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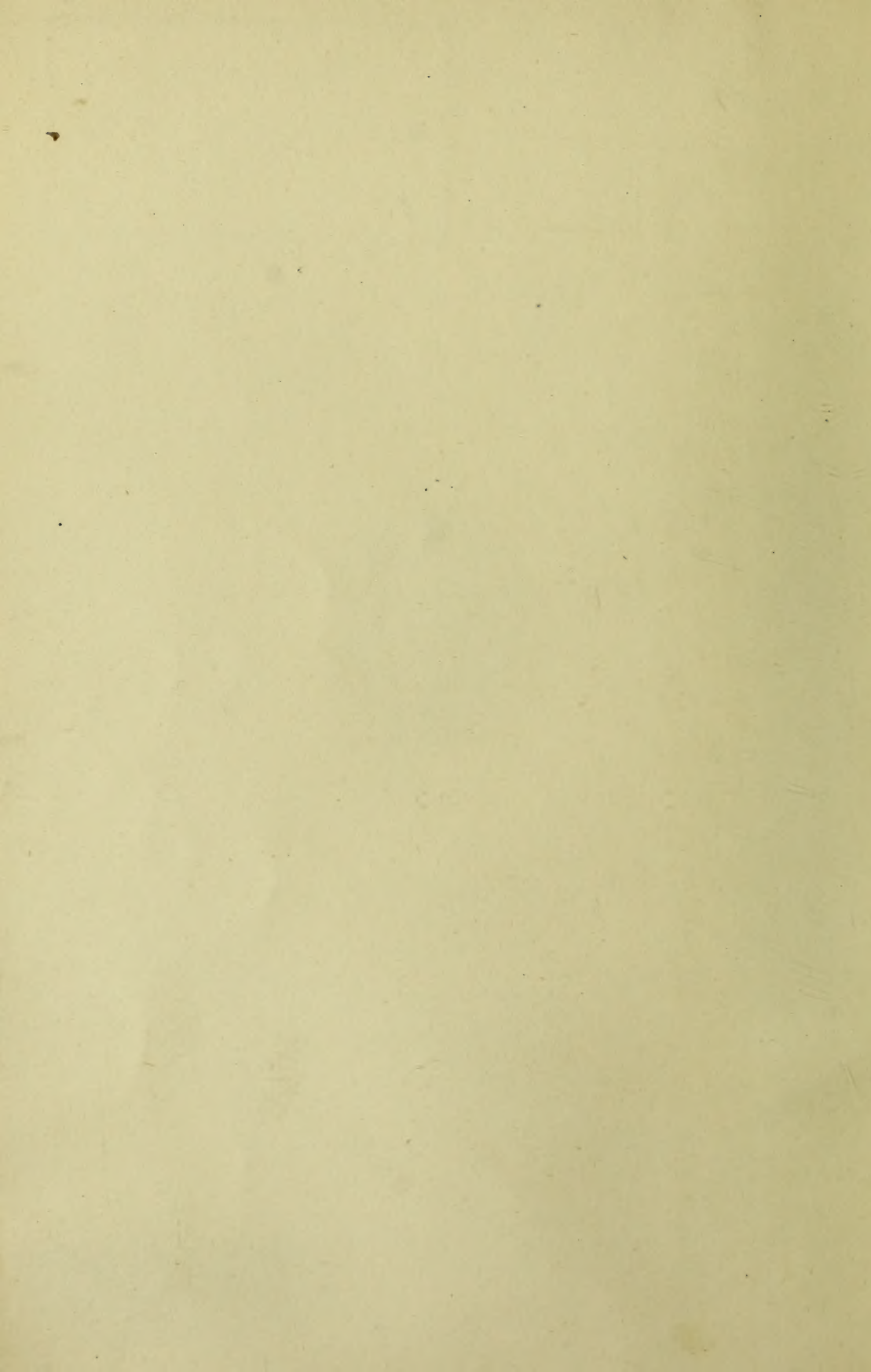
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**Lexikon**  
der  
**Kohlenstoff-Verbindungen**

**Dritte Auflage**

**III. Teil**





W.C.R.L. 251

# Lexikon der Kohlenstoff-Verbindungen

von

M. M. Richter

Dritte Auflage

III. Teil

Verbindungen  $C_{13}H_{10}ON_2Br_2 - C_{20}H_{14}O_2$



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1911

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- $C_{13}H_{10}ON_2Br_2$  8) *p*-Dibrom-6-Oxy-3-Methylazobenzol. Sm. 168°. — IV, 1421.  
 9) *p*-Dibrom-4'-Oxy-3-Methylazobenzol. Sm. 129° (Soc. 79, 1091). — \*IV, 1038.
- $C_{13}H_{10}ON_2J_2$  1) *s*-Di[4-Jodphenyl]harnstoff. Subl. oberhalb 300° (Bl. [3] 21, 305). — \*II, 187.  
 2)  $\alpha$ -Phenyl- $\beta$ -[3,5-Dijod-2-Oxybenzyliden]hydrazin. Sm. 167,5° (J. pr. [2] 57, 205; [2] 59, 118). — \*IV, 492.  
 3)  $\alpha$ -Phenyl- $\beta$ -[3,5-Dijod-4-Oxybenzyliden]hydrazin. Sm. 160° (159°) (B. 29, 2304; J. pr. [2] 57, 205; [2] 58, 128; A. 321, 16 C. 1902 [1] 927). — IV, 761; \*IV, 493.
- $C_{13}H_{10}ON_2S$  1) 2-Imido-4-Keto-3-[2-Naphtyl]tetrahydrothiazol. Sm. 147° (C. 1903 [2] 110). — \*IV, 304.  
 2) 2-[2-Naphtyl]imido-4-Ketotetrahydrothiazol (stabil. 2-Naphtylpseudothiohydantoïn). Sm. 213—214° u. Zers. (C. 1903 [2] 110). — \*IV, 304.  
 3) 2-Thiocarbonyl-5-Methyl-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Ox-diazol. Sm. 86° (B. 24, 4184). — IV, 926.  
 4) 2-Thiocarbonyl-5-Methyl-3-[2-Naphtyl]-2,3-Dihydro-1,3,4-Ox-diazol. Sm. 109° (B. 24, 4180). — IV, 929.  
 5) Methylthionolin (B. 20, 933). — II, 811.  
 6) Acetyl-1-Naphtylthiocarbizin. Sm. 283° (B. 24, 4187). — IV, 927.  
 7) Amid d. Thiodiphenylamin-N-Carbonsäure (Thiodiphenylharnstoff). Sm. 201—202° (B. 24, 2908). — II, 806.
- $C_{13}H_{10}ON_3Cl$  1) 4-Benzoylamidodiazobenzolchlorid. Zers. bei 139° (Soc. 95, 1323 C. 1909 [2] 977).  
 2) *p*-Chlor-*p*-Diamido-5-Keto-5,10-Dihydroakridin. Sm. 230° (B. 18, 1452). — IV, 404.  
 3) Amid d. 4-Chlorazobenzol-3-Carbonsäure. Sm. 210° (A. 263, 232). — IV, 1461.
- $C_{13}H_{10}ON_4Br_2$  1) Dibromid d. Diphenylcarbodiazon. Zers. bei 60° (Bl. [3] 25, 378). — \*IV, 429.  
 2) Phenylamid d. 3,5-Dibrom-4-Amidodiazobenzol-1-Carbonsäure. Sm. 155—156° (B. 40, 3814 C. 1907 [2] 1504).
- $C_{13}H_{10}ON_4S_2$  1) Thionylpseudodiphenylthiocarbazon. Sm. 144—145° (B. 26, 2495). — IV, 685.
- $C_{13}H_{10}OClJ$  1) Aldehyd d. Diphenyljodoniumchlorid-3-Carbonsäure. Sm. 167°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (B. 38, 1481 C. 1905 [1] 1386).  
 2) Aldehyd d. Diphenyljodoniumchlorid-4-Carbonsäure. Sm. 183°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (B. 38, 1481 C. 1905 [1] 1386).
- $C_{13}H_{10}OBrJ$  1) Aldehyd d. Diphenyljodoniumbromid-3-Carbonsäure. Sm. 165° (B. 38, 1481 C. 1905 [1] 1386).  
 2) Aldehyd d. Diphenyljodoniumbromid-4-Carbonsäure. Sm. 157° (B. 38, 1482 C. 1905 [1] 1386).
- $C_{13}H_{10}OBr_2S$  1)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha$ -[2-Thiänyl]- $\gamma$ -Phenylpropan (Zimtsäurethiänylketondibromid). Sm. 157° (B. 19, 2895). — III, 768.
- $C_{13}H_{10}O_2NCl$  1) 2-Chlor-4'-Nitrodiphenylmethan<sup>p</sup> Sm. 67° (R. 23, 108 C. 1904 [1] 1136).  
 2) 4-Chlor-4'-Nitrodiphenylmethan. Sm. 104° (R. 23, 107 C. 1904 [1] 1136).  
 3) 4-Chlor-3-Benzoylamido-1-Oxybenzol. Sm. 191—192° (Soc. 69, 1323). — \*II, 740.  
 4) 5'-Chlor-2'-Amido-4-Oxydiphenylketon. Sm. 174° (B. 39, 1933 C. 1906 [2] 114).  
 5) 5-Chlordiphenylamin-2-Carbonsäure. Sm. 207° (A. 355, 365 C. 1907 [2] 1510).  
 6) 2'-Chlordiphenylamin-2-Carbonsäure. Sm. 192° (A. 355, 336 C. 1907 [2] 1507).  
 7) 3'-Chlordiphenylamin-2-Carbonsäure. Sm. 167° (A. 355, 337 C. 1907 [2] 1507).  
 8) 4'-Chlordiphenylamin-2-Carbonsäure. Sm. 177° (A. 355, 339 C. 1907 [2] 1508).



- $C_{13}H_{10}O_2NCl$  9) 4-Chlorphenylester d. Phenylamidoameisensäure. Sm. 138° (*B.* 28, 979). — \*II, 370.
- 10) Phenylamid d. 3-Chlor-2-Oxybenzol-1-Carbonsäure. Sm. 158,5 bis 159° (*A.* 346, 314 *C.* 1906 [2] 332).
- 11) Phenylamidoformiat d. 2-Chlor-1-Oxybenzol. Sm. 120–121° (*A.* 363, 92 *C.* 1908 [2] 1724).
- $C_{13}H_{10}O_2NCl_3$  1) Phenylaminverbindung (aus 2,3,5,6-Tetrachlor-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol). Sm. 192° (*A.* 328, 303 *C.* 1903 [2] 1248).
- $C_{13}H_{10}O_2NBr$  1)  $\alpha$ -Brom- $\alpha$ -Nitrodiphenylmethan. Sm. 44° (*J. r.* 26, 83). — \*II, III.
- 2) 2-Brom-4'-Nitrodiphenylmethan? Sm. 73° (*R.* 23, 109 *C.* 1904 [1] 1136).
- 3) 4-Brom-4'-Nitrodiphenylmethan. Sm. 121° (*R.* 23, 108 *C.* 1904 [1] 1136).
- 4) 5-Brom-6-Oximido-3-Oxy-1,6-Dihydropentanthren (*B.* 34, 1549). — \*III, 159.
- 5) 4'-Bromdiphenylamin-2-Carbonsäure. Sm. 182° (185°) (*B.* 39, 1695 *C.* 1906 [2] 57; *A.* 355, 341 *C.* 1907 [2] 1508).
- 6) 4-Bromphenylester d. Phenylamidoameisensäure. Sm. 144° (*B.* 28, 981). — \*II, 372.
- 7) Phenylamid d. 5-Brom-2-Oxybenzol-1-Carbonsäure. Sm. 222° (*A.* 273, 122). — II, 1505.
- $C_{13}H_{10}O_2NBr_3$  1) 3,4,6-Tribrom-5-Phenylamido-1-Oxy-2-Keto-1-Methyl-1,2-Dihydrobenzol. Sm. 160–161° (*B.* 40, 683 *C.* 1907 [1] 884).
- 2) 3,5,6-Tribrom-2-Phenylamido-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 206° (*A.* 341, 333 *C.* 1905 [2] 1424).
- $C_{13}H_{10}O_2N_2Br_2$  1) 2,6-Dibrom-2',4'-Dioxy-4-Methylazobenzol. Sm. 141° (*Soc.* 93, 1018 *C.* 1908 [2] 409).
- 2) Benzolazodibromorein. Sm. 183° (*B.* 10, 1580). — IV, 1447.
- 3)  $\alpha\beta$ -Dibrom- $\alpha$ -[2-Nitrophenyl]- $\beta$ -[2-Pyridyl]äthan. Sm. 167–168° (*B.* 34, 465; *Ar.* 240, 256 *C.* 1902 [2] 130). — \*IV, 225.
- 4)  $\alpha\beta$ -Dibrom- $\alpha$ -[3-Nitrophenyl]- $\beta$ -[2-Pyridyl]äthan. Sm. 145° (153°) (*B.* 23, 2717; 34, 466; *Ar.* 240, 253 *C.* 1902 [2] 130). — IV, 395; \*IV, 235.
- 5)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Pyridyl]äthan. Sm. 173° (*B.* 34, 466; *Ar.* 240, 251 *C.* 1902 [2] 130). — \*IV, 225.
- 6)  $\alpha\beta$ -Dibrom- $\alpha$ -[3-Nitrophenyl]- $\beta$ -[4-Pyridyl]äthan. Sm. 190° (*B.* 38, 2839 *C.* 1905 [2] 1110).
- $C_{13}H_{10}O_2N_2S$  1) 1-Phenyläther d. 1-Thiodiazobenzol-2-Carbonsäure. Sm. 60° u. Zers. (*A.* 263, 3). — IV, 1553.
- 2) Inn. Anhydrid d. 2-Phenylsulfonamidobenzol-1-Carbonsäureamid. Sm. 145° (*J. pr.* [2] 44, 421). — II, 1253.
- 3) Anhydro- $\beta$ -Benzyliden- $\alpha$ -Phenylhydrazin- $\beta$ -Sulfonsäure? Sm. 174,5° (*A.* 299, 365). — IV, 754.
- 4) Nitril d. 3-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 126,5 bis 127° (*C.* 1904 [2] 102).
- 5) Amid d.  $\alpha$ -Naphtochinolin-5-Sulfonsäure. Sm. bei 225° (*J. pr.* [2] 57, 82). — \*IV, 248.
- 6) Pseudosaccharinphenylamid (*B.* 26, 2296). — II, 1298.
- 7) Phenylamid d. 2-Cyanbenzol-1-Sulfonsäure. Sm. 150–152° (*B.* 26, 2292). — II, 1297.
- 8) Phenylamid d. 4-Cyanbenzol-1-Sulfonsäure. Sm. 112° (*Am.* 18, 161). — \*II, 805.
- 9) Phenylcyanamid d. Benzolsulfonsäure. Sm. 66–67° (*B.* 37, 2810 *C.* 1904 [2] 592).
- $C_{13}H_{10}O_2N_3Cl$  1) Phenyl-4-Chlor-2-Nitrobenzylidenhydrazin. Sm. 176–177° (180 bis 181°) (*B.* 36, 3301 *C.* 1903 [2] 1173; *D. R. P.* 149748 *C.* 1904 [1] 909).
- 2) Phenyl-5-Chlor-2-Nitrobenzylidenhydrazin. Sm. 180–181° u. Zers. (*A.* 262, 138). — IV, 752.
- 3) Phenyl-6-Chlor-3-Nitrobenzylidenhydrazin. Sm. 182° (183°) (*B.* 28, 1256 *Ann.*; *M.* 25, 367 *C.* 1904 [2] 322). — IV, 752; \*IV, 487.
- 4) 2-Chlorphenyl-3-Nitrobenzylidenhydrazin. Sm. 150° (*J. pr.* [2] 75, 135 *C.* 1907 [1] 1037).



- C<sub>13</sub>H<sub>10</sub>O<sub>2</sub>N<sub>3</sub>Br** 1) Phenyl-4-Brom-2-Nitrobenzylidenhydrazin. Sm. 181—182° (*B.* 36, 3303 *C.* 1903 [2] 1173; D.R.P. 149748 *C.* 1904 [1] 909).  
 2) Phenyl-5-Brom-2-Nitrobenzylidenhydrazin. Sm. 180° u. Zers. (*A.* 284, 145). — IV, 752.  
 3)  $\alpha$ -[4-Bromphenyl]- $\beta$ -[2-Nitrobenzyliden]hydrazin. Sm. 184—189° u. Zers. (*M.* 26, 1084 *C.* 1905 [2] 1533).  
 4)  $\alpha$ -[4-Bromphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 150—152° (*M.* 26, 339 *C.* 1905 [1] 1144).  
 5)  $\alpha$ -[4-Bromphenyl]- $\beta$ -[4-Nitrobenzyliden]hydrazin. Sm. 154—156° (*M.* 26, 1086 *C.* 1905 [2] 1533).  
 6) Benzyliden-4-Brom-2-Nitrophenylhydrazin. Sm. 207° (*B.* 22, 2817). — IV, 749.  
 7)  $\alpha$ -Nitroso- $\beta$ -Benzoyl- $\alpha$ -[4-Bromphenyl]hydrazin. Sm. 123° u. Zers. (*G.* 39 [1] 562 *C.* 1909 [2] 594).  
 8) 4-Brom-1-Phenylamidodiazobenzol-1<sup>3</sup>-Carbonsäure (*J.* 1866, 453). — IV, 1578.
- C<sub>13</sub>H<sub>10</sub>O<sub>2</sub>N<sub>3</sub>J** 1) Phenyl-4-Jod-2-Nitrobenzylidenhydrazin. Sm. 185° (*B.* 36, 3303 *C.* 1903 [2] 1173; D.R.P. 149749 *C.* 1904 [1] 909; *B.* 39, 2758 *C.* 1906 [2] 1322).  
 2) 2-Jodphenyl-3-Nitrobenzylidenhydrazin. Sm. 170° (*J. pr.* [2] 75, 139 *C.* 1907 [1] 1038).
- C<sub>13</sub>H<sub>10</sub>O<sub>2</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) 3,6-Dichlor-2-Amido-1-[4-Nitrophenylhydrazon]methylbenzol. Sm. 295° (*B.* 34, 1322 Anm.). — \*IV, 487.
- C<sub>13</sub>H<sub>10</sub>O<sub>2</sub>ClBr** 1) Acetat d. 6-Brom-2-Oxy-1-Chlormethylnaphtalin. Sm. 158° (*B.* 39, 451 *C.* 1906 [1] 849).
- C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>NCl** 1) 2-Nitrophenyläther d. 2-Chlor-1-Oxymethylbenzol. Sm. 89° (D.R.P. 142061 *C.* 1903 [2] 83).  
 2) 2-Nitrophenyläther d. 4-Chlor-1-Oxymethylbenzol. Sm. 75—78° (D.R.P. 142061 *C.* 1903 [2] 83).  
 3) Benzyläther d. 4-Chlor-2-Nitro-1-Oxybenzol. Sm. 86° (D.R.P. 142899 *C.* 1903 [2] 83).
- C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>NBr** 1) *p*-Brom-*p*-Nitro-2-Oxydiphenylmethan. Sm. 105—110°. K (*Soc.* 49, 410). — II, 896.  
 2) 3-Brom-5-Nitro-4-Oxydiphenylmethan. Sm. 64—65°. K (*Soc.* 41, 223). — II, 897.  
 3) Benzyläther d. 2-Brom-4-Nitro-1-Oxybenzol. Sm. 125,5° (*J. pr.* [2] 32, 57). — II, 1049.  
 4) Benzyläther d. 4-Brom-2-Nitro-1-Oxybenzol. Sm. 84—85° (88—89°) (*J. pr.* [2] 32, 57; D.R.P. 142899 *C.* 1903 [2] 83; *A.* 357, 92 *C.* 1907 [2] 1974). — II, 1049.  
 5) Methylester d. *p*-Brom-2-Keto-1-Phenyl-1,2-Dihydropyridin-5-Carbonsäure. Sm. 183,3° (*B.* 17, 2399). — IV, 153.
- C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>N<sub>2</sub>S** 1) 2-Phenylindazol-*p*-Sulfonsäure. 2 isom. Formen,  $\alpha$ -Verb. Zers. bei 300°;  $\beta$ -Verb. Zers. bei 320°. Na, Ba, Pb (*B.* 27, 50). — IV, 867.  
 2) 2-Phenylbenzimidazol-*p*-Sulfonsäure. Na, Ba (*B.* 10, 1710). — IV, 1008.
- C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2-Thiocarbonyl-4-Keto-5-[2-Nitrobenzyliden]-3-Allyltetrahydrothiazol. Sm. 73° (*M.* 24, 513 *C.* 1903 [2] 837).  
 2) 2-Thiocarbonyl-4-Keto-5-[3-Nitrobenzyliden]-3-Allyltetrahydrothiazol. Sm. 145° (*M.* 25, 161 *C.* 1904 [1] 894).  
 3) 2-Thiocarbonyl-4-Keto-5-[4-Nitrobenzyliden]-3-Allyltetrahydrothiazol. Sm. 153° (*M.* 25, 162 *C.* 1904 [1] 894).
- C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>N<sub>3</sub>Cl** 1) Chlornitroharmin + 2H<sub>2</sub>O. HCl, (2HCl, PtCl<sub>4</sub>), + J<sub>2</sub> (*A.* 92, 330). — III, 886.  
 2) 4-Chlorphenyl-2-Nitrobenzylnitrosamin. Sm. 100° (*J. pr.* [2] 52, 387). — \*II, 290.  
 3) Azoverbindung (aus 4-Nitrodiazobenzol u. 6-Chlor-2-Oxy-1-Methylbenzol). Sm. 230° (*B.* 37, 1020 *C.* 1904 [1] 1202).
- C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>N<sub>3</sub>Br** 1) Bromnitroharmin (*A.* 92, 335). — III, 886.  
 2) 4-Bromphenyl-2-Nitrobenzylnitrosamin. Sm. 167° (*J. pr.* [2] 52, 394). — \*II, 291.  
 3) *s*-3-Bromphenyl-3-Nitrophenylharnstoff. Sm. 214—215°. — II, 380.  
 4)  $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]hydrazin. Sm. 243° (*B.* 37, 3936 *C.* 1904 [2] 1596).

- $C_{13}H_{10}O_3N_3Br$  5) 5-Brom-4'-Nitro-4-Oxy-3-Methylazobenzol. Sm. 150—152° (A. 356, 163 Anm. C. 1907 [2] 1700).
- 6) 5'-Brom-3'-Nitro-4'-Oxy-4-Methylazobenzol. Sm. 161° (Soc. 89, 185 C. 1906 [1] 1339).
- 7) p-Brom-3-Nitro-p-Oxy-p-Methylazobenzol. Sm. 198—199° (Soc. 65, 838). — IV, 1421.
- 8) Azoverbindung (aus 4-Nitrodiazobenzol u. 6-Brom-2-Oxy-1-Methylbenzol). Sm. 215° (B. 37, 1022 C. 1904 [1] 1203).
- 9) 4-Brom-2-Nitrophenylhydrazid d. Benzolcarbonsäure. Sm. 185° (B. 22, 2817). — IV, 668.
- $C_{13}H_{10}O_3Br_2S$  1)  $\gamma\gamma$ -Dibrom- $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -Ketopropan. Sm. 155—157° (J. pr. [2] 55, 405). — \*II, 528.
- $C_{13}H_{10}O_4NCl$  1) Monoäthyläther d. Pyridylchlordioxy-1,4-Benzochinon (C. r. 133, 235). — \*IV, 88.
- 2) Äthylester d. 5-Chlor-8-Nitronaphtalin-1-Carbonsäure. Sm. 121° (J. pr. [2] 38, 170). — II, 1449.
- 3) Äthylester d. 8-Chlor-p-Nitronaphtalin-1-Carbonsäure. Sm. 84° (J. pr. [2] 38, 254). — II, 1450.
- 4) Äthylester d. 5[oder 8]-Chlor-p-Nitronaphtalin-2-Carbonsäure. Sm. 118° (J. pr. [2] 43, 414). — II, 1458.
- $C_{13}H_{10}O_4NBr$  1) Äthylester d.  $\alpha$ -Cyan- $\beta$ -[p-Brom-3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 131° (J. pr. [2] 50, 19; C. 1905 [2] 622). — II, 1777.
- 2) Benzylimid d. Bromakonitsäure (G. 24 [1] 229). — II, 531.
- $C_{13}H_{10}O_4N_2Br_2$  1) Phenylhydrazid d. 2,6-Dibrom-3,4,5-Trioxybenzol-1-Carbonsäure. Sm. 160° u. Zers. (Bl. [3] 15, 785). — IV, 716.
- $C_{13}H_{10}O_4N_2S$  1) 2,4-Dinitrophenyläther d. Mercaptomethylbenzol. Sm. 128° (B. 18, 331). — II, 1052.
- 2) 4-Phenylsulfon-1-Keto-3,4-Dihydro-2,3,4-Benzoxdiazin. Zers. bei 169—170° (B. 30, 316, 2558). — IV, 1553.
- 3) 1-Phenylsulfondiazobenzol-4-Carbonsäure. Zers. bei 122—123° (B. 30, 315). — IV, 1554.
- 4) 7-Oxy-2-Methyl-5,10-Naphtdiazin-p-Sulfonsäure. Ba (J. pr. [2] 65, 74 C. 1902 [1] 580). — \*IV, 674.
- $C_{13}H_{10}O_4N_3Br$  1) 4-Brom-2-Nitrophenyl-4-Nitrobenzylamin. Sm. 151° (R. 21, 430 C. 1903 [1] 506).
- 2) 2-Brom-4-Nitrophenyl-4-Nitrobenzylamin. Sm. 180° (R. 21, 429 C. 1903 [1] 506).
- 3) Phenylhydrazid d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 190° (G. 34 [1] 276 C. 1904 [1] 1499).
- $C_{13}H_{10}O_4N_4Cl_2$  1) Di[5-Chlor-2-Nitrophenylamido]methan (D.R.P. 212594 C. 1909 [2] 774).
- $C_{13}H_{10}O_4N_4S$  1) s-Di[3-Nitrophenyl]thioharnstoff. Sm. 160—161° (B. 6, 1103; 15, 470; 16, 550). — II, 396.
- $C_{13}H_{10}O_4Cl_2S_2$  1) Chlorid d. Diphenylmethan-4,4'-Disulfonsäure. Sm. 124° (Soc. 73, 409). — \*II, 111.
- $C_{13}H_{10}O_4Cl_6S$  1) 1,2,3,4,5,6-Hexachlorhexahydrodiphenylketon-p-Sulfonsäure. Ba + 7 $\frac{1}{2}$  H<sub>2</sub>O (Soc. 73, 431). — \*III, 133.
- $C_{13}H_{10}O_5NBr$  1) Acetat d. 6-Brom-3-Nitro-1-Oxy-2-Keto-1-Methyl-1,2-Dihydronaphtalin. Sm. 177° (B. 39, 449 C. 1906 [1] 848).
- $C_{13}H_{10}O_5N_2S$  1) 1-[2-Nitrobenzyliden]amidobenzol-4-Sulfonsäure (D.R.P. 97948 C. 1898 [2] 742). — \*III, 22.
- 2) 1-[4-Nitrobenzyliden]amidobenzol-4-Sulfonsäure (D.R.P. 97948 C. 1898 [2] 742). — \*III, 22.
- 3) Azobenzol-3-Carbonsäure-3'-Sulfonsäure (B. 31, 2204; C. 1899 [1] 1077). — IV, 1461.
- 4) Aldehyd d. 4-Oxyazobenzol-3-Carbonsäure-3'-Sulfonsäure. Sm. oberhalb 270°. Na + 2H<sub>2</sub>O, Ba + 5H<sub>2</sub>O (A. 251, 80). — IV, 1476.
- 5) Aldehyd d. 4-Oxyazobenzol-3-Carbonsäure-4'-Sulfonsäure. Sm. 232—235°. + C<sub>6</sub>H<sub>6</sub>O, Na + 2H<sub>2</sub>O, Ba + 5H<sub>2</sub>O, BaH + 3H<sub>2</sub>O (A. 251, 174). — IV, 1476.
- 6) Amid d. 5-Nitrodiphenylsulfon-2-Carbonsäure. Sm. 191—192° (Am. 24, 486). — \*II, 901.

- C<sub>13</sub>H<sub>10</sub>O<sub>5</sub>N<sub>3</sub>Cl** 1) 3'-Chlor-4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 176° (B. 37, 2093 C. 1904 [2] 34).
- C<sub>13</sub>H<sub>10</sub>O<sub>5</sub>ClBr** 1) Methyl ester d. 2-Chlor-2-Brom-3-Acetoxy-1-Keto-2,3-Dihydroinden-3-Carbonsäure. Sm. 136—137° (B. 21, 2386). — II, 1866.
- C<sub>13</sub>H<sub>10</sub>O<sub>6</sub>N<sub>2</sub>S** 1) 4-Oxyazobenzol-3-Carbonsäure-3'-Sulfonsäure. Na + 3H<sub>2</sub>O (C. 1908 [2] 310).  
 2) 4-Oxyazobenzol-3-Carbonsäure-4'-Sulfonsäure. Ba (B. 11, 2196; 15, 2190; 17, 339). — IV, 1470.  
 3) 2-Oxyazobenzol-3-Carbonsäure-2'-Sulfonsäure + 1/2 H<sub>2</sub>O. K + H<sub>2</sub>O, Ba (B. 14, 2034). — IV, 1463.  
 4) 2-Amid d. 4-Nitrobenzol-1-Carbonsäurephenylester-2-Sulfonsäure. Sm. 135° (Am. 30, 385 C. 1904 [1] 275).  
 5) 1-Phenylamid d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Ba + 9 1/2 H<sub>2</sub>O (Am. 25, 21). — \*II, 806.
- C<sub>13</sub>H<sub>10</sub>O<sub>6</sub>N<sub>2</sub>Br** 1) 4-Brom-2,6-Dinitro-3-Methyldiphenylamin. Sm. 116° (J. pr. [2] 37, 17). — II, 477.
- C<sub>13</sub>H<sub>10</sub>O<sub>7</sub>N<sub>2</sub>S** 1) 4'-Nitrodiphenylamin-2-Carbonsäure-2'-Sulfonsäure (D. R. P. 193351 C. 1908 [1] 430).  
 2) 4-Nitrophenylester d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 115° (113—114°) (D. R. P. 91314; B. 34, 2997). — \*II, 380.  
 3) 4-Nitrophenylester d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure. Sm. 195° (D. R. P. 91314). — \*II, 380.  
 4) 2,4-Dinitrophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 121° (D. R. P. 194951 C. 1908 [1] 1115; B. 41, 1872 C. 1908 [2] 154).
- C<sub>13</sub>H<sub>10</sub>O<sub>7</sub>N<sub>4</sub>S** 1) α-Phenyl-β-[2,4-Dinitrobenzyliden]hydrazin-α'-Sulfonsäure. Sm. 217° u. Zers. (B. 35, 1231 C. 1902 [1] 1000; B. 35, 2711 C. 1902 [2] 637). — \*IV, 486.
- C<sub>13</sub>H<sub>10</sub>O<sub>8</sub>N<sub>3</sub>S** 1) 4'-Nitro-4-Oxydiphenylamin-3-Carbonsäure-2'-Sulfonsäure. Zers. oberhalb 260° (D. R. P. 109150 C. 1900 [1] 1215). — \*II, 898.
- C<sub>13</sub>H<sub>10</sub>O<sub>8</sub>N<sub>4</sub>S** 1) 2,4-Dinitrophenylamid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 214° (B. 34, 3001).
- C<sub>13</sub>H<sub>10</sub>NCIS** 1) 4-Chlorphenylamid d. Benzolthiocarbonsäure. Sm. 146—147° (J. pr. [2] 67, 464 C. 1903 [1] 1422).
- C<sub>13</sub>H<sub>10</sub>NBrS** 1) Phenylamid d. 4-Brombenzol-1-Thiocarbonsäure. Sm. 161—162° (C. 1904 [1] 1003).
- C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>Cl<sub>2</sub>S** 1) s-Di[2-Chlorphenyl]thioharnstoff. Sm. 141° (133°) (B. 13, 14; 32, 1088; B. 39, 4375 C. 1907 [1] 337). — II, 396; \*II, 197.  
 2) s-Di[3-Chlorphenyl]thioharnstoff. Sm. 121—123° (B. 13, 13, 14; B. 36, 197 C. 1903 [1] 450; B. 39, 4376 C. 1907 [1] 337). — II, 396.  
 3) s-Di[4-Chlorphenyl]thioharnstoff. Sm. 168° (141°) (A. 176, 47; B. 5, 156; 13, 13; B. 36, 197 C. 1903 [1] 450; B. 39, 4376 C. 1907 [1] 337). — II, 396.
- C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>Br<sub>2</sub>S** 1) s-Di[3-Bromphenyl]thioharnstoff. Sm. 135° (128°) (B. 36, 197 C. 1903 [1] 450; B. 39, 4376 C. 1907 [1] 337).  
 2) s-Di[4-Bromphenyl]thioharnstoff. Sm. 178° (180°) (B. 2, 409; 13, 230; B. 39, 4376 C. 1907 [1] 337). — II, 396.
- C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>Br<sub>4</sub>S** 1) Verbindung (aus s-Diphenylthioharnstoff). Sm. 136° (B. 36, 3127 C. 1903 [2] 1070).
- C<sub>13</sub>H<sub>10</sub>N<sub>2</sub>J<sub>2</sub>S** 1) s-Di[4-Jodphenyl]thioharnstoff. Sm. 173° (181°) (B. 5, 158; B. 39, 4376 C. 1907 [1] 337). — II, 396.
- C<sub>13</sub>H<sub>10</sub>N<sub>3</sub>Br<sub>3</sub>S** 1) α-[2,4,6-Tribromphenyl]amido-β-Phenylthioharnstoff. Sm. 203° (B. 32, 1085). — \*IV, 442.
- C<sub>13</sub>H<sub>10</sub>ClBr<sub>2</sub>J** 1) 2',5'-Dibrom-4-Methyldiphenyljodoniumchlorid. Sm. 195°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (J. pr. [2] 71, 559 C. 1905 [2] 318).
- C<sub>13</sub>H<sub>10</sub>Cl<sub>2</sub>BrJ** 1) 2',5'-Dichlor-4-Methyldiphenyljodoniumbromid. Sm. 188° (J. pr. [2] 71, 549 C. 1905 [2] 316).
- C<sub>13</sub>H<sub>11</sub>ONCl<sub>2</sub>** 1) Phenyläther d. α,α-Dichlor-α-Phenylamido-α-Oxymethan. Sm. 65° u. Zers. (Am. 17, 106). — \*II, 362.  
 2) 2-Chlorbenzyläther d. 4-Chlor-2-Amido-1-Oxybenzol. HCl (D. R. P. 142061 C. 1903 [2] 83).
- C<sub>13</sub>H<sub>11</sub>ONBr<sub>2</sub>** 1) Phenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 98—99° (A. 302, 149). — \*II, 428.  
 2) αβ-Dibrom-α-[2-Oxyphenyl]-β-[2-Pyridyl]äthan (Dibromoxydihydrostilbazol) (B. 23, 2699). — IV, 395.



- C<sub>13</sub>H<sub>11</sub>ONBr<sub>2</sub>** 3) **2-Dibrom-10-Keto-8-Methyl-3,4-Dihydrojulol** (2-Dibrom- $\alpha_1$ -Keto- $\gamma_1$ -Methyljulolin). Sm. 153° (corr.) (B. 24, 850). — IV, 193.
- C<sub>13</sub>H<sub>11</sub>ONS** 1) **4-Benzylamido-1-Merkaptobenzol**. (2 Modif.) Sm. 182° (B. 39, 2434 C. 1906 [2] 1005).  
 2)  **$\alpha$ -Thionylamidodiphenylmethan**. Sd. 88°<sub>36</sub> (B. 26, 2169). — II, 635.  
 3) **2-Keto-3-[1-Naphtyl]tetrahydrothiazol** (Äthylenester(?) d. 1-Naphtylcarbaminthionsäure). Sm. 102° (B. 21, 970). — II, 608.  
 4) **Äthyläther d. 1-Oxy- $\alpha$ -Naphtthiazol**. Sm. 78–79° (B. 26, 2366). — II, 871.  
 5) **Phenylester d. Phenylamidothioameisensäure**. Sm. 149–151° (147°) (Soc. 57, 268; 69, 98; B. 27, 1370; Am. 22, 471; Bl. [3] 35, 840 C. 1906 [2] 1760). — II, 663; \*II, 362.  
 6) **Phenylester d. Phenylamidothiolumeisensäure**. Sm. 125° (122 bis 122,5°) (B. 18, 2432; Bl. [4] 1, 736 C. 1907 [2] 1159). — II, 785.
- C<sub>13</sub>H<sub>11</sub>ONS<sub>2</sub>** 1) **2-Thiocarbonyl-4-Keto-3-Allyl-5-Benzylidentetrahydrothiazol**. Sm. 144° (M. 24, 506 C. 1903 [2] 836).  
 2) **2-Thiocarbonyl-4-Keto-5-Cinnamyliden-3-Methyltetrahydrothiazol**. Sm. 226° (M. 25, 172 C. 1904 [1] 895).
- C<sub>13</sub>H<sub>11</sub>ON<sub>2</sub>Cl** 1) **s-2-Chlordiphenylharnstoff**. Sm. 181–182° (A. 363, 93 C. 1908 [2] 1724).  
 2) **s-3-Chlordiphenylharnstoff**. Sm. 184° (B. 25, 1366). — II, 379.  
 3) **s-4-Chlordiphenylharnstoff**. Sm. 237–238° (238–244°) (B. 25, 1366; G. 29 [2] 139; J. pr. [2] 73, 112 C. 1906 [1] 830). — II, 379; \*II, 186.  
 4) **Phenyl-2-Chlorbenzylnitrosamin**. Sm. 53,5–54° (A. 313, 119). — \*II, 289.  
 5)  **$\alpha$ -Oximido- $\alpha$ -Phenylamido-2-Chlorphenylmethan** (o-Chlorbenzenyl-anilidoxim). Sm. 140° (B. 32, 1981). — \*II, 764.  
 6)  **$\alpha$ -Oximido- $\alpha$ -[2-Chlorphenyl]amido- $\alpha$ -Phenylmethan**. Sm. 163 bis 164° (J. pr. [2] 78, 494 C. 1909 [1] 281).  
 7)  **$\alpha$ -Oximido- $\alpha$ -[3-Chlorphenyl]amido- $\alpha$ -Phenylmethan**. Sm. 114 bis 115°. + C<sub>2</sub>H<sub>6</sub>O (J. pr. [2] 78, 488 C. 1909 [1] 281).  
 8)  **$\alpha$ -Oximido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan** (Benzenyl-4-Chlorphenylamidoxim). Sm. 183° (173–174°). + C<sub>2</sub>H<sub>6</sub>O, Pikrat (B. 31, 242; J. pr. [2] 67, 470 C. 1903 [1] 1422). — \*II, 754.  
 9)  **$\alpha$ -Phenyl- $\beta$ -[5-Chlor-2-Oxybenzyliden]hydrazin**. Sm. 150–152° (148°) (A. 312, 325 Anm.; B. 37, 4025 C. 1904 [2] 1717).  
 10)  **$\alpha$ -[2-Chlorphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin**. Sm. 123° (A. 365, 323 C. 1909 [1] 1866).  
 11)  **$\alpha$ -[3-Chlorphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin**. Sm. 163–164° (A. 365, 324 C. 1909 [1] 1866).  
 12)  **$\alpha$ -[4-Chlorphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin**. Sm. 169–170° (A. 365, 325 C. 1909 [1] 1867).  
 13)  **$\beta$ -Chlor- $\gamma$ -Phenylhydrazon- $\alpha$ -Furylpropen**. Sm. 157° u. Zers. (B. 21, 425). — IV, 765.  
 14) **3'-Chlor-4-Oxy-2-Methylazobenzol** + H<sub>2</sub>O. Sm. 76° (104° wasserfrei) (B. 32, 3098). — \*IV, 1040.  
 15) **3'-Chlor-4'-Oxy-2-Methylazobenzol**. Sm. 97° (B. 32, 3099). — \*IV, 1037.  
 16) **3'-Chlor-6-Oxy-3-Methylazobenzol**. Sm. 103° (B. 25, 1329). — IV, 1420.  
 17) **4'-Chlor-6-Oxy-3-Methylazobenzol**. Sm. 151–152° (B. 25, 1326). — IV, 1420.  
 18) **Methyläther d. 3-Chlor-4'-Oxyazobenzol**. Sm. 53° (B. 32, 3097). — \*IV, 1035.  
 19) **Methyläther d. 4-Chlor-4'-Oxyazobenzol**. Sm. 122° (121°) (B. 30, 1630; 32, 3096). — IV, 1409; \*IV, 1035.  
 20) **Chlorid d.  $\beta\beta$ -Diphenylhydrazidoameisensäure** (B. 36, 3156 C. 1903 [2] 1057).  
 21) **2-Chlorphenylhydrazid d. Benzolcarbonsäure**. Sm. 152° (B. 30, 320). — IV, 668.  
 22) **4-Chlorphenylhydrazid d. Benzolcarbonsäure**. Sm. 153° (G. 39 [1] 632 C. 1909 [2] 906; G. 39 [2] 323 C. 1909 [2] 1802).
- C<sub>13</sub>H<sub>11</sub>ON<sub>2</sub>Br** 1) **2-Brom-4-Methyldiphenylnitrosamin**. Sm. 166° (A. 239, 56). — II, 485.

- C<sub>13</sub>H<sub>11</sub>ON<sub>2</sub>Br** 2) 2-Brom-4-Amido-1-Benzoylamidobenzol. Sm. 205° (B. 10, 1709). — IV, 594.
- 3) 4-Bromphenyläther d. α-Amido-α-Phenylimido-α-Oxymethan (4-Bromdiphenylisoharnstoff). Sm. 142° (B. 28, 983). — \*II, 373.
- 4) 3-Brom-s-Diphenylharnstoff. Sm. 235—236° (G. 29 [2] 140). — \*II, 187.
- 5) 4-Brom-s-Diphenylharnstoff. Sm. 245° (B. 21, 2568; 25, 1090; 30, 1405). — II, 379; \*II, 186.
- 6) α-Phenyl-β-[3-Brom-2-Oxybenzyliden]hydrazin. Sm. 100° (B. 42, 3701 C. 1909 [2] 1645).
- 7) α-Phenyl-β-[4-Brom-2-Oxybenzyliden]hydrazin. Sm. 145° (B. 42, 3699 C. 1909 [2] 1644).
- 8) α-Phenyl-β-[5-Brom-2-Oxybenzyliden]hydrazin. Sm. 145—146° (151°) (A. 312, 323 Anm.; B. 37, 3934 C. 1904 [2] 1596). — \*III, 50.
- 9) α-Phenyl-β-[3-Brom-4-Oxybenzyliden]hydrazin. Sm. 105° (A. 321, 21 C. 1902 [1] 927). — \*IV, 493.
- 10) α-[2-Bromphenyl]-β-[2-Oxybenzyliden]hydrazin. Sm. 111—112° (A. 365, 328 C. 1909 [1] 1867).
- 11) α-[4-Bromphenyl]-β-[2-Oxybenzyliden]hydrazin. Sm. 175,5° (A. 324, 315 C. 1902 [2] 1505). — \*IV, 491.
- 12) s-Benzoyl-4-Bromphenylhydrazin. Sm. 156° u. Zers. (Am. 21, 38; G. 39 [1] 562 C. 1909 [2] 594; G. 39 [2] 323 C. 1909 [2] 1802). — \*IV, 427.
- 13) 5-Brom-6-Oxy-3-Methylazobenzol. Sm. 123° (Soc. 79, 164). — \*IV, 1041.
- 14) 2'-Brom-6-Oxy-3-Methylazobenzol. Sm. 116° (Soc. 79, 165). — \*IV, 1040.
- 15) 3'-Brom-6-Oxy-3-Methylazobenzol. Sm. 112° (Soc. 79, 166). — \*IV, 1040.
- 16) 4'-Brom-6-Oxy-3-Methylazobenzol. Sm. 147° (Soc. 79, 166). — \*IV, 1040.
- 17) 2-Brom-4'-Oxy-4-Methylazobenzol + ½H<sub>2</sub>O. Sm. 104° (B. 31, 1782). — IV, 1413.
- 18) Phenylhydrazid d. 3-Brombenzol-1-Carbonsäure. Sm. 152° (B. 34, 185). — \*IV, 427.
- 19) Phenylhydrazid d. 4-Brombenzol-1-Carbonsäure. Sm. 198—200° (B. 41, 4132 C. 1909 [1] 168).
- C<sub>13</sub>H<sub>11</sub>ON<sub>2</sub>J** 1) Phenylhydrazid d. 2-Jodbenzol-1-Carbonsäure. Sm. 203° u. Zers. (B. 26, 1745). — IV, 668.
- C<sub>13</sub>H<sub>11</sub>ON<sub>2</sub>S** 1) 5-Methylamido-2-Keto-3-[2-Naphtyl]-2,3-Dihydro-1,3,4-Thio-diazol. Sm. 153° (B. 32, 1087). — \*IV, 615.
- 2) Äthyläther d. 5-Merkapto-1-Phenyl-2,4,6-Benzoxtriazol. Sm. 108 bis 109° (Am. 34, 203 C. 1905 [2] 1500).
- C<sub>13</sub>H<sub>11</sub>OCl<sub>2</sub>J** 1) 2',5'-Dichlor-4-Methyldiphenyljodoniumhydroxyd. Salze, siehe (J. pr. [2] 71, 548 C. 1905 [2] 316).
- C<sub>13</sub>H<sub>11</sub>OCl<sub>2</sub>P** 1) Dichlorid d. 4-Benzylphenylphosphinsäure. Sd. 261°<sub>20</sub> (A. 315, 44). — \*IV, 1183.
- C<sub>13</sub>H<sub>11</sub>OBrS** 1) 3-Brom-5-Benzoyl-2-Äthylthiophen. Fl. (B. 26, 2462). — III, 767.
- 2) 4-Brom-3-Benzoyl-2,5-Dimethylthiophen. Sm. 85° (B. 28, 1809). — III, 768.
- 3) isom. Brom-β-Benzoyl-β-Dimethylthiophen. Sm. 78° (B. 28, 1806).
- C<sub>13</sub>H<sub>11</sub>OBr<sub>2</sub>J** 1) 2',5'-Dibrom-4-Methyldiphenyljodoniumhydroxyd. Salze, siehe (J. pr. [2] 71, 559 C. 1905 [2] 318).
- C<sub>13</sub>H<sub>11</sub>O<sub>2</sub>NJ<sub>2</sub>** 1) 5-Nitro-2-Methyldiphenyljodoniumjodid. Zers. bei 131°. + J<sub>3</sub> (B. 41, 2081 C. 1908 [2] 301).
- C<sub>13</sub>H<sub>11</sub>O<sub>2</sub>NS** 1) Benzyläther d. 4-Nitro-1-Merkaptobenzol. Sm. 123° (B. 41, 2267 C. 1908 [2] 691).
- 2) 2'-Nitro-2-Methyldiphenylsulfid. Sm. 86—87° (B. 39, 3598 C. 1907 [1] 30).
- 3) N-Methyl-Diphenylaminsulfon. Sm. 222° (A. 230, 92). — II, 808.
- 4) 5-Amidodiphenylsulfid-2-Carbonsäure. Sm. 200—201° (B. 42, 3066 C. 1909 [2] 1458).
- 5) 2'-Amidodiphenylsulfid-2-Carbonsäure. Sm. 156—157,5° (B. 42, 3062 C. 1909 [2] 1458).

- $C_{13}H_{11}O_2NS$  6) 3'-Amidodiphenylsulfid-2-Carbonsäure. Sm. 159—160° (B. 42, 3065 C. 1909 [2] 1458).
- 7) 4'-Amidodiphenylsulfid-2-Carbonsäure. Sm. 193° (B. 42, 3054 C. 1909 [2] 1457).
- 8) Acetat d. 2[oder 3]-[ $\alpha$ -Oximidobenzyl]thiophen.  $\alpha$ -Derivat, Sm. 80 bis 84;  $\beta$ -Derivat, Sm. 88—89° (B. 24, 60). — III, 767.
- $C_{13}H_{11}O_2NS_2$  1) 2-Thiocarbonyl-4-Keto-3-Allyl-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 179° (M. 24, 508 C. 1903 [2] 836).
- $C_{15}H_{11}O_2N_2Cl$  1) 5'-Chlor-2'-Nitro-4-Methyldiphenylamin. Sm. 124° (126°) (B. 11, 1157; 34, 1102). — II, 486.
- 2) 2-Chlorphenyl-2-Nitrobenzylamin. Sm. 67°. HCl (J. pr. [2] 52, 374). — \*II, 290.
- 3) 3-Chlorphenyl-2-Nitrobenzylamin. Sm. 59° (J. pr. [2] 52, 377). — \*II, 291.
- 4) 4-Chlorphenyl-2-Nitrobenzylamin. Sm. 85°. HCl,  $H_2SO_4$  (J. pr. [2] 48, 542; [2] 52, 380). — II, 517; \*II, 290.
- 5) Phenyl-2-Chlor-4-Nitrobenzylamin. Sm. 73° (B. 25, 87). — II, 517.
- 6) Phenyl-5-Chlor-2,4-Dioxybenzylidenhydrazin. Sm. 185—193° u. Zers. (A. 357, 340 C. 1908 [1] 355).
- $C_{13}H_{11}O_2N_2Cl_3$  1) Methyldimidobenzol + 2,4,6-Trichlor-1-Nitrobenzol. Sm. 78° (C. 1906 [2] 32).
- $C_{13}H_{11}O_2N_2Br$  1) 4-Bromphenyl-2-Nitrobenzylamin. Sm. 82—83° (84—85°) (J. pr. [2] 47, 348; [2] 48, 549). — II, 517.
- 2) 4'-Brom-4,6-Dioxy-2-Methylazobenzol. Sm. 212—213° (Soc. 93, 1020 C. 1908 [2] 410).
- $C_{13}H_{11}O_2N_2P$  1) Benzoylamid d. Phosphorsäurephenylimid. Sm. 226° (Soc. 95, 1152 C. 1909 [2] 815).
- $C_{13}H_{11}O_2N_3S$  1) 3-Nitro-s-Diphenylthioharnstoff. Sm. 155° (145°) (B. 7, 1235; 14, 2365; 16, 2331; 17, 3045; B. 36, 197 C. 1903 [1] 450; J. pr. [2] 67, 480 C. 1903 [1] 1407). — II, 396.
- 2) 2,5-Anhydrid d. 5-Diazo-2-Phenylsulfonamido-1-Methylbenzol. Zers. bei 163° (Soc. 87, 926 C. 1905 [2] 320).
- 3) Phenylsulfon-o-Benzylendiazoimid (3-Phenylsulfon-3,4-Dihydro-1,2,3-Benztriazin). Zers. bei 130° (Soc. 89, 1162 C. 1906 [2] 1056).
- 4) Phenylsulfon-m-Benzylendiazoimid (Soc. 89, 1163 C. 1906 [2] 1056).
- 5) 4-Diazophenylamid d. 1-Methylbenzol-4-Sulfonsäure (Soc. 87, 1303 C. 1905 [2] 1334).
- $C_{13}H_{11}O_2N_4Br$  1) Methyl-4'-Brom-3-Nitrodiazoamidobenzol. Sm. 160,5—161° (Soc. 55, 425). — IV, 1565.
- 2) Methyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 144° (Soc. 55, 425). — IV, 1565.
- 3) isom. Methyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 125—127,5° (Soc. 55, 425; 57, 786). — IV, 1565.
- 4) Methyl-4'-Brom-4-Nitrodiazoamidobenzol. Sm. 163—164° u. Zers. (Soc. 55, 419). — IV, 1566.
- 5) Methyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 151—151,5° (Soc. 55, 418). — IV, 1566.
- 6) isom. Methyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 150,5—151,5° (Soc. 55, 419). — IV, 1566.
- $C_{13}H_{11}O_2ClS$  1) Phenyl- $\alpha$ -Chlorbenzylsulfon (J. pr. [2] 40, 516). — II, 1052.
- $C_{13}H_{11}O_3NS$  1) 3-Nitro-5-Benzoyl-2-Äthylthiophen. Sm. 117° (B. 26, 2464). — \*III, 767.
- 2) 3-Methyl- $\beta$ -Naphthindol-1-[oder 2]-Sulfonsäure. Na (B. 39, 3142 C. 1906 [2] 1268).
- 3) Amid d. Diphenylsulfon-2-Carbonsäure. Sm. 171—171,5° (175 bis 175,5°) (Am. 33, 411 C. 1905 [1] 1395).
- 4) Amid d. Diphenylsulfon-4-Carbonsäure. Sm. 242—243° (248,3 bis 248,5°) (Am. 20, 308; 25, 105; Am. 33, 428 C. 1905 [1] 1396). — \*II, 807, 901.
- 5) Benzoylamid d. Benzolsulfonsäure. Sm. 147° (146°).  $NH_4$ , Na, Pb, Ag (J. 1856, 503; B. 11, 754; 34, 3160; A. 108, 216; 214, 211; Am. 8, 238; B. 37, 693 C. 1904 [1] 1074). — II, 1174.
- 6) Phenylformylamid d. Benzolsulfonsäure. Sm. 148—149° (Am. 19, 135, 759). — \*II, 223.



- $C_{13}H_{11}O_3NS_2$  1) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Äthyltetrahydrothiazol. Sm. 154° (*M.* 25, 177 *C.* 1904 [1] 895).
- $C_{13}H_{11}O_3N_2P$  1) Lakton d. s-Benzoylphenylhydrazidophosphorsäure. Sm. 161° (*B.* 27, 2123). — IV, 668.
- $C_{13}H_{11}O_3N_3S$  1) s-3-Nitrophenyl-4-Oxyphenylthioharnstoff. Sm. 152° (*B.* 16, 2335). — II, 720.
- 2) 4-Methylbenzolsulfonat d. 2-Oxydiazobenzolimid. Sm. 100—101° (*Soc.* 91, 1354 *C.* 1907 [2] 1247).
- $C_{13}H_{11}O_3N_4Br$  1) 2-[4-Bromphenyl]-1,2,3,4-Tetrazin-6-Dimethylmalonsäure. Sm. 154°.  $2 + C_6H_6$  (*Soc.* 83, 1255 *C.* 1903 [2] 1422).
- $C_{13}H_{11}O_3Cl_2P$  1) Di[4-Chlorphenylester] d. Methylphosphinsäure. *Sd.* 245°<sub>20</sub> (*B.* 31, 1053). — \*II, 370.
- $C_{13}H_{11}O_3BrS$  1)  $\gamma$ -Brom- $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -Ketopropan. Sm. 130—132° (*J. pr.* [2] 55, 404). — \*II, 528.
- $C_{13}H_{11}O_3JS$  1) 2-Jodphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 73° (*A.* 332, 64 *C.* 1904 [2] 41).
- $C_{13}H_{11}O_4NS$  1) 5-Nitro-2-Methyldiphenylsulfon. Sm. 158° (159°) (*Am.* 24, 475; *B.* 38, 736 *C.* 1905 [1] 876). — \*II, 482.
- 2) 3'-Nitro-4-Methyldiphenylsulfon. Sm. 93° (*A.* 278, 259). — II, 824.
- 3) 4-Nitrophenylbenzylsulfon. Sm. 169° (*B.* 41, 2270 *C.* 1908 [2] 692).
- 4) 1-Benzoylamidobenzol-4-Sulfonsäure. *Na* (*B.* 39, 1565 *C.* 1906 [2] 36).
- 5) 1-Benzoylamidobenzol- $\beta$ -Sulfonsäure.  $K + 1\frac{1}{2}H_2O$ ,  $Ca$ ,  $Ba + 4H_2O$ ,  $Pb + 4H_2O$ ,  $Cu + 6H_2O$ ,  $Ag$  (*Z.* 1868, 266). — II, 1193.
- 6) 4-Benzylidenamido-1-Oxybenzol-2-Sulfonsäure.  $K$ ,  $K_2 + H_2O$  (*B.* 42, 2107 *C.* 1909 [2] 348).
- 7) 2-Oxy-1-Phenylimidomethylbenzol-5-Sulfonsäure +  $H_2O$ .  $NaH$ ,  $Ba + 4H_2O$ ,  $Ag + 3H_2O$  (*M.* 18, 126). — \*III, 52.
- 8) 2-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 214—215° (*B.* 38, 1683 *C.* 1905 [1] 1540; *B.* 40, 1615 *C.* 1907 [1] 1629; *B.* 40, 2630 *C.* 1907 [2] 330; *A.* 367, 104 *C.* 1909 [2] 698).
- 9) 4-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 212° (*B.* 40, 1615 *C.* 1907 [1] 1629).
- 10) 2-Amidodiphenylsulfon-4-Carbonsäure. Sm. 270—275° (*B.* 34, 1156).
- 11) Phenylester d. Phenylsulfonamidoameisensäure. Sm. 123° (*B.* 37, 694 *C.* 1904 [1] 1074).
- 12) 1-Amid d. Benzol-1-Carbonsäureamid-2-Sulfonsäureäthylester. Sm. 95° (*Am.* 30, 300 *C.* 1903 [2] 1122).
- 13) 2-Amid d. Benzol-1-Carbonsäure-2-Sulfonsäure-1-Phenylester. Sm. 131—132° (*Am.* 18, 799; *Am.* 30, 295 *C.* 1903 [2] 1121). — \*II, 799.
- 14) Amid d. 4-Benzoxylbenzol-1-Sulfonsäure. Sm. 234—236° (*R.* 16, 423). — \*II, 718.
- 15) 1-Phenylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure.  $Fl.$   $NH_4 + H_2O$ ,  $K$ ,  $Ba + 5H_2O$ ,  $Cd$ , Anilinsalz (*Am.* 20, 272). — \*II, 802.
- 16) 2-Phenylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 173° (156°).  $Ba$ , Anilinsalz (*Am.* 17, 321, 346). — \*II, 800.
- 17) 4-Phenylamid d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 252 bis 253° u. Zers.  $K + 2H_2O$ ,  $Ba + 5H_2O$  (*Am.* 18, 161). — \*II, 804.
- $C_{13}H_{11}O_4N_3S_2$  1) 3-Nitro-1-[4-Methylphenylthiosulfon]diazobenzol. Zers. bei 92 bis 93° (*J. pr.* [2] 62, 415). — \*IV, 1106.
- 2) 4-Nitro-1-[4-Methylphenylthiosulfon]diazobenzol. Sm. 116° u. Zers. (*J. pr.* [2] 62, 413). — \*IV, 1107.
- $C_{13}H_{11}O_4N_5S$  1)  $\alpha$ -[2,4-Dinitrophenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 186° (*G.* 24 [1] 562; *J. pr.* [2] 76, 381 *C.* 1908 [1] 125). — IV, 679.
- $C_{13}H_{11}O_4ClS_3$  1) 1-Chlor-7-Sulfo-2-Naphtylester d. Oxydithioameisenäthyläthersäure.  $K + H_2O$  (*C.* 1895 [2] 121). — \*II, 534.
- $C_{13}H_{11}O_4BrS$  1)  $\beta$ -Brom-2-Oxydiphenylmethan- $\beta$ -Sulfonsäure.  $K$  (*Soc.* 49, 409). — II, 896.
- 2)  $\beta$ -Brom-4-Oxydiphenylmethansulfonsäure.  $K$  (*Soc.* 41, 35). — II, 898.

- C<sub>13</sub>H<sub>11</sub>O<sub>5</sub>NS**
- 1) 3-Phenylsulfonamido-2-Oxybenzol-1-Carbonsäure. Sm. 194° (*J. pr.* [2] 61, 540). — \*II, 898.
  - 2) Diphenylamin - 2 - Carbonsäure - 3 - Sulfonsäure. Na, Ba (D.R.P. 146102 C. 1903 [2] 1152).
  - 3) Diphenylamin-2-Carbonsäure-4-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
  - 4) Diphenylamin-2-Carbonsäure-5-Sulfonsäure. Ba + 5H<sub>2</sub>O, Anilinsalz (*B.* 24, 3805). — II, 1306.
  - 5) Diphenylamin-2-Carbonsäure-4'-Sulfonsäure. K (D.R.P. 173523 C. 1906 [2] 932).
  - 6) 2-Benzoylamido-1-Oxybenzol-4-Sulfonsäure. Na + 4½H<sub>2</sub>O, Ca + 4½H<sub>2</sub>O, Sr + 4½H<sub>2</sub>O, Ba (*A.* 205, 56). — II, 1193.
  - 7) 4-Benzoylamido-1-Oxybenzol-2-Sulfonsäure (*A.* 205, 62). — II, 1193.
  - 8) Phenylester d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 59 bis 60° (*B.* 35, 1443 C. 1902 [1] 1201).
  - 9) Phenylester d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure. Sm. 64° (*Soc.* 85, 1432 C. 1904 [2] 1740).
  - 10) 2-Nitrophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 81,5° (*B.* 34, 241).
  - 11) 4-Nitrophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 97 bis 97,5° (98°) (*B.* 34, 240, 2996).
- C<sub>13</sub>H<sub>11</sub>O<sub>5</sub>N<sub>3</sub>S**
- 1) 4-Amidophenyl - 4' - Nitrobenzylidenamin - 2' - Sulfonsäure. Na (D.R.P. 135335 C. 1902 [2] 1167).
  - 2) α-[3-Nitrophenyl]-β-Benzylidenhydrazin-β<sup>2</sup>-Sulfonsäure (*Bl.* [3] 21, 595). — \*IV, 488.
  - 3) 4'-Amidoazobenzol-3-Carbonsäure-2'-Sulfonsäure (*C.* 1899 [1] 1078).
  - 4) p-Amidoazobenzol-3'-Carbonsäure-p-Sulfonsäure (*B.* 31, 2205). — IV, 1461.
  - 5) 4-Oxy-3-Oximidomethylazobenzol-4'-Sulfonsäure. Na (*A.* 251, 177). — IV, 1476.
  - 6) Amid d. 4-Oxyazobenzol-3-Carbonsäure-4'-Sulfonsäure. Na + 3H<sub>2</sub>O (*A.* 251, 187). — IV, 1470.
- C<sub>13</sub>H<sub>11</sub>O<sub>6</sub>N<sub>3</sub>S<sub>2</sub>**
- 1) Amid d. 2-Phenylbenzisoxazol-p-Disulfonsäure. Sm. 187—188° (*M.* 15, 651).
- C<sub>13</sub>H<sub>11</sub>O<sub>5</sub>N<sub>4</sub>Br**
- 1) p-Brom-5-Nitro-3-Diacetylamido-4-Keto-2-Methyl-3,4-Dihydro-1,3-Benzodiazin. Sm. 110° (corr.) (*C.* 1906 [2] 688).
- C<sub>13</sub>H<sub>11</sub>O<sub>5</sub>N<sub>5</sub>S**
- 1) α-Phenylhydrazon-α-[4-Sulfophenyl]azo-α-Nitromethan. K (*C.* 1903 [2] 427).
- C<sub>13</sub>H<sub>11</sub>O<sub>6</sub>NCl<sub>2</sub>**
- 1) Acetylderivat d. 1-[αβ-Dichlor-β-Nitroäthyl]benzol-2-Ketocarbon-säuremethylester. Sm. 130—131° (*A.* 268, 281; 295, 5). — II, 1660; \*II, 968.
- C<sub>13</sub>H<sub>11</sub>O<sub>6</sub>NS**
- 1) p-Nitro-2-Oxydiphenylmethan-p-Sulfonsäure. K (*Soc.* 49, 408). — II, 896.
  - 2) p-Nitro-4-Oxydiphenylmethansulfonsäure. K (*Soc.* 41, 35). — II, 898.
  - 3) 2'-Nitro-2-Methyldiphenyläther - p - Sulfonsäure. Fl. Ba, Sr + 2H<sub>2</sub>O, Pb (*C.* 1902 [1] 36).
  - 4) 4'-Nitro-2-Methyldiphenyläther-p-Sulfonsäure. Sm. 115°. Na, K, Ba, Cu + 5H<sub>2</sub>O (*C.* 1903 [1] 509).
  - 5) 2'-Nitro-3-Methyldiphenyläther-p-Sulfonsäure. Ba + 2H<sub>2</sub>O (*C.* 1902 [1] 36).
  - 6) 4'-Nitro-3-Methyldiphenyläther-p-Sulfonsäure. Sm. 135°. Ba, Cu + 4H<sub>2</sub>O (*Am.* 28, 487 C. 1903 [1] 327).
  - 7) 2'-Nitro-4-Methyldiphenyläther-p-Sulfonsäure. Ba + 5H<sub>2</sub>O (*C.* 1902 [1] 36).
  - 8) 4'-Nitro-4-Methyldiphenyläther-p-Sulfonsäure. Sm. 102°. Na + 3½H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (*C.* 1903 [1] 634).
- C<sub>13</sub>H<sub>11</sub>O<sub>6</sub>N<sub>2</sub>P**
- 1) p-Nitrophenyl-p-Nitro-4-Methylphenylphosphinsäure. Sm. 205°. Ag (*A.* 315, 60). — \*IV, 1180.
- C<sub>13</sub>H<sub>11</sub>O<sub>6</sub>N<sub>3</sub>S**
- 1) 2,4-Dinitrophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 219° (*B.* 34, 3000).
  - 2) 4,6-Dinitro-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 167 bis 168°. Ba (*Bl.* [3] 13, 634). — \*II, 257.

- $C_{13}H_{11}O_6N_3S$  3) 2,6-Dinitro-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 178° (B. 16, 596; Bl. [3] 15, 1035). — II, 504; \*II, 282.
- $C_{13}H_{11}O_7NS_2$  1) 5-Nitro-2-Methyldiphenylsulfon-2-Sulfonsäure. Ba + 6H<sub>2</sub>O (Am. 24, 478). — \*II, 482.
- $C_{13}H_{11}O_7N_3S$  1) Alloxanchinolindisulfat (A. 248, 150). — IV, 250.  
2) Phenyl-2,4-Dinitrobenzylamin-4'-Sulfonsäure (B. 35, 1266 C. 1902 [1] 1102; M. 23, 549 C. 1902 [2] 742).  
3) 2',4'-Dinitro-2-Methyldiphenylamin-5-Sulfonsäure. Na (B. 36, 34 C. 1903 [1] 521).  
4) 2',4'-Dinitro-4-Methyldiphenylamin-3-Sulfonsäure. Na (B. 36, 34 C. 1903 [1] 521).  
5) 2,6-Dinitro-4-Oxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 157—158° (B. 40, 2851 C. 1907 [2] 454).
- $C_{13}H_{11}O_7N_3S_2$  1) 3-Amido-7-Oxy-2-Methyl-5,10-Naphtdiazin-6,8-Disulfonsäure (D.R.P. 210702 C. 1909 [2] 244).
- $C_{13}H_{11}O_8NS_2$  1) 2-Nitro-1-[4-Methylphenyl]sulfonylbenzol-4-Sulfonsäure. Na (D.R.P. 195226 C. 1908 [1] 1224).
- $C_{13}H_{11}O_8N_2Cl_3$  1) Diäthylester d. Trichlordinitrophenylmalonsäure. Sm. 82° (Am. 31, 331 C. 1904 [1] 1409).
- $C_{13}H_{11}O_{10}N_3Cl_2$  1) Diäthylester d.  $\alpha$ -Nitro-3,5-Dichlor-2,6-Dinitrophenylmethan- $\alpha$ -Dicarbonsäure. Sm. 87—89° (94—95°) (Am. 18, 677). — \*II, 1066.
- $C_{13}H_{11}O_{12}N_4Br$  1) Diäthylester d. 3-Brom-2,4,6-Trinitrophenylnitromethandicarbonsäure (Am. 14, 336). — II, 1841.
- $C_{13}H_{11}NClIJ$  1) Phenyl- $\alpha$ -Chlor- $\alpha$ -Jodbenzylamin (Benzophenylamidchlorjodid). Sm. 106° u. Zers. (Soc. 85, 1695 C. 1905 [1] 442).
- $C_{13}H_{11}N_2ClS$  1) s-2-Chlordiphenylthioharnstoff. Sm. 163° (165°) (B. 32, 1089; B. 36, 196 C. 1903 [1] 450).  
2) s-3-Chlordiphenylthioharnstoff. Sm. 120° (B. 36, 196 C. 1903 [1] 450).  
3) s-4-Chlordiphenylthioharnstoff. Sm. 152° (B. 36, 197 C. 1903 [1] 450).
- $C_{13}H_{11}N_2BrS$  1) s-2-Bromdiphenylthioharnstoff. Sm. 161° (144°) (B. 36, 196 C. 1903 [1] 450).  
2) s-3-Bromdiphenylthioharnstoff. Sm. oberhalb 120° (B. 36, 196 C. 1903 [1] 450).  
3) s-4-Bromdiphenylthioharnstoff. Sm. 158° (B. 13, 231). — II, 396.
- $C_{13}H_{11}N_3Cl_2S$  1)  $\alpha$ -Amido- $\alpha\beta$ -Di[4-Chlorphenyl]thioharnstoff. Sm. 142° (B. 32, 1084). — \*IV, 442.  
2)  $\alpha$ -[3-Chlorphenyl]amido- $\beta$ -[3-Chlorphenyl]thioharnstoff. Sm. 142° (B. 32, 1085). — \*IV, 442.  
3)  $\alpha$ -[4-Chlorphenyl]amido- $\beta$ -[4-Chlorphenyl]thioharnstoff. Sm. 160° (B. 32, 1084). — \*IV, 442.
- $C_{13}H_{11}ClBrJ$  1) 3'-Brom-2-Methyldiphenyljodoniumchlorid. Sm. 170°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (J. pr. [2] 69, 330 C. 1904 [2] 36).  
2) 3'-Brom-4-Methyldiphenyljodoniumchlorid. Sm. 174,5°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (J. pr. [2] 69, 329 C. 1904 [2] 36).
- $C_{13}H_{12}ONCl$  1)  $\alpha$ -Oxy- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. oberhalb 100° (B. 34, 830). — \*III, 21.  
2) 3-Chlor-4-Benzylamido-1-Oxybenzol. Fl. HCl (D.R.P. 213592 C. 1909 [2] 1097).  
3) 2-Chlorphenyl-2-Oxybenzylamin. Sm. 118° (Ar. 240, 689 C. 1903 [1] 395).  
4) 4-Chlorphenyl-2-Oxybenzylamin. Sm. 121° (Ar. 240, 684 C. 1903 [1] 395).  
5) Benzyläther d. 4-Chlor-2-Amido-1-Oxybenzol. HCl (D.R.P. 142899 C. 1903 [2] 83).  
6) 2-Amidophenyläther d. 2-Chlor-1-Oxymethylbenzol. HCl (D.R.P. 142061 C. 1903 [2] 83).  
7) 2-Amidophenyläther d. 4-Chlor-1-Oxymethylbenzol. HCl (D.R.P. 142061 C. 1903 [2] 83).  
8) Äthyläther d.  $\alpha$ -Chlorimido- $\alpha$ -Oxy- $\alpha$ -[2-Naphtyl]methan. Sm. 68° (72°) (C. 1900 [1] 462; Am. 29, 317 C. 1903 [1] 1167; Am. 40, 39 C. 1908 [2] 788). — \*II, 866.



- $C_{13}H_{12}ONCl$  9) Äthyläther d. isom.  $\alpha$ -Chlorimido- $\alpha$ -Oxy-2-Naphtylmethan (*Am.* 40, 39 *C.* 1908 [2] 788).
- 10) Chlorbenzoylmethylat d. Pyridin +  $H_2O$ . Sm. 196—198° u. Zers. +  $HgCl_2$ , 2 +  $PtCl_3$ , +  $AuCl_3$  (*C.* 1900 [2] 581). — \*IV, 92.
- $C_{18}H_{12}ONCl_3$  1) 4-Methyl-2-[ $\gamma\gamma\gamma$ -Trichlor- $\beta$ -Oxypropyl]chinolin. Sm. 126° (*B.* 37, 1330 *C.* 1904 [1] 1360).
- $C_{13}H_{12}ONBr$  1) Phenyl-5-Brom-2-Oxybenzylamin. Sm. 114—115° (*A.* 302, 144). — \*II, 428.
- 2) 4-Bromphenyl-2-Oxybenzylamin. Sm. 126° (*Ar.* 240, 685 *C.* 1903 [1] 395).
- 3) Benzyläther d. 4-Brom-2-Amido-1-Oxybenzol. HCl (*D.R.P.* 142899 *C.* 1903 [2] 83).
- 4) Äthyläther d.  $\alpha$ -Bromimido- $\alpha$ -Oxy- $\alpha$ -[2-Naphtyl]methan. Sm. 77° (*C.* 1900 [1] 462; *Am.* 29, 318 *C.* 1903 [1] 1167). — \*II, 866.
- 5) 9-Brom-10-Keto-8-Methyl-3,4-Dihydrojulol ( $\beta_1$ -Brom- $\alpha_1$ -Keto- $\gamma_1$ -Methyljulolin). Sm. 178,5° (*B.* 24, 850). — IV, 193.
- 6) Brombenzoylmethylat d. Pyridin (Pyridinphenacylbromid). Sm. 198° wasserfrei (*B.* 20, 3344; *C.* 1900 [2] 581). — IV, 112; \*IV, 92.
- 7)  $\beta$ -Bromäthylamid d. Naphtalin-1-Carbonsäure. Sm. 97° (*B.* 33, 2638). — \*II, 864.
- 8)  $\beta$ -Bromäthylamid d. Naphtalin-2-Carbonsäure. Sm. 152° (*B.* 33, 2637). — \*II, 866.
- 9) 1-Naphtylamid d.  $\alpha$ -Brompropionsäure. Sm. 158° (*B.* 25, 2922). — II, 607.
- 10) 2-Naphtylamid d.  $\alpha$ -Brompropionsäure. Sm. 174° (*B.* 25, 2922). — II, 616.
- $C_{13}H_{12}ONP$  1) Benzyläther d. Phosphazobenzol +  $2H_2O$ . Sm. 105° (*B.* 27, 496). — II, 1051.
- $C_{13}H_{12}ON_2Br_2$  1)  $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm. 163—164° (*A.* 360, 5 *C.* 1908 [1] 2031).
- $C_{13}H_{12}ON_2Br_4$  1) Harminetetrabromid (*B.* 22, 638). — III, 886.
- $C_{13}H_{12}ON_2S$  1)  $\alpha$ -Oxy- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 111° (*J. pr.* [2] 56, 89). — \*II, 245.
- 2) 2-Oxy-s-Diphenylthioharnstoff. Sm. 146° (*B.* 16, 1829). — II, 711.
- 3) 3-Oxy-s-Diphenylthioharnstoff (s-Phenyl-3-Oxyphenylthioharnstoff). Sm. 155—156° (*B.* 32, 2116). — \*II, 396.
- 4) 4-Oxy-s-Diphenylthioharnstoff. Sm. 162° (*B.* 16, 376). — II, 720.
- 5) s-Acetyl-1-Naphtylthioharnstoff. Sm. 146° (*B.* 33, 3031, 3034). — \*II, 335.
- 6) s-Acetyl-2-Naphtylthioharnstoff. Sm. 145° (*B.* 33, 3032, 3034). — \*II, 335.
- 7) s-Acetyl-1-Naphtylisothioharnstoff. Sm. 198° (*Bl.* 28, 103; 33, 3031, 3034). — II, 610; \*II, 335.
- 8) s-Acetyl-2-Naphtylisothioharnstoff. Sm. 158° (*B.* 33, 3032, 3034). — \*II, 338.
- 9) Thionyl- $\alpha$ -Phenyl- $\alpha$ -Benzylhydrazin. Sm. 65° (*A.* 270, 122). — IV, 812.
- $C_{13}H_{12}ON_3Br$  1) 2-Brom-1-[4-Methylphenyl]hydroxylamidodiazobenzol. Sm. 92° u. Zers. (*Soc.* 95, 775 *C.* 1909 [2] 19).
- 2) 3-Brom-1-[4-Methylphenyl]hydroxylamidodiazobenzol. Sm. 173° u. Zers. (*Soc.* 95, 776 *C.* 1909 [2] 19).
- 3) 4-Brom-1-[4-Methylphenyl]hydroxylamidodiazobenzol. Sm. 162° u. Zers. (*Soc.* 95, 776 *C.* 1909 [2] 19).
- 4) 4-Bromphenylazomethylanilidoxyd. Sm. 77—78° (*B.* 32, 3559). — \*IV, 1142.
- $C_{13}H_{12}ON_4Br_2$  1)  $\beta$ -Dibrom-6-Phenylureido-2,4-Dimethyl-1,3-Diazin. Sm. 238° (*J. pr.* [2] 31, 374). — IV, 1128.
- $C_{13}H_{12}ON_4S_2$  1) Thionylpseudodiphenylthiocarbizin. Sm. 162° (*B.* 26, 2495). — IV, 685.
- $C_{13}H_{12}OClBr$  1) Propyläther d. 1-Chlor-6-Brom-2-Oxynaphtalin. Sm. 60,5° (*Soc.* 77, 41). — \*II, 523.
- $C_{13}H_{12}OBrJ$  1) 3'-Brom-2-Methyldiphenyljodoniumhydroxyd. Salze, siehe (*J. pr.* [2] 69, 330 *C.* 1904 [2] 36).

- C<sub>13</sub>H<sub>12</sub>OBrJ** 2) 3'-Brom-4-Methyldiphenyljodoniumhydroxyd. Salze, siehe (*J. pr.* [2] 69, 329 *C.* 1904 [2] 36).
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>NCl** 1) 2-Oxy-1-Chloracetylamidomethylnaphtalin. Sm. 132° (*A.* 361, 161 *C.* 1908 [2] 399).  
 2) Aldehyd d. δ-[Acetyl-4-Chlorphenyl]amido-αγ-Butadien-α-Carbonsäure. Sm. 126° (*A.* 333, 322 *C.* 1904 [2] 1149; *A.* 353, 382 *C.* 1907 [2] 411).  
 3) Äthylester d. 8-Chlor-2-Methylechinolin-3-Carbonsäure. Sm. 92°. (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (*J. pr.* [2] 56, 383). — \*IV, 213.  
 4) α-Chloräthylester d. 1-Naphtylamidoameisensäure. Sm. 100—101° (*J. pr.* [2] 44, 18). — II, 608.  
 5) α-Chloräthylester d. 2-Naphtylamidoameisensäure. Sm. 98° (*J. pr.* [2] 44, 18). — II, 617.  
 6) Phenylester d. 1-Chlor-1,1-Dihydropyridin-1-Methylcarbonsäure? (*Bl.* [3] 21, 966).
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>NBr** 1) Monoacetylderivat d. 6-Brom-3-Amido-2-Oxy-1-Methylnaphtalin. Sm. 183° (*B.* 39, 450 *C.* 1906 [1] 849).  
 2) Methyläther d. p-Brom-8-Acetylamido-1-Oxynaphtalin. Sm. 124° (*B.* 39, 3336 *C.* 1906 [2] 1616).  
 3) Methyläther d. 6-Brom-1-Acetylamido-2-Oxynaphtalin. Sm. 252° (*C.* 1897 [1] 239).  
 4) Aldehyd d. 1-[2-Brom-4-Oxybenzyl]hexahydropyridin-1<sup>3</sup>-Carbon-säure. Sm. 188—190° (*A.* 344, 264 *Anm. C.* 1906 [1] 1609).
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Di[4-Chlorphenylhydroxylamido]methan. Sm. 103° (u. 140° u. Zers). (*B.* 33, 951). — \*II, 244.
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Di[4-Bromphenylhydroxylamido]methan. Sm. 95° (*B.* 33, 952). — \*II, 244.
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>S** 1) s-Di[3-Oxyphenyl]thioharnstoff. Sm. 164—165° (*B.* 32, 2116). — \*II, 396.  
 2) s-Di[4-Oxyphenyl]thioharnstoff. Sm. 222° u. Zers. (219—220°) (*B.* 16, 1830; *Soc.* 67, 559). — II, 720.  
 3) Oxalyl-s-Allyl-[4-Methylphenyl]thioharnstoff. Sm. 157° (*J.* 1869, 637). — II, 498.  
 4) α-Phenylsulfonimido-α-Amido-α-Phenylmethan. Sm. 139° (*A.* 108, 215; 184, 348; 214, 218; *B.* 11, 755). — IV, 847.  
 5) Di[4-Amidophenyl]methansulfon. Sm. 217° (*B.* 27, 2806). — IV, 975; \*IV, 648.  
 6) 4-Methyl-1-Phenylsulfondiazobenzol. Zers. bei 90° (*B.* 30, 313). — IV, 1531.  
 7) 2-Naphtylpseudothiohydantoinsäure. Sm. 195—230° (*C.* 1903 [2] 110).  
 8) α-Phenylhydrazon-3-Methylthiénylessigsäure. Sm. 141° (*B.* 20, 1749). — III, 759.  
 9) Methylester d. α-[1-Naphtyl]thioharnstoff-β-Carbonsäure. Sm. 193° (*Soc.* 79, 909).  
 10) Methylester d. α-[2-Naphtyl]thioharnstoff-β-Carbonsäure. Sm. 184° (*Soc.* 79, 909).  
 11) 2-Methylphenylamidoformiat d. syn-2-Oximidomethylthiophen. Sm. 66° (*B.* 25, 2593). — III, 762.  
 12) 1-Naphtylamid d. Carbaminmerkaptocessigsäure. Sm. 165—166° u. Zers. (*A.* 360, 115 *C.* 1908 [1] 2145).  
 13) 2-Naphtylamid d. Carbaminmerkaptocessigsäure. Sm. 185—186° u. Zers. (*A.* 360, 116 *C.* 1908 [1] 2145).  
 14) Benzylidenhydrazid d. Benzolsulfonsäure. Sm. 110° (110—112° u. Zers.) (*B.* 27, 600; *J. pr.* [2] 58, 171). — III, 39; \*III, 30.
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2-Methyl-1-Phenylthiosulfondiazobenzol. Sm. 52°; Zers. bei 55° (*J. pr.* [2] 62, 391). — \*IV, 1112.  
 2) 4-Methyl-1-Phenylthiosulfondiazobenzol. Sm. 80° u. Zers. (*J. pr.* [2] 62, 388). — \*IV, 1112.  
 3) 4-Methylphenylthiosulfondiazobenzol. Zers. 88—89° (*J. pr.* [2] 62, 386). — \*IV, 1103.
- C<sub>13</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) 4'-Chlor-2',6'-Diamidodiphenylamin-2-Carbonsäure. Sm. 245° u. Zers. (*B.* 18, 1455). — II, 1248.

- $C_{13}H_{12}O_3N_3Br$  1)  $\alpha$ -[4-Bromphenyl]- $\alpha$ -[2-Nitrobenzyl]hydrazin. Sm. 123° (corr.). HCl (*M.* 26, 1033 *C.* 1905 [2] 1533).  
 2)  $\alpha$ -[4-Bromphenyl]- $\alpha$ -[4-Nitrobenzyl]hydrazin. Sm. 144° (corr.) (*M.* 26, 1085 *C.* 1905 [2] 1533).
- $C_{13}H_{12}O_2N_4S$  1)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -[4-Nitrophenyl]thioharnstoff. Sm. 198—200° (*B.* 32, 1084). — \*IV, 442.  
 2)  $\beta$ -[2-Nitrophenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 185—186° (*B.* 32, 1085). — \*IV, 442.  
 3)  $\beta$ -[3-Nitrophenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 164° (*B.* 32, 1085). — \*IV, 442.  
 4) isom.  $\beta$ -[3-Nitrophenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 146 bis 147° (*B.* 22, 2815). — IV, 679.  
 5)  $\beta$ -[4-Nitrophenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 220° (*B.* 32, 1084). — \*IV, 442.
- $C_{13}H_{12}O_2N_5Br$  1) 4'-Brom-5-Nitro-2,6-Diamido-3-Methylazobenzol. Sm. 207—208° (*Soc.* 87, 940 *C.* 1905 [2] 467).
- $C_{13}H_{12}O_2ClP$  1) Monochlorid d. 4-Methylphenylphosphinsäuremonophenylester. Sm. 55°; Sd. oberhalb 360° (*A.* 293, 262). — IV, 1668.
- $C_{13}H_{12}O_2Cl_2S$  1)  $\beta\gamma$ -Dichlorpropyl-1-Naphtylsulfon. Fl. (*J. pr.* [2] 55, 205). — \*II, 508.  
 2)  $\beta\gamma$ -Dichlorpropyl-2-Naphtylsulfon. Sm. 104—105° (*J. pr.* [2] 55, 205). — \*II, 528.
- $C_{13}H_{12}O_2Br_2S$  1)  $\beta\gamma$ -Dibrompropyl-1-Naphtylsulfon. Fl. (*J. pr.* [2] 55, 207). — \*II, 508.  
 2)  $\beta\gamma$ -Dibrompropyl-2-Naphtylsulfon. Sm. 85° (*J. pr.* [2] 53, 487; [2] 55, 208). — \*II, 528.
- $C_{13}H_{12}O_3NCl$  1) Pyridinoacetyl-brenzkatechinchlorid. Sm. 265° u. Zers. (*J. r.* 25, 285; D.R.P. 71312). — IV, 112; \*IV, 92.  
 2) Chlorid d.  $\delta$ -[1,2-Phtalyl]amidovaleriansäure. Sm. 78—81° (*B.* 41, 2011 *C.* 1908 [2] 305).
- $C_{13}H_{12}O_3NBr$  1) Äthylester d.  $\beta$ -Brom- $\alpha$ -Cyan- $\beta$ -[4-Methoxyphenyl]akrylsäure. Sm. 185° (*J. pr.* [2] 50, 13). — II, 1637.
- $C_{13}H_{12}O_3NJ$  1) 5-Nitro-2-Methyldiphenyljodoniumhydroxyd. Salze, siehe (*B.* 41, 2080 *C.* 1908 [2] 301).  
 2) 2-Nitro-4-Methyldiphenyljodoniumhydroxyd (*B.* 39, 272 *C.* 1906 [1] 663).  
 3) Acetat d. Verbind.  $C_{11}H_{10}O_2NJ + H_2O$ . Sm. 165—168° (*G.* 31 [2] 263).  
 4) Acetylderivat d. Verbind.  $C_{11}H_{10}O_2NJ$ . Sm. 205—207° (*G.* 32 [1] 452 *C.* 1902 [1] 270).
- $C_{13}H_{12}O_3N_2S$  1)  $\alpha$ -Phenylsulfon- $\beta$ -Phenylharnstoff. Sm. 158,4° (*B.* 37, 695 *C.* 1904 [1] 1074).  
 2) Methyläther d. 2-Oxy-1-Phenylsulfondiazobenzol. Sm. 104° (*B.* 30, 315). — IV, 1544.  
 3) Methyläther d. 4-Oxy-1-Phenylsulfondiazobenzol. Sm. 73—74° (*B.* 30, 314).  
 4) Diacetylderivat d. 2-Phenylimido-4-Ketotetrahydrothiazol. Sm. 161—162° (*Am.* 28, 146 *C.* 1902 [2] 793).  
 5) 1-[4-Amidobenzyliden]amidobenzol-4-Sulfonsäure (D.R.P. 99542 *C.* 1899 [1] 238). — \*III, 22.  
 6)  $\beta$ -Benzyliden- $\alpha$ -Phenylhydrazin- $\alpha^3$ -Sulfonsäure. Na + 2H<sub>2</sub>O (*B.* 21, 3410). — IV, 751.  
 7)  $\beta$ -Benzyliden- $\alpha$ -Phenylhydrazin- $\alpha^4$ -Sulfonsäure. Ca + 4H<sub>2</sub>O (*A.* 239, 218). — IV, 751.  
 8)  $\beta$ -Benzyliden- $\alpha$ -Phenylhydrazin- $\beta^2$ -Sulfonsäure. Na (*A.* 299, 365). — IV, 753.  
 9)  $\beta$ -Benzyliden- $\alpha$ -Phenylhydrazin- $\beta^3$ -Sulfonsäure (*B.* 24, 791). — IV, 754.  
 10) 4-Methylazobenzol-4'-Sulfonsäure. Na (*Soc.* 67, 930). — IV, 1384.  
 11) Amid d. 2-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 167 bis 168° (*J. pr.* [2] 44, 417; *B.* 40, 1618 *C.* 1907 [1] 1630). — II, 1253.  
 12) Phenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 189° (*Am.* 11, 346). — II, 1296.



- $C_{13}H_{12}O_3N_2S_2$  1) Methyläther d. 2-Oxy-1-Phenylthiosulfondiazobenzol. Sm. 73° u. Zers. (*J. pr.* [2] 62, 420). — \*IV, 1121.
- 2) Methyläther d. 4-Oxy-1-Phenylthiosulfondiazobenzol. Sm. 70 bis 71°; Zers. bei 73° (*J. pr.* [2] 62, 418). — \*IV, 1122.
- $C_{18}H_{12}O_3N_4S$  1)  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazonmethan- $\alpha$ -Sulfonsäure (Formazylsulfonsäure). Sm. 192°. K (B. 29, 2166). — IV, 1227.
- $C_{18}H_{12}O_3N_6S$  1) 5-Amido-1-Methyl-1,2,3-Benzotriazol- $\beta$ -Diazobenzolsulfonsäure. Ca (B. 30, 2858). — IV, 1583; \*IV, 1087.
- $C_{13}H_{12}O_4NCl$  1) Pyridinoacetylpyrogallolchlorid. Sm. 180° (*J. r.* 25, 285). — IV, 112.
- $C_{18}H_{12}O_4NBr$  1)  $\alpha$ -Brom- $\delta$ -[1,2-Phtalyl]imidovaleriansäure. Sm. 127—128° (B. 34, 461). — \*II, 1056.
- 2) Methylester d.  $\alpha$ -Brom- $\gamma$ -Phtalylamidobuttersäure. Sm. 76—77° (B. 41, 514 C. 1908 [1] 1163).
- 3) Äthylester d.  $\alpha$ -Brom- $\beta$ -[1,2-Phtalyl]amidopropionsäure. Sm. 48 bis 50° (B. 41, 246 C. 1908 [1] 730).
- $C_{13}H_{12}O_4NBr_3$  1) Äthylester d.  $\beta\gamma\delta$ -Tribrom- $\delta$ -[4-Nitrophenyl]- $\alpha$ -Buten- $\alpha$ -Carbon-säure. Sm. 124° (A. 253, 365). — II, 1431.
- $C_{13}H_{11}O_4NaS$  1) 4-[4-Oxybenzyliden]amidophenylarsinsäure (D. R. P. 193542 C. 1908 [1] 999).
- 2) 4-Benzoylamidophenylarsinsäure (D. R. P. 191548 C. 1908 [1] 780).
- $C_{18}H_{12}O_4N_2S$  1) s-Diphenylharnstoff-4-Sulfonsäure. Zers. bei 270°. Ca +  $3\frac{1}{2}H_2O$ , Ba, Ag (B. 28, 3233). — \*II, 322.
- 2) 2-Oxy-1-Phenylhydrazonmethylbenzol-5-Sulfonsäure. Phenylhydrazinsalz (M. 18, 134). — \*IV, 492.
- 3)  $\beta$ -Benzoyl- $\alpha$ -Phenylhydrazin- $\alpha^4$ -Sulfonsäure (B. 33, 748). — \*IV, 475.
- 4) 4-Oxy-3-Methylazobenzol-4'-Sulfonsäure. Na +  $2H_2O$ , Ba +  $3H_2O$  (B. 17, 365). — IV, 1421.
- 5) 6-Oxy-3-Methylazobenzol-4'-Sulfonsäure. Na, K +  $3H_2O$ , Mg +  $5H_2O$ , Ba (B. 17, 355). — IV, 1421.
- 6) 6-Oxy-3-Methylazobenzol-5-Sulfonsäure. Na (B. 17, 357). — IV, 1421.
- 7) isom. Oxymethylazobenzolsulfonsäure (B. 13, 718). — IV, 1421.
- 8) 3-Keto-4-Methyl-1,2,3,4-Tetrahydro-1,4-Naphtisodiazin-8-Sulfonsäure. Na (D. R. P. 196563 C. 1908 [1] 1590).
- 9) Harmin-N-Sulfonsäure (B. 38, 334 C. 1905 [1] 544).
- 10) Phenylamid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 109° (B. 34, 3000).
- 11) Phenylamid d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure. Sm. 148° (B. 41, 2293 C. 1908 [2] 599).
- 12) Benzylamid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 101° (*Soc.* 87, 160 C. 1905 [1] 1011).
- 13) 2-Methylphenylamid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 164° (*Soc.* 85, 1187 C. 1904 [2] 1115).
- 14) 4-Methylphenylamid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 132° (*Soc.* 85, 1187 C. 1904 [2] 1115).
- 15) 3-Nitrophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 137 bis 138° (*Soc.* 89, 1292 C. 1906 [2] 1120).
- 16) 4-Nitrophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 191° (D. R. P. 157859 C. 1905 [1] 416; *Soc.* 87, 1303 C. 1905 [2] 1334).
- 17) 2-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 92° (*Soc.* 89, 1161 C. 1906 [2] 1056).
- 18) 3-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 123—124° (*Soc.* 89, 1161 C. 1906 [2] 1056).
- 19) 4-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 118° (*Soc.* 89, 1161 C. 1906 [2] 1056).
- 20) Methyl-2-Nitrophenylamid d. Benzolsulfonsäure. Sm. 118 bis 119° (*Soc.* 87, 84 C. 1905 [1] 734; B. 40, 3532 C. 1907 [2] 1614).
- 21) Methyl-3-Nitrophenylamid d. Benzolsulfonsäure. Sm. 83° (*Soc.* 87, 85 C. 1905 [1] 734; B. 40, 3534 C. 1907 [2] 1615).
- 22) Methyl-4-Nitrophenylamid d. Benzolsulfonsäure. Sm. 120° (*Soc.* 87, 84 C. 1905 [1] 734; B. 40, 3535 C. 1907 [2] 1615).

- C<sub>13</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>S** 23) **4-Nitro-2-Methylphenylamid d. Benzolsulfonsäure** (*Soc.* 87, 925 *C.* 1905 [2] 320).  
 24) **5-Nitro-2-Methylphenylamid d. Benzolsulfonsäure**. Sm. 172° (*Soc.* 89, 1294 *C.* 1906 [2] 1121).  
 25) **2-Nitro-4-Methylphenylamid d. Benzolsulfonsäure**. Sm. 99° (89°) (*A.* 221, 18; *B.* 16, 595; *D.R.P.* 164130 *C.* 1905 [2] 1477). — **II**, 504.  
 26) **3-Nitro-4-Methylphenylamid d. Benzolsulfonsäure**. Sm. 160° (*D.R.P.* 135016 *C.* 1902 [2] 1166; *Soc.* 89, 1293 *C.* 1906 [2] 1121).  
 27) **Verbindung** (aus d. Chlor- $\beta$ -Oximidobutylat d. Pyridin). 2 + 3H<sub>2</sub>O. Sm. noch nicht bei 240° (*C.* 1900 [2] 582). — **\*IV**, 92.
- C<sub>13</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>S** 1) **3-Nitrobenzylidenphenylaminbisulfat**. Sm. 177° (*A.* 316, 141). — **\*III**, 21.  
 2) **5-Nitro-2-Phenylamidophenylmethan- $\alpha$ -Sulfonsäure**. Anilinsalz (*D.R.P.* 150366 *C.* 1904 [1] 1308).  
 3) **4'-Nitro-2-Methyldiphenylamin-2'-Sulfonsäure**. Na (*B.* 41, 3749 *C.* 1908 [2] 1862).  
 4) **6-Nitro-3-Methyldiphenylamin-4-Sulfonsäure**. Ba + 2H<sub>2</sub>O (*B.* 26, 580). — **II**, 579.  
 5) **2-Nitro-4-Methyldiphenylamin-4'-Sulfonsäure**. p-Toluidinsalz (*B.* 40, 383 *C.* 1907 [1] 823).  
 6) **4'-Nitro-4-Methyldiphenylamin-2'-Sulfonsäure**. Na (*D.R.P.* 193448 *C.* 1908 [1] 1003; *B.* 41, 3751 *C.* 1908 [2] 1862).  
 7) **2-Nitrobenzylamidobenzol-1-Sulfonsäure** (*C.* 1900 [2] 408, 461). — **\*II**, 324.  
 8) **4-Nitrobenzylamidobenzol-1-Sulfonsäure** (*C.* 1900 [2] 408, 461). — **\*II**, 324.  
 9) **4'-Amidodiphenylamin-2-Carbonsäure-2'-Sulfonsäure**. Sm. 200° u. Zers. (*D.R.P.* 193351 *C.* 1908 [1] 430).  
 10) **3'-Oxy-4-Methyldiphenylnitrosamin- $\beta$ -Sulfonsäure** (*J. pr.* [2] 65, 73 *C.* 1902 [1] 579).  
 11) **2-Amido-6-Acetylamido-1-Oxybenzol-4-Sulfonsäure** (*D.R.P.* 177622 *C.* 1906 [2] 1793).  
 12) **Orcinazobenzol-4-Sulfonsäure**. K + 2H<sub>2</sub>O (*B.* 11, 2196). — **IV**, 1447.  
 13) **4-Nitro-2-Methoxyphenylamid d. Benzolsulfonsäure**. Sm. 181° (*D.R.P.* 157859 *C.* 1905 [1] 416).
- C<sub>13</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>S<sub>2</sub>** 1)  **$\alpha\beta$ -Di[Phenylsulfon]harnstoff**. Sm. 159° (*B.* 37, 695 *C.* 1904 [1] 1074).  
 2) **Amid d. Diphenylketon-3,3' [oder 3,4]-Disulfonsäure**. Sm. 157° (*Soc.* 73, 405). — **\*III**, 152.
- C<sub>13</sub>H<sub>12</sub>O<sub>5</sub>N<sub>4</sub>S** 1) **4,6-Diamidoazobenzol-2-Carbonsäure-4'-Sulfonsäure** (*B.* 15, 2199). — **IV**, 1461.
- C<sub>13</sub>H<sub>12</sub>O<sub>6</sub>N<sub>6</sub>S** 1) **7-Phenylazo-2,6-Diketo-1,3-Dimethylpurin-7'-Sulfonsäure**. Sm. noch nicht bei 265° (*B.* 37, 704 *C.* 1904 [1] 1562).
- C<sub>13</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>S** 1) **4'-Nitro-2-Oxydiphenylaminmethyläther-2'-Sulfonsäure**. K (*B.* 42, 1082 *C.* 1909 [1] 1553).  
 2) **4'-Nitro-4-Oxydiphenylaminmethyläther-2'-Sulfonsäure**. K (*B.* 42, 1081 *C.* 1909 [1] 1553).  
 3) **4'-Amido-4-Oxydiphenylamin-3-Carbonsäure-2'-Sulfonsäure** (*D.R.P.* 122288 *C.* 1901 [2] 250). — **\*IV**, 393.  
 4) **4'-Amido-4-Oxydiphenylamin-3-Carbonsäure-3'-Sulfonsäure** (*C.* 1900 [2] 932).
- C<sub>13</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>S** 1) **Amid d. 2',4'-Dinitro-2-Methyldiphenylamin-5-Sulfonsäure**. Sm. 209° (*B.* 36, 34 *C.* 1903 [1] 521).  
 2) **Amid d. 2,4'-Dinitro-4-Methyldiphenylamin-3-Sulfonsäure**. Sm. 255° (*B.* 36, 34 *C.* 1903 [1] 521).
- C<sub>13</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>S<sub>2</sub>** 1) **4'-Nitro-2'-Thioureido-4-Oxydiphenylamin-3-Sulfonsäure** (*D.R.P.* 139679 *C.* 1903 [1] 748).  
 2) **Diazobenzolphenylhydrazonmethandisulfonsäure**. K<sub>2</sub> (*B.* 29, 2165). — **IV**, 1578.
- C<sub>13</sub>H<sub>12</sub>O<sub>7</sub>NCl** 1) **1-[ $\beta$ -Chlor- $\beta$ -Nitro- $\alpha$ -Acetoxyäthyl]benzol-2-Ketocarbonsäure**. Sm. 179° (*A.* 278, 204; 295, 2, 5). — **II**, 1782; **\*II**, 1042.
- C<sub>13</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) **Diäthylester d. 3,5-Dichlor-2,6-Dinitrophenylmethan- $\alpha$ -Dicarbonsäure**. Sm. 101° (*Am.* 18, 675). — **\*II**, 1066.

- $C_{13}H_{12}O_8N_2Br_2$  1) Diäthylester d.  $\alpha$ ,5-Dibrom-2,4-Dinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 72—73° (*Am.* 18, 140). — \*II, 1066.
- 2) Diäthylester d.  $\beta$ -Dibrom- $\beta$ -Dinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 89° (*Am.* 12, 296). — II, 1841.
- 3) Diäthylester d.  $\beta$ -Dibrom- $\beta$ -Dinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure (aus 3,4,5-Tribrom-1,2-Dinitrobenzol). Sm. 103—104° (*Am.* 30, 74 C. 1903 [2] 355).
- $C_{13}H_{12}O_{10}N_3Br$  1) Diäthylester d.  $\alpha$ -Brom-2,4,6-Trinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 85—86° (*Am.* 18, 138). — \*II, 1066.
- 2) Diäthylester d. 3-Brom-2,4,6-Trinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 104—105°. Na (*Am.* 12, 9). — II, 1841.
- 3) Diäthylester d. 5-Brom-2,4-Dinitrophenylnitromethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 111° (*Am.* 14, 358). — II, 1841.
- $C_{13}H_{12}O_{11}N_3Br$  1) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -[3-Brom-2,4,6-Trinitrophenyl]methan- $\alpha\alpha$ -Dicarbonsäure. Sm. 156° (*Am.* 14, 345). — II, 1947.
- $C_{13}H_{12}NCl_2P$  1)  $\beta$ -Methylphenylamidophenyldichlorphosphin. Fl. Zers. bei 300° (*A.* 260, 37). — IV, 1647.
- $C_{13}H_{12}N_3ClS$  1)  $\alpha$ -Amido- $\alpha$ -Phenyl- $\beta$ -[3-Chlorphenyl]thioharnstoff. Sm. 120° (*B.* 32, 1084). — \*IV, 442.
- 2)  $\alpha$ -Amido- $\alpha$ -Phenyl- $\beta$ -[4-Chlorphenyl]thioharnstoff. Sm. 133° (*B.* 32, 1084). — \*IV, 442.
- 3)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -[4-Chlorphenyl]thioharnstoff. Sm. 149° (150°) (*Soc.* 59, 210; *B.* 32, 1084). — IV, 679; \*IV, 442.
- 4)  $\alpha$ -Phenylamido- $\beta$ -[3-Chlorphenyl]thioharnstoff. Sm. 168° (*B.* 32, 1084). — \*IV, 442.
- 5)  $\alpha$ -Phenylamido- $\beta$ -[4-Chlorphenyl]thioharnstoff. Sm. 165° (*B.* 32, 1084). — \*IV, 442.
- 6)  $\beta$ -[2-Chlorphenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 134° (*Soc.* 59, 210). — IV, 679.
- 7) isom.  $\beta$ -[2-Chlorphenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 156° (*B.* 32, 1085). — \*IV, 442.
- 8)  $\beta$ -[3-Chlorphenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 138—139° (*Soc.* 63, 870). — IV, 679.
- 9)  $\beta$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 176—177° (*B.* 32, 1084). — \*IV, 442.
- $C_{13}H_{12}N_3BrS$  1)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -[4-Bromphenyl]thioharnstoff. Sm. 160° (*B.* 32, 1084). — \*IV, 442.
- 2)  $\alpha$ -[3-Bromphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 113° (*B.* 32, 1085). — \*IV, 442.
- 3)  $\alpha$ -[4-Bromphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 200° (*B.* 32, 1084). — \*IV, 442.
- $C_{13}H_{13}ONS$  1) 3-[ $\alpha$ -Benzoylamidoäthyl]thiophen. Sm. 95° (*B.* 20, 1701). — III, 745.
- 2) Äthylester d. 2-Naphtylamidothioameisensäure. Sm. 96—97°. Ag (*B.* 14, 62). — II, 618.
- $C_{13}H_{13}ONS_2$  1) 2-Thiocarbonyl-4-Keto-5-[4-Isopropylbenzyliden]tetrahydrothiazol. Sm. 154—157° (*C.* 1906 [1] 1438).
- $C_{13}H_{13}ON_2Cl$  1) 3'-Chlor-4'-Methylamido-4-Oxydiphenylamin. Sm. 105° (*D.R.P.* 172079 C. 1906 [2] 649).
- 2) Chlor- $\beta$ -Oximidobutylat d. Pyridin. Sm. 210°. 2 +  $PtCl_4$ , +  $AuCl_3$  (*M.* 21, 324; C. 1900 [2] 581). — \*IV, 92.
- 3) Phenylamid d. Chlorpyridyliumessigsäure. Zers. bei 234°. +  $HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (*C.* 1900 [2] 582; *Ar.* 241, 124 C. 1903 [1] 1023). — \*IV, 91.
- $C_{13}H_{13}ON_2Br$  1) Phenylamid d. Brompyridyliumessigsäure. Sm. 199—200° (*Ar.* 241, 124 C. 1903 [1] 1023). — \*IV, 91.
- $C_{13}H_{13}ON_2P$  1) Phenylamid-4-Methylphenylimid d. Phosphorsäure. Sm. 188° (*Soc.* 83, 1045 C. 1903 [2] 663).
- $C_{13}H_{13}ON_3S$  1) 2-Allylimido-3-Acetyl-5-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 123—124° (*B.* 27, 630). — IV, 1158.
- 2) Äthyläther d. 5-Benzylidenamido-2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 185—187° (*B.* 38, 202 C. 1905 [2] 1500).
- $C_{13}H_{13}ON_4Br$  1) 5-Brom-6-Phenylureido-2,4-Dimethyl-1,3-Diazin (Carbauilidobromkyanmethin). Sm. 190° (*J. pr.* [2] 31, 375). — IV, 1128.



- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>NS** 1) 5-Amido-2-Methyldiphenylsulfon. Sm. 156° (*Am.* 24, 480). — \*II, 482.  
 2) 4'-Amido-4-Methyldiphenylsulfon. Sm. 181,5° (*B.* 34, 251).  
 3) p-Phenylsulfon-4-Amido-1-Methylbenzol (Amidotolylphenylsulfon). Sm. 176° (*B.* 29, 2022). — \*II, 487.  
 4) α-[2-Naphtyl]sulfon-β-Imidopropan. Sm. 124° (*J. pr.* [2] 55, 402). — \*II, 528.  
 5) Äthylester d. 4-Methyl-2-Phenylthiazol-5-Carbonsäure. Sm. 43° (*A.* 259, 237). — IV, 355.  
 6) Phenylamid d. Phenylmethan-α-Sulfonsäure. Sm. 103,5° (*B.* 39, 3313 *C.* 1908 [2] 1602).  
 7) Phenylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 136° (134°) (*B.* 12, 1348; *J. pr.* [2] 51, 437; *Am.* 17, 343; *B.* 38, 733 *C.* 1905 [1] 876). — II, 425; \*II, 223.  
 8) Phenylamid d. 1-Methylbenzol-3-Sulfonsäure. Sm. 96° (72°) (*B.* 12, 1349; *Am.* 19, 197). — II, 425; \*II, 223.  
 9) Phenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 103° (*B.* 12, 1348; *Am.* 8, 242; *J. pr.* [2] 47, 369; [2] 51, 437). — II, 425; \*II, 223.  
 10) Methylphenylamid d. Benzolsulfonsäure. Sm. 79° (*J. pr.* [2] 47, 309, 370; *A.* 273, 23; *B.* 27, 372; *B.* 36, 2706 *C.* 1903 [2] 829). — II, 425; \*II, 223.  
 11) 2-Methylphenylamid d. Benzolsulfonsäure. Sm. 124° (125—126°); Sd. 290—295°<sub>80</sub> (*A.* 265, 184; 273, 13; *Bl.* [3] 13, 633). — II, 468; \*II, 257.  
 12) 3-Methylphenylamid d. Benzolsulfonsäure. Sm. 95° (80°) (*C.* 1904 [1] 1075; *Soc.* 85, 375 *C.* 1904 [1] 1412; *B.* 38, 911 *C.* 1905 [1] 1003).  
 13) 4-Methylphenylamid d. Benzolsulfonsäure. Sm. 120° (122°) (*B.* 9, 427; *Bl.* [3] 15, 1034). — II, 504; \*II, 282.  
 14) Benzylamid d. Benzolsulfonsäure. Sm. 88° (85°) (*A.* 265, 182; *B.* 34, 3162). — II, 531.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>NS<sub>2</sub>** 1) Methyläther d. 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-Äthyltetrahydrothiazol. Sm. 143° (*M.* 25, 175 *C.* 1904 [1] 895).
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>NSe** 1) Äthylester d. 4-Methyl-2-Phenylselenazol-5-Carbonsäure. Sm. 123—124° (*A.* 250, 319). — IV, 366.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) Äthylester d. 5-Chlor-3-Methyl-1-Phenylpyrazol-1'-Carbonsäure. Sd. 315° (*B.* 37, 2230 *C.* 1904 [2] 229).  
 2) Äthylester d. 5-Chlor-3-Methyl-1-Phenylpyrazol-1'-Carbonsäure. Sd. 271° (*B.* 33, 2620). — \*IV, 319.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Anhydrochloralantipyryn. Sm. 186—187° (*A. ch.* [6] 27, 333). — IV, 510.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) Methyläther d. 3-Keto-6-[p-Brom-4-Oxyphenyl]-2-Äthyl-2,3-Dihydro-1,2-Diazin. Sm. 140° (*B.* 34, 3259). — \*IV, 633.  
 2) 3'-Methyläther-6-Äthyläther d. 6-Oxy-3-[p-Brom-4-Oxyphenyl]-1,2-Diazin. Sm. 114°. Pikrat (*B.* 34, 3261). — \*IV, 633.  
 3) 4-Dimethylamidophenylimid d. α-Brompropen-αβ-Dicarbonssäure (4-D. d. Bromcitronensäure). Sm. 125° (*J. pr.* [2] 74, 302 *C.* 1906 [2] 1819).
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>3</sub>** 1) 2,4-Diketo-3-[βγ-Dibrompropyl]-1-[p-Brom-3-Methylphenyl]tetrahydroimidazol. Sm. 117° (*J. pr.* [2] 66, 253 *C.* 1902 [2] 1125).  
 2) 2,5-Diketo-4-Methyl-1-[βγ-Dibrompropyl]-3-[4-Bromphenyl]tetrahydroimidazol. Sm. 148° (*Ar.* 243, 691 *C.* 1906 [1] 460).
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>S** 1) Äthyläther d. 5-Benzoylamido-2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 238—239° (*Am.* 32, 144 *C.* 1904 [2] 957).
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>S<sub>2</sub>** 1) Diacetylbenzylidenthiobiuret. Sm. 189° (*M.* 8, 31). — III, 34.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>Cl<sub>2</sub>Br** 1) 6-Brom-2,4-Di[Chloracetyl]-1,3,5-Trimethylbenzol. Sm. 113° (*B.* 34, 1829). — \*III, 211.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>BrS** 1) β-Brompropyl-1-Naphtylsulfon. Fl. (*J. pr.* [2] 55, 210). — \*II, 508.  
 2) β-Brompropyl-2-Naphtylsulfon. Sm. 124° (*J. pr.* [2] 53, 490). — \*II, 528.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>JS** 1) β-Jodpropyl-2-Naphtylsulfon. Sm. 106° (*J. pr.* [2] 53, 491). — \*II, 528.
- C<sub>13</sub>H<sub>13</sub>O<sub>2</sub>NCl<sub>2</sub>** 1) Dimethyläther d. 3,4-Dichlor-5,5-Dioxy-2-Keto-1-[4-Methylphenyl]-2,5-Dihydropyrrol (Dichlormalein-p-Toluidimethyläther). Sm. 98° (*A.* 295, 49). — \*II, 280.

- C<sub>13</sub>H<sub>13</sub>O<sub>3</sub>NS**
- 1)  $\alpha$ -[1-Naphtyl]sulfon- $\beta$ -Oxidopropion (J. pr. [2] 55, 415). — \*II, 509.
  - 2)  $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -Oxidopropion. Sm. 172° (J. pr. [2] 55, 400). — \*II, 528.
  - 3) Benzyläther d. Phenylsulfonhydroxylamin (Benzsulfhydroxamsäure-benzyläther). Sm. 107° (A. 299, 81). — \*II, 303.
  - 4) Diphenylamidomethan- $\alpha$ -Sulfonsäure. Na, K (D.R.P. 158718 C. 1905 [1] 784).
  - 5)  $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan- $\alpha$ -Sulfonsäure. Na, Anilinsalz (B. 37, 4080, 4083 C. 1904 [2] 1722; B. 39, 2810 C. 1906 [2] 1491).
  - 6) Methyldiphenylamin-4-Sulfonsäure? Na (C. 1897 [1] 1165; D.R.P. 73178). — \*II, 324.
  - 7) 2-Amidophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 101 bis 101,5° (B. 34, 241).
  - 8) 4-Amidophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 142,5°. p-Tolylsulfonat (B. 34, 236, 252).
  - 9) Acetoximester d. Naphtalin-2-Sulfonsäure. Sm. 87° (B. 24, 3539). — II, 202.
  - 10) Phenylamid d. 2-Oxybenzylmethyläther-1-Sulfonsäure. Sm. 161° (B. 32, 1154). — \*II, 490.
  - 11) Phenylamid d. 4-Oxybenzylmethyläther-1-Sulfonsäure. Sm. 109° (110—111°) (Am. 18, 864; B. 32, 1155). — \*II, 490.
  - 12) Phenylhydroxylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 142° (143—143,5°) (J. pr. [2] 55, 302; B. 32, 215; 34, 238, 253). — \*II, 245.
  - 13) Benzylhydroxylamid d. Benzolsulfonsäure. +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (Sm. 92 bis 93°) (B. 29, 1566). — \*II, 305.
  - 14) 2-Oxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 138 bis 139° (J. pr. [2] 51, 441). — \*II, 393.
  - 15) 3-Oxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 157° (J. pr. [2] 51, 442). — \*II, 397.
  - 16) 4-Oxyphenylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 144° (D.R.P. 128815 C. 1902 [1] 551).
  - 17) 4-Oxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 143° (J. pr. [2] 51, 438). — \*II, 411.
  - 18) 5-Oxy-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 183° (Soc. 89, 1295 C. 1906 [2] 1121).
  - 19) 2-Methoxyphenylamid d. Benzolsulfonsäure. Sm. 89° (B. 32, 3517; D.R.P. 157859 C. 1905 [1] 416). — \*II, 393.
  - 20) 4-Methoxyphenylamid d. Benzolsulfonsäure. Sm. 95—96° (B. 37, 2810 C. 1904 [2] 592).
- C<sub>13</sub>H<sub>13</sub>O<sub>3</sub>NS<sub>2</sub>**
- 1) 5<sup>3</sup>-Methyläther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Äthyltetrahydrothiazol. Sm. 140° (M. 25, 176 C. 1904 [1] 895).
- C<sub>13</sub>H<sub>13</sub>O<sub>3</sub>N<sub>2</sub>Cl**
- 1)  $\alpha$ -Chloracetyl-amido-d- $\beta$ -[3-Indolyl]propionsäure (Chloracetyl-d-Tryptophan). Sm. 159° (B. 40, 2743 C. 1907 [2] 464).
- C<sub>13</sub>H<sub>13</sub>O<sub>3</sub>N<sub>2</sub>J**
- 1)  $\alpha$ -Jodacetyl-amido-l- $\beta$ -[3-Indolyl]propionsäure. Zers. bei 175—176° (B. 41, 2857 C. 1908 [2] 1735).
- C<sub>13</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>S**
- 1) 2-[ $\alpha$ -Sulfophenylhydrazonäthyl]pyridin. Sm. noch nicht bei 300° (B. 24, 2529). — IV, 799.
  - 2) 4-Methyl-1-Phenylamidodiazobenzol-1<sup>4</sup>-Sulfonsäure. Na, Ca (B. 29, 292). — IV, 1572.
  - 3) Methylphenyldiazoamidobenzol-4-Sulfonsäure. Na (B. 20, 927). — IV, 1567.
  - 4) 4-Methylamidoazobenzol-4'-Sulfonsäure. Na (B. 20, 925; B. 41, 1190 C. 1908 [1] 1885). — IV, 1369.
  - 5) p-Amido-p-Methylazobenzol-4-Sulfonsäure (B. 15, 2189). — IV, 1384.
  - 6) isom. p-Amido-p-Methylazobenzol-4-Sulfonsäure (B. 15, 2189).
- C<sub>13</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>S<sub>2</sub>**
- 1)  $\alpha$ -Phenylamido- $\beta$ -Phenylthioharnstoff- $\alpha$ <sup>4</sup>-Sulfonsäure. Ca + 2H<sub>2</sub>O (A. 239, 218). — IV, 735.
- C<sub>13</sub>H<sub>13</sub>O<sub>3</sub>BrS**
- 1) Propylester d. 1-Bromnaphtalin-5-Sulfonsäure. Sm. 57—57,5°. — II, 210.
  - 2) Isopropylester d. 1-Bromnaphtalin-5-Sulfonsäure. Sm. 74°. — II, 210.

- $C_{13}H_{18}O_8JS$  1) Propylester d. 1-Jodnaphtalin-5-Sulfonsäure. Sm. 67° (B. 22, 2822). — II, 211.
- \* 2) Isopropylester d. 1-Jodnaphtalin-5-Sulfonsäure. Sm. 90° (B. 22, 2822). — II, 211.
- $C_{13}H_{18}O_4NS$  1) 2-Oxybenzylidenamidobenzolbisulfit. Sm. 128° (A. 316, 142). — \*III, 52.
- 2) 3'-Oxy-2-Methyldiphenylamin-?-Sulfonsäure. Na, K, Ba (J. pr. [2] 65, 56 C. 1902 [1] 578).
- 3) Benzaldehyd-4-Oxyphenylthionaminsäure (A. 274, 244). — III, 7.
- 4) d- $\alpha$ -[2-Naphtylsulfon]amidopropionsäure + xH<sub>2</sub>O. Sm. 79—81° (122—123° wasserfrei) (B. 35, 3781 C. 1902 [2] 1469).
- 5) r- $\alpha$ -[2-Naphtylsulfon]amidopropionsäure. Sm. 152—153° (B. 35, 3781 C. 1902 [2] 1469).
- 6) Methyl-2-Naphtylsulfonamidoessigsäure. Sm. 172—173° (C. 1908 [1] 969).
- $C_{13}H_{13}O_4NS_2$  1) Imid d. Benzolsulfonsäure u. 1-Methylbenzol-4-Sulfonsäure (C. 1901 [2] 1185).
- 2) Methylimid d. Benzolsulfonsäure. Sm. 104—105° (C. 1899 [2] 867). — \*II, 69.
- $C_{13}H_{13}O_4N_2As$  1) 4'-Oxy-2-Methylazobenzol-4-Arsinsäure. Na + 2½H<sub>2</sub>O, Na<sub>2</sub> + 4½H<sub>2</sub>O (Soc. 93, 1898 C. 1909 [1] 163).
- $C_{13}H_{13}O_4N_3S$  1) Phenylhydrazid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 157—158° u. Zers. (B. 34, 3002). — \*IV, 474.
- $C_{13}H_{13}O_5NCl_2$  1) Methylcarbonat d. l- $\alpha$ -Chloracetyl-amido- $\beta$ -[4-Oxyphenyl]propionsäurechlorid (C. 1908 [2] 314).
- $C_{13}H_{13}O_5NS$  1)  $\alpha$ -[2-Naphtylsulfon]amido- $\beta$ -Oxypropionsäure. Sm. 214° (B. 35, 3784 C. 1902 [2] 1470).
- $C_{13}H_{13}O_5N_3S$  1) 4'-Nitro-3-Amido-4-Methyldiphenylamin-2'-Sulfonsäure (D.R.P. 193448 C. 1908 [1] 1003).
- $C_{13}H_{13}O_6NS_2$  1) 2-Amido-1-[2-Methylphenyl]sulfonoxybenzol-4-Sulfonsäure. Na (D.R.P. 195226 C. 1908 [1] 1224).
- 2) 2-Amido-1-[4-Methylphenyl]sulfonoxybenzol-4-Sulfonsäure. Na (D.R.P. 195226 C. 1908 [1] 1224).
- $C_{13}H_{13}O_6N_3S$  1)  $\alpha$ -[4-Nitro- $\alpha$ -Oxybenzyl]- $\beta$ -[4-Sulfophenyl]hydrazin. Zers. bei 80 bis 90°. Na (B. 35, 2007 C. 1902 [2] 196). — \*IV, 486.
- $C_{13}H_{13}O_7NS_2$  1) 3'-Oxy-4-Methyldiphenylamin-?-Disulfonsäure. Na<sub>2</sub>, K<sub>2</sub>, Ba + H<sub>2</sub>O (J. pr. [2] 65, 60 C. 1902 [1] 578).
- $C_{13}H_{13}O_8N_2Br$  1) Diäthylester d. 3-Brom-4,6-Dinitrophenylmethandicarbonsäure. Sm. 76°. Na, Cu<sub>2</sub>OH (Am. 11, 94, 543). — II, 1841.
- $C_{13}H_{13}O_8N_2J$  1) Diäthylester d. 3-Jod-4,6-Dinitrophenylmethandicarbonsäure? Sm. 83° (Am. 32, 305 C. 1904 [2] 1385).
- $C_{13}H_{13}O_{10}NS_3$  1) 3'-Oxy-4-Methyldiphenylamin-?-Trisulfonsäure. Ba<sub>3</sub> (J. pr. [2] 65, 61 C. 1902 [1] 578).
- $C_{13}H_{13}NClJ$  1) 4-Amido-3-Methyldiphenyljodoniumchlorid. HCl, 2 + PtCl<sub>4</sub> (B. 40, 4081 C. 1907 [2] 1836).
- $C_{13}H_{13}NBrJ$  1) 4-Amido-3-Methyldiphenyljodoniumbromid. Sm. 175° (B. 40, 4081 C. 1907 [2] 1836).
- $C_{13}H_{13}N_2ClS_2$  1) 2-Äthyläther-5-Benzyläther d. 4-Chlor-2,5-Dimerkapto-1,3-Diazin. Sm. 47—48° (Am. 42, 280 C. 1909 [2] 1638).
- $C_{13}H_{13}N_2SP$  1) Phenylamid-2-Methylphenylimid d. Thiophosphorsäure (Sulfo-phosphaz-o-Toluolanilid). Sm. 162° (B. 28, 1244). — \*II, 251.
- $C_{13}H_{13}N_4BrS_2$  1) Äthyläther d. 5-Brom-2-Merkapto-4-[ $\beta$ -Phenylthioureido]-1,3-Diazin. Sm. 166—167° (Am. 33, 454 C. 1905 [1] 1712).
- $C_{13}H_{14}ONCl$  1) 1-Oximido-5-Methyl-3-[4-Chlorphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 154° (A. 303, 256). — \*III, 139.
- 2) 2-Methylchinolylacetonylechlorid. 2 + PtCl<sub>4</sub> (C. 1899 [1] 117). — \*IV, 196.
- $C_{13}H_{14}ONBr$  1) 9-Brom-10-Oxy-8-Methyl-3,4-Dihydrojulol ( $\alpha_1$ -Oxy- $\beta_1$ -Brom- $\gamma_1$ -Methyljulolin). Sm. 80,5° (B. 25, 116). — IV, 194.
- $C_{13}H_{14}ONJ$  1) 4-Amido-3-Methyldiphenyljodoniumhydroxyd. Salze, siehe (B. 40, 4081 C. 1907 [2] 1836).
- $C_{13}H_{14}ON_2Cl_4$  1) Verbindung (aus d. Chlormethyläther d.  $\alpha\beta\beta$ -Trichlor- $\alpha$ -Oxyäthan u. 2 Molec. Pyridin). + PtCl<sub>4</sub> (A. 330, 130 C. 1904 [1] 1064).



- C<sub>13</sub>H<sub>14</sub>ON<sub>2</sub>S** 1) 2-Äthylimido-4-Keto-3-Methyl-5-Benzylidentetrahydrothiazol. Sm. 44° (C. 1899 [2] 804). — \*II, 953.  
2) Äthyläther d. 2-Merkapto-4-Keto-1-Benzyl-1,4-Dihydro-1,3-Diazin. Sm. 139° (Am. 40, 451 C. 1909 [1] 86).  
3) Äthyläther d. 2-Merkapto-4-Keto-3-Benzyl-3,4-Dihydro-1,3-Diazin. Sm. 77° (Am. 40, 450 C. 1909 [1] 86).
- C<sub>13</sub>H<sub>14</sub>ON<sub>2</sub>S<sub>2</sub>** 1) 2-Thiocarbonyl-4-Keto-3-Methyl-5-[4-Dimethylamidobenzyliden]-tetrahydrothiazol. Sm. 220° (M. 26, 1204 C. 1905 [2] 1675).  
2) 2-Äthyläther-5-Benzyläther d. 2,5-Dimerkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 155–156° (Am. 42, 279 C. 1909 [2] 1638).
- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>NCl** 1) Äthyläther d. 5-Chlor-6-Oxy-2-Keto-1-Äthyl-1,2-Dihydrochinolin + 3H<sub>2</sub>O. Sm. 72° (102° wasserfrei) (B. 38, 1263 C. 1905 [1] 1409).  
2) 1-Acetyl-*p*-Chloracetyltetrahydrochinolin. Sm. 137° (B. 42, 3197 C. 1909 [2] 1254).  
3) Chinolinbetainäthylesterchlorid. 2 + PtCl<sub>4</sub> (B. 15, 2006). — IV, 253.  
4) Isochinolinbetainäthylesterchlorid. Sm. 183–186°. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Ar. 240, 506 C. 1902 [2] 1326). — \*IV, 192.  
5) Chinolmethylyat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. 157° u. Zers. (A. 282, 120). — IV, 352.  
6) Äthylester d.  $\beta$ -[ $\alpha$ -Chlorbenzyliden]amidopropen- $\alpha$ -Carbonsäure. Sm. 98–99° (B. 42, 3921 C. 1909 [2] 1799).  
7)  $\epsilon$ -Chloramylimid d. Benzol-1,2-Dicarbonsäure. Sm. 30–31° (B. 42, 4052 C. 1909 [2] 1924).
- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>NBr** 1) 4-Äthoxylbromphenylat d. 3-Oxypyridin + H<sub>2</sub>O. Sm. 167–168° (J. pr. [2] 72, 562 C. 1906 [1] 370).  
2) Äthyläther d. 5-Brom-6-Oxy-2-Keto-1-Äthyl-1,2-Dihydrochinolin. Sm. 95–97° (B. 36, 461 C. 1903 [1] 590). — \*IV, 189.  
3) 1-Acetyl-*p*-Bromacetyltetrahydrochinolin. Sm. 134° (B. 42, 3197 C. 1909 [2] 1254).  
4) Brompropylat d. Chinolin-4-Carbonsäure. Sm. 218° u. Zers. (A. 270, 357). — IV, 347.  
5) Chinolinbetainäthylesterbromid. Sm. 178° (Ar. 240, 517 C. 1902 [2] 1326). — \*IV, 179.  
6) Isochinolinbetainäthylesterbromid. Sm. 199° (Ar. 240, 505 C. 1902 [2] 1326). — \*IV, 192.  
7)  $\epsilon$ -Bromamylimid d. Benzol-1,2-Dicarbonsäure. Sm. 61° (B. 35, 1368 C. 1902 [1] 1091).  
8) Bromderivat d. Verb. C<sub>13</sub>H<sub>15</sub>O<sub>2</sub>N. Sm. 190° (A. 357, 37 C. 1907 [2] 1968).
- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>NJ** 1) Jodmethylyat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. 200° u. Zers. (A. 282, 119). — IV, 352.  
2) Jodmethylyat d. Chinolin-4-Carbonsäureäthylester + 2H<sub>2</sub>O. Sm. 57° (63° wasserfrei) (J. pr. [2] 79, 345 C. 1909 [1] 1995).  
3) Äthylester d. Chinoliniumjodessigsäure. Sm. 174° (B. 35, 3586 C. 1902 [2] 1386). — \*IV, 179.  
4)  $\epsilon$ -Jodamylimid d. Benzol-1,2-Dicarbonsäure. Sm. 75–76° (B. 42, 4052 C. 1909 [2] 1924).
- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>NP** 1) *p*-Methylphenylamidophenylphosphinsäure. Sm. 150,5°. Na + 2H<sub>2</sub>O (A. 260, 37). — IV, 1650.  
2) Monamid d. 4-Methylphenylphosphinsäuremonophenylester. Sm. 115–116° (A. 293, 263). — IV, 1669.  
3) Phenylmonamid d. 4-Methylphenylphosphinsäure. Sm. 150°. Cu (A. 293, 268). — IV, 1669.
- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) 2,4-Diketo-3-[ $\beta\gamma$ -Dibrompropyl]-1-[2-Methylphenyl]tetrahydroimidazol. Sm. 104–105° (J. pr. [2] 66, 251 C. 1902 [2] 1124).  
2) 2,4-Diketo-3-[ $\beta\gamma$ -Dibrompropyl]-1-[3-Methylphenyl]tetrahydroimidazol. Sm. 77–78° (J. pr. [2] 66, 252 C. 1902 [2] 1124).  
3) 2,4-Diketo-3-[ $\beta\gamma$ -Dibrompropyl]-1-[4-Methylphenyl]tetrahydroimidazol. Sm. 124° (J. pr. [2] 66, 251 C. 1902 [2] 1124).  
4) 2,5-Diketo-4-Methyl-1-[ $\beta\gamma$ -Dibrompropyl]-3-Phenyltetrahydroimidazol. Sm. 137° (Ar. 243, 691 C. 1906 [1] 460).  
5) Acetyldibromcytisin. Sm. 164° (B. 27 [2] 510). — III, 879.  
6) Piperidindibromsatin. Sm. 152° (B. 24, 2606; B. 40, 2509 C. 1907 [2] 705). — IV, 16.

- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>S**
- 1)  $\beta$ -[2-Naphtylsulfon]hydrazonpropan. Sm. 156—158° u. Zers. (*J. pr.* [2] 58, 184). — \*II, 102.
  - 2) 2-[2,4-Dimethylphenyl]imido-4-Keto-3-Acetyltetrahydrothiazol. Sm. 165—166° u. Zers. (*C.* 1903 [2] 110). — \*IV, 305.
  - 3)  $\beta$ -[2-Allylthioureidophenyl]akrylsäure. Sm. 204—208° u. Zers. (*B.* 23, 3343). — II, 1418.
  - 4) 2-Methylphenylamid d. 1-Amidobenzol-4-Sulfonsäure. Sm. 132° (*J. pr.* [2] 77, 375 *C.* 1908 [1] 2150).
  - 5) 3-Methylphenylamid d. 1-Amidobenzol-4-Sulfonsäure. Sm. 135° (*J. pr.* [2] 77, 377 *C.* 1908 [1] 2151).
  - 6) 4-Methylphenylamid d. 1-Amidobenzol-4-Sulfonsäure. Sm. 109° (*J. pr.* [2] 77, 378 *C.* 1908 [1] 2151).
  - 7) 3-Amidophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 143° (*Soc.* 89, 1292 *C.* 1906 [2] 1120).
  - 8) 4-Amidophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 183° (185—186°). p-Toluolsulfonsaures Salz (D. R. P. 160710 *C.* 1905 [1] 1678; *B.* 38, 2247 *C.* 1905 [2] 234; *Soc.* 87, 1303 *C.* 1905 [2] 1334).
  - 9) 4-Amido-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 147° (*Soc.* 87, 926 *C.* 1905 [2] 320).
  - 10) 2-Amidobenzylamid d. Benzolsulfonsäure. Sm. 108—110°. + C<sub>6</sub>H<sub>6</sub> (Sm. 95°) (*Soc.* 89, 1161 *C.* 1906 [2] 1056).
  - 11) 3-Amidobenzylamid d. Benzolsulfonsäure. Sm. 76—78° (*Soc.* 89, 1162 *C.* 1906 [2] 1056).
  - 12) 4-Amidobenzylamid d. Benzolsulfonsäure. Sm. 131—133° (*Soc.* 89, 1162 *C.* 1906 [2] 1056).
  - 13) Methyl-2-Amidophenylamid d. Benzolsulfonsäure. Sm. 116° (*Soc.* 87, 85 *C.* 1905 [1] 734).
  - 14) Methyl-3-Amidophenylamid d. Benzolsulfonsäure. Sm. 96° (*Soc.* 87, 85 *C.* 1905 [1] 734).
  - 15) Methyl-4-Amidophenylamid d. Benzolsulfonsäure. Sm. 119° (*Soc.* 87, 85 *C.* 1905 [1] 734).
  - 16) 5-Amido-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 138° (*Soc.* 89, 1294 *C.* 1906 [2] 1121).
  - 17) 2-Amido-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 146,5° (*A.* 221, 18; *B.* 24, 633). — IV, 617.
  - 18) 3-Amido-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 138° (139°) (D. R. P. 135016 *C.* 1902 [2] 1166; *Soc.* 89, 1294 *C.* 1906 [2] 1121). — \*IV, 401.
  - 19) Phenylhydrazid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 150—151° (155° u. Zers.) (*J. pr.* [2] 51, 443; [2] 56, 219). — IV, 734.
  - 20)  $\beta\beta$ -Methylphenylhydrazid d. Benzolsulfonsäure. Sm. 131,5—132° (*B.* 27, 372; 32, 1804). — IV, 734; \*IV, 474.
- C<sub>13</sub>H<sub>14</sub>O<sub>2</sub>N<sub>3</sub>Cl**
- 1) 5-Keto-3-Methyl-4-Chloracetylamidomethyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 187° (*A.* 343, 304 *C.* 1906 [1] 928).
- C<sub>13</sub>H<sub>14</sub>O<sub>3</sub>NCl**
- 1) Methylester d.  $\epsilon$ -Chlor- $\beta$ -Phenylamido- $\delta$ -Keto- $\beta$ -Penten- $\gamma$ -Carbonsäure. Sm. 59—60° (*B.* 42, 3919 *C.* 1909 [2] 1798).
  - 2) Methylester d. 5-Keto-2-Methyl-1-[4-Chlorphenyl]tetrahydropyrrol-2-Carbonsäure (*B.* 40, 4047 *C.* 1907 [2] 1837).
- C<sub>13</sub>H<sub>14</sub>O<sub>3</sub>NBr**
- 1) Bromäthylat d. Chininsäure. Sm. 210° (*A.* 276, 276). — IV, 362.
  - 2)  $\beta\delta$ -Lakton d.  $\delta$ -Brom- $\beta$ -Oxypentan- $\beta\delta$ -Dicarbonsäure- $\beta$ -Phenylamid. Sm. 137—138° (*A.* 292, 232). — \*II, 220.
  - 3) Methylester d. 5-Keto-2-Methyl-1-[4-Bromphenyl]tetrahydropyrrol-2-Carbonsäure (*B.* 40, 4048 *C.* 1907 [2] 1837).
  - 4) Propylester d. Phenylamidomukobromsäure. Sm. 80° (*B.* 34, 518).
- C<sub>13</sub>H<sub>14</sub>O<sub>3</sub>NJ**
- 1) Methylester d. 5-Keto-2-Methyl-1-[4-Jodphenyl]tetrahydropyrrol-2-Carbonsäure. Fl. (*B.* 40, 4049 *C.* 1907 [2] 1837).
- C<sub>13</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>Br<sub>2</sub>**
- 1) Äthylester d.  $\gamma\gamma$ -Dibrom- $\alpha$ -[4-Methylphenyl]hydrazon- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 102—103° (*Bl.* [4] 1, 1241 *C.* 1908 [1] 815).
- C<sub>13</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>S**
- 1) Methyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[1-Naphtyl]sulfonäthan. Sm. 137° (*J. pr.* [2] 78, 10 *C.* 1908 [2] 506).
  - 2) Methyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[2-Naphtyl]sulfonäthan. Sm. 159° u. Zers. (*J. pr.* [2] 78, 11 *C.* 1908 [2] 506).
  - 3) Äthyläther d. 2-Acetylimido-4-Keto-3-[4-Oxyphenyl]tetrahydrothiazol. Sm. 155° (*Am.* 28, 157 *C.* 1902 [2] 794). — \*IV, 305.

- $C_{13}H_{14}O_3N_2S$  4) 4'-Amido-2-Methyldiphenylamin-2'-Sulfonsäure (B. 41, 3750 C. 1908 [2] 1862).
- 5) 4'-Amido-4-Methyldiphenylamin-2'-Sulfonsäure. Na (B. 41, 3752 C. 1908 [2] 1863).
- 6) 4-Amidobiphenyl-4'-Amidomethansulfonsäure. Na (B. 39, 2806 C. 1906 [2] 1490).
- 7) 1,8-Isopropylidendiamidonaphtalin-4-Sulfonsäure (C. 1901 [2] 448).
- 8) 2,4-Diamidophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 125° (B. 41, 1874 C. 1908 [2] 154).
- 9) Amid d. r- $\alpha$ -[2-Naphtylsulfon]amidopropionsäure. Sm. 220° (B. 41, 4433 C. 1909 [1] 439).
- 10) Verbindung (aus Dicyanbenzoylessigsäureäthylester). Sm. 160° (A. 332, 151 C. 1904 [2] 192).
- $C_{13}H_{14}O_4NJ$  1) Verbindung (aus Dehydracetsäure u. Pyridin). Sm. 234° u. Zers. (G. 34 [1] 344 C. 1904 [2] 194).
- $C_{13}H_{14}O_4N_2S$  1) 4,4'-Diamido-3'-Oxy-3-Methylbiphenyl-6'-Sulfonsäure. HCl (B. 20, 3174). — II, 898.
- 2) 4'-Amido-2-Oxydiphenylaminmethyläther-2'-Sulfonsäure (B. 42, 1083 C. 1909 [1] 1553).
- 3) 4'-Amido-4-Oxydiphenylaminmethyläther-2'-Sulfonsäure (B. 42, 1081 C. 1909 [1] 1553).
- 4)  $\alpha$ -[ $\alpha$ -Oxybenzyl]- $\beta$ -Phenylhydrazin- $\beta^4$ -Sulfonsäure. Zers. bei 95°. Na (B. 35, 2004 C. 1904 [2] 196). — \*IV, 484.
- $C_{13}H_{14}O_4N_2S_2$  1) Benzoyldithiocarbaminsäureacetyläthylurethan. Sm. 159° (C. 1901 [2] 276).
- 2) Di[Phenylamid] d. Methandisulfonsäure. Sm. 192°. Ba + 3H<sub>2</sub>O (D. R. P. 171935 C. 1906 [2] 572; B. 38, 3392 C. 1905 [2] 1525).
- $C_{13}H_{14}O_5NCl$  1) Diacetat d. 4[oder 6]-Chlor-6[oder 4]-Acetylamido-2,5-Dioxy-1-Methylbenzol. Sm. 198° (J. pr. [2] 63, 186; A. 328, 318 C. 1903 [2] 1247). — \*II, 579.
- $C_{13}H_{14}O_5NBr$  1) Diacetat d. 4[oder 6]-Brom-6[oder 4]-Acetylamido-2,5-Dioxy-1-Methylbenzol. Sm. 203—204° (J. pr. [2] 63, 187; A. 341, 316 C. 1905 [2] 1423). — \*II, 579.
- $C_{13}H_{14}O_5N_2Cl_2$  1) 2-Oxy- $\beta$ -Di[Chloracetylamidomethyl]benzol-1-Carbonsäure. Sm. 196—197° (A. 343, 298 C. 1906 [1] 928).
- $C_{13}H_{14}O_5N_2S$  1)  $\alpha$ -[2, $\alpha$ -Dioxybenzyl]- $\beta$ -Phenylhydrazin- $\beta^4$ -Sulfonsäure. Zers. bei 100—110°. Na (B. 35, 2003 C. 1902 [2] 195). — \*IV, 491.
- $C_{13}H_{14}O_6NCl$  1) Methylcarbonat d. l- $\alpha$ -Chloracetylamido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 116° (C. 1908 [2] 314; B. 41, 2863 C. 1908 [2] 1251).
- $C_{13}H_{14}O_7NBr$  1) Diäthylester d. Bromoxymalon-4-Nitrophenyläthersäure. Sm. 95° (B. 40, 3148 C. 1907 [2] 979).
- $C_{13}H_{14}O_7N_4S_2$  1) 4,4'-Diamido-s-Diphenylharnstoff-3,3'-Dicarbonsäure (D. R. P. 140613 C. 1903 [1] 1010). — \*IV, 393.
- $C_{13}H_{14}NJS$  1) 2-Jodallylat d. 2-Thiocarbonyl-1-Methyl-1,2-Dihydrochinolin. Sm. 180° u. Zers. (B. 35, 3677 C. 1902 [2] 1474). — \*IV, 190.
- $C_{13}H_{14}N_2ClBr$  1) 2-Chlorallylat d. 5-Brom-3-Methyl-1-Phenylpyrazol. Sm. 182° (A. 331, 212 C. 1904 [1] 1219).
- $C_{13}H_{14}N_2ClJ$  1) 2-Chlorallylat d. 5-Jod-3-Methyl-1-Phenylpyrazol. Sm. 193—194° (A. 331, 213 C. 1904 [1] 1219).
- $C_{13}H_{15}ONBr_2$  1)  $\beta$ -Dibrom-2-Keto-1-Methyl-3,3-Diäthyl-2,3-Dihydroindol. Sm. 92 bis 93° (G. 28 [2] 355). — \*IV, 168.
- 2) Bromäthylat d. 5-Brom-6-Oxychinolinäthyläther + 3H<sub>2</sub>O. Sm. 80 bis 85° (195° wasserfrei) (B. 36, 460 C. 1903 [1] 590). — \*IV, 186.
- $C_{13}H_{15}ONJ_2$  1) Di[ $\beta$ -Jodäthyl]äther + Chinolin. Sm. 176° u. Zers. (B. 34, 1392). — \*IV, 179.
- $C_{13}H_{15}ONS_2$  1) Gem. Anhydrid d. Benzolcarbonsäure u. Hexahydropyridin-1-Dithiocarbonsäure (N-Piperidyl-S-Benzoyldithiourethan). Sm. 89—90° (B. 36, 3523 C. 1903 [2] 1326).
- $C_{13}H_{15}ON_2Cl_3$  1) Verbindung (aus d. Chlormethyläther d.  $\alpha\beta$ -Dichlor- $\alpha$ -Oxyäthan u. 2 Molec. Pyridin). + PtCl<sub>4</sub>, 2 + AuCl<sub>3</sub> (A. 330, 129 C. 1904 [1] 1064).
- $C_{13}H_{15}ON_2Br$  1) 3-Keto-5-Brommethyl-2-Phenyl-1-Methyl-4-Äthyl-2,3-Dihydro-pyrazol. Sm. 112—113° (D. R. P. 206637 C. 1909 [1] 806).
- 2) 6-Brom-4-Keto-2-Isoamyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 253 bis 263° (C. 1906 [1] 943).



- $C_{13}H_{15}ON_2Br$  3) 4-Bromphenylamid d.  $\beta$ -Cyan- $\beta$ -Methylbutan- $\gamma$ -Carbonsäure. Sm. 139—140°; Sd. 220—225°<sub>17</sub> (B. 30, 291; G. 29 [2] 556). — \*II, 178.
- $C_1H_{15}ON_2J$  1) Jodmethylat d. 4-Acetyl-5-Methyl-1-Phenylpyrazol. Sm. 166° (A. 295, 321). — IV, 550.
- $C_{13}H_{15}ON_3S$  1) 4<sup>4</sup>-Methyläther-2-Äthyläther d. 4-[4-Oxyphenyl]amido-2-Merkapto-1,3-Diazin. Fl. HCl (Am. 36, 175 C. 1908 [2] 1068).  
2) Diäthyläther d. 5-Merkapto-3-Oxy-1-Phenyl-1,3,5-Triazin. Sm. 47—48° (Am. 32, 370 C. 1904 [2] 1506).
- $C_{13}H_{15}O_2NS$  1) *s*-[1,2-Phtalyl]amido- $\alpha$ -Merkaptopentan. Sm. 49,5° (B. 35, 1371 C. 1902 [1] 1092).  
2) Propylamid d. Naphtalin-2-Sulfonsäure. Sm. 124° (Soc. 87, 162 C. 1905 [1] 1011).  
3) 1-Naphtylamid d. Propan- $\alpha$ -Sulfonsäure. Sm. 84° (C. 1906 [1] 1530).  
4) 1-Naphtylamid d. Propan- $\beta$ -Sulfonsäure. Sm. 154° (C. 1906 [1] 1529).
- $C_{13}H_{15}O_2N_2Cl$  1) Piperidinchlorisatin. Sm. 185° (B. 40, 2509 C. 1907 [2] 705).
- $C_{13}H_{15}O_2N_2Br$  1) 2,4-Diketo-3-[ $\beta$ - oder  $\gamma$ -Brompropyl]-1-[2-Methylphenyl]tetrahydroimidazol. Sm. 60—61° (J. pr. [2] 66, 249 C. 1902 [2] 1124).  
2) 2,4-Diketo-3-[ $\beta$ - oder  $\gamma$ -Brompropyl]-1-[3-Methylphenyl]tetrahydroimidazol. Sm. 141—142° (J. pr. [2] 66, 249 C. 1902 [2] 1124).  
3) 2,4-Diketo-3-[ $\beta$ - oder  $\gamma$ -Brompropyl]-1-[4-Methylphenyl]tetrahydroimidazol. Sm. 149—150° (J. pr. [2] 66, 249 C. 1902 [2] 1124).  
4) 2,5-Diketo-4-Methyl-1-[ $\beta$ - oder  $\gamma$ -Brompropyl]-3-Phenyltetrahydroimidazol. Sm. 89° (Ar. 243, 690 C. 1906 [1] 460).  
5) Piperidinbromisatin. Sm. 208° (B. 40, 2508 C. 1907 [2] 704).
- $C_{13}H_{15}O_2N_2P$  1) Phenylamid-4-Methylphenylamid d. Phosphorsäure. Sm. 195 bis 196° u. Zers. (Soc. 81, 1369 C. 1902 [2] 1197).
- $C_{13}H_{15}O_2N_3Br_2$  1) 3,5-Dibrom-3,5-Dicyan-2,6-Diketo-4,4-Dipropylhexahydro-pyridin. Sm. 136—138° (C. 1901 [1] 581).
- $C_{13}H_{15}O_2N_3S$  1) 4,6-Diamido-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 217° (Bl. [3] 13, 635). — IV, 1128.  
2) 2,6-Diamido-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 143 bis 144° (Bl. [3] 15, 1036).
- $C_{13}H_{15}O_3NBr_2$  1)  $\delta$ -[ $\beta$ -Dibrom-2-Acetylamidophenyl]valeriansäure. Sm. 205—206° (B. 20, 383). — II, 1393.
- $C_{13}H_{15}O_3NS$  1) 3,6-Dimethyl-2-Äthylchinolin- $\beta$ -Sulfonsäure. Sm. noch nicht bei 290°. Ba + H<sub>2</sub>O, Pb + 2C<sub>13</sub>H<sub>15</sub>O<sub>3</sub>NS + 6H<sub>2</sub>O (B. 18, 3389). — IV, 340.
- $C_{13}H_{15}O_3NS_2$  1) Benzoyldithiocarbaminsäure- $\alpha$ -Äthylpropionat. Sm. 144—145° (Am. 26, 201).
- $C_{13}H_{15}O_3N_2Cl$  1) Äthylester d.  $\gamma$ -Chlor- $\alpha$ -[2-Methylphenyl]hydrazon- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 121—122° (C. r. 145, 195 C. 1907 [2] 1062).  
2) Äthylester d.  $\gamma$ -Chlor- $\alpha$ -[4-Methylphenyl]hydrazon- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 96—97° (C. r. 145, 195 C. 1907 [2] 1062).
- $C_{13}H_{15}O_3N_2Cl_3$  1) Chloralantipyrin (Hypnal). Sm. 67—68° (A. ch. [6] 27, 330; C. r. 125, 957; C. 1903 [2] 19; G. 36 [2] 171 C. 1906 [2] 1339). — IV, 510; \*IV, 326.
- $C_{13}H_{15}O_3N_2Br$  1) 4 $\alpha$ -Äthyläther d. 4-[ $\beta$ -Brom- $\alpha$ -Oxy- $\beta$ -Phenyläthyl]-2,5-Diketo-tetrahydroimidazol. Sm. 175° u. Zers. (B. 22, 695). — II, 1655.  
2) Propyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin (J. pr. [2] 45, 186). — IV, 265.  
3) Isopropyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 95° (J. pr. [2] 45, 187). — IV, 265.  
4) Äthylester d.  $\gamma$ -Brom- $\alpha$ -[2-Methylphenyl]hydrazon- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 108—110° (Bl. [4] 1, 1240 C. 1908 [1] 815).  
5) Äthylester d.  $\gamma$ -Brom- $\alpha$ -[4-Methylphenyl]hydrazon- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 82—83° (Bl. [4] 1, 1240 C. 1908 [1] 815).
- $C_{13}H_{15}O_3N_2J$  1) Jodäthylat d. 5-Nitro-8-Oxychinolin-8-Äthyläther + 5H<sub>2</sub>O (J. pr. [2] 45, 536). — IV, 283.
- $C_{13}H_{15}O_3N_8S$  1)  $\alpha$ -Benzoylamido- $\beta$ -Pseudoäthylureidoakrylsäure. Na + H<sub>2</sub>O (Am. 34, 202 C. 1905 [2] 1500).  
2) Äthylester d. 2-Phenylimido-5-Oxy-2,3-Dihydro-1,3,4-Thiodiazol-3-[Äthyl- $\alpha$ -Carbonsäure]. Sm. 171°. Na (C. 1904 [2] 1028).

- C<sub>13</sub>H<sub>15</sub>O<sub>4</sub>N<sub>2</sub>Cl** 1) Chlormethyl-4-Nitro-5-Acetylamido-2,3,6-Trimethylphenylketon. Sm. 200° (B. 33, 2652). — \*III, 124.  
2) α-Chloracetylamidoacetylamido-β-Phenylpropionsäure. Sm. 151 bis 152° (B. 37, 3315 C. 1904 [2] 1307).
- C<sub>13</sub>H<sub>15</sub>O<sub>4</sub>N<sub>2</sub>Br** 1) α-Brom-β-Phenylpropionylamidoacetylamidoessigsäure. Sm. 157 bis 158° (B. 37, 3066 C. 1904 [2] 1207).  
2) Diäthylester d. 4-Bromphenylmethan-α-α-Dicarbonsäure. Sm. 76° (B. 38, 2273 C. 1905 [2] 406).
- C<sub>13</sub>H<sub>15</sub>O<sub>5</sub>NS** 1) 4-Methylbenzolsulfonat d. α-Cyan-β-Oxypropen-α-Carbonsäure. Sm. 116° (Bl. [3] 31, 340 C. 1904 [1] 1135).
- C<sub>13</sub>H<sub>15</sub>O<sub>5</sub>N<sub>2</sub>Cl** 1) l-α-Chloracetylamido-β-[4-Oxyphenyl]propionylamidoessigsäure. Sm. 188—190° u. Zers. (C. 1908 [2] 314; B. 41, 2865 C. 1908 [2] 1251).  
2) Chlorid d. 2,6-Dinitro-5-Pseudobutyl-1,3-Dimethylbenzol-4-Carbonsäure. Sm. 99° (B. 31, 1348). — \*II, 848.
- C<sub>13</sub>H<sub>15</sub>O<sub>5</sub>N<sub>2</sub>Br** 1) Diäthylester d. 4-Bromphenylnitrosamidoessigsäure-2-Carbonsäure. Fl. (D.R.P. 134986 C. 1902 [2] 1086).
- C<sub>13</sub>H<sub>15</sub>O<sub>5</sub>BrS** 1) αγ-Sulton d. β-Brom-α-Oxy-α-Phenylbutan-γ-Sulfonsäure-δ-Carbonsäureäthylester. Sm. 121° (Am. 31, 255 C. 1904 [1] 1081).
- C<sub>13</sub>H<sub>16</sub>ONCl** 1) Nitrosochlorid d. l-Methyl-5-Phenyl-1,2,3,4-Tetrahydrobenzol? Sm. 124—127° (C. 1905 [2] 676).  
2) Chloräthylat d. 8-Oxychinolin-8-Äthyläther. Sm. 125—127°. 2 + PtCl<sub>4</sub> (J. pr. [2] 45, 533). — IV, 274.  
3) Chloräthylat d. 5[oder 8]-Oxyisochinolinäthyläther + xH<sub>2</sub>O. Sm. 63° (J. pr. [2] 52, 16).
- C<sub>13</sub>H<sub>16</sub>ONBr** 1) 8-Brom-5-Propionylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 185 bis 186° (Soc. 85, 746 C. 1904 [2] 447).  
2) Bromäthylat d. 6-Oxychinolin-6-Äthyläther + 2H<sub>2</sub>O. Zers. bei 210° (J. pr. [2] 56, 443). — \*IV, 184.
- C<sub>13</sub>H<sub>16</sub>ONBr<sub>3</sub>** 1) l-[3,4,6-Tribrom-5-Oxy-2-Methylbenzyl]hexahydropyridin. Sm. 155—158° (A. 302, 103). — \*IV, 15.  
2) l-[3,5,6-Tribrom-4-Oxy-2-Methylbenzyl]hexahydropyridin. Sm. 159,5—160° (A. 344, 175 C. 1906 [1] 1158).  
3) l-[2,5,6-Tribrom-4-Oxy-3-Methylbenzyl]hexahydropyridin. Sm. 157° (155°) (B. 29, 2354; A. 344, 179 C. 1906 [1] 1159). — IV, 20.  
4) l-[2,5,6-Tribrom-3-Oxy-4-Methylbenzyl]hexahydropyridin. Sm. 116—117° (A. 344, 186 C. 1906 [1] 1159).
- C<sub>13</sub>H<sub>16</sub>ONJ** 1) Jodäthylat d. 6-Oxy-2-Methylchinolin-6-Methyläther (D.R.P. 167770 C. 1906 [1] 1127).  
2) Jodäthylat d. 6-Oxychinolin-6-Äthyläther (D.R.P. 167770 C. 1906 [1] 1127).  
3) Jodäthylat d. 8-Oxychinolin-8-Äthyläther. Sm. 168—169° (J. pr. [2] 45, 533). — IV, 274.  
4) Jodäthylat d. 7-Oxyisochinolin-7-Äthyläther. Sm. 122—123° (A. 286, 15). — IV, 303.  
5) Jodäthylat d. 8-Oxyisochinolin-8-Äthyläther. Sm. 170° (J. pr. [2] 52, 16). — IV, 303.
- C<sub>13</sub>H<sub>16</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) Verbindung (aus d. Chlormethyläther d. α-Chlor-α-Oxyäthan u. Pyridin). + PtCl<sub>4</sub>, + 2AuCl<sub>3</sub> (A. 330, 125 C. 1904 [1] 1064).
- C<sub>13</sub>H<sub>16</sub>ON<sub>2</sub>S** 1) 2-Thiocarbonyl-5-Keto-4-Butyl-1-Phenyltetrahydroimidazol. Sm. 179° (B. 17, 426; 31, 2188). — II, 405; \*II, 205.  
2) 2-Methyläther d. 2-Merkapto-5-Keto-4,4-Dimethyl-1-[2-Methylphenyl]-4,5-Dihydroimidazol. Fl. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 24, 3297). — II, 472.  
3) 2-Methyläther d. 2-Merkapto-5-Keto-4,4-Dimethyl-1-[4-Methylphenyl]-4,5-Dihydroimidazol. Fl. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 24, 3297). — II, 500.  
4) 2,5-Dimethyläther d. 2-Merkapto-5-Oxy-4-Methyl-1-[2-Methylphenyl]imidazol. Sm. 118—120°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 24, 3292). — II, 472.  
5) 2,5-Dimethyläther d. 2-Merkapto-5-Oxy-4-Methyl-1-[4-Methylphenyl]imidazol. Sm. 109°. HCl, Pikrat (B. 24, 3292). — II, 500.  
6) 2-[4-Isopropylbenzyl]imido-4-Ketotetrahydroimidazol. HCl (B. 22, 933). — II, 561.

- $C_{13}H_{16}ON_2S$  7) 3-Acetyl-2-[2-Methylphenyl]imido-5-Methyltetrahydrothiazol. Sm. 58° (*Soc.* 89, 74 *C.* 1906 [1] 1027).  
 8) 3-Acetyl-2-[4-Methylphenyl]imido-5-Methyltetrahydrothiazol. Sm. 61° (*Soc.* 89, 72 *C.* 1906 [1] 1027).  
 9) Amid d. 5-Keto-2-Methyl-1-[4-Methylphenyl]tetrahydropyrrol-2-Thiocarbonsäure. Sm. 207—208° u. Zers. (*B.* 38, 1221 *C.* 1905 [1] 1257).  
 10) Benzoylamid d. Hexahydropyridin-1-Thiocarbonsäure (s-Benzoyl-piperidinthioharnstoff). Sm. 122—123° (*Soc.* 55, 623). — *IV*, 15.
- $C_{13}H_{16}O_2NCl$  1) Chlormethyl-5-Acetylamido-2,3,6-Trimethylphenylketon. Sm. 189° (*B.* 33, 2652). — \**III*, 124.  
 2) Chlorid d.  $\epsilon$ -Benzoylamidopentan- $\alpha$ -Carbonsäure. Fl. (*B.* 42, 1251 *C.* 1909 [1] 1693).  
 3) Chlorid d.  $\alpha$ -Benzoylamidoisocaprinsäure. Zers. bei 80—90° (*A.* 369, 279 *C.* 1909 [2] 2140).
- $C_{13}H_{16}O_2NBr$  1)  $\beta$ -[ $\alpha$ -Brompropionyl]-4-Acetylamido-1,3-Dimethylbenzol. Sm. 115 bis 116° (*B.* 33, 2653). — \**III*, 124.  
 2) 3-Brom-4-Methylphenylester d. Hexahydropyridin-1-Carbonsäure. Sm. 75—76°; Sd. 262°<sub>34</sub> (*Bl.* [3] 29, 754 *C.* 1903 [2] 629).  
 3) Piperidid d. 5-Brom-2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 82—84° (*M.* 22, 953 *C.* 1902 [1] 194). — \**IV*, 13.
- $C_{13}H_{16}O_2NJ$  1) Jodmethylat d. 7-Dimethylamido-4-Methyl-1,2-Benzpyron. Zers. bei 188° (*B.* 32, 3698). — \**II*, 964.
- $C_{13}H_{16}O_2N_2Cl_2$  1) Verbindung (aus d. Methylenäther d. Chloroxymethan u. Pyridin). +  $PtCl_4$ , +  $2AuCl_3$  (*A.* 334, 37 *C.* 1904 [2] 948).
- $C_{13}H_{16}O_2N_2S$  1) 5-Isopropylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 83° (*A.* 331, 236 *C.* 1904 [1] 1221).  
 2) 5-Äthylsulfon-3,4-Dimethyl-1-Phenylpyrazol. Sm. 115° (*A.* 331, 244 *C.* 1904 [1] 1221).  
 3) Äthylester d. Merkaptoameisenallylamidophenylimidomethyläthersäure. HCl (*Soc.* 93, 28 *C.* 1908 [1] 1542).  
 4) S-Phenylmonamid d.  $\beta$ -Imidopropan- $\alpha$ -Carbonsäure- $\alpha$ -Thiocarbonsäure-O-Äthylester. Sm. 135—136° (*A.* 314, 226). — \**II*, 220.
- $C_{13}H_{16}O_2N_4S_2$  1) 2,4-Di[ $\beta$ -Acetylthioureido]-1-Methylbenzol. Sm. 232° (*B.* 8, 668). — *IV*, 604.
- $C_{13}H_{16}O_3NCl$  1) Methylester d. 2-Chloracetylamido-1-Isopropylbenzol-4-Carbonsäure. Sm. 101—102° (*J. pr.* [2] 40, 440). — *II*, 1388.
- $C_{13}H_{16}O_3NBr$  1)  $\alpha$ -Brom- $\epsilon$ -Benzoylamidopentan- $\alpha$ -Carbonsäure. Sm. 166° (*B.* 42, 842 *C.* 1909 [1] 1090).  
 2)  $\gamma$ -[4-Bromphenyl]amid d.  $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 125—126° (*B.* 30, 292). — \**II*, 214.
- $C_{13}H_{16}O_4NCl$  1) Äthylester d. 1- $\alpha$ -Chloracetylamido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 87—88° (*B.* 37, 2495 *C.* 1904 [2] 425).
- $C_{13}H_{16}O_4NBr$  1) Diäthylester d. 4-Bromphenylamidoessigsäure-2-Carbonsäure. Sm. 97° (*D. R. P.* 134986 *C.* 1902 [2] 1086).
- $C_{13}H_{16}O_4NJ$  1) Äthylester d. 1- $\alpha$ -Jodacetylamido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 120° (*B.* 41, 2854 *C.* 1908 [2] 1734).
- $C_{13}H_{16}O_4N_2S$  1) 2-Merkapto-4-[ $\alpha\beta\gamma\delta$ -Tetraoxybutyl]-1-Phenylimidazol. Sm. 208° (*B.* 34, 3843 *C.* 1902 [1] 71). — \**IV*, 344.
- $C_{13}H_{16}O_4N_3J$  1)  $\alpha$ -Bisamidoacetylamido- $\beta$ -[4-Jodphenyl]propionsäure. Sm. 240,3° (*B.* 42, 3416 *C.* 1909 [2] 1548).
- $C_{13}H_{16}O_4ClJ$  1) Diacetat d. 4-Chlor-2-Jodoso-1,3,5-Trimethylbenzol. Sm. 169° (*J. pr.* [2] 61, 430).
- $C_{13}H_{16}O_5NCl$  1) 2-Chlor-4-Diäthylamidophenyltartronsäure. K (*C.* 1900 [2] 791).
- $C_{13}H_{16}N_2ClBr$  1) Brommethylat d. 5-Chlor-3-Methyl-4-Äthyl-1-Phenylpyrazol. Sm. 197° (*B.* 34, 1307). — \**IV*, 341.
- $C_{13}H_{16}N_2ClJ$  1) Jodmethylat d. 5-Chlor-3-Methyl-4-Äthyl-1-Phenylpyrazol. Sm. 176° (*B.* 34, 1307). — \**IV*, 341.  
 2) Chloräthylat d. 5-Jod-3,4-Dimethyl-1-Phenylpyrazol +  $4H_2O$ . Sm. 85° (190° wasserfrei) (*B.* 34, 1306). — \**IV*, 337.
- $C_{13}H_{17}ONBr_2$  1) Diäthylamid d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 127° (*C.* 1899 [1] 730; *A.* 320, 91). — \**II*, 834.
- $C_{13}H_{17}ONS_2$  1) Isoamylester d. Benzoylamidodithioameisensäure. Sm. 48—49° (*Am.* 26, 195).



- $C_{13}H_{17}ON_2Cl$  1) Chlormethylat d. 3-Keto-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. 2 +  $PtCl_4$  (A. 293, 23). — IV, 521.  
2) 2-Chlormethylat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-5-Äthyläther. 2 +  $PtCl_4$  (A. 293, 20).  
3) 2-Chloräthylat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-5-Methyläther. 2 +  $PtCl_4$  (A. 293, 23). — IV, 511.
- $C_{13}H_{17}ON_2J$  1) Jodmethylat d. 3-Keto-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 114—115° (A. 293, 23). — IV, 521.  
2) Jodmethylat d. 3-Oxy-5-Methyl-4-Äthyl-1-Phenylpyrazol. Sm. 175° (A. 350, 328 C. 1907 [1] 737).  
3) 2-Jodmethylat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-5-Äthyläther. Sm. 113—116° u. Zers. (A. 293, 19; Z. Kr. 29, 217). — \*IV, 327.  
4) 2-Jodäthylat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-5-Methyläther. Zers. bei 114—115° (A. 293, 23). — IV, 511.
- $C_{13}H_{17}ON_3S$  1) 1-Phenylamido-2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Äthyltetrahydroimidazol. Sm. 85° (C. 1904 [2] 1028).
- $C_{13}H_{17}ON_4Cl$  1) Hexamethylentetraminbenzoylchlorid (J. pr. [2] 46, 1). — II, 1170.
- $C_{13}H_{17}O_2NBr_2$  1) Äthylester d.  $\delta$ -[p-Dibrom-2-Amidophenyl]valeriansäure. Fl. HCl (Sm. 135—136° u. Zers.) (B. 20, 383). — II, 1393.  
2) Acetat d. Diäthyl-3,5-Dibrom-2-Oxybenzylamin (A. 332, 221 C. 1904 [2] 203).
- $C_{13}H_{17}O_2NS$  1) O-Methyläther-S-Isobutyläther d. Benzoylimidomerkaptooxymethan. Fl. (Am. 24, 216).  
2) Isoamylester d. Benzoylamidothionameisensäure (A. ch. [5] 11, 336). — II, 1181; \*II, 743.
- $C_{13}H_{17}O_2NS_2$  1) Propylxanthogenacet-4-Methylphenylamid. Sm. 132—133° (Ar. 244, 84 C. 1906 [1] 1875).
- $C_{13}H_{17}O_2N_2Cl$  1) 1-Hydroxylamido-5-Oximido-3-[4-Chlorphenyl]-1-Methylhexahydrobenzol. Sm. 197° (A. 303, 256). — \*III, 139.  
2)  $\beta$ -Oxyäthyläther d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Chlormethylat. 2 +  $PtCl_4$  (A. 293, 24). — IV, 514.  
3) 1'-Äthyläther d. 5-Keto-1-[4-Oxyphenyl]-3-Methyl-4,5-Dihydropyrazol-2-Chlormethylat. 2 +  $PtCl_4$  (B. 28, 636).  
4) Äthylester d. 2,5-Dimethyl-2,3-Dihydrobenzimidazol-2-Chlormethylcarbonsäure (Ä. d. Äthenyltoluylendiaminchloressigsäure). Sm. 110° (B. 25, 606). — IV, 615.
- $C_{13}H_{17}O_2N_2Br$  1) Methylester d.  $\gamma$ -[4-Bromphenyl]hydrazon- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 90° (Soc. 83, 1231 C. 1903 [2] 1420).
- $C_{13}H_{17}O_2N_2J$  1)  $\beta$ -Oxyäthyläther d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Jodmethylat. Sm. 129—130° (A. 293, 24). — IV, 514.
- $C_{13}H_{17}O_2N_2J_3$  1) Verbindung (aus 4-Oxy-3,4-Dimethyl-6-Phenyl-1,2,5-Oxdiazin). Sm. 126° (B. 38, 3370 C. 1905 [2] 1602).
- $C_{13}H_{17}O_2N_3S$  1) Äthylester d.  $\beta$ -[ $\alpha$ -Phenylthiosemicarbazon]buttersäure. Sm. 142° (G. 38 [1] 347 C. 1908 [1] 2030).
- $C_{13}H_{17}O_3NS$  1) Äthylester d.  $\alpha$ -Phenylamidoformylmerkaptisobuttersäure. Sm. 79—81° (Ann. 24, 75). — \*II, 193.  
2) Nitril d.  $\gamma$ -[4-Methoxyphenyl]sulfonpentan- $\gamma$ -Carbonsäure. Fl. (J. pr. [2] 72, 334 C. 1905 [2] 1785).  
3) 2-Methylphenylmonamid d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäuremonoäthylester. Fl. (J. pr. [2] 74, 42 C. 1906 [2] 753).  
4) 3-Methylphenylmonamid d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäuremonoäthylester. Fl. (J. pr. [2] 74, 46 C. 1906 [2] 754).  
5) 4-Methylphenylmonamid d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäuremonoäthylester. Sm. 46—47° (J. pr. [2] 74, 50 C. 1906 [2] 754).
- $C_{13}H_{17}O_3N_2Cl$  1) Äthyläther d. 4-Acetylamido-1-Oxy-p-Chloracetylamidomethylbenzol. Sm. 179° (A. 343, 301 C. 1906 [1] 928).
- $C_{13}H_{17}O_4BrS$  1) Äthylester d.  $\alpha$ -Brom- $\alpha$ -[4-Methylphenyl]sulfonbuttersäure. Fl. (J. pr. [2] 59, 344).
- $C_{13}H_{17}O_5NS$  1) N-Acetyl-2,4,5-Trimethylphenylsulfonamidoessigsäure. Sm. 158° (B. 27 [2] 888). — \*II, 82.  
2) Isobutylester d. Phenylsulfonacetylamidoameisensäure. Sm. 81° (C. 1899 [2] 285). — \*II, 471.
- $C_{13}H_{17}O_6N_2Cl$  1) 4-Chlorbenzoylhydrazon d. d-Glykose. Zers. bei 211° (C. 1904 [2] 1493).

- $C_{13}H_{17}O_6N_2Br$  1) 4-Brombenzoylhydrazon d. d-Galaktose. Zers. bei  $216^\circ$  (C. 1904 [2] 1493).  
 2) 4-Brombenzoylhydrazon d. d-Glykose. Zers. bei  $206-207^\circ$  (C. 1904 [2] 1493).  
 3) 4-Brombenzoylhydrazon d. d-Mannose (C. 1904 [2] 1493).
- $C_{13}H_{17}N_2ClS$  1) 2-Chlormethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Methyläther. Sm.  $91^\circ$ .  $2 + PtCl_4$  (A. 331, 218 C. 1904 [1] 1219).
- $C_{13}H_{17}N_2JS$  1) 2-Jodmethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Methyläther. Sm.  $167^\circ$  (A. 331, 218 C. 1904 [1] 1219).  
 2) 2-Jodmethylat d. 3-Merkapto-4,5-Dimethyl-1-Phenylpyrazol-3-Methyläther. Sm.  $175^\circ$  (A. 350, 326 C. 1907 [1] 737).  
 3) Jodmethylat d. 3-Merkapto-5-Methyl-1-[2-Methylphenyl]pyrazol-3-Methyläther. Sm.  $173^\circ$  (A. 338, 319 C. 1905 [1] 1163).  
 4) Jodmethylat d. 3-Merkapto-5-Methyl-1-[4-Methylphenyl]pyrazol-3-Methyläther. Sm.  $168^\circ$  (A. 338, 319 C. 1905 [1] 1163).  
 5) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Äthyläther. Sm.  $158^\circ$  (A. 331, 201, 234 C. 1904 [1] 1218).  
 6) Jodmethylat d. 3-Merkapto-5-Methyl-1-Phenylpyrazol-3-Äthyläther. Sm.  $121^\circ$  (A. 338, 295 C. 1905 [1] 1161).  
 7) 3-Jodmethylat d. 2-Merkapto-1-[2,4-Dimethylphenyl]imidazol-2-Methyläther. Sm.  $169-170^\circ$  (B. 25, 2368). — IV, 504.  
 8) 2-Jodäthylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Methyläther. Sm.  $203^\circ$  (A. 331, 209, 227 C. 1904 [1] 1219).  
 9) Jodäthylat d. 3-Merkapto-5-Methyl-1-Phenylpyrazol-3-Methyläther. Sm.  $148^\circ$  (A. 338, 300 C. 1905 [1] 1161).
- $C_{13}H_{17}N_2JSe$  1) Jodmethylat d. 5-Seleno-3-Methyl-1-Phenylpyrazol-5-Äthyläther. Sm.  $152^\circ$  (A. 320, 37 C. 1902 [1] 666). — \*IV, 333.  
 2) Jodmethylat d. 3-Seleno-5-Methyl-1-Phenylpyrazol-3-Äthyläther. Sm.  $132^\circ$  (A. 338, 304 C. 1905 [1] 1162).  
 3) 2-Jodäthylat d. 5-Merkapto-1-Methyl-3-Phenylpyrazol-5-Methyläther. Sm.  $118^\circ$  (A. 352, 195 C. 1907 [1] 1050).  
 4) Jodäthylat d. 3-Seleno-5-Methyl-1-Phenylpyrazol-3-Methyläther. Sm.  $110^\circ$  (A. 338, 309 C. 1905 [1] 1162).
- $C_{13}H_{18}ONCl$  1) Nitrosochlorid d.  $\alpha$ -[2,4,6-Trimethylphenyl]- $\alpha$ -Buten. Sm. 122 bis  $122,5^\circ$  (B. 35, 2260 C. 1902 [2] 275).  
 2) Nitrosochlorid d.  $\alpha$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylpropen. Sm.  $136^\circ$  (B. 37, 929 C. 1904 [1] 1209).
- $C_{13}H_{18}ONBr$  1) Äthyläther d.  $\beta$ -Brom-8-Oxy-1-Äthyl-1,2,3,4-Tetrahydrochinolin. Sm.  $35^\circ$ . Pikrat (B. 17, 762). — IV, 200.  
 2) Äthylphenylamid d.  $\alpha$ -Bromisovaleriansäure. Sd.  $148-165^\circ$  (B. 30, 3180). — \*II, 177.  
 3) 2,4-Dimethylphenylamid d.  $\alpha$ -Bromisovaleriansäure. Sm.  $153^\circ$  (B. 31, 3237). — \*II, 312.
- $C_{13}H_{18}ON_2S$  1) s-Caproylphenylthioharnstoff. Sm.  $77-78^\circ$  (Soc. 85, 809 C. 1904 [2] 201, 519).  
 2) s-Isovaleryl-2-Methylphenylthioharnstoff. Sm.  $142-143^\circ$  (Soc. 67, 1042). — \*II, 255.  
 3) s-Isovaleryl-4-Methylphenylthioharnstoff. Sm.  $116-117^\circ$  (Soc. 67, 1043). — \*II, 273.  
 4)  $\beta$ -[ $\beta$ -Phenylthioureido]- $\delta$ -Keto- $\beta$ -Methylpentan (s-Diacetonphenylthioharnstoff). Sm.  $144^\circ$  (B. 27, 279; 32, 3156). — II, 446; \*II, 237.
- $C_{13}H_{18}ON_2S_2$  1) Isoamylester d.  $\beta$ -Phenylthioureidothiolameisensäure (Isoamylester d. Phenylthioallophansäure). Sm.  $102^\circ$  (J. pr. [2] 32, 256). — II, 398.
- $C_{13}H_{18}ON_3J$  1) Jodmethylat d. 4-Dimethylamido-3-Keto-5-Methyl-1-Phenyl-2,3-Dihydropyrazol. Sm.  $216^\circ$  (A. 350, 309 C. 1907 [1] 736).  
 2) 3-Jodmethylat d. 4-Acetylamido-1,2,5-Trimethylbenzimidazol +  $H_2O$ . Sm.  $232^\circ$  (B. 34, 1134). — \*IV, 800.
- $C_{13}H_{18}O_2NCl$  1) 3-Oxy- $\beta$ -Chloracetylamidomethyl-1-Methyl-4-Isopropylbenzol. Sm.  $152-153^\circ$  (A. 343, 285 C. 1906 [1] 927).  
 2) Chlormethylat d. Methylhydrohydrastinin. Sm.  $211^\circ$ .  $2 + PtCl_4$ ,  $+ AuCl_3$  (B. 24, 2739). — IV, 203.  
 3) Chlormethylat d. 1,2,3,4-Tetrahydrochinolin-1-Essigsäuremethyl-ester.  $2 + PtCl_4$  (Soc. 83, 1417 C. 1904 [1] 439).

- $C_{13}H_{18}O_2NCl$  4) Diäthylamid d.  $\alpha$ -Chlor- $\beta$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 149° (Bl. [4] 1, 557 C. 1907 [2] 405).
- $C_{13}H_{18}O_2NJ$  1) Jodmethylat d. Methylhydrohydrastinin. Sm. 216—217° (B. 24, 2738). — IV, 203.  
2) Jodäthylat-6,7-Methylenäther d. 6,7-Dioxy-2-Methyl-1,2,3,4-Tetrahydroisochinolin. Sm. 206—207° (B. 20, 2404). — IV, 202.  
3) Jodmethylat d. 1,2,3,4-Tetrahydro-1-Chinolylessigsäuremethyl-ester. Zers. bei 150—155° (A. 318, 112; B. 35, 3585 C. 1902 [2] 1385). — \*IV, 143.
- $C_{13}H_{18}O_2N_2S$  1)  $\beta$ -[ $\alpha$ -Oxy- $\beta$ -Phenylthioureido]- $\delta$ -Keto- $\beta$ -Methylpentan. Sm. 110 bis 112° (B. 31, 1378). — \*II, 202.  
2) Phenylester d.  $\alpha$ -Isoamylthioharnstoff- $\beta$ -Carbonsäure. Sm. 99 bis 100° (Soc. 87, 342 C. 1905 [1] 1098, 1315).  
3) S-Phenylamid d. Amidothioameisensäure-N-Carbonsäureamyl-ester. Sm. 97—98° (Soc. 79, 914).
- $C_{13}H_{18}O_2N_2S_2$  1) Diäthylester d. 4-Methyl-1,3-Phenylendi[amidothioameisensäure]. Sm. 119—120° (B. 20, 230). — IV, 603.
- $C_{13}H_{18}O_3NCl$  1) Chlormethylat d. Hydrastinin. 2 +  $PtCl_4$  (B. 22, 2331). — III, 105.  
2) Hydrastininmethinmethylchlorid. 2 +  $PtCl_4$  (B. 22, 2339). — III, 106.
- $C_{13}H_{18}O_3NBr$  1) Brommethylat d. 6,7,8-Trioxy-2-Methyl-1,2,3,4-Tetrahydroisochinolin-6,7-Methylenäther-8-Methyläther (Br. d. Hydrocotarnin). Sm. 221° u. Zers. (B. 42, 1095 C. 1909 [1] 1717).
- $C_{13}H_{18}O_3NJ$  1) Jodmethylat d. 6,7,8-Trioxy-2-Methyl-1,2,3,4-Tetrahydroisochinolin-6,7-Methylenäther-8-Methyläther (J. d. Hydrocotarnin). Sm. 206° (B. 42, 1096 C. 1909 [1] 1717).  
2) Jodmethylat d. Hydrastinin. Sm. 267° (B. 22, 2330). — III, 105.  
3) Hydrastininmethinmethyljodid. Sm. 230—232° (B. 22, 2337). — III, 106.
- $C_{13}H_{18}O_4NCl$  1) Chloracetylpyrogallolpiperidin. Sm. 101° (J. r. 25, 290). — IV, 5.  
2) Chloräthylat d. Pyridin-3,4-Dicarbonsäurediäthylester. 2 +  $PtCl_4$  (M. 16, 697; 18, 238). — IV, 164.
- $C_{13}H_{19}O_4NJ$  1) Jodmethylat d. 3,4,5-Trioxy-1-[ $\beta$ -Dimethylamidoäthyl]benzol-4,5-Methylenäther-2-Carbonsäurealdehyd (Norcotarniummethinmethyljodid). Sm. 272° (B. 36, 1529 C. 1903 [2] 52).  
2) Jodäthylat d. Pyridin-3,4-Dicarbonsäurediäthylester (M. 16, 697; 18, 238). — IV, 164; \*IV, 124.
- $C_{13}H_{18}O_5N_2S$  1) 2,4,5-Trimethylphenylsulfonamidoacetylamidoessigsäure (B. 27 [2] 888). — \*II, 82.  
2) Monamid-4-Sulfophenylmonamid d. Pentan- $\gamma\gamma$ -Dicarbonsäure (A. 340, 347 C. 1905 [2] 892).
- $C_{13}H_{18}O_6N_2S$  1) Tetraoxybutyl-N-Phenylthiohydantoinsäure. Sm. 178—180° u. Zers. (B. 35, 4014 C. 1903 [1] 390).
- $C_{13}H_{18}O_9NCl_3$  1) Verbindung (aus Albumin) (A. 101, 175). — IV, 1584.
- $C_{13}H_{13}Cl_2BrJ$  1)  $\alpha\beta$ -Dichloräthyl-4-Isoamylphenyljodoniumbromid. Sm. 109° u. Zers. (B. 34, 3687).
- $C_{13}H_{19}ONBr_2$  1) Diäthyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 87°. HBr (B. 29, 1114; A. 344, 215 C. 1906 [1] 1161). — \*II, 454.  
2) Diäthyl-2,6-Dibrom-4-Oxy-3,5-Dimethylbenzylamin. Sm. 115 bis 116° (A. 344, 237 C. 1906 [1] 1163).
- $C_{13}H_{19}ONS$  1) Phenylamid d.  $\alpha$ -Merkaptobutterisopropyläthersäure. Sm. 87 bis 88° (J. pr. [2] 74, 35 C. 1906 [2] 752).
- $C_{13}H_{19}ON_2J$  1) Jodmethylat d. Methylcytsin. — III, 879.  
2) Jodäthylat d. Cytisin. — III, 879.
- $C_{13}H_{19}ON_3S$  1)  $\delta$ -Oximido- $\beta$ -[ $\beta$ -Phenylthioureido]- $\beta$ -Methylpentan (Oxim d. Diacetophenylthioharnstoff). Sm. 152—153° (B. 32, 3158). — \*II, 237.
- $C_{13}H_{19}OCl_2J$  1)  $\alpha\beta$ -Dichloräthyl-4-Isoamylphenyljodoniumhydroxyd. Salze, siehe (B. 34, 3687).
- $C_{13}H_{19}O_2NS$  1) 1-Phenylsulfon-2-Methyl-R-Hexamethylenimin. Sm. 78° (B. 42, 1263 C. 1909 [1] 1696).  
2) 1-Phenylsulfon-2-Propyltetrahydropyrrol. Sm. 66—67,5° (B. 42, 1265 C. 1909 [1] 1696).  
3) 1-Phenylsulfon-2-Äthylhexahydropyridin. Sm. 64—65° (B. 33, 3516). — \*IV, 25.



- C<sub>13</sub>H<sub>19</sub>O<sub>2</sub>NS** 4) 1-Phenylsulfon-2,6-Dimethylhexahydropyridin. Sm. 50° (B. 34, 2427). — \*IV, 27.  
5) isom. 1-Phenylsulfon-2,6-Dimethylhexahydropyridin. Sm. 65° (B. 34, 2427). — \*IV, 27.  
6) Sultam d.  $\gamma$ -Oxy- $\gamma$ -Phenylpentan- $\gamma^2$ -Sulfonsäureäthylamid. Sm. 140—150° (B. 37, 3259 C. 1904 [2] 1031).
- C<sub>13</sub>H<sub>19</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) Chlormethylat d.  $\beta$ -Benzoximido- $\alpha$ -Dimethylamidopropan. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (C. 1898 [2] 632). — \*II, 758.  
2) Verbindung (aus Chlordimethyläther u. Cytisin). + AuCl<sub>3</sub> (A. 334, 56 C. 1904 [2] 949).
- C<sub>13</sub>H<sub>19</sub>O<sub>2</sub>N<sub>3</sub>S** 1) Äthylester d.  $\gamma$ -Äthyl- $\alpha$ -Phenylthiosemicarbazidoessigsäure. Sm. 84° (B. 40, 1025 C. 1907 [1] 1191).
- C<sub>13</sub>H<sub>19</sub>O<sub>2</sub>ClS** 1) Chlorid d. 2-Propyl-4-Isopropyl-1-Methylbenzol- $\beta$ -Sulfonsäure. Sm. 61° (B. 40, 2370 C. 1907 [2] 335).
- C<sub>13</sub>H<sub>19</sub>O<sub>3</sub>N<sub>3</sub>J** 1) Oxim d. Hydrastininjodmethylat. Zers. bei 250° (B. 22, 2331). — III, 106.
- C<sub>13</sub>H<sub>19</sub>O<sub>4</sub>NS** 1)  $\zeta$ -Phenylsulfonamidohexan- $\alpha$ -Carbonsäure. Sm. 80° (B. 40, 1840 C. 1907 [2] 39).  
2)  $\alpha$ -[4-Methylphenylsulfon]amido- $\beta$ -Methylbutan- $\alpha$ -Carbonsäure. Sm. 141° (C. r. 141, 116 C. 1905 [2] 615).  
3) Äthylester d. 2,4,5-Trimethylphenylsulfonamidoessigsäure. Sm. 77° (B. 27 [2] 888). — \*II, 82.
- C<sub>13</sub>H<sub>19</sub>O<sub>5</sub>NS** 1) Äthylester d. Äthylsulfon-4-Äthoxyphenylamidoameisensäure. Sm. 112° (Ar. 242, 587 C. 1905 [1] 166).
- C<sub>13</sub>H<sub>19</sub>O<sub>5</sub>NS<sub>2</sub>** 1) Benzoyldi[ $\beta$ -Methylsulfonäthyl]amin. Sm. 131° (B. 27, 3048). — II, 1161.
- C<sub>13</sub>H<sub>19</sub>NCIBr** 1) Verbindung (aus 2-Amido-1-Methylbenzol). HCl (B. 25, 2804). — II, 458.
- C<sub>13</sub>H<sub>19</sub>NBrJ** 1) d-Methylallylpropyl-4-Bromphenylammoniumjodid. Sm. 142 bis 143° (Soc. 93, 300 C. 1908 [1] 1618).  
2) r-Methylallylpropyl-4-Bromphenylammoniumjodid. Sm. 140° (Soc. 93, 298 C. 1908 [1] 1618).  
3) d-Methylallylisopropyl-4-Bromphenylammoniumjodid. Sm. 153° (Soc. 93, 302 C. 1908 [1] 1618).  
4) r-Methylallylisopropyl-4-Bromphenylammoniumjodid. Sm. 153° (150°) (C. 1907 [2] 799; Soc. 93, 300 C. 1908 [1] 1618).
- C<sub>13</sub>H<sub>20</sub>ONCl** 1) Chlormethylat d. 3-Dimethylamido-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 243° u. Zers. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (A. 288, 125).
- C<sub>13</sub>H<sub>20</sub>ONBr** 1) d-Methylallylpropyl-4-Bromphenylammoniumhydroxyd. d-Bromcamphersulfonat (Soc. 93, 299 C. 1908 [1] 1618).  
2) r-Methylallylpropyl-4-Bromphenylammoniumhydroxyd. d-Camphersulfonat, d-Bromcamphersulfonat, Jodid (Soc. 93, 299 C. 1908 [1] 1618).  
3) d-Methylallylisopropyl-4-Bromphenylammoniumhydroxyd. d-Camphersulfonat (Soc. 93, 301 C. 1908 [1] 1618).  
4) r-Methylallylisopropyl-4-Bromphenylammoniumhydroxyd. Jodid, d-Camphersulfonat (Soc. 93, 301 C. 1908 [1] 1618).
- C<sub>13</sub>H<sub>20</sub>ONJ** 1) Jodmethylat d. 3-Dimethylamido-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 201° (A. 288, 119).  
2) Jodmethylat d. 2-Oxy-1,3,3-Trimethyl-2,3-Dihydroindol-2-Methyläther. Sm. 183—184° (G. 27 [1] 480). — IV, 225.  
3) Jodäthylat d. 8-Oxy-1-Äthyl-1,2,3,4-Tetrahydrochinolin. Sm. 160° (B. 19, 1044). — IV, 200.
- C<sub>13</sub>H<sub>20</sub>ON<sub>2</sub>S** 1)  $\alpha$ -Phenyl- $\beta$ -[ $\gamma$ -Oxy- $\alpha$ -Dimethylbutyl]thioharnstoff. Sm. 163—164° (B. 30, 1324). — \*II, 195.  
2)  $\alpha$ -Phenyl- $\beta$ -[ $\gamma$ -Oxy- $\alpha$ - $\gamma$ -Dimethylbutyl]thioharnstoff. Sm. 131—132° (M. 23, 761 C. 1902 [2] 1097).  
3)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oxymethyl- $\gamma$ -Methylbutyl]thioharnstoff. Fl. (C. 1902 [1] 400).  
4) Äthyläther d.  $\alpha$ -[ $\beta$ -Oxybutyl]- $\beta$ -Phenylthioharnstoff. Sm. 94° (B. 28, 3113). — \*II, 194.  
5) Äthyläther d.  $\alpha$ -[ $\gamma$ -Oxybutyl]- $\beta$ -Phenylthioharnstoff. Sm. 91—92° (B. 28, 3120; 29, 1427). — \*II, 194.  
6) Isoamyläther d.  $\alpha$ -Oxymethyl- $\beta$ -Phenylthioharnstoff. Sm. 109° (Am. 41, 343 C. 1909 [1] 1548).

- C<sub>13</sub>H<sub>20</sub>O<sub>2</sub>NBr** 1) **Menthylester d. Bromcyanessigsäure.** Sm. 134—135° (C. 1903 [1] 566; Soc. 85, 44 C. 1904 [1] 789).
- C<sub>13</sub>H<sub>20</sub>O<sub>2</sub>N<sub>2</sub>S** 1) **Diäthyläther d. α-[ββ-Dioxyäthyl]-β-Phenylthioharnstoff** (s-Acetylphenylthioharnstoff). Sm. 96° (B. 22, 569; 27, 2203). — II, 443; \*II, 236.
- 2) **Verbindung** (aus s-Acetyl-2,4-Dimethylphenylthioharnstoff). Sm. 94 bis 95°. Pikrat (B. 25, 2370). — II, 544.
- 3) **Verbindung** (aus Diäthylamin u. Benzoylamidothioameisensäuremethylester). Fl. (Am. 24, 206).
- C<sub>13</sub>H<sub>20</sub>O<sub>2</sub>ClP** 1) **Methyldiäthyl-4-Methylphenylphosphoniumchlorid-α-Carbonsäure.** Sm. 96°. (2 + PtCl<sub>4</sub>) (A. 293, 291). — IV, 1673.
- 2) **Äthylester d. Trimethyl-4-Methylphenylphosphoniumchlorid-α-Carbonsäure.** Sm. 153°. 2 + PtCl<sub>4</sub> (A. 293, 288). — IV, 1673.
- C<sub>13</sub>H<sub>20</sub>O<sub>2</sub>ClAs** 1) **Triäthylphenylarsoniumchlorid-4-Carbonsäure.** 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (A. 320, 312 C. 1902 [1] 921). — \*IV, 1198.
- C<sub>13</sub>H<sub>20</sub>O<sub>2</sub>Br<sub>2</sub>Mg** 1) **Verbindung** (aus Benzaldehyd, Äthylbromid u. Magnesium) (B. 38, 1297 C. 1905 [1] 1366; B. 38, 3263 C. 1905 [2] 1523).
- C<sub>13</sub>H<sub>20</sub>O<sub>3</sub>NJ** 1) **Verbindung** (aus Tyrosin). K (G. 11, 550). — II, 1569.
- C<sub>13</sub>H<sub>20</sub>O<sub>3</sub>NP** 1) **Diäthylester d. 1,2,3,4-Tetrahydro-1-Chinolylphosphinsäure.** Sd. 155° (A. 326, 188 C. 1903 [1] 820). — \*IV, 142.
- C<sub>13</sub>H<sub>20</sub>O<sub>3</sub>N<sub>3</sub>Br** 1) **Methylester d. d-α-[α-Bromisocapronyl]amido-1-β-[4-Imidazolyl]-propionsäure.** Sm. 173° (A. 363, 109 C. 1908 [2] 1728).
- C<sub>13</sub>H<sub>20</sub>O<sub>5</sub>NP** 1) **Triäthylester d. Phenylamidophosphinsäure-3-Carbonsäure.** Sd. 232—234° (A. 326, 242 C. 1903 [1] 868).
- 2) **Triäthylester d. Phenylamidophosphinsäure-4-Carbonsäure.** Sd. 206—207° (A. 326, 244 C. 1903 [1] 868).
- C<sub>13</sub>H<sub>20</sub>NS<sub>2</sub>P** 1) **Diäthyl-4-Dimethylamidophenylphosphin + Schwefelkohlenstoff.** Sm. 107° (A. 260, 26). — IV, 1656.
- C<sub>13</sub>H<sub>21</sub>ONS** 1) **5-[α-Oximidoheptyl]-2-Äthylthiophen.** Sm. 38—39° (B. 19, 668). — III, 766.
- C<sub>13</sub>H<sub>21</sub>ON<sub>2</sub>Cl** 1) **Methyldiäthyl-4-Acetylamidophenylammoniumchlorid.** Zers. bei 170° (D.R.P. 88557). — \*IV, 385.
- C<sub>13</sub>H<sub>21</sub>ON<sub>2</sub>Br** 1) **Dimethyldiäthyl-2-Acetylamido-4-Methylphenylammoniumbromid.** Sm. 187—187,5° (B. 34, 1137). — \*IV, 401.
- C<sub>13</sub>H<sub>21</sub>ON<sub>2</sub>J** 1) **Methyldiäthyl-4-Acetylamidophenylammoniumjodid.** Zers. bei 195° (D.R.P. 88557). — \*IV, 385.
- C<sub>13</sub>H<sub>21</sub>O<sub>2</sub>NS** 1) **norm. Heptylamid d. Benzolsulfonsäure.** Fl. Na (C. 1899 [2] 868; B. 32, 3513; 33, 478). — \*II, 70.
- 2) **Äthyl-α-Äthylpropylamid d. Benzolsulfonsäure.** Sm. 58—58,5° (C. 1900 [2] 944; J. pr. [2] 63, 205). — \*II, 70.
- 3) **Äthyl-α-Dimethylpropylamid d. Benzolsulfonsäure.** Sm. 99° (C. 1900 [2] 945). — \*II, 70.
- 4) **Benzolsulfonderivat d. β-Äthylamido-β-Methylbutan.** Sm. 90 bis 91° (J. pr. [2] 63, 218).
- C<sub>13</sub>H<sub>21</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) **Triäthyl-4-Nitrobenzylammoniumchlorid** (D. R. P. 87997). — \*II, 288.
- C<sub>13</sub>H<sub>21</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) **Bromäthylat d. Pilocarpin.** Sm. 60° (J. 1885, 1724). — III, 925.
- 2) **Bromäthylat d. Metapilocarpin** (B. 38, 2561 C. 1905 [2] 557).
- C<sub>13</sub>H<sub>21</sub>O<sub>2</sub>N<sub>2</sub>J** 1) **Jodäthylat d. Pilocarpin.** Sm. 30° (J. 1885, 1724). — III, 925.
- 2) **isom. Jodäthylat d. Pilocarpin.** Sm. 114° (Soc. 77, 479; B. 37, 2452 C. 1902 [2] 526). — \*III, 684.
- 3) **Jodäthylat d. Isopilocarpin** (B. 35, 2454). — \*III, 685.
- C<sub>13</sub>H<sub>21</sub>O<sub>2</sub>N<sub>3</sub>S** 1) **Diäthyläther d. α-Amido-α-[ββ-Dioxyäthyl]-β-Phenylthioharnstoff** (Acetylphenylthiosemicarbazid). Sm. 97—98° (B. 27, 184, 2203). — II, 444; \*II, 236.
- C<sub>13</sub>H<sub>21</sub>O<sub>2</sub>N<sub>3</sub>S<sub>2</sub>** 1) **Tetraäthyläther d. 4-Merkaptooxymethylenamido-2-Merkapto-5-Oxy-1,3-Diazin.** Fl. (Am. 36, 154 C. 1906 [2] 1065).
- C<sub>13</sub>H<sub>21</sub>O<sub>3</sub>NS** 1) **4-Diisopropylamido-1-Methylbenzol-3-Sulfonsäure.** Sm. 222 bis 223° (J. pr. [2] 48, 66). — II, 581.
- 2) **Önantholanilinhydrosulfit** (A. 210, 127). — II, 445.
- 3) **Äthylamid d. γ-Oxy-γ-Phenylpentan-γ<sup>2</sup>-Sulfonsäure.** Sm. 99 bis 100° (B. 37, 3258 C. 1904 [2] 1031).
- 4) **Verbindung** (aus Äthylsaccharin). Sm. 99—100° (B. 37, 389 C. 1904 [1] 669).

- $C_{13}H_{21}O_3NS$  5) Verbindung (aus Dimethylanilinsulfurtrioxyd u. Trimethyläthylen) (*Am.* 32, 458 *C.* 1905 [1] 15).
- $C_{13}H_{21}NBrJ$  1) Dimethylisoamyl-4-Bromphenylammoniumjodid. Sm. 176° (*C.* 1907 [2] 799; *Soc.* 91, 2088 *C.* 1908 [1] 628).
- $C_{13}H_{22}ONCl$  1) Chlormethylat d.  $\alpha$ -Dimethylamido- $\gamma$ -Oxy- $\alpha$ -Phenylbutan. +  $AuCl_3$  (*M.* 28, 435 *C.* 1907 [2] 1226).
- $C_{13}H_{22}ONBr$  1) Dimethylisoamyl-4-Bromphenylammoniumhydroxyd. Pikrat (*C.* 1907 [2] 799).
- $C_{13}H_{22}ONJ$  1) Jodmethylat d.  $\alpha$ -Oxy- $\alpha$ -[4-Dimethylamidophenyl]butan. Sm. 161° (*B.* 40, 4363 *C.* 1908 [1] 33).
- 2) Jodmethylat d.  $\alpha$ -Oxy- $\alpha$ -[4-Dimethylamidophenyl]- $\beta$ -Methylpropan. Sm. 118° (*B.* 40, 4366 *C.* 1908 [1] 34).
- $C_{13}H_{22}ON_2Br_2$  1)  $\beta\gamma$ -Dibrompropylpinennitrolamin. Sm. 163–164° (*A.* 268, 217). — IV, 57.
- $C_{13}H_{22}OClP$  1) Methyläther d. Triäthyl-4-Oxyphenylphosphoniumchlorid. 2 +  $PtCl_4$  (*A.* 293, 257). — IV, 1655.
- 2) Äthyläther d. Methyläthyl-4-Oxyphenylphosphoniumchlorid. 2 +  $PtCl_4$  (*A.* 293, 259). — IV, 1655.
- $C_{13}H_{22}OJP$  1) Methyläther d. Triäthyl-4-Oxyphenylphosphoniumjodid. Sm. 65° (*A.* 293, 257). — IV, 1655.
- 2) Äthyläther d. Methyläthyl-4-Oxyphenylphosphoniumjodid. Sm. 60° (*A.* 293, 259). — IV, 1655.
- $C_{13}H_{22}O_2N_2Cl_2$  1) Chlorid d. 3,5-Hexamethyldiamidobenzol-1-Carbonsäure + 4  $H_2O$ . +  $PtCl_4$  +  $H_2O$  (*B.* 7, 41). — II, 1276.
- $C_{13}H_{22}O_2N_2J_2$  1) Jodid d. 3,5-Hexamethyldiamidobenzol-1-Carbonsäure +  $H_2O$  (*B.* 7, 41). — II, 1276.
- $C_{13}H_{22}O_3NCl$  1) Trimethyläther d. Trimethyl-3,4,5-Trioxybenzylammoniumchlorid. 2 +  $PtCl_4$  (*B.* 38, 3640 *C.* 1905 [2] 1733).
- 2) Chlormethylat d. N-Methylmezcalin. 2 +  $PtCl_4$  (*B.* 34, 3011). — \*III, 601.
- $C_{13}H_{22}O_3NJ$  1) Trimethyläther d. Trimethyl-3,4,5-Trioxybenzylammoniumjodid. Sm. 218° (*B.* 38, 3640 *C.* 1905 [2] 1733).
- 2) Jodmethylat d. N-Methylmezcalin. Sm. 220° (225°) (*B.* 34, 3011; *B.* 38, 3640 *C.* 1905 [2] 1733). — \*III, 601.
- $C_{13}H_{22}O_3SSi$  1) r-Methyläthylpropylbenzylsilicium- $\beta$ -Sulfonsäure. l-Menthylaminsalz (*Soc.* 91, 719, 732 *C.* 1907 [2] 44).
- $C_{13}H_{23}O_3NBr_2$  1) Äthylester d. 1-Äthyl-3-[ $\alpha\beta$ -Dibromäthyl]hexahydropyridin-4-Methylcarbonsäure (Ä. d. N-Äthyl-3,4,5-Tribrom-1,2,3,4-tetrahydropyridin-4-carbonsäure).  $HBr$  (*B.* 30, 1337; *A.* 347, 226 *C.* 1906 [2] 686; *A.* 350, 200 *C.* 1907 [1] 175). — \*III, 629.
- $C_{13}H_{23}NJ$  1) Methyläthyl-4-Dimethylamidophenylphosphoniumjodid. Sm. 186° (*A.* 260, 26). — IV, 1656.
- $C_{13}H_{24}ONCl$  1) Chlormethylat d. Dimethylamidocampher. 2 +  $PtCl_4$  (*B.* 32, 1543). — \*III, 360.
- 2) Chlormethylat d. Oxywrightin. 2 +  $PtCl_4$  (*J.* 1888, 2238). — III, 875.
- $C_{13}H_{24}ONJ$  1) Jodmethylat d. Dimethylamidocampher. Sm. 206° (*B.* 32, 1543).
- 2) Jodmethylat d. Oxywrightin (*J.* 1888, 2238). — III, 875.
- $C_{13}H_{24}O_2NCl$  1) Chlormethylat d. Methylhydroecgonidinäthylester. +  $AuCl_3$  +  $2\frac{1}{2}H_2O$  (*B.* 30, 718). — \*III, 647.
- $C_{13}H_{24}O_2NJ$  1) Jodmethylat d. Methylhydroecgonidinäthylester. Sm. 149–150° (*B.* 30, 718). — \*III, 647.
- $C_{13}H_{24}O_3NJ$  1) Jodmethylat d.  $\delta$ -Piperidyl- $\gamma$ -Keto- $\beta$ -Methylbutan- $\beta$ -Carbonsäure-methylester. Sm. 169–170° (*B.* 32, 139). — \*IV, 17.
- $C_{13}H_{24}O_4NBr$  1) Äthylester d.  $\alpha$ -[ $\beta$ -Bromisovaleroxyl]- $\beta$ -Dimethylamidoisobuttersäure. Fl.  $HCl$  (*D.R.P.* 202 167 *C.* 1908 [2] 1220; *Bl.* [4] 5, 240 *C.* 1909 [1] 1319).
- $C_{13}H_{24}O_4NJ$  1) Jodmethylat d. 1-Methylhexahydropyridin-3,4-Dicarbonsäure. Sm. 141° (*M.* 23, 276 *C.* 1902 [1] 1323). — \*I, 45.
- 2) Jodmethylat d. Dimethylgranatensäuredimethylester Sm. 143 bis 144° (*G.* 29 [2] 110). — \*I, 670.
- $C_{13}H_{24}O_4N_2S$  1) sym. Thioureid d.  $\gamma$ -Oxypentan- $\gamma$ -Carbonsäure. Sm. 117–118° (*Am.* 40, 296 *C.* 1908 [2] 1773).



- $C_{13}H_{24}O_5Br_2S_2$  1)  $\beta$ -Dibrom- $\beta$ - $\zeta$ -Di[Äthylsulfon]- $\delta$ -Keto- $\beta$ - $\zeta$ -Dimethylheptan. Sm. 139 bis 140° (B. 34, 1400; B. 35, 814 C. 1902 [1] 757).
- $C_{13}H_{25}ONS_2$  1) Diisoamyläther d. Acetylindodimerkaptomethan. Sd. 198—200°<sub>20</sub> (Am. 26. 192).
- $C_{13}H_{26}ONJ$  1) Jodmethylat d.  $\beta$ -7-Dimethylamido-5-Oxy-1-Methylbicyclo-[1,3,3]-Nonan. Sm. 278° (A. 360, 281 C. 1908 [2] 245).
- $C_{13}H_{26}O_4NBr$  1) Jodmethylat d. Dimethylupinin. Fl. (B. 35, 1924). — \*III, 664.
- $C_{13}H_{27}O_5NS_2$  1) Brommethylat d.  $\delta$ -Dimethylamidobutan- $\alpha\alpha$ -Dicarbonsäurediäthylester (B. 37, 1855 C. 1904 [1] 1487).
- $C_{13}H_{27}O_5NS_2$  1) Diäthylamid d.  $\gamma\gamma$ -Di[Äthylsulfon]valeriansäure. Sm. 101° (B. 32, 2810). — \*I, 758.
- $C_{13}H_{28}O_4NCl$  1)  $\zeta$ -Trimethylchlorammonium- $\beta$ -Methylheptan- $\gamma$ -Methylcarbon-säure. 2 + PtCl<sub>4</sub> (A. 323, 328 C. 1902 [2] 1111).
- $C_{13}H_{28}O_4NCl$  2) Äthylesterchlorid d. Tripropylammoniumessigsäure. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Bl. [3] 9, 236). — \*I, 657.
- $C_{13}H_{28}O_2NJ$  1) Jodäthylat d. 1-[ $\beta\beta$ -Dioxyäthyl]hexahydropyridin (J. d. Piperido-acetal). Sm. 105° (B. 27, 2017; 28, 1247). — IV, 22.
- $C_{13}H_{28}O_4N_2S$  1) Tetraäthyläther d. s-Di[ $\beta\beta$ -Dioxyäthyl]thioharnstoff. Sm. 54° (B. 25, 2356). — I, 1330.
- $C_{13}H_{29}O_2N_2P$  1) Äthyläther d. Dipiperidylmethoxyphosphoniumhydroxyd (A. 326, 167 C. 1903 [1] 762). — \*IV, 13.
- $C_{13}H_{29}O_4NS_2$  1)  $\beta\beta$ -Di[Amylsulfon]- $\alpha$ -Amidopropan. Sm. 104—106°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 32, 2759). — \*I, 693.
- $C_{13}H_{30}O_2NJ$  1) Diäthyläther d. Methyl- $\beta\beta$ -Dioxyäthylpropylammoniumjodid. Sm. 79—80° (B. 30, 1510). — \*I, 477.
- $C_{13}H_{30}O_3N_2Cl_2$  1) Verbindung (aus  $\alpha$ -Oxypropionsäure u. Trimethyl- $\beta$ -Oxyäthylammoniumchlorid). + PtCl<sub>4</sub> + 2H<sub>2</sub>O (B. 24 [2] 967). — I, 1171; \*I, 646.
- $C_{13}H_{31}ON_2P$  1) Di[Dipropylamid] d. Methylphosphinsäure. Sd. 176—180°<sub>25</sub> (A. 326, 165 C. 1903 [1] 762).

### $C_{13}$ -Gruppe mit fünf Elementen.

- $C_{13}H_5O_5N_2ClBr$  1) 4'-Chlor-3-Brom- $\beta$ -Dinitrodiphenylketon. Sm. 165° (B. 37, 3486 C. 1904 [2] 1131).
- $C_{13}H_7ONClBr_3$  1) 2,4,6-Tribromphenylechloramid d. Benzolcarbonsäure. Sm. 115° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_7ONCl_2Br_2$  1) 2-Chlor-4,6-Dibromphenylechloramid d. Benzolcarbonsäure. Sm. 97° (Soc. 85, 182 C. 1904 [1] 938).
- $C_{13}H_7ONCl_2Br_2$  2) 4-Chlor-2,6-Dibromphenylechloramid d. Benzolcarbonsäure. Sm. 111° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_7ONCl_3Br$  1) 2,4-Dichlor-6-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 92° (Soc. 85, 182 C. 1904 [1] 938).
- $C_{13}H_7ONCl_3Br$  2) 2,6-Dichlor-4-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 95° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_8ONClBr_2$  1) 2-Chlor-4,6-Dibromphenylamid d. Benzolcarbonsäure. Sm. 192° (Soc. 85, 182 C. 1904 [1] 938).
- $C_{13}H_8ONClBr_2$  2) 4-Chlor-2,6-Dibromphenylamid d. Benzolcarbonsäure. Sm. 194° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_8ONClS$  1) Chlorid d. Thiodiphenylamin-N-Carbonsäure. Sm. 167,5° (171°) (B. 18, 1846; 24, 2905). — II, 806.
- $C_{13}H_8ONCl_2Br$  1) 2,6-Dichlor-4-Bromphenylamid d. Benzolcarbonsäure. Sm. 195° (Soc. 85, 181 C. 1904 [1] 938).
- $C_{13}H_8ONCl_2Br$  2) 2-Chlor-4-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 74° (Soc. 85, 180 C. 1904 [1] 938).
- $C_{13}H_8ONCl_2Br$  3) 4-Chlor-2-Bromphenylechloramid d. Benzolcarbonsäure. Sm. 62° (Soc. 85, 180 C. 1904 [1] 938).
- $C_{13}H_8O_2NCIS$  1) Chlorid d.  $\alpha$ -Naphtochinolin-5-Sulfonsäure. Sm. 116° (J. pr. [2] 57, 81). — \*IV, 248.
- $C_{13}H_8O_2N_3Br_3S$  1) Nitril d.  $\beta$ -Phenylsulfon- $\beta$ -[2,4,6-Tribromphenyl]hydrazidoameisensäure. Sm. 162° (B. 30, 2556). — IV, 1523.
- $C_{13}H_8O_3NBrS$  1) Phenylimid d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 184,5° (Am. 30, 493 C. 1904 [1] 370).

- $C_{13}H_9O_5NCIS$  1) Chlorid d. 4-Nitrodiphenylketon-2-Sulfonsäure. Sm. 177° (*Am.* 23, 240; 25, 6). — \*III, 152.  
2) Chlorid d. 5-Nitrodiphenylsulfon-2-Carbonsäure. Sm. 109° (*Am.* 24, 485). — \*II, 901.
- $C_{13}H_9O_6NCIS$  1) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäurephenylester-2-Sulfonsäure. Sm. 145–147° (*Am.* 30, 375 C. 1904 [1] 275).
- $C_{13}H_9ONClBr$  1) 4-Bromphenyläther d.  $\alpha$ -Chlor- $\alpha$ -Phenylimido- $\alpha$ -Oxymethan. Sm. 45°; Sd. 227°<sub>23</sub> u. Zers. (*B.* 28, 981). — \*II, 373.  
2) 2-Chlorphenylbromamid d. Benzolcarbonsäure. Sm. 110° (*Soc.* 81, 985 C. 1902 [2] 360).  
3) 2-Bromphenylchloramid d. Benzolcarbonsäure. Sm. 85° (*Soc.* 81, 986 C. 1902 [2] 360).  
4) 2-Chlor-4-Bromphenylamid d. Benzolcarbonsäure. Sm. 145° (*Soc.* 85, 180 C. 1904 [1] 938).  
5) 4-Chlor-2-Bromphenylamid d. Benzolcarbonsäure. Sm. 130,5° (*Soc.* 85, 180 C. 1904 [1] 938).
- $C_{13}H_9O_2NClBr_3$  1) 2,5,6[oder 3,5,6]-Tribrom-3[oder 2]-Phenylamido-4-Keto-1-Oxy-1-Chlormethyl-1,4-Dihydrobenzol. Sm. 180–181° (*A.* 343, 131 C. 1906 [1] 135).
- $C_{13}H_{10}O_2NClBr_2$  1) 2[oder 5]-Chlor-3,6-Dibrom-5[oder 2]-Phenylamido-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 197° (*A.* 341, 338 C. 1905 [2] 1424).
- $C_{13}H_{10}O_2NCIS$  1) Verbindung (aus d. Benzoylamid d. Benzolsulfonsäure). Sm. 79 bis 80° (*A.* 108 214; 214, 212; *B.* 5, 140; 11, 754). — II, 1174.
- $C_{13}H_{10}O_2NCl_3S$  1) 2,4-Dichlorphenylchloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 81° (*Soc.* 85, 1186 C. 1904 [2] 1115).
- $C_{13}H_{10}O_2N_3CIS$  1) Nitril d.  $\beta$ -Phenylsulfon- $\beta$ -[4-Chlorphenyl]hydrazidoameisensäure. Zers. bei 131° (*B.* 30, 2555). — IV, 1520.
- $C_{13}H_{10}O_2N_3BrS$  1) Nitril d.  $\beta$ -Phenylsulfon- $\beta$ -[4-Bromphenyl]hydrazidoameisensäure. Zers. bei 127° (*B.* 30, 2556). — IV, 1522.
- $C_{13}H_{10}O_3NCIS$  1) Chlorid d. 2-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 155° (*B.* 40, 1618 C. 1907 [1] 1630; *A.* 367, 105 C. 1909 [2] 698).  
2) Chlorid d. 1-Benzoylamidobenzol-4-Sulfonsäure. Sm. 176° (*B.* 39, 1566 C. 1906 [2] 36).
- $C_{13}H_{10}N_2ClJS$  1)  $\alpha$ -Phenyl- $\beta$ -[2 oder 3-Chlor-4-Jodphenyl]thioharnstoff. Sm. 159° (*Soc.* 91, 246 C. 1907 [1] 1198).
- $C_{13}H_{11}ON_2ClHg$  1) 6-Oxy-3-Methylazobenzol-5-Quecksilberchlorid. Zers. bei 249° (*C.* 1901 [1] 453; *B.* 35, 2864 C. 1902 [2] 1039). — \*IV, 1215.
- $C_{13}H_{11}O_2NClJ$  1) 5-Nitro-2-Methyldiphenyljodoniumchlorid. Sm. 183°. 2 +  $HgCl_2$ , 2 +  $PtCl_4$  (*B.* 41, 2080 C. 1908 [2] 301).
- $C_{13}H_{11}O_2NCl_2S$  1) 4-Chlorphenylchloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 102° (*Soc.* 85, 1185 C. 1904 [2] 1115).  
2) 2,4-Dichlorphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 126° (*Soc.* 85, 1186 C. 1904 [2] 1115).  
3) 2,4-Dichlor-3-Methylphenylamid d. Benzolsulfonsäure. Sm. 114° (*C.* 1904 [1] 1075; *Soc.* 85, 376 C. 1904 [1] 1412).
- $C_{13}H_{11}O_2NBrJ$  1) 5-Nitro-2-Methyldiphenyljodoniumbromid. Sm. 165° (*B.* 41, 2081 C. 1908 [2] 301).
- $C_{13}H_{11}O_2N_2CIS$  1) Chlorid d. 4-Methylazobenzol-4'-Sulfonsäure. Sm. 130–132° (*Soc.* 67, 930). — IV, 1384.
- $C_{13}H_{11}O_2N_2ClS_2$  1) 2-Chlor-1-[4-Methylphenylthiosulfon]diazobenzol. Zers. bei 89–90° (*J. pr.* [2] 62, 408). — \*IV, 1104.  
2) 4-Chlor-1-[4-Methylphenylthiosulfon]diazobenzol. Zers. bei 106° (*J. pr.* [2] 62, 404). — \*IV, 1104.
- $C_{13}H_{11}O_2N_2BrS_2$  1) 4-Brom-1-[4-Methylphenylthiosulfon]diazobenzol. Sm. 111° u. Zers. (*J. pr.* [2] 62, 409). — \*IV, 1105.
- $C_{13}H_{11}O_2N_4BrS$  1)  $\beta$ -[4-Brom-2-Nitrophenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 160–164° (*B.* 22, 2817). — IV, 679.
- $C_{13}H_{11}O_3N_4BrS$  1)  $\alpha$ -[4-Bromphenyl]azo- $\alpha$ -Phenylhydrazonmethan- $\alpha$ -Sulfonsäure (4-Bromformazylsulfonsäure). Sm. 196° (*B.* 29, 2167). — IV, 1227.
- $C_{13}H_{11}O_4N_2CIS$  1) Benzylchloramid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 142° (*Soc.* 87, 160 C. 1905 [1] 1011).  
2) 2-Methylphenylchloramid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 118° u. Zers. (*Soc.* 85, 1187 C. 1904 [2] 1115).

- $C_{13}H_{11}O_4N_2ClS$  3) 4-Methylphenylchloramid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 115° (Soc. 85, 1187 C. 1904 [2] 1115).  
 4) 4-Chlor-2-Nitrophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 110° (D.R.P. 164130 C. 1905 [2] 1477).  
 5) 4-Chlor-3-Nitrophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 142° (D.R.P. 135016 C. 1902 [2] 1166).  
 6) 2-Chlor-4-Nitrophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 164° (D.R.P. 157859 C. 1905 [1] 416).  
 7) 3-Nitro-4-Methylphenylamid d. 4-Chlorbenzol-1-Sulfonsäure. Sm. 137° (D.R.P. 135016 C. 1902 [2] 1166).
- $C_{13}H_{11}O_4N_2BrS$  1) Benzylbromamid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 147° (Soc. 87, 170 C. 1905 [1] 1012).
- $C_{13}H_{11}O_6N_4BrS_2$  1) 4-Bromdiazobenzolphenylhydrazonmethandisulfonsäure.  $K_2$  (B. 29, 2167). — IV, 1579.
- $C_{13}H_{12}ONBrS$  1) 4-Brom-3-[ $\alpha$ -Oximidobenzyl]-2,5-Dimethylthiophen. Sm. 176 bis 177° (B. 28, 1810). — III, 768.  
 2) isom. Brom- $\beta$ -[ $\alpha$ -Oximidobenzyl]- $\beta$ -Dimethylthiophen (B. 28, 1807). — III, 767.
- $C_{13}H_{12}ONSP$  1) 2-Methylphenylimid d. Thiophosphorsäuremonophenylester (Sulfophosphazo-o-Toluolphenylester). Sm. 236° (B. 28, 1243). — \*II, 359.
- $C_{13}H_{12}O_2NClS$  1) Phenylamid d. 2-Chlor-1-Methylbenzol-4-Sulfonsäure. Sm. 96° (Soc. 73, 765). — \*II, 224.  
 2) Phenylamid d. 2-Chlor-1-Methylbenzol-5-Sulfonsäure. Sm. 92° (Soc. 73, 765). — \*II, 224.  
 3) Phenylamid d. 4-Chlor-1-Methylbenzol-2-Sulfonsäure. Sm. 144° (Soc. 73, 762). — \*II, 224.  
 4) Phenylamid d. 4-Chlor-1-Methylbenzol-3-Sulfonsäure. Sm. 188° (Soc. 73, 760). — \*II, 224.  
 5) Phenylchloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 91° (Soc. 85, 1184 C. 1904 [2] 1115).  
 6) 2-Chlorphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 105° (D.R.P. 157859 C. 1905 [1] 416).  
 7) 4-Chlorphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 95° (119°) (Soc. 85, 1184 C. 1904 [2] 1115; D.R.P. 164130 C. 1905 [2] 1477).  
 8) 5-Chlor-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 124 bis 125° (C. 1904 [1] 1075; Soc. 85, 374 C. 1904 [1] 1412).  
 9) 4-Chlor-3-Methylphenylamid d. Benzolsulfonsäure. Sm. 130°. Na (C. 1904 [1] 1075; Soc. 85, 375 C. 1904 [1] 1412).  
 10) 2-Chlor-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 110° (C. 1904 [1] 1075; Soc. 85, 376 C. 1904 [1] 1412).  
 11) Benzylchloramid d. Benzolsulfonsäure. Sm. 109° (C. 1905 [1] 231).  
 12) 2-Methylphenylchloramid d. Benzolsulfonsäure. Sm. 99–100° (106°) (C. 1904 [1] 1075; Soc. 85, 374 C. 1904 [1] 1411; Soc. 85, 1186 C. 1904 [2] 1115).  
 13) 4-Methylphenylchloramid d. Benzolsulfonsäure. Sm. 86° (Soc. 85, 1186 C. 1904 [2] 1115).
- $C_{13}H_{12}O_2NBrS$  1) Benzylbromamid d. Benzolsulfonsäure. Sm. 104° (Soc. 87, 168 C. 1905 [1] 1012).
- $C_{13}H_{12}O_2NJS$  1) Methylphenylamid d. 4-Jodbenzol-1-Sulfonsäure. Sm. 111° (A. 332, 58 C. 1904 [2] 41).  
 2) 3-Jodphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 128° (A. 332, 61 C. 1904 [2] 41).
- $C_{13}H_{12}O_2N_2ClP$  1) Chlorid d. Phosphorsäurephenylamidbenzoylamid. Sm. 176° (Soc. 95, 1152 C. 1909 [2] 815).
- $C_{13}H_{12}O_3N_3BrS$  1) Amid d.  $\beta$ -Phenylsulfon- $\beta$ -[4-Bromphenyl]hydrazidoameisensäure. Sm. 151° (B. 30, 2557). — IV, 1522.
- $C_{13}H_{13}ON_2BrS$  1) Äthyläther d. 5-Brom-2-Merkapto-4-Keto-1-Benzyl-1,4-Dihydro-1,3-Diazin. Sm. 129° (Am. 40, 451 C. 1909 [1] 87).
- $C_{13}H_{13}O_2NClP$  1) 4-Methylphenylmonamid d. Phenylphosphorsäurechlorid. Sm. 77° (A. 326, 237 C. 1903 [1] 867).



- $C_{13}H_{13}O_2N_2ClS$  1) 4-Chlor-3-Amidophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 128° (D.R.P. 135016 C. 1902 [2] 1166). — \*IV, 376.  
 2) 2-Chlor-4-Amidophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 167° (D.R.P. 160710 C. 1905 [1] 1678).  
 3) 3-Amido-4-Methylphenylamid d. 4-Chlorbenzol-1-Sulfonsäure. Sm. 121° (D.R.P. 135016 C. 1902 [2] 1166). — \*IV, 401.
- $C_{13}H_{13}O_3NClBr$  1) Chloräthylat d. Bromtarkonin.  $2 + PtCl_4$  (A. 212, 174). — III, 919.
- $C_{13}H_{13}O_3NBrJ$  1) Jodäthylat d. Bromtarkonin. Sm. 205—206° u. Zers. (A. 212, 174). — III, 919.
- $C_{13}H_{13}O_3NBrP$  1) 4-Bromphenylmonamid d. Phosphorsäuremono[4-Methylphenylester]. Sm. 230° (A. 326, 233 C. 1903 [1] 867).
- $C_{13}H_{14}ON_2ClP$  1) Phenylamid-4-Methylphenylamid d. Phosphorsäuremono-chlorid. Sm. 133—134° (C. 1901 [1] 688; Soc. 81, 1369 C. 1902 [2] 1197).
- $C_{13}H_{14}O_2NCIS$  1) Propylchloramid d. Naphtalin-2-Sulfonsäure. Sm. 86° (C. 1905 [1] 231).
- $C_{13}H_{14}O_4N_2ClJ$  1)  $\alpha$ -Chloracetylamidoacetyl-amido- $\beta$ -[4-Jodphenyl]propionsäure. Sm. 176,2° (B. 42, 3416 C. 1909 [2] 1548).
- $C_{13}H_{14}O_5NSAs$  1) 4-[4-Methylphenylsulfon]amidophenylarsinsäure (Soc. 95, 1481 C. 1909 [2] 1495).
- $C_{13}H_{15}ONClJ$  1) Jodäthylat d. 5-Chlor-6-Oxychinolin-6-Äthyläther. Sm. 206° (B. 38, 1262 C. 1905 [1] 1409).
- $C_{13}H_{15}ON_3ClJ$  1) Jodmethylat d. 5-Chlor-3-Methyl-1-[4-Acetyl-amido]pyrazol. Sm. 171° (B. 33, 2602). — \*IV, 319.
- $C_{13}H_{15}O_3N_2ClS$  1)  $\beta$ -Chlorpropylthiopyrintrioxyd +  $H_2O$ . Sm. 244° u. Zers. (A. 331, 214 C. 1904 [1] 1219).
- $C_{13}H_{16}O_3NBrS$  1) Äthylester d.  $\alpha$ -Acetyl-amido- $\alpha$ -Merkaptopropion-4-Bromphenyläthersäure. Sm. 91° (H. 20, 436). — \*II, 472.
- $C_{13}H_{16}O_3NJS$  1) Äthylester d.  $\alpha$ -Acetyl-amido- $\alpha$ -Merkaptopropion-4-Jodphenyläthersäure. Sm. 104—105° (H. 20, 589). — \*II, 473.
- $C_{13}H_{16}O_5NCIS$  1) Äthylester d.  $\alpha$ -Acetyl-amido- $\alpha$ -[4-Chlorphenylsulfon]propionsäure. Sm. 165° u. Zers. (H. 16, 527). — II, 792.
- $C_{13}H_{17}O_2N_2ClS$  1) Chlormethylat d. 5-Methylsulfon-3,4-Dimethyl-1-Phenylpyrazol. Sm. 81°.  $2 + PtCl_4$  (A. 331, 243 C. 1904 [1] 1221).
- $C_{13}H_{17}O_2N_2JS$  1) Jodmethylat d. 5-Methylsulfon-3,4-Dimethyl-1-Phenylpyrazol. Sm. 188° (A. 331, 242 C. 1904 [1] 1221).
- $C_{13}H_{17}O_4NBrJ$  1) Jodmethylat d. 6-Brom-3,4,5-Trioxyl-1-[ $\beta$ -Dimethylamidoäthyl]-benzol-3-Methyläther-4,5-Methylenäther-2-Carbonsäurealdehyd (Bromnoretarniamethinmethyljodid). Zers. bei 264° (B. 36, 1535 C. 1903 [2] 52).
- $C_{13}H_{19}O_3NBrJ$  1) Jodmethylat d. Brommethylhydrohydrastininhydrat. Sm. 177° (B. 24, 2740). — IV, 203.
- $C_{13}H_{28}ON_2JP$  1) Äthyläther d. Dipiperidylmethoxyphosphoniumjodid (A. 326, 166 C. 1903 [1] 762). — \*IV, 9.

### $C_{13}$ -Gruppe mit sechs Elementen.

- $C_{13}H_{13}ONClSP$  1) Benzylmonamid d. Phenylthiophosphorsäuremonochlorid. Fl. (A. 326, 205 C. 1903 [1] 821).

### $C_{14}$ -Gruppe mit einem Element.

- $C_{14}H_2$  C 98,8 — H 1,2 — M. G. 170.
- $C_{14}H_{10}$  1) Kohlenwasserstoff (aus Petroleumkoks) (J. 1880, 435). — II, 305.  
 C 94,5 — H 4,5 — M. G. 178.  
 2) Diphenyläthin (Tolan; Diphenylacetylen). Sm. 60°. Pikrat (A. 145, 347; 168, 74 Anm.; 174, 198; 279, 328; B. 12, 1974; 15, 900; J. 1876, 366; Ph. Ch. 10, 412; G. 30 [1] 154; J. pr. [2] 53, 9; C. 1900 [2] 527; 1905 [1] 1147). — II, 270; \*II, 123.  
 2) 9-Methylenfluoren (Biphenylenäthen). Sm. 95°. Pikrat (A. 337, 196 C. 1905 [1] 235).

- C<sub>14</sub>H<sub>10</sub>**
- 3) Anthracen. Sm. 213° (216,5°); Sd. 351°<sub>760</sub> (subl. bei 103—104°). Lit. bedeutend. — II, 256; \*II, 121.
  - 4) Isoanthracen. Sm. 133,5—134,5° (B. 7, 1156). — II, 270.
  - 5) Phenanthren. Sm. 99°; Sd. 340° i. D.; subl. bei 95—96°. Pikrat (Sm. 145°). Lit. bedeutend. — II, 266; \*II, 122.
  - 6) Synanthren (Phosen). Sm. 189—195° (A. 191, 298; M. 3, 668). — II, 269.
  - 7) Phosen. Sm. 193° (J. 1868, 404; A. ch. [5] 7, 526). — II, 270.
  - 8) Kohlenwasserstoff (aus d. Äthyläther d. ββ-Diphenyl-α-Oxyäthen). Sm. 157—158° (A. 279, 329). — \*II, 123.
  - 9) Kohlenwasserstoff. Sm. 189—190° (M. 3, 670).  
C 93,3 — H 6,7 — M. G. 180.
- C<sub>14</sub>H<sub>12</sub>**
- 1) αα-Diphenyläthen. Sm. 8—9° (6°); Sd. 277° (270—271°) (B. 7, 1409; 12, 2245; A. 235, 159, 336; J. r. 22, 365; C. 1901 [1] 1357; 1906 [2] 323; 1907 [1] 1579; R. 14, 189; B. 35, 2647 C. 1902 [2] 587; C. r. 135, 533 C. 1902 [2] 1209; B. 37, 1449 C. 1904 [1] 1352; B. 38, 842 Anm. C. 1905 [1] 875). — II, 249; \*II, 119.
  - 2) αβ-Diphenyläthen (Stilben). Sm. 124°; Sd. 306—307°. Lit. bedeutend. — II, 247; \*II, 117.
  - 3) isom. αβ-Diphenyläthen (Isostilben). Sd. 139—145°<sub>12</sub> (142—143°<sub>21</sub>) (C. 1901 [1] 464; B. 30, 1799; A. 342, 261 C. 1905 [2] 1790). — \*II, 118.
  - 4) Polydiphenyläthen = (C<sub>14</sub>H<sub>12</sub>)<sub>n</sub>. Sd. 190° (B. 7, 1412). — II, 250.
  - 5) 1-Cinnamylmethylen-R-Penten (Cinnamylfulven). Sm. 102° (A. 348, 9 C. 1906 [2] 1051).
  - 6) 9-Methylfluoren. Sm. 46—47°; Sd. oberhalb 320° (B. 35, 762 C. 1902 [1] 814).
  - 7) 9,10-Dihydroanthracen. Sm. 108,5°; Sd. 313° (A. Spl. 7, 265; B. 9, 1202; 20, 708, 3076; A. 212, 5; G. 31 [1] 6; M. 30, 167 C. 1909 [1] 1403). — II, 250.
  - 8) 9,10-Dihydrophenanthren. Sm. 94—95°; Sd. 312—314°<sub>740</sub>. Pikrat (B. 40, 4247 C. 1907 [2] 1845; C. 1908 [2] 1103; B. 41, 999 C. 1908 [2] 327; B. 41, 4225 C. 1909 [1] 182).
  - 9) Phenylbenzylidenmethan? Sd. 258—262° (M. 7, 524). — II, 250.
  - 10) Kohlenwasserstoff (aus Benzylalkohol oder Benzyläthyläther). Sm. 27 bis 28°; Sd. 253—254° (A. 92, 114; J. pr. [2] 53, 369).
  - 11) Kohlenwasserstoff (aus Phenylpropionsäurechlorid). Sm. 95° (Soc. 85, 1325 C. 1904 [2] 1645).  
C 92,3 — H 7,7 — M. G. 182.
- C<sub>14</sub>H<sub>14</sub>**
- 1) αα-Diphenyläthan. Sd. 286° (268—270°) (B. 6, 1501; 7, 142, 1190; 15, 1128, 1481; 27, 3238; J. pr. [2] 39, 301; A. 235, 165, 328; Bl. 36, 66; 41, 448; B. 35, 2647 C. 1902 [2] 587; C. r. 135, 533 C. 1902 [2] 1209; B. 37, 1450 C. 1904 [1] 1352). — II, 230; \*II, 112.
  - 2) αβ-Diphenyläthan. Sm. 51,5—52,5°; Sd. 284°. Lit. bedeutend. — II, 232; \*II, 112.
  - 3) 2-Methyldiphenylmethan (2-Benzyl-1-Methylbenzol). Sd. 275—280° (A. 161, 93; B. 6, 906; 26, 2810; 33, 464; R. NEGRUSZ, Privatmittl.). — II, 236; \*II, 114.
  - 4) 3-Methyldiphenylmethan (3-Benzyl-1-Methylbenzol). Sd. 268—269,5°<sub>725</sub> (272—273°<sub>743</sub>) (B. 12, 2300; R. NEGRUSZ, Privatmittl.). — II, 236.
  - 5) 4-Methyldiphenylmethan (4-Benzyl-1-Methylbenzol). Sm. — 30°; Sd. 279—280° (271—272°<sub>750</sub>) (A. 161, 93; B. 5, 683; 7, 19; 29, 114; 31, 999; 32, 1053; 33, 464; Soc. 67, 828; R. NEGRUSZ, Privatmittl.; R. 14, 189; R. 27, 443 C. 1909 [1] 354). — II, 237; \*II, 114.
  - 6) p-Methyldiphenylmethan. Sd. 283—286° (B. 7, 1544). — II, 236.
  - 7) 3-Äthylbiphenyl. Sd. 283—284°<sub>763</sub> (Bl. 47, 689; 49, 101). — II, 235; \*II, 114.
  - 8) 2,2'-Dimethylbiphenyl. Sm. 17,8°; Sd. 258°<sub>337</sub> (272°) (A. 139, 178; B. 28, 2555; A. 332, 42 C. 1904 [2] 39). — II, 235.
  - 9) 2,3'-Dimethylbiphenyl. Sd. 270° (B. 17, 471). — II, 236.
  - 10) 3,3'-Dimethylbiphenyl (mm-Bitolyl). Sm. 5—7°; Sd. 286° (283°<sub>718</sub>) (Bl. [3] 7, 182; B. 17, 486; 21, 1096; B. 37, 1401 C. 1904 [1] 1443; A. 332, 43 C. 1904 [2] 39; A. 352, 112 C. 1907 [1] 1797). — II, 235.
  - 11) 4,4'-Dimethylbiphenyl. Sm. 121° (122—123°); Sd. 295°<sub>760</sub> (B. 4, 397, 515; 16, 2877; 29, 113; 32, 1052; A. 223, 262; B. 36, 1011 C. 1903 [1] 1078; A. 322, 44 C. 1904 [2] 39). — II, 236; \*II, 114.

$C_{14}H_{14}$ 

- 12) isom. Dimethylbiphenyl. Sm.  $91^{\circ}$  (B. 17, 472). — II, 236.
- 13) isom. Dimethylbiphenyl. Sm.  $283-288^{\circ}$  (B. 4, 399). — II, 235.
- 14) isom. Dimethylbiphenyl. Sd.  $272-280^{\circ}$  (J. 1877, 384; B. 4, 515; Soc. 37, 707). — \*II, 235.
- 15) isom. Dimethylbiphenyl. Sd.  $284-290^{\circ}$  (A. ch. [6] 15, 247). — II, 237.
- 16) Tetrahydroanthracen. Sm.  $89^{\circ}$ ; Sd.  $309-313^{\circ}$  (C. r. 139, 605 C. 1904 [2] 1573; C. 1908 [1] 1395).
- 17) isom. Tetrahyanthracen. Sm.  $101^{\circ}$  ( $103^{\circ}$ ) (C. r. 142, 1204 C. 1906 [2] 249; B. 41, 997 C. 1908 [2] 327).
- 18)  $\alpha$ -Tetrahydrophenanthren. Sm. — 4 bis —  $5^{\circ}$ ; Sd.  $310^{\circ}$  ( $307^{\circ}_{117}$ ). Pikrat (B. 8, 1056; 20, 3076; A. 167, 154; G. 31 [1] 7; B. 40, 4249 C. 1907 [2] 1845; C. 1908 [2] 1103; B. 41, 999 C. 1908 [2] 327). — II, 267.
- 19)  $\beta$ -Tetrahydrophenanthren. Sm. — 3 bis —  $4^{\circ}$ ; Sd.  $302-303^{\circ}_{737}$  (B. 40, 4251 C. 1907 [2] 1845; C. 1908 [2] 1103).
- 20) 3,4-Dimethylindacen. Fl. (B. 34, 2793).
- 21) Kohlenwasserstoff (aus Bixin). Sd.  $270-280^{\circ}$  (B. 11, 868). — III, 651.

 $C_{14}H_{16}$ 

- 1)  $\delta$ -Phenyl- $\beta$ -tert. Butyl- $\alpha\gamma$ -Butenin. Sd.  $115-116^{\circ}_{10}$  (C. 1905 [2] 1020).
- 2) 3-Äthyl-5-Phenyl-1,2-Dihydrobenzol. Sd.  $126-128^{\circ}_8$  (Bl. [4] 3, 421 C. 1908 [1] 1831).
- 3) 1-Butylnaphtalin. Sd.  $281-283^{\circ}$ . Pikrat (C. 1908 [2] 949).
- 4) 2-Butylnaphtalin. Sd.  $283-285^{\circ}$ . Pikrat (C. 1908 [2] 949).
- 5) 1-Isobutylnaphtalin. Sd.  $136-138^{\circ}_{11}$  (C. r. 146, 934 C. 1908 [1] 2100).
- 6) 2-Isobutylnaphtalin. Sd.  $112-113^{\circ}_6$  (C. r. 146, 934 C. 1908 [1] 2100).
- 7) 2-Pseudobutylnaphtalin. Sd.  $280^{\circ}$ . Pikrat (Sm.  $96^{\circ}$ ) (M. 5, 237; B. 27, 1623). — II, 220; \*II, 107.
- 8) 7-Äthyl-1,4-Dimethylnaphtalin. Sd.  $298-302^{\circ}$  (G. 22 [2] 43). — II, 220.
- 9) Tetramethylnaphtalin. Sm. —  $20^{\circ}$ ; Sd.  $320^{\circ}$ . Pikrat (Sm.  $138^{\circ}$ ) (C. 1898 [1] 812). — \*II, 108.
- 10) Hexahydroanthracen. Sm.  $63^{\circ}$ ; Sd.  $290^{\circ}$  (A. Spl. 7, 272; A. 212, 25). — II, 260.

 $C_{14}H_{18}$ 

- 11) isom. Hexahydroanthracen. Sm.  $66,5^{\circ}$ ; Sd.  $303-306^{\circ}$  (C. r. 142, 1203 C. 1906 [2] 249).
- 12) Hexahydrophenanthren. Sm. —  $3^{\circ}$ ; Sd.  $305-307^{\circ}_{760}$ . Pikrat (C. r. 140, 942 C. 1905 [1] 1396; B. 40, 4252 C. 1907 [2] 1846; C. 1908 [2] 1103).
- 13) Kohlenwasserstoff (aus Naphtalin). Sd.  $215-225^{\circ}_{10}$  (Soc. 91, 1109 C. 1907 [2] 600).  
C 90,3 — H 9,7 — M. G. 186.
- 1)  $\alpha$ -Phenyl- $\zeta$ -Methyl- $\alpha\gamma$ -Heptadiën. Sd.  $146-147^{\circ}_{15}$  (B. 40, 1772 C. 1907 [1] 1743).
- 2) 1-Methyl-6-Benzyl-1,2,3,4-Tetrahydrobenzol. Sd.  $170^{\circ}_{42}$  (C. 1909 [1] 852).
- 3) 2-Methyl-5-Benzyl-1,2,3,4-Tetrahydrobenzol. Sd.  $160^{\circ}_{80}$  (C. r. 142, 440 C. 1906 [1] 1096).
- 4) 1-Methyl-6-[4-Methylphenyl]-1,2,3,4-Tetrahydrobenzol. Sd. 158 bis  $160^{\circ}_{15}$  (C. 1909 [1] 852).
- 5) 3-Methylhexahydrofluoren. Sd.  $128^{\circ}_{14}$  (B. 29, 2962). — \*II, 94.
- 6) Oktohydroanthracen. Sm.  $71^{\circ}$ ; Sd.  $292-295^{\circ}$ . Pikrat (C. r. 139, 605 C. 1904 [2] 1574; Bl. [4] 1, 121 C. 1907 [1] 1422; C. 1908 [1] 370).
- 7) Oktohydrophenanthren. Sm. —  $4^{\circ}$ ; Sd.  $280-285^{\circ}_{760}$  (A. 147, 155; C. r. 140, 942 C. 1905 [1] 1397; B. 40, 4253 C. 1907 [2] 1846; C. 1908 [2] 1103; B. 41, 1000 C. 1908 [2] 327). — II, 267.
- 8) Kohlenwasserstoff (aus Hexyl-4-Methylphenylketon). Sd.  $260-262^{\circ}$  (Soc. 67, 507). — \*II, 94.
- 9) Kohlenwasserstoff (aus  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Hexahydrophenyläthan). Sd.  $260^{\circ}_{755}$  (C. r. 139, 345 C. 1904 [2] 705).
- 10) Kohlenwasserstoff (aus Önanthol) (Z. 1870, 75).
- 11) Kohlenwasserstoff (aus 2-Phenyl-1,1,2-Trimethyl-R-Pentamethylen-3-Carbonsäurechlorid). Sd.  $195-200^{\circ}_{40}$  (Bl. [3] 21, 840). — \*II, 94.  
C 89,4 — H 10,6 — M. G. 188.
- 1)  $\gamma$ -Phenyl- $\delta$ -Okten. Sd.  $104^{\circ}_8$  (B. 36, 1406 C. 1903 [1] 1347).

 $C_{14}H_{20}$



$C_{14}H_{20}$ 

- 2)  $\alpha$ -[2,4,6-Trimethylphenyl]- $\gamma$ -Methyl- $\alpha$ -Buten. Sd. 239—240°<sub>758</sub> (B. 37, 930 C. 1904 [1] 1209).
- 3)  $\beta$ -Dibenzyl-naphthalin. Sm. 146,5° (B. 39, 2868 C. 1906 [2] 1197).
- 4) Dekahydroanthracen. Sm. 73—74° (B. 41, 997 C. 1908 [2] 327).
- 5) Dekahydrophenanthren. Sd. 274—275°<sub>737</sub> (B. 40, 4254 C. 1907 [2] 1846).

 $C_{14}H_{22}$ 

- C 88,5 — H 11,5 — M. G. 190.
- 1) Oktylbenzol. Sd. 261—263° (B. 19, 641, 2718; 31, 938). — II, 38; \*II, 22.
  - 2) Isooktylbenzol. Sd. 245—255° (B. 23, 1502). — II, 38.
  - 3) 2-Isoamyl-1,3,5-Trimethylbenzol. Sd. 241—243°<sub>747</sub> (B. 37, 1720 C. 1904 [1] 1489).
  - 4) Diisobutylbenzol (Gemisch). Sd. 230—240° (B. 15, 1067; 26 [2] 693). — II, 38.
  - 5) 1,4-Dipseudobutylbenzol. Sm. 76° (70°); Sd. 230—235°<sub>736,5</sub> (236,5°<sub>760</sub>) (B. 23, 2420; 27, 1608; Bl. [3] 19, 72; Bl. [3] 31, 969 C. 1904 [2] 1112; Bl. [3] 35, 835 C. 1906 [2] 1725). — II, 38; \*II, 22.
  - 6) 1-Methyl-4-Isopropyl-2-Butylbenzol. Sd. 235° (J. pr. [2] 46, 487). — II, 38.
  - 7) 1-Methyl-4-Isopropyl-2-Isobutylbenzol. Sd. 230° (J. pr. [2] 46, 486). — II, 38.
  - 8) 1,2,3,4-Tetraäthylbenzol. Sd. 254° (249°) (B. 16, 1745; 21, 2818; Soc. 77, 280). — II, 38; \*II, 22.
  - 9) 1,2,4,5-Tetraäthylbenzol. Sd. 250° (B. 21, 2819; B. 36, 1635 C. 1903 [2] 26). — II, 38.
  - 10) Dodekahydroanthracen. Sd. 140—150°<sub>15</sub> (C. r. 141, 1030 C. 1906 [1] 367).
  - 11) Dodekahydrophenanthren. Sd. 268—269°<sub>737</sub> (B. 40, 4255 C. 1907 [2] 1846).
  - 12) Kohlenwasserstoff (aus rohem Anilin). Sd. 255—259° (B. 22, 510). — II, 38.
  - 13) Kohlenwasserstoff (aus Fichtenteer). Sd. 254—257° (Bl. [3] 11, 1151). — \*II, 22.
  - 14) Kohlenwasserstoff (aus Laktocerin). Sd. 247—252° (B. 12, 11). — II, 38.
  - 15) Kohlenwasserstoff (aus Önanthol). Sd. 320—330° (Z. 1870, 75). — I, 956.
- C 87,5 — H 12,5 — M. G. 192.
- 1)  $\beta\gamma\delta\epsilon\zeta\eta$ -Hexamethyl- $\beta\delta\zeta$ -Oktatriën. Sd. 215°<sub>755</sub> (C. 1909 [1] 1982).
  - 2) bim.  $\beta\delta$ -Dimethyl- $\alpha\gamma$ -Pentadiën. Sd. 98—100°<sub>12</sub> (C. 1901 [2] 624; B. 37, 3579 C. 1904 [2] 1376).
  - 3) polym. Methylpropylallylen = (C<sub>7</sub>H<sub>12</sub>)<sub>2</sub>. Sd. 245—247° (Soc. 1882, 167).
  - 4) 2-Methyl-6-[3-Methylhexahydrophenyl]-1,2,3,4-Tetrahydrobenzol. Sd. 257—259° (C. 1904 [1] 1346).
  - 5) 4-[ $\beta$ -Äthylbutenyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten (Diäthylcampholandiën). Sd. 222—224° (Bl. [3] 31, 463 C. 1904 [1] 1516).
  - 6) 1,4-Dimethyl- $\beta$ -Äthyl-oktohydronaphthalin. Sd. 247—248° (B. 28 [2] 622; G. 25 [1] 487). — \*II, 15.
  - 7) Tetradekahydroanthracen. Sm. 88°; Sd. 270° (B. 21, 2510; C. r. 141, 1029 C. 1906 [1] 367; C. 1908 [1] 370; B. 41, 998 C. 1908 [2] 327). — II, 260.
  - 8) Tetradekahydrophenanthren. Sm. — 3°; Sd. 270—275° (B. 22, 779; B. 40, 4257 C. 1907 [2] 1846; B. 41, 1000 C. 1908 [2] 327). — II, 267.
  - 9) Isobutylcamphen. Sd. 228—229°<sub>750,4</sub> (A. 197, 135). — III, 536.
  - 10)  $\alpha$ -Diheptin (aus Tetrahydrotoluol). Sd. 230—235° (A. ch. [6] 1, 231). — II, 16.
  - 11)  $\beta$ -Diheptin (aus Tetrahydrotoluol). Sd. 230—235° (A. ch. [6] 1, 231). — II, 16.
  - 12) Kohlenwasserstoff (aus Teeröl). Sd. 240° (A. 139, 245).

 $C_{14}H_{26}$ 

- C 86,6 — H 13,4 — M. G. 194.
- 1)  $\alpha$ -Tetradekin (Dodekylacetylen). Sd. 128°<sub>15</sub>. Ag + AgNO<sub>3</sub> (B. 25, 2249). — \*I, 30.
  - 2)  $\beta$ -Tetradekin (s-Methylundekylacetylen). Sm. 6,5°; Sd. 134°<sub>15</sub> (B. 17, 1372; 25, 2249). — I, 137; \*I, 30.

- $C_{14}H_{26}$
- 3)  $\alpha\beta$ -Di[Hexahydrophenyl]äthan. *Sd.* 220—230° (263—264°; 274—275,8°) (*Am.* 25, 290; *C. r.* 142, 343 *C.* 1906 [1] 935; *Bl.* [3] 35, 550 *C.* 1906 [2] 782; *B.* 40, 1287 *C.* 1907 [1] 1721; *C.* 1907 [2] 2036; 1909 [2] 2148).
  - 4) 3, 3'-Dimethyldodekahydrobiphenyl (m-Dimethyldicyklohexyl). *Sd.* 264°<sub>781</sub> (*C.* 1902 [1] 1278; *B.* 37, 853 *C.* 1904 [1] 1146).
  - 5) Disuberyl (Bi-R-Heptamethylenyl). *Sd.* 290—291°<sub>723</sub> (*C.* 1903 [1] 568; *A.* 327, 70 *C.* 1903 [1] 1124).
  - 6) Kohlenwasserstoff (aus Butyronpinakon). *Sd.* 216—218° (*M.* 25, 125 *C.* 1904 [1] 716).
  - 7) Kohlenwasserstoff (aus Gondangwachs). *Sd.* 220° (*R.* 20, 73).
  - 8) Kohlenwasserstoff (aus d. Kohlenw.  $C_{14}H_{22}$  aus Fichtenteer). *Sd.* 250 bis 253° (*Bl.* [3] 11, 1151).
  - 9) Kohlenwasserstoff (aus Onanthol). *Sd.* 245—260° (*Z.* 1870, 75).
  - 10) Kohlenwasserstoff (aus Petroleum). *Sd.* 125—130°<sub>25</sub> (*C.* 1900 [2] 761).
  - 11) Kohlenwasserstoff (aus Petroleum). *Sd.* 160—165°<sub>80</sub> (*C.* 1904 [1] 61).
  - 12) Kohlenwasserstoff (aus Petroleum). *Sd.* 230—240° (*C.* 1900 [2] 453).
- $C_{14}H_{28}$
- 1) Dihepten. *Sd.* 250° (*C. r.* 135, 88 *C.* 1902 [2] 503).
  - 2) Tetradekanaphten. *Sd.* 240—241° (*J. r.* 15, 339). — II, 16.
  - 3) isom. Tetradekanaphten. *Sd.* 144—146°<sub>50</sub> (*Am.* 25, 282).
  - 4) Tetradeken. *Sm.* — 12°; *Sd.* 127°<sub>15</sub> (*B.* 16, 3021). — I, 124.
  - 5) Kohlenwasserstoff (aus Petroleum). *Sd.* 138—140°<sub>30</sub> (*Am.* 33, 255 *C.* 1905 [1] 1349).
  - 6) Kohlenwasserstoff (aus Petroleum). *Sd.* 141—143°<sub>50</sub> (*Am.* 33, 266 *C.* 1905 [1] 1349).
  - 7) Kohlenwasserstoff (aus Petroleum). *Sd.* 240—250° (*J. r.* 1882, 36).
- $C_{14}H_{30}$
- 1) norm. Tetradekan. *Sm.* 4,5°; *Sd.* 252,5° (236—238°<sub>780</sub>) (*B.* 15, 1700; 19, 2223; *Soc.* 47, 41; *Am.* 28, 171 *C.* 1902 [2] 1081). — I, 106.
  - 2) Kohlenwasserstoff (aus Anthracen) oder  $C_{14}H_{28}$ . *Sd.* 240° (*Bl.* 8, 239). — I, 106.
- $C_{14}Cl_{10}$
- 1) Verbindung (aus Pyren). *Sm.* oberhalb 300° (*B.* 16, 2880). — II, 285.

### $C_{14}$ -Gruppe mit zwei Elementen.

- $C_{14}H_2Cl_8$
- 1) Oktochloranthracen (*B.* 11, 177). — II, 263.
  - 2) Oktochlorphenanthren. *Sm.* 270—280° (*B.* 11, 168; siehe auch *B.* 9, 1490; 12, 677). — II, 268.
- $C_{14}H_2Br_8$
- 1) Oktobromanthracen. *Subl.* (*B.* 11, 179). — II, 264.
- $C_{14}H_3Cl_7$
- 1) Heptachloranthracen. *Sm.* oberhalb 350° (*B.* 11, 176). — II, 263.
- $C_{14}H_3Br_7$
- 1) Heptabromanthracen (*B.* 11, 178). — II, 264.
  - 2) Heptabromphenanthren. *Sm.* oberhalb 270° (*B.* 11, 172). — II, 268.
- $C_{14}H_4O_6$
- 1) Dianhydrid d. Naphtalin-1,4,5,8-Tetracarbonsäure. *Subl.* oberhalb 300° (*A.* 240, 185). — II, 2081.
- $C_{14}H_4Cl_6$
- 1) Hexachloranthracen. *Sm.* 320—330° (*J.* 1873, 392; *B.* 11, 175). — II, 263.
  - 2) Hexachlorphenanthren. *Sm.* 249—250° (*B.* 11, 168). — II, 268.
- $C_{14}H_4Br_6$
- 1) Hexabromanthracen. *Sm.* 310—320° (*B.* 11, 178). — II, 264.
  - 2) isom. Hexabromanthracen (*B.* 10, 1213). — II, 264.
  - 3) Hexabromphenanthren. *Sm.* 245° (*B.* 11, 172). — II, 268.
- $C_{14}H_5Br_5$
- 1) Pentabromanthracen. *Sm.* 212° (*B.* 10, 1213). — II, 264.
- $C_{14}H_5Br_3$
- 1) 3,4,5,6,2',3',4',5',6'-Nonobrom-2-Methyldiphenylmethan. *Sm.* 281° (*B.* 40, 2373 *C.* 1907 [2] 335).
- $C_{14}H_6O_4$
- 1) Morphenolchinon (*B.* 33, 357). — \*III, 321.
  - 2) Verbindung (aus d. Verb.  $C_{28}H_{14}O_8$ ). *Sm.* 294—296° (*B.* 18, 1725; *Soc.* 53, 837). — III, 415.
- $C_{14}H_8O_5$
- 1) Metellagsäure. *Sm.* 273—276° (*Soc.* 87, 1426 *C.* 1905 [2] 324, 1589).
- $C_{14}H_8O_6$
- 1) Katellagsäure. *Sm.* oberhalb 360° (*Soc.* 87, 1417 *C.* 1905 [2] 323, 1589; *C.* 1905 [2] 621; *Soc.* 93, 1196 *C.* 1908 [2] 790).

- $C_{14}H_8O_6$  2) Verbindung (aus 2,5-Dioxybenzol-1-Carbonsäure). Sm. oberhalb  $360^\circ$ .  $K_2$  (M. 26, 846 C. 1905 [2] 620).  
C 58,7 — H 2,1 — O 39,2 — M. G. 286.
- $C_{14}H_8O_7$  1) Resoflavin. Zers. oberhalb  $380^\circ$  (A. 351, 31 C. 1907 [1] 1429; M. 29, 282 C. 1908 [2] 312; M. 29, 661 C. 1908 [2] 1262).  
C 55,6 — H 2,0 — O 42,4 — M. G. 302.
- $C_{14}H_8O_8$  1) 2,6'-2',6-Dilakton d. 4,5,6,4',5',6'-Hexaoxybiphenyl-2,2'-Dicarbonsäure +  $2H_2O$  (Ellagsäure). Na +  $H_2O$ ,  $Na_2$  +  $H_2O$ ,  $K_2$ ,  $K_3$ ,  $Ba_3$ , Pb, Phenylhydrazinsalz. Lit. bedeutend. — II, 2084; \*II, 1221.  
C 52,8 — H 1,9 — O 45,3 — M. G. 318.
- $C_{14}H_8O_9$  1) 2,6-2',6-Dilakton d. 3,4,5,6,4',5',6'-Heptaoxybiphenyl-2,2'-Dicarbonsäure (Flavellagsäure). Sm. oberhalb  $360^\circ$  (Soc. 89, 251 C. 1906 [1] 1418; M. 29, 289 C. 1908 [2] 313; Soc. 93, 1195 C. 1908 [2] 790).  
C 52,8 — H 1,9 — O 45,3 — M. G. 318.
- $C_{14}H_8Cl_4$  1) 1,2,3,4-Tetrachloranthracen. Sm.  $148-149^\circ$  (A. 238, 346). — II, 263.  
2)  $\alpha$ -Tetrachloranthracen. Sm.  $164^\circ$  ( $220^\circ$ ) (A. Spl. 7, 283; B. 19, 1108; C. r. 135, 1122 C. 1903 [1] 283). — II, 262.  
3) isom. Tetrachloranthracen. Sm.  $152^\circ$  (B. 13, 1589). — II, 263.  
4) Tetrachlorphenanthren. Sm.  $171-172^\circ$  (B. 11, 167). — II, 267.
- $C_{14}H_8Br_4$  1) 2,6,9,10-Tetrabromanthracen. Sm.  $298-300^\circ$  (B. 37, 4707 C. 1905 [1] 368).  
2) Tetrabromanthracen. Sm.  $254^\circ$  (A. 122, 305; A. Spl. 7, 281; D.R.P. 69835). — II, 263; \*II, 121.  
3) Tetrabromphenanthren. Sm.  $183-185^\circ$  (B. 11, 171). — II, 268.
- $C_{14}H_8Br_3$  1) Tetrabromanthracenbromid. Sm.  $212^\circ$  u. Zers. (B. 10, 1213). — II, 264.
- $C_{14}H_8S$  1) Tolallylsulfid. Sm.  $180^\circ$  (A. 167, 188). — III, 226.
- $C_{14}H_7Cl_3$  1) 2,9,10-Trichloranthracen. Sm.  $172^\circ$  (C. 1908 [2] 1032).  
2) isom. Trichloranthracen. Sm.  $162-163^\circ$  (B. 10, 378). — II, 262.  
3) isom. Trichloranthracen (A. 160, 126). — II, 262.  
4) 2,9,10-Trichlorphenanthren. Sm.  $123-124^\circ$  (B. 39, 3892 C. 1907 [1] 166).
- $C_{14}H_7Br_3$  1) 2,9,10-Tribromanthracen. Sm.  $169^\circ$  ( $171^\circ$ ) (A. Spl. 7, 279; B. 14, 979; D.R.P. 69835; B. 37, 4708 C. 1905 [1] 368). — II, 263; \*II, 121.  
2) Tribromphenanthren. Sm.  $126^\circ$  (A. 167, 182; B. 11, 171). — II, 268.
- $C_{14}H_8O$  1) 9-Ketomethylenfluoren (Biphenylenketen). Sm.  $90-90,5^\circ$  (B. 39, 3063 C. 1906 [2] 1500).  
C 87,5 — H 4,2 — O 8,3 — M. G. 192.
- $C_{14}H_8O_2$  1) 9-Ketomethylenfluoren (Biphenylenketen). Sm.  $90-90,5^\circ$  (B. 39, 3063 C. 1906 [2] 1500).  
C 80,8 — H 3,8 — O 15,4 — M. G. 208.
- 1) Methyläther d. 3-Oxyphenanthren-4,5-Oxyd (Morphenol). Sm.  $145^\circ$  (B. 30, 2441; 31, 55, 3202; 32, 1522; 33, 354, 358; 34, 2722; A. 368, 321 C. 1909 [2] 1662). — \*III, 320.  
2) 1,2-Anthrachinon. Sm.  $180^\circ$  u. Zers. ( $185-190^\circ$  u. Zers.) (B. 7, 1156; 27, 1438; 28, 1423; B. 36, 4020 C. 1904 [1] 168; A. 342, 80 C. 1905 [2] 1593; B. 39, 930 C. 1906 [1] 1256). — \*III, 315.  
3) 1,4-Anthrachinon. Sm.  $206^\circ$  ( $190^\circ$ ;  $218^\circ$ ) (B. 39, 931 C. 1906 [1] 1256; B. 39, 1717 C. 1906 [2] 55; B. 39, 2089 C. 1906 [2] 249; B. 39, 3537 C. 1906 [2] 1617; B. 41, 1436 C. 1908 [1] 1978).  
4) 9,10-Anthrachinon. Sm.  $273^\circ$ ; Sd.  $379-381^\circ$ . +  $Al_2Br_6$ , +  $Al_2Br_6$  +  $C_6H_6$ , +  $2SbCl_5$ . Lit. bedeutend. — III, 406; \*III, 293.  
5) 9,10-Phenanthrenchinon. Sm.  $205^\circ$  ( $202^\circ$ ); Sd. oberhalb  $360^\circ$ . Nitrat, +  $NaHSO_3$  +  $2H_2O$ , 2 +  $ZnCl_2$ , +  $AlCl_3$ , 3 +  $FeCl_3$ , +  $SnCl_4$ , 2 +  $HgCl_2$ , 2 +  $Hg(CN)_2$ , +  $Al_2Br_6$ . Lit. bedeutend. — III, 440; \*III, 315.  
6) Isophenanthrenchinon. Sm.  $156^\circ$  (A. 167, 186). — III, 448.
- $C_{14}H_8O_3$  C 75,0 — H 3,5 — O 21,4 — M. G. 224.  
1) 1,3-Diketo-2-[2-Fural]-2,3-Dihydroindien. Sm.  $203^\circ$  (B. 30, 2142). — \*III, 522.  
2) 2-Oxy-1,4-Anthrachinon. Zers. bei  $235^\circ$  (A. 344, 90 C. 1906 [1] 1100).  
3) 1-Oxy-9,10-Anthrachinon (Erythrooxyanthrachinon). Sm.  $190^\circ$  (B. 7, 970; 10, 611; 11, 1611; 12, 2128; 15, 1793, 1804; 20, 2438; 21, 2527; D.R.P. 97688; A. 212, 20; 240, 264; J. pr. [2] 18, 147; B. 35, 2926 C. 1902 [2] 1050; D.R.P. 145238 C. 1903 [2] 1099; D.R.P. 158891 C. 1905 [1] 842; D.R.P. 161725 C. 1905 [2] 183; D.R.P. 172642 C. 1906 [2] 471; D.R.P. 163517 C. 1905 [2] 1207). — III, 418; \*III, 300.





- 4) 2-Oxy-9,10-Anthrachinon. Sm. 302°. K, Ba (*J.* 1875, 450; *A.* 160, 141; 166, 151; 183, 154, 208; 212, 25, 53; 240, 263; D. R. P. 106505; *B.* 7, 670; 8, 530, 974; 12, 1569; 14, 464; 21, 2527; *Soc.* 63, 1177; *J. pr.* [2] 54, 89). — III, 418; \*III, 300.
- 5) 2-Oxy-9,10-Phenanthrenchinon. Sm. 280—283° (*B.* 18, 1943; *A.* 322, 159 *C.* 1902 [2] 282). — III, 442; \*III, 316.
- 6) 3-Oxy-9,10-Phenanthrenchinon. Sm. 330° u. Zers. (*B.* 34, 4007 *C.* 1902 [1] 203; *A.* 322, 138 *C.* 1902 [2] 281; *B.* 41, 3697 *C.* 1908 [2] 1870). — \*III, 317.
- 7) 9-Oxy-9,10-Phenanthrenchinon (*B.* 13, 1180). — III, 448.
- 8) 9-Ketofluoren-1-Carbonsäure (o-Diphenylenketoncarbonsäure). Sm. 191 bis 192°. Ca + 2H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag (*A.* 193, 149; 200, 6). — II, 1718; \*II, 1014.
- 9) 9-Ketofluoren-2-Carbonsäure. Sm. noch nicht bei 275°; subl. Ag (*A.* 229, 158; *M.* 25, 451 *C.* 1904 [2] 450). — II, 1719.
- 10) 9-Ketofluoren-4-Carbonsäure. Sm. 227°. NH<sub>4</sub> + H<sub>2</sub>O, Na + 6H<sub>2</sub>O, Ag (*B.* 13, 1303; 21, 2357; *A.* 247, 261, 275; *M.* 23, 29 *C.* 1902 [1] 875). — II, 1719.
- 11) Anhydrid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 217° (*B.* 10, 326, 1884; *A.* 243, 251; 247, 260). — II, 1884.
- 12) Verbindung (aus o-Benzophenonoxyd). Sm. 192° (*Soc.* 43, 188). — II, 1895.



- 1) 1,2-Dioxy-9,10-Anthrachinon (Alizarin). Sm. 289—290°; Sd. 430° (subl. bei 153°). Hydrat (*A.* 66, 187); NH<sub>4</sub>, Na, K, Ca + H<sub>2</sub>O, Ba + H<sub>2</sub>O, Al, Pb, Cr<sub>3</sub>. Lit. bedeutend. — III, 420; \*III, 302.
- 2) Isoalizarin (*B.* 3, 294). — III, 425.
- 3) 1,3-Dioxy-9,10-Anthrachinon (Purpuroxanthin; Xanthopurpurin). Sm. 262—263°; subl. Ca (*Bl.* 4, 12; *J.* 1874, 487; *A. ch.* [5] 18, 224; *A.* 183, 213; 240, 266; *B.* 9, 1204; 10, 172, 615; 15, 1804; *M.* 26, 580 *C.* 1905 [2] 333; D. R. P. 212697). — III, 425; \*III, 304.
- 4) 1,4-Dioxy-9,10-Anthrachinon (Chinizarin). Sm. 194—195° (*A.* 212, 11; D. R. P. 81245, 81960, 89027; *B.* 6, 508; 8, 152; 10, 555; 17, 376; 19, 2330; 28, 117; *J. pr.* [2] 54, 90; *C.* 1901 [2] 1189; D. R. P. 146223 *C.* 1903 [2] 1299; D. R. P. 153129 *C.* 1904 [2] 751; D. R. P. 162792 *C.* 1905 [2] 1062; *B.* 39, 3537 *C.* 1906 [2] 1617). — III, 426; \*III, 304.
- 5) 1,5-Dioxy-9,10-Anthrachinon (Anthrarufin). Sm. 280° (*B.* 11, 1176, 1616; 12, 1289, 1293; 16, 371; 17, 896; *A.* 280, 10; D. R. P. 97674, 101220; D. R. P. 145238 *C.* 1903 [2] 1099; D. R. P. 158891 *C.* 1905 [1] 842; D. R. P. 170108 *C.* 1906 [2] 471). — III, 426; \*III, 305.
- 6) 1,6-Dioxy-9,10-Anthrachinon. Sm. 271—272° (276°) (D. R. P. 145188 *C.* 1903 [2] 1037; D. R. P. 170329 *C.* 1906 [1] 1719; *B.* 40, 1048 *C.* 1907 [1] 1203; D. R. P. 202398 *C.* 1908 [2] 1476).
- 7) 1,7-Dioxy-9,10-Anthrachinon (m-Benzdioxyanthrachinon). Sm. 291 bis 293° (*B.* 9, 946; 10, 1225; 11, 970; 17, 897; *Bl.* 29, 401; *A.* 280, 9, 14, 31; *B.* 36, 4198 *C.* 1904 [1] 290; D. R. P. 170329 *C.* 1906 [1] 1719; D. R. P. 202398 *C.* 1908 [2] 1476). — III, 429; \*III, 308.
- 8) 1,8-Dioxy-9,10-Anthrachinon (Chrysazin). Sm. 191°. K (*A.* 183, 184; *B.* 12, 186, 1289; D. R. P. 97688; D. R. P. 145238 *C.* 1903 [2] 1099; *B.* 36, 2941 *C.* 1903 [2] 886; *B.* 36, 4198 *C.* 1904 [1] 290; D. R. P. 158891 *C.* 1905 [1] 842; D. R. P. 170108 *C.* 1906 [2] 471; *Ar.* 247, 416 *C.* 1909 [2] 2083). — III, 427; \*III, 307.
- 9) Isochrysazin. Sm. 175—180° (*B.* 17, 897). — III, 431.
- 10) 2,3-Dioxy-9,10-Anthrachinon (Hystazarin). Sm. noch nicht bei 280°. Ca, Ba (*B.* 21, 2501; 28, 118, 1533; *Soc.* 67, 822; *Ph. Ch.* 18, 559; *B.* 35, 1778 *C.* 1902 [2] 62; *A.* 342, 102 *C.* 1905 [2] 1594). — III, 429; \*III, 308.
- 11) 2,6-Dioxy-9,10-Anthrachinon (Anthraflavinsäure). Sm. oberhalb 330°. Na<sub>2</sub> + 5H<sub>2</sub>O, Ba + 6½H<sub>2</sub>O (*Z.* 1871, 583; *J.* 1871, 490; *Bl.* 29, 401, 403; *A.* 170, 103; 280, 9, 32; D. R. P. 106505; *B.* 4, 359; 5, 868; 9, 379; 11, 969; 21, 445; D. R. P. 137948 *C.* 1903 [1] 268; D. R. P. 140128 *C.* 1903 [1] 903). — III, 430; \*III, 309.
- 12) 2,7-Dioxy-9,10-Anthrachinon + H<sub>2</sub>O (Isoanthraflavinsäure). Sm. oberhalb 330° (wasserfrei). Ba (*B.* 9, 379, 679; 15, 1041; 19, 2330; *A.* 280, 31). — III, 431.

$C_{14}H_8O_4$ 

- 13) **2,7-Dioxy-9,10-Phenanthrenchinon.** Sm. oberhalb 400° u. Zers. (B. 18, 1944; B. 36, 3741 C. 1904 [1] 37; B. 37, 3087 C. 1904 [2] 1056). — III, 442.
- 14) **3,4-Dioxy-9,10-Phenanthrenchinon (Morpholchinon)** (B. 32, 1522, 2379 Anm.; 33, 352, 1810; B. 41, 3699 C. 1908 [2] 1870). — \*III, 318.
- 15) **4,5-Dioxy-9,10-Phenanthrenchinon.** Zers. oberhalb 400° (B. 36, 3750 C. 1904 [1] 38).
- 16) **3-Oxy-9-Ketofluoren-2-Carbonsäure.** Sm. 277—279° u. Zers. K, Na + 2H<sub>2</sub>O, Ag (G. 35 [2] 542 C. 1906 [1] 849).
- 17) **1,4- $\alpha$ -Naphtopyron-2-Carbonsäure ( $\alpha$ -Naphtochromoncarbonsäure).** Sm. 277—278° (B. 35, 860 C. 1902 [1] 812). — \*III, 572.
- 18) **3,4- $\beta$ -Naphtopyron-2-Carbonsäure ( $\beta$ -Naphtocumarin- $\alpha$ -Carbonsäure).** Sm. 234° (232°) (B. 36, 1972 C. 1903 [2] 377; B. 37, 4487, 4495 C. 1905 [1] 248; C. 1905 [1] 448).
- 19) **Säure (aus Hydrobenzursäure)** (A. 134, 319). — II, 1189.
- 20) **Säure (aus d. Verb. C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>).** Sm. 275°. Ag (Soc. 43, 188). — II, 1895.
- 21) **Allofluorescein.** Sm. 140° (B. 28, 109, 2360; 31, 1302). — \*II, 1048.
- 22) **Anhydrid d. 4-Acetylnaphtalin-1,8-Dicarbonsäure.** Sm. 189° (A. 327, 94 C. 1903 [1] 1228).
- 23) **Bianhydrid d. 2-Oxybenzol-1-Carbonsäure (Disalicylid).** Sm. 200 bis 201° (B. 34, 2951; B. 35, 3646 C. 1902 [2] 1456).
- 24) **Verbindung (aus Phtalylchlorid u. 1,4-Dioxybenzol)** (B. 28, 108). C 65,6 — H 3,1 — O 31,2 — M. G. 256.

 $C_{14}H_8O_5$ 

- 1) **1,2,3-Trioxy-9,10-Anthrachinon (Anthragallol).** Subl. bei 290°; Sm. 310°. Na, K, Ca, Ba, Pb<sub>2</sub> (B. 10, 39; 15, 2918; 18, 2148; 19, 2331, 2335; J. 1881, 573; M. 6, 759; D.R.P. 119755; Soc. 63, 1168; 67, 819; 75, 435; M. 23, 688 C. 1902 [2] 1119). — III, 432; \*III, 309.
- 2) **1,2,4-Trioxy-9,10-Anthrachinon + H<sub>2</sub>O (Purpurin).** Subl. bei 150°; Sm. 256° (253°). Na, K, Ca, Ba, Pb. Lit. bedeutend. — III, 433; \*III, 311.
- 3) **1,2,5-Trioxy-9,10-Anthrachinon (Oxyanthrarufin).** Sm. 273—274° (D.R.P. 156960 C. 1905 [1] 482; D.R.P. 178631 C. 1907 [1] 775; A. 349, 206, 215 C. 1906 [2] 1336; D.R.P. 195028 C. 1908 [1] 1223).
- 4) **1,2,6-Trioxy-9,10-Anthrachinon (Flavopurpurin).** Sm. oberhalb 330°; Sd. 459° (B. 9, 679, 682; 10, 1821; 13, 42; 19, 2331; 21, 441, 2524; 26, 1515; 31, 2300; A. 280, 12; Ph. Ch. 18, 558; D.R.P. 137948 C. 1903 [1] 268; D.R.P. 140127 C. 1903 [1] 903; D.R.P. 140129 C. 1903 [1] 904; D.R.P. 194955 C. 1908 [1] 1229; D.R.P. 205097 C. 1909 [1] 483). — III, 435; \*III, 312.
- 5) **1,2,7-Trioxy-9,10-Anthrachinon (Anthrapurpurin).** Sm. 369°; Sd. 462° (J. 1873, 450; 1874, 488; 1879, 550; Bl. 29, 405; A. 280, 15, 31; Soc. 37, 557; B. 9, 679; 10, 1823; 11, 972; 13, 42; 19, 2331; 21, 443; 26, 1515; A. 349, 226 C. 1906 [2] 1338). — III, 436; \*III, 312.
- 6) **1,2,8-Trioxy-9,10-Anthrachinon (Oxychrysazin).** Sm. 230° (A. 183, 191; 280, 16; D.R.P. 67063, 68114; B. 11, 1179, 1617; 12, 1289; A. 349, 219 C. 1906 [2] 1338; D.R.P. 195028 C. 1908 [1] 1223). — III, 434; \*III, 312.
- 7) **1,4,8-Trioxy-9,10-Anthrachinon** (D.R.P. 161401 C. 1905 [2] 182; D.R.P. 162035 C. 1905 [2] 864; D.R.P. 163041 C. 1905 [2] 1142).
- 8) **P-Trioxy-9,10-Anthrachinon** (B. 11, 186). — III, 436.
- 9) **P-Trioxy-9,10-Phenanthrenchinon** (B. 41, 3703 C. 1908 [2] 1871).
- 10) **3-Oxyfluoron-9-Carbonsäure.** Ag (B. 29, 2826). — \*III, 579.
- 11) **Anhydrid d.  $\alpha\delta$ -Di[2-Furanyl]- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure.** Sm. 187° (204°) (Soc. 85, 188 C. 1904 [1] 644, 925; B. 38, 4080 C. 1906 [1] 351).
- 12) **Anhydrid d. p-Acetoxylnaphtalin-1,8-Dicarbonsäure.** Sm. 216° (B. 32, 3290). — \*II, 1140.
- 13) **Phenylester d. 3,4-Carbonyldioxybenzol-1-Carbonsäure.** Sm. 126° (Soc. 93, 569 C. 1908 [1] 1689).
- 14) **1,2-Carbonat-3-Benzozat d. 1,2,3-Trioxybenzol.** Sm. 149° (B. 37, 108 C. 1904 [1] 584).
- 15) **Verbindung (aus Oxalsäure u. 1,3-Dioxybenzol)** (B. 11, 1186; Soc. 75, 519). — II, 938.  
C 61,8 — H 2,9 — O 35,3 — M. G. 272.
- 1) **1,2,3,4-Tetraoxy-9,10-Anthrachinon** (C. 1899 [2] 966). — \*III, 314.

 $C_{14}H_8O_6$

- $C_{14}H_8O_6$
- 2) 1,2,4,8-Tetraoxy-9,10-Anthrachinon (D.R.P. 162035 C. 1905 [2] 864).
  - 3) 1,2,5,8-Tetraoxy-9,10-Anthrachinon (Chinalizarin; Alizarinbordeaux). Sm. noch nicht bei 275° (A. 240, 301; B. 23, 3739; D.R.P. 60855; J. pr. [2] 43, 239, 247). — III, 437; \*III, 314.
  - 4) 1,2,7,8-Tetraoxy-9,10-Anthrachinon (D.R.P. 103988 C. 1899 [2] 922). — \*III, 314.
  - 5) 1,2,7,9-Tetraoxy-9,10-Anthrachinon (Oxyanthrapurpurin) (J. pr. [2] 54, 91).
  - 6) 1,3,5,7-Tetraoxy-9,10-Anthrachinon + 2H<sub>2</sub>O (Anthrachryson). Sm. noch nicht bei 360°. Ba + 11H<sub>2</sub>O (A. 164, 113; B. 19, 754; B. 35, 2305 C. 1902 [2] 283). — III, 436; \*III, 312.
  - 7) 1,4,5,8-Tetraoxy-9,10-Anthrachinon (C. 1901 [1] 1028; 1901 [2] 1189; D.R.P. 143804 C. 1903 [2] 476; D.R.P. 162035 C. 1905 [2] 864).
  - 8) 1,6,9,9-Tetraoxy-9,10-Anthrachinon. Sm. 217° (B. 36, 2937 C. 1903 [2] 885).
  - 9) isom. 1,6,9,9-Tetraoxy-9,10-Anthrachinon. Sm. 292° (B. 36, 2941 C. 1903 [2] 886).
  - 10) 9-Tetraoxy-9,10-Anthrachinon (Oxypurpurin). Sm. noch nicht bei 290° (B. 11, 185; J. pr. [2] 43, 251). — III, 436.
  - 11) 9-Tetraoxy-9,10-Anthrachinon (Rufopin). Subl. Ca, Ba + H<sub>2</sub>O (A. 162, 323; D.R.P. 103988). — III, 437; \*III, 313.
  - 12) 9-Tetraoxy-9,10-Anthrachinon (α-Oxyanthragallol). Sm. noch nicht bei 350° (B. 19, 2339; A. 240, 270). — III, 437.
  - 13) 9-Tetraoxy-9,10-Anthrachinon (β-Oxyanthragallol). Sm. noch nicht bei 380° (B. 19, 2339; A. 240, 271). — III, 437.
  - 14) Säure (aus 4-Oxybenzol-1-Carbonsäure). Sm. noch nicht bei 300° (Soc. 87, 1420 C. 1905 [2] 1589).
  - 15) Resorcincarbonat. Sm. 190° u. Zers. (A. 300, 152).
  - 16) Hydrochinoncarbonat. Sm. noch nicht bei 280° (A. 300, 154).
  - 17) Phlorotanninrot (A. 252, 88). — II, 1919.
- $C_{14}H_8O_7$
- C 58,3 — H 2,8 — O 38,9 — M. G. 288.
  - 1) 1,2,3,5,7-Pentaoxy-9,10-Anthrachinon (Dioxyanthragallol). Sm. noch nicht bei 360° (A. 240, 273; D.R.P. 69013). — III, 438; \*III, 314.
  - 2) 1,2,5,8,9-Pentaoxy-9,10-Anthrachinon (Alizarineyanin) (J. pr. [2] 43, 250; D.R.P. 62018, 62506, 66153, 68114). — III, 438; \*III, 314.
- $C_{14}H_8O_8$
- C 55,3 — H 2,6 — O 42,1 — M. G. 304.
  - 1) 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon + 2H<sub>2</sub>O (Rufgallussäure) (A. 19, 204; 163, 218; 240, 271; A. ch. [7] 21, 569; J. 1860, 288; Z. 1870, 128; Bl. 24, 359; M. 1, 431; D.R.P. 62531, 89698; B. 3, 694; 8, 931; 9, 1256; 10, 880; 21, 446; C. 1903 [1] 398). — III, 438; \*III, 315.
  - 2) 1,2,4,5,6,8-Hexaoxy-9,10-Anthrachinon (C. 1901 [1] 1027; 1901 [2] 1189; D.R.P. 64418, 65375, 65453, 74353, 69388, 81481, 81742, 83055, 89969, 97674, 103898, 125579; D.R.P. 162035 C. 1905 [2] 864). — \*III, 314.
  - 3) 1,2,5,8,9,9-Hexaoxy-9,10-Anthrachinon (J. pr. [2] 43, 243, 250). — III, 438.
  - 4) isom. Hexaoxy-9,10-Anthrachinon (D.R.P. 66153, 103988). — \*III, 315.
  - 5) Naphthalin-1,4,5,8-Tetracarbonsäure. Ba<sub>2</sub>, Ag<sub>4</sub> (A. 240, 182). — II, 2081.
- $C_{14}H_8O_9$
- C 52,5 — H 2,5 — O 45,0 — M. G. 320.
  - 1) 2,6-Lakton d. 4,5,6,4',5',6'-Hexaoxybiphenyl-2,2'-Dicarbonsäure (Luteosäure). Zers. bei 338–342° (B. 41, 3017 C. 1908 [2] 1352; B. 42, 354 C. 1909 [1] 757).
- $C_{14}H_8N_2$
- C 82,3 — H 3,9 — N 13,7 — M. G. 204.
  - 1) Nitril d. Biphenyl-2,4'-Dicarbonsäure. Sm. 152–153° (B. 22, 3018). — II, 1883.
  - 2) Nitril d. Biphenyl-9-Dicarbonsäure. Sm. 234° (A. 172, 116). — II, 1887.
- $C_{14}H_8N_4$
- C 72,4 — H 3,4 — N 24,1 — M. G. 232.
  - 1) Chinoxalophenazin. Sm. oberhalb 370° (B. 29, 785; A. 319, 269 C. 1902 [1] 359). — IV, 1293; \*IV, 960.
  - 2) Pyrazol (aus 1,5-Disulfidihydrazido-9,10-Anthrachinon) (D.R.P. 171293 C. 1906 [2] 387).
  - 3) Verbindung (aus Natriumcyanamid u. Benzoylchlorid) (2 isom. Formen) (J. pr. [2] 42, 98). — II, 1173.



- C<sub>14</sub>H<sub>8</sub>N<sub>6</sub>** C 64,6 — H 3,1 — N 32,3 — M. G. 260.  
 1) Biphenyl-4,4'-Di[Diazocyanid]. Zers. 98—100° (C. 1907 [1] 1573).  
 2) isom. Biphenyl-4,4'-Di[Diazocyanid]. Zers. bei 180° (C. 1907 [1] 1573).
- C<sub>14</sub>H<sub>8</sub>Cl<sub>2</sub>** 1) αβ-Di[2-Chlorphenyl]äthin (2,2'-Dichlordiphenylacetylen). Sm. 88 bis 89° (B. 26, 652, 655). — II, 270.  
 2) 1,2-Dichloranthracen. Sm. 255° (A. 238, 347). — II, 262.  
 3) 9,10-Dichloranthracen. Sm. 209° (A. 34, 294; 160, 137; A. Spl. 7, 282; B. 34, 2768; D.R.P. 68775). — II, 262; \*II, 121.  
 4) 9,10-Dichlorphenanthren. Sm. 160—161° (B. 37, 4402 C. 1905 [1] 97; B. 39, 3893 C. 1907 [1] 166).  
 5) p-Dichlorphenanthren. Sm. 124° (A. 369, 117 C. 1909 [2] 1810).  
 6) p-Dichlorphenanthren (B. 11, 166). — II, 267.
- C<sub>14</sub>H<sub>8</sub>Cl<sub>4</sub>** 1) ββ-Dichlor-αα-Di[p-Chlorphenyl]äthen. Sm. 89° (B. 7, 1181). — II, 249.  
 2) αβ-Dichlor-αβ-Di[2-Chlorphenyl]äthen (o o-Dichlortolandiichlorid). α-Modif. Sm. 172°; Sd. 354°; β-Modif. Sm. 129°; Sd. 353—356° (B. 26, 653). — II, 271.  
 3) 2,3,9,10-Tetrachlor-2,3-Dihydroanthracen. Zers. bei 150° (C. 1908 [2] 1032).  
 4) 9,10,9',10'-Tetrachlor-9,10-Dihydroanthracen. Sm. 139° (C. 1908 [2] 1032).  
 5) isom. Tetrachlordihydroanthracen. Sm. 149—150° (B. 10, 377). — II, 262.  
 6) Verbindung (aus Anthrachinonchlorid). Sm. 203—204° (B. 10, 1480). — III, 408.
- C<sub>14</sub>H<sub>8</sub>Cl<sub>6</sub>** 1) α-Dichloranthracentetrachlorid. Sm. 187° u. Zers. (185°) (B. 11, 174; 19, 1108; C. 1908 [2] 1032). — II, 262.  
 2) β-Dichloranthracentetrachlorid. Sm. 205—207° (B. 13, 1588). — II, 262.  
 3) γ-Dichloranthracentetrachlorid. Sm. 149° u. Zers. (C. 1908 [2] 1032).  
 4) isom. Dichloranthracentetrachlorid. Sm. 141—145° u. Zers. (B. 11, 174).  
 5) Dichlorphenanthrentetrachlorid. Sm. 145° (B. 11, 165). — II, 267.
- C<sub>14</sub>H<sub>8</sub>Br<sub>2</sub>** 1) 9,10-Dibromanthracen. Sm. 221° (A. Spl. 7, 275; B. 14, 456; J. pr. [2] 23, 145; A. 228, 255; D.R.P. 68775). — II, 263; \*II, 121.  
 2) isom. Dibromanthracen. Sm. 190—192° (A. 182, 366). — II, 263.  
 3) 2,7-Dibromphenanthren. Sm. 199—200° (B. 40, 4562 C. 1908 [1] 135).  
 4) 3,9[oder 3,10]-Dibromphenanthren. Sm. 146° (B. 37, 3576 C. 1904 [2] 1404).  
 5) 4,9[oder 4,10]-Dibromphenanthren. Sm. 112—113° (110°) (A. 167, 182; A. 321, 333 C. 1902 [2] 61; B. 37, 3554 C. 1904 [2] 1399).  
 6) 9,10-Dibromphenanthren. Sm. 181—182° (B. 37, 4404 C. 1905 [1] 98).  
 7) α-Dibromphenanthren. Sm. 146—148° (B. 11, 170; B. 37, 3027 C. 1904 [2] 1225). — II, 268.  
 8) γ-Dibromphenanthren. Sm. 202° (A. 167, 182). — II, 268.  
 9) Dibromsynanthren. Sm. 175° (A. 191, 300). — II, 270.
- C<sub>14</sub>H<sub>8</sub>Br<sub>6</sub>** 1) p-Hexabrom-αβ-Diphenyläthan. Sm. 267° (A. 137, 269; B. 29, 2126). — II, 234; \*II, 113.  
 2) Dibromanthracentetrabromid. Sm. 170—180° u. Zers. (A. 122, 304; A. Spl. 7, 277). — II, 263.
- C<sub>14</sub>H<sub>8</sub>S<sub>2</sub>** 1) Tolallyldisulfid (oder C<sub>8</sub>H<sub>14</sub>S<sub>4</sub>?). Sm. 208°. Pikrat (A. 167, 187). — III, 226.
- C<sub>14</sub>H<sub>8</sub>N** C 88,0 — H 4,7 — N 7,3 — M. G. 191.  
 1) meso-Methylcarbazoakridin. Sm. 175—178° (G. 21 [2] 159, 352). — IV, 424.  
 2) Nitril d. Fluoren-2-Carbonsäure. Sm. 88° (M. 25, 446 C. 1904 [2] 449). C 76,7 — H 4,1 — N 19,2 — M. G. 219.
- C<sub>14</sub>H<sub>8</sub>N<sub>8</sub>** 1) 3-Diazo-2-Phenylpseudoindol. Sm. 115°. HCl, HNO<sub>3</sub>, Chromat, Pikrat (C. 1905 [2] 899; G. 36 [2] 60 C. 1906 [2] 1128).  
 2) Methenyl-β-o-Amidophenylbenzimidazol. Sm. 227° (B. 32, 1474). — \*IV, 849.  
 3) Isatomonohydrophenazin (Indophenazin). Sm. 285—287°. Ag (B. 28, 2529; 29, 200; B. 34, 4010 C. 1902 [1] 205). — IV, 1189; \*IV, 848.  
 4) Nitril d. 2-Phenylbenzimidazol-1-Carbonsäure. Sm. 105,5° (Am. 5, 415). — IV, 1008.  
 5) Verbindung (aus 3-Amido-2-Phenylindol). Sm. 115° (C. 1904 [1] 1357).

- $C_{14}H_5N_5$  C 68,0 — H 3,6 — N 28,3 — M. G. 247.  
 1) Nitril d. Diazoamidobenzol-2,2'-Dicarbonsäure. Sm. 133° u. Zers. (B. 29, 630). — IV, 1566.
- $C_{14}H_5Cl$  1) *p*-Chloranthracen. Sm. 103° (Bl. 27, 465). — II, 262.  
 2) 3-Chlorphenanthren. Sm. 70,5—71° (u. 81°) (A. 369, 117 C. 1909 [2] 1810).  
 3) *p*-Chlorphenanthren (B. 11, 166). — II, 267.
- $C_{14}H_9Cl_3$  1)  $\alpha$ -Chlor- $\alpha\beta$ -Di[2-Chlorphenyl]äthen (Trichlorstilben). Sm. 66° (B. 26, 652). — II, 248.  
 2) *p*-Trichlor- $\alpha\beta$ -Diphenyläthen (Chlortolandichlorid).  $\alpha$ -Modif. Sm. 137 bis 145°;  $\beta$ -Modif. Sm. 150° (B. 4, 379). — II, 271.
- $C_{14}H_9Cl_5$  1) 4-Trichlormethylaldiphenyldichlormethan. Sm. 79—80° (A. 189, 95). — II, 237.  
 2)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[*p*-Chlorphenyl]äthan. Sm. 105° (B. 7, 1181). — II, 231.
- $C_{14}H_9Br$  1) *p*-Bromanthracen. Sm. 100° (Bl. 27, 464). — II, 263.  
 2) *p*-Bromphenanthren. Sm. 63°. Pikrat (B. 11, 1217; A. 167, 181; A. 321, 332 C. 1902 [2] 60; B. 40, 4565 C. 1908 [1] 135). — II, 268.
- $C_{14}H_{10}O$  C 86,6 — H 5,1 — O 8,2 — M. G. 194.  
 1) 1-Oxyanthracen. Sm. 152° (B. 37, 70 C. 1904 [1] 666; B. 38, 2863 C. 1905 [2] 1094).  
 2) 2-Oxyanthracen (m-Anthrol). Zers. bei 200°.  $Hg + HgCl_2 + 4H_2O$  (A. 212, 26, 49; A. 342, 68 C. 1905 [2] 1593). — II, 901; \*II, 540.  
 3) 9-Oxyanthracen. Sm. 163—170° u. Zers. (161°). (HJ, J<sub>2</sub>), (4 + HJ, J<sub>2</sub>) (B. 9, 1201; 20, 1854; 21, 2507; 27, 2789; A. 212, 6; Am. 18, 459; A. 330, 182 C. 1904 [1] 892; B. 38, 1791 C. 1905 [1] 1647). — II, 902; \*II, 541.  
 4) isom. Oxyanthracen. Zers. 250° (J. pr. [2] 11, 227). — II, 901.  
 5) isom. Oxyanthracen (J. pr. [2] 11, 227). — II, 901.  
 6) 2-Oxyphenanthren. Sm. 169° (B. 34, 2525; B. 34, 4005 C. 1902 [1] 202; A. 321, 305 C. 1902 [2] 59).  
 7) 3-Oxyphenanthren. Sm. 118—119° (122—123°). Pikrat (B. 33, 1821; 34, 3835; B. 34, 4006 C. 1902 [1] 203; A. 321, 282 C. 1902 [2] 57; A. 369, 116 C. 1909 [2] 1810). — \*II, 541.  
 8) 9-Oxyphenanthren (Phenanthron). Sm. 148—149° (152—153°). Pikrat (J. pr. [2] 28, 172; Soc. 63, 770; 71, 1118; A. 321, 298 C. 1902 [2] 58; B. 35, 2728 C. 1902 [2] 643; B. 36, 2517 C. 1903 [2] 507; Soc. 87, 697 C. 1905 [2] 245; B. 41, 4221 C. 1909 [1] 181). — III, 442; \*III, 319.  
 9) *p*-Oxyphenanthren. Sm. 112° (B. 10, 1252). — II, 903.  
 10)  $\beta$ -Keto- $\alpha\alpha$ -Diphenyläthen (Diphenylketen). Sd. 146°<sub>12</sub> (B. 38, 1736 C. 1905 [1] 1646; A. 356, 74 C. 1907 [2] 1700; B. 42, 2346 C. 1909 [2] 355).  
 11) 9-Formylfluoren. Sd. 193—193,5°<sub>12</sub> (B. 42, 786 C. 1909 [1] 1004).  
 12) isom. 9-Formylfluoren. Sm. 70—90° (B. 42, 787 C. 1909 [1] 1004).  
 13) 1-Phenylbenzofuran. Sm. 120—121° (B. 36, 3931 C. 1904 [1] 171; B. 36, 4006 C. 1904 [1] 175; B. 42, 826 C. 1909 [1] 1163).  
 14) 2-Phenylbenzofuran. Sm. 12—13° (u. 42°); Sd. 316—317°<sub>780</sub> (B. 36, 4004 C. 1904 [1] 174).  
 15) 9-Keto-3-Methylfluoren. Sm. 66,5° (B. 31, 1694). — \*III, 178.  
 16) 9-Methylenxanthon. Fl. (B. 38, 2508 C. 1905 [2] 635).  
 C 80,0 — H 4,8 — O 15,2 — M. G. 210.  
 1)  $\alpha\beta$ -Di[4-Oxyphenyl]äthin. Sm. 220—225° (A. 335, 184 C. 1904 [2] 1130).  
 2) 1,2-Phenylenäther d.  $\alpha\beta$ -Dioxy- $\alpha$ -Phenyläthen. Sm. 73° (Bl. [4] 5, 509 C. 1909 [2] 21).  
 3) 1,2-Dioxyanthracen. Sm. 131° u. Zers. (B. 36, 4020 C. 1904 [1] 168; A. 342, 87 C. 1905 [2] 1594).  
 4) 1,5-Dioxyanthracen (Rufol). Sm. 265° u. Zers. (B. 11, 1615; B. 42, 1414 C. 1909 [1] 1711). — II, 999.  
 5) 1,8-Dioxyanthracen (Chrysazol). Sm. 225° u. Zers. (B. 12, 185; B. 42, 1415 C. 1909 [1] 1711). — II, 999.  
 6) 1,9[oder 1,10]-Dioxyanthracen. Sm. 136—138°. (HJ, J<sub>3</sub>) (B. 38, 1794 C. 1905 [1] 1648).

- $C_{14}H_{10}O_2$
- 7) 2,3-Dioxyanthracen. Zers. bei  $180^\circ$  (B. 28, 1535; A. 342, 106 C. 1905 [2] 1594). — \*II, 608.
  - 8) 2,9-Dioxyanthracen. Sm.  $221^\circ$  (B. 31, 2793). — \*II, 695.
  - 9) 2,10-Dioxyanthracen. Sm.  $202-206^\circ$  (A. 212, 28; B. 31, 2794). — II, 1112; \*II, 694.
  - 10) 9,10-Dioxyanthracen (B. 18, 3037; A. ch. [7] 21, 563; C. 1900 [1] 132; D.R.P. 151981 C. 1904 [2] 167; B. 37, 3085 C. 1904 [2] 1056). — II, 1000; \*II, 607.
  - 11) P-Dioxyanthracen (Flavol). Sm.  $260-270^\circ$  u. Zers. (B. 15, 1808). — II, 999.
  - 12) 3,4-Dioxyphenanthren (Morphol). Sm.  $143^\circ$  (B. 19, 792; 25, 1147; 30, 2439; 32, 1522; 33, 354). — II, 1000; \*II, 607.
  - 13) 9,10-Dioxyphenanthren. Sm.  $147-148^\circ$  (A. 167, 146; 247, 268; 314, 189; B. 19, 1870; B. 35, 3124 C. 1902 [2] 1212). — II, 1000.
  - 14) 10-Oxy-9-Keto-9,10-Dihydroanthracen (Oxanthranol). Sm.  $204-206^\circ$  u. Zers. (B. 14, 1264; A. 160, 126; 212, 28, 66; 314, 179; B. 39, 3563 C. 1907 [1] 46). — III, 242; \*III, 178.
  - 15) Methyläther d. 1-Oxy-9-Ketofluoren. Sm.  $141,5-142,5^\circ$  (B. 31, 3034; J. pr. [2] 59, 453). — \*III, 177.
  - 16) Methyläther d. 2-Oxy-9-Ketofluoren. Sm.  $77-78^\circ$  (A. 322, 168 C. 1902 [2] 283). — \*III, 178.
  - 17) Methyläther d. 3-Oxy-9-Ketofluoren. Sm.  $99^\circ$  ( $96-97^\circ$ ) (B. 35, 4278 C. 1903 [1] 333; G. 35 [2] 548 C. 1906 [1] 850).
  - 18)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan (Benzil). Sm.  $95^\circ$ ; Sd.  $346-348^\circ$  u. ger. Zers. ( $104-106^\circ$ ). +  $SnCl_4$ . Lit. bedeutend. — III, 280; \*III, 221.
  - 19) Isobenzil. Sd.  $314^\circ$  (A. 129, 347). — III, 297.
  - 20) Stilbenchinon (A. 335, 168 C. 1904 [2] 1128).
  - 21) Indoncyklomethylacetoäthylen. Sm.  $216-217^\circ$  (Soc. 87, 1392 C. 1905 [2] 1542).
  - 22) 1[oder 3]-Methylxanthon. Sm.  $89-91^\circ$  (B. 38, 2115 C. 1905 [2] 246).
  - 23) 2-Methylxanthon. Sm.  $121^\circ$  ( $105^\circ?$ ) (B. 19, 2612; A. 257, 94 Anm.; B. 38, 2115 C. 1905 [2] 246). — III, 216; \*III, 162.
  - 24) 4-Methylxanthon. Sm.  $105^\circ$  ( $126^\circ$ ); Sd.  $350-355^\circ$  (B. 25, 3644; B. 38, 2114 C. 1905 [2] 245). — III, 212.
  - 25) 2-Acetyl- $\beta$ -Naphtofuran. Sm.  $115-116^\circ$  (B. 36, 2866 C. 1903 [2] 832).
  - 26) 4-Methyl-1,2- $\alpha$ -Naphtopyron ( $\beta$ -Methyl- $\alpha$ -Naphtocumarin). Sm.  $167^\circ$  (B. 36, 1967 C. 1903 [2] 376).
  - 27) 2-Methyl-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Methyl- $\beta$ -Naphtocumarin). Sm.  $157$  bis  $158^\circ$  (B. 36, 1969 C. 1903 [2] 377).
  - 28) Oxytoliden. Sm.  $172^\circ$  (A. 153, 122). — III, 296.
  - 29) 3-Acetylbiphenylenoxyd. Sm.  $80-81^\circ$  (A. 264, 189). — III, 217.
  - 30) Dianhydrid d.  $\alpha\beta$ -Di[2-Oxyphenyl]- $\alpha\beta$ -Oxyäthan. Sm.  $116-117^\circ$ ; Sd.  $220^\circ_{30-40}$  (B. 24, 3175). — II, 1117.
  - 31) isom. Dianhydrid d.  $\alpha\beta$ -Di[2-Oxyphenyl]- $\alpha\beta$ -Oxyäthan. Sm.  $67$  bis  $68^\circ$  (B. 24, 3176). — II, 1118.
  - 32) Fluoren-1-Carbonsäure. Sm.  $245-246^\circ$ .  $Ca + 2\frac{1}{2}H_2O$ ,  $Ba + 3H_2O$  (A. 200, 15). — II, 1473.
  - 33) Fluoren-2-Carbonsäure. Zers. oberhalb  $260^\circ$ . Ag (M. 25, 448 C. 1904 [2] 449).
  - 34) Fluoren-4-Carbonsäure. Sm.  $175^\circ$  (A. 247, 283). — II, 1473.
  - 35) Fluoren-9-Carbonsäure. Sm.  $225^\circ$  ( $216-217^\circ$ ); Zers. bei  $280-290^\circ$ . Ag, Chinolinsalz (B. 10, 536; Bl. [3] 27, 875 C. 1902 [2] 991; B. 39, 3064 C. 1906 [2] 1501). — II, 1473.
  - 36) Lakton d.  $\alpha$ -Oxydiphenylelessigsäure (Diphenylglykolid). Sm.  $140^\circ$  (B. 28 [2] 613).
  - 37) Lakton d. 2-Oxydiphenylelessigsäure. Sm.  $113-114^\circ$ ; Sd.  $337^\circ$  u. ger. Zers. (B. 28, 989; 30, 124; 31, 2812). — II, 1698; \*II, 995.
  - 38) Lakton d.  $\beta$ -[2-Oxynaphtyl]propen- $\alpha$ -Carbonsäure (L. d.  $\beta$ -Naphtolangelikasäure). Sm.  $161-162^\circ$  (B. 17, 2190). — II, 1698.
  - 39) Lakton d.  $\alpha$ -Oxydiphenylmethan-2-Carbonsäure (Phenylphtalid). Sm.  $115^\circ$  (J. 1875, 596; A. 291, 21; B. 21, 2005; M. 28, 1229 C. 1908 [1] 737; B. 41, 982 C. 1908 [1] 1695). — II, 1697; \*II, 994.



- $C_{14}H_{10}O_2$  40) Aldehyd d. Biphenyl-4,4'-Dicarbonsäure. Sm. 145° (A. 332, 76 C. 1904 [2] 43).
- 41) Aldehyd d. Diphenylketon-4-Carbonsäure. Sm. 64,2° (Bl. [3] 15, 950). — \*III, 70.
- $C_{14}H_{10}O_3$  C 74,3 — H 4,4 — O 21,2 — M. G. 226.
- 1) 1,2,10-Trioxyanthracen (Desoxyalizarin). Sm. 208° (B. 14, 1259; B. 38, 1785 Ann. C. 1905 [1] 1647). — II, 1114.
- 2) 1,4,9-Trioxyanthracen. Sm. 156° (B. 35, 2924 C. 1902 [2] 1049; B. 38, 1795 C. 1905 [1] 1648).
- 3) 1,5,9-Trioxyanthracen. Zers. bei 200° (B. 35, 2928 C. 1902 [2] 1050).
- 4) 1,8,9[oder 1,8,10]-Trioxyanthracen. Sm. 176—177° (B. 35, 2930 C. 1902 [2] 1050).
- 5) 2,3,9-Trioxyanthracen. Sm. 282° (B. 36, 2938 C. 1903 [2] 886).
- 6) 3,4,5-Trioxyphenanthren. Sm. 148° (B. 39, 1720 C. 1906 [2] 54).
- 7)  $\alpha\beta$ -Diketo- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 175° (M. 26, 993 C. 1905 [2] 1181).
- 8) 9-Dioxy-9-Keto-9,10-Dihydroanthracen (Desoxyisoanthraflavinsäure). Sm. oberhalb 330° (B. 15, 1040). — III, 245.
- 9) 3-Oxy-1-Methylxanthon. Sm. 285° (B. 24, 1895). — III, 212.
- 10) 1-Oxy-3-Methylxanthon (Salicylorcinäther). Sm. 140°. Na +  $1\frac{1}{2}$  H<sub>2</sub>O, Na + NaOH (Am. 5, 95). — III, 212.
- 11) 1-Oxy-4-Methylxanthon. Sm. 112° (B. 27, 1991). — III, 213.
- 12) 1-Oxy-5-Methylxanthon. Sm. 152° (B. 27, 1990). — III, 213.
- 13) 1-Oxy-6-Methylxanthon. Sm. 176° (B. 27, 1990). — III, 216.
- 14) 1-Oxy-7-Methylxanthon. Sm. 135° (B. 27, 1990). — III, 213.
- 15) Methyläther d. 1-Oxyxanthon. Sm. 138° (A. 350, 113 C. 1907 [1] 173).
- 16) Methyläther d. 2-Oxyxanthon. Sm. 131,5° (129°) (B. 26, 77; B. 38, 2119 C. 1905 [2] 246; B. 38, 2122 C. 1905 [2] 247; B. 39, 4334 C. 1907 [1] 346; A. 355, 369 C. 1907 [2] 1511). — III, 201.
- 17) Methyläther d. 3-Oxyxanthon. Sm. 128,5° (B. 26, 77; B. 39, 4335 C. 1907 [1] 346). — III, 201.
- 18) Methyläther d. 4-Oxyxanthon. Sm. 165° (173°) (B. 26, 77; B. 38, 2119 C. 1905 [2] 246). — III, 201.
- 19) 3-Oxy-9-Methylfluoron (Acetaldehydoxyfluoron) (B. 27, 2893; 31, 147 Ann.). — \*III, 570.
- 20) 8-Oxy-7-Methylfluoron. Zers. oberhalb 220°. HCl (M. 21, 70; M. 25, 313 C. 1904 [1] 1494). — \*III, 570.
- 21) Oreoselon. Sm. 190° (A. 51, 320). — III, 620.
- 22) Diphenylketon-2-Carbonsäure + H<sub>2</sub>O (2-Benzoylbenzol-1-Carbonsäure). Sm. 93—94° (95—97°) (127° wasserfrei). Ca, Ba, Zn + 2H<sub>2</sub>O, Cu + H<sub>2</sub>O, Ag (J. 1878, 739; 1879, 727; A. 206, 45; 227, 253; 291, 9, 17; 306, 157, 234; B. 6, 907; 7, 17, 578, 805, 987; 9, 32; 11, 838; 13, 1612; 26, 1199; 27 [2] 664; A. ch. [6] 14, 446; C. 1900 [1] 260; Am. 20, 111; B. 38, 2216 C. 1905 [2] 332; M. 26, 971 C. 1905 [2] 1491; M. 28, 1237 C. 1908 [1] 738; B. 42, 3475 C. 1909 [2] 1558). — II, 1703; \*II, 999.
- 23) Diphenylketon-3-Carbonsäure (3-Benzoylbenzol-1-Carbonsäure). Sm. 161—162°. Ca + 2H<sub>2</sub>O, Ba + 3(4)H<sub>2</sub>O, Ag (J. 1875, 599; A. 210, 277; 220, 236, 250; B. 13, 320; 14, 648). — II, 1705.
- 24) Diphenylketon-4-Carbonsäure (4-Benzoylbenzol-1-Carbonsäure). Sm. 194°. Ba + 2H<sub>2</sub>O, Ag (J. 1875, 595; 1879, 726; M. 2, 438; A. 161, 98; B. 4, 510; 6, 539, 907; 7, 988; 9, 92; M. 28, 1223 C. 1908 [1] 737). — II, 1705.
- 25) Biphenyl-4-Ketocarbonsäure. Sm. 170° u. Zers. (Bl. [3] 17, 810). — \*II, 1002.
- 26) 9-Oxyfluoren-4-Carbonsäure. Sm. 203° (A. 247, 284). — II, 1706.
- 27) 9-Oxyfluoren-9-Carbonsäure +  $\frac{1}{2}$  H<sub>2</sub>O (Biphenylenglykolsäure). Sm. 125° (166° wasserfrei). Ca + 2H<sub>2</sub>O (B. 10, 125, 534; 11, 211; 16, 2872; B. 38, 3757 C. 1906 [1] 43; B. 39, 3062 C. 1906 [2] 1500). — II, 1706; \*II, 1002.
- 28) isom. 9-Oxyfluoren-9-Carbonsäure. Sm. 212° (B. 38, 3757 C. 1906 [1] 43).
- 29) 2-Methyl- $\alpha$ -Naphtofuran-1-Carbonsäure. Subl. Sm. 243—245° u. Zers. (B. 19, 1303). — III, 734.

- $C_{14}H_{10}O_8$  30) 1-Methyl- $\beta$ -Naphtofuran-2-Carbonsäure. Sm. 253—254° (B. 19, 1304). — III, 734.
- 31) Säure (aus p-Kresol). Zers. bei 100° (B. 36, 2032 C. 1903 [2] 360).
- 32) Anhydrid d. Benzolcarbonsäure. Sm. 42°; Sd. 360° (347—348°). Lit. bedeutend. — II, 1157; \*II, 725.
- 33)  $\alpha$ ,2-Lakton d. 2,4-Dioxydiphenylmethan- $\alpha$ -Carbonsäure. Sm. 183° (B. 31, 2826; J. pr. [2] 78, 96 C. 1908 [2] 714). — \*II, 1090.
- 34)  $\alpha$ ,2-Lakton d. 2,5-Dioxydiphenylmethan- $\alpha$ -Carbonsäure. Sm. 153 bis 154° (157°) (B. 30, 130; J. pr. [2] 78, 96 C. 1908 [2] 714). — \*II, 1090.
- 35)  $\alpha$ ,2-Lakton d. 2,6-Dioxydiphenylmethan- $\alpha$ -Carbonsäure. Sm. 125° (B. 31, 2826). — \*II, 1090.
- 36)  $\alpha$ ,2'-Lakton d.  $\alpha$ -Oxy-4-Oxydiphenylmethan-2'-Carbonsäure (4-Oxyphenylphthalid). Sm. 148—151° (157—160°) (B. 27, 2632; 31, 2790; M. 20, 363). — II, 1881; \*II, 1089.
- 37) Aldehyd d. 2-Benzoxylbenzol-1-Carbonsäure. Sd. oberhalb 360° (A. 145, 297). — III, 68.
- 38) Aldehyd d. 4-Benzoxylbenzol-1-Carbonsäure. Sm. 72° (A. 277, 350). — III, 82.
- 39) Disalicylaldehyd (Parasalicyl). Sm. 130° (128°) (A. 53, 77; 78, 228; 145, 299; 244, 46; A. Spl. 8, 42; C. 1897 [1] 589; B. 38, 3630 C. 1906 [2] 1729). — III, 78; \*III, 57.
- 40) Verbindung (aus Salicylaldehyd) (B. 17, 502; 30, 1772; 31, 1601; A. 163, 223). — III, 78; \*III, 57.
- 41) Verbindung (aus d. 4-Oxybenzol-1-Carbonsäure) (B. 17, 503). — III, 88.
- 42) Verbindung (aus 2,6-Dioxy-9,10-Anthrachinon) (B. 21, 445). — III, 430.
- $C_{14}H_{10}O_4$  C 69,4 — H 4,1 — O 26,4 — M. G. 242.
- 1) Di[1,2-Phenylenäther] d.  $\alpha\alpha\beta\beta$ -Tetraoxyäthan (Dibrenzkatechinäthan). Sm. 88—89° (Bl. [3] 21, 101, 106). — \*II, 555.
- 2) 1,2,5,9[oder 1,2,5,10]-Tetraoxy-9,10-Anthrachinon (Desoxyanthra-  
rufin). Sm. 258° (A. 349, 218 C. 1906 [2] 1337).
- 3) 1,2,6,9-Tetraoxyanthracen (Desoxyflavopurpurin). Sm. 258° (C. 1901 [1] 601; A. 349, 214 C. 1906 [2] 1337).
- 4) 1,2,7,9-Tetraoxyanthracen (Desoxyanthrapurpurin) (C. 1901 [1] 601; A. 349, 227 C. 1906 [2] 1338).
- 5) 1,2,9,10-Tetraoxyanthracen. Sm. 150° (Bl. [3] 35, 73 C. 1906 [1] 939; C. 1908 [1] 2179).
- 6) 1,4,9,10-Tetraoxyanthracen (Leukochinizarin). Sm. 150° (153—154°; 155°) (A. 212, 14; D. R. P. 89027, 95271, 95494; C. 1904 [1] 101; D. R. P. 148792 C. 1904 [1] 557; J. pr. [2] 76, 139 C. 1907 [2] 1329; C. 1908 [1] 2178). — II, 1119; \*II, 700.
- 7)  $\alpha\beta$ -Diketo- $\alpha$ -Phenyl- $\alpha$ -[2,4-Dioxyphenyl]äthan (2,4-Dioxybenzil). Sm. 239° (M. 26, 1128 C. 1905 [2] 1181).
- 8) 1,3-Dioxy- $\beta$ -Dihydro-9,10-Anthrachinon (Hydropurpuroxanthin) (A. ch. [5] 18, 230). — III, 426.
- 9) 1,2,9-Trioxo-10-Keto-9,10-Dihydroanthracen (Bl. [3] 35, 73 C. 1906 [1] 939).
- 10) Anthragallolhydranthron (B. 21, 444). — III, 433.
- 11) 3,3'-Dimethylbiphenyl-2,5,2',5'-Dichinon. Sm. 163° (M. 10, 181; B. 31, 1337). — II, 956; \*II, 578.
- 12) Methyläther d. 5-Oxy-2-Keto-1-[2-Fural]-1,2-Dihydrobenzofuran. Sm. 136° (B. 30, 302). — \*III, 530.
- 13) 1,7-Dioxy-3-Methylxanthon. Sm. 252° (B. 27, 1993). — III, 216.
- 14) Monomethyläther d. 1,3-Dioxyxanthon. Sm. 145° (B. 26, 78). — III, 204.
- 15) 6-Methyläther d. 1,6-Dioxyxanthon. Sm. 143—144° (B. 27, 1992). — III, 206; \*III, 157.
- 16) 1-Methyläther d. 1,7-Dioxyxanthon. Sm. 240° (A. 318, 367). — \*III, 157.
- 17) 7-Methyläther d. 1,7-Dioxyxanthon. Sm. 129° (130,5°; 124—125°). Na (B. 27, 1992; A. 318, 366; M. 30, 532 C. 1909 [2] 1569). — III, 206; \*III, 157.
- 18) Dimethyldicumarin (B. 20, 1329). — II, 2019.
- 19) Pseudobaptigin. Sm. 172° (Ar. 245, 567 C. 1908 [1] 524).

- $C_{14}H_{10}O_4$
- 20) 2-Benzoxylbenzol-1-Carbonsäure (Benzoösalicylsäure). Sm. 132°. Pyridinsalz (A. 87, 161; D.R.P. 169247 C. 1906 [1] 1307; B. 41, 3362 C. 1908 [2] 1687). — II, 1497.
  - 21) 5-Oxydiphenylketon-2-Carbonsäure. Zers. bei 220—222° (B. 38, 296 C. 1905 [1] 617).
  - 22) 3'-Oxydiphenylketon-2-Carbonsäure. Sm. 181—182° (D.R.P. 148110 C. 1904 [1] 329).
  - 23) 4'-Oxydiphenylketon-2-Carbonsäure. Sm. 210° u. Zers. Ag (B. 26, 176). — II, 1887.
  - 24) 4-Oxydiphenylketon-3-Carbonsäure (6-Oxy-3-Benzoylbenzol-1-Carbonsäure). Sm. 207—210°. Ba (A. 290, 164). — \*II, 1094.
  - 25)  $\alpha$ -[1-Oxy-P-Naphtoyl]äthen- $\beta$ -Carbonsäure. Sm. 90°. Pb (B. 18, 2868). — II, 1887.
  - 26) Biphenyl-3,5-Dicarbonsäure (1-Phenylbenzol-3,5-Dicarbonsäure). Sm. oberhalb 310°. Ca, Ba + 4H<sub>2</sub>O, Cu (B. 22, 2381; 24, 1750). — II, 1886.
  - 27) Biphenyl-2,2'-Dicarbonsäure (Diphensäure). Sm. 228—229°. Mg + 4H<sub>2</sub>O, Ca + 2½H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag<sub>2</sub> (A. 166, 367; 193, 116, 128; 196, 50; 203, 97; 247, 263; 320, 138; J. 1879, 727; B. 16, 2872; 21, 2356; 28, 2555; 29, 228; J. pr. [2] 32, 359). — II, 1883; \*II, 1092.
  - 28) Biphenyl-2,3'-Dicarbonsäure (Isodiphensäure). Sm. 216°. Ca + 2H<sub>2</sub>O, Ba + 6H<sub>2</sub>O, Ag<sub>2</sub> (A. 193, 155; 200, 9). — II, 1883; \*II, 1092.
  - 29) Biphenyl-2,4'-Dicarbonsäure. Sm. 251—252°. Ag<sub>2</sub> (B. 22, 3018). — II, 1883; \*II, 1092.
  - 30) Biphenyl-3,3'-Dicarbonsäure. Sm. oberhalb 340° (339—341°; 356 bis 357°). Ba + 3½H<sub>2</sub>O (B. 21, 983; 31, 2576; A. 332, 71 C. 1904 [2] 42). — II, 1886; \*II, 1093.
  - 31) Biphenyl-3,4'-Dicarbonsäure. Sm. 333,5—334,5° (B. 32, 1063). — \*II, 1094.
  - 32) Biphenyl-4,4'-Dicarbonsäure. Ca, Ba, Ag<sub>2</sub> (A. 172, 117; B. 9, 272; 32, 1061 Anm.). — II, 1886; \*II, 1093.
  - 33) Superoxyd d. Benzolcarbonsäure (Benzoylsuperoxyd). Sm. 103,5° (110°) (J. 1863, 315; 1870, 686; M. 5, 562; 7, 522; B. 27, 1511, 1959; 29, 1725 Anm.; 30, 2003; 33, 1575; H. 27, 493; Ph. Ch. 12, 68; A. 298, 287; C. 1898 [1] 330; 1898 [2] 1094). — II, 1158; \*II, 726.
  - 34)  $\alpha$ ,2'-Lakton d.  $\alpha$ -Oxy- $\alpha$ -[2,4(P)-Dioxydiphenyl]methan-2'-Carbonsäure + H<sub>2</sub>O (Resorcylphtalid). Sm. 130° (B. 27, 2637; 31, 2792). — II, 1971; \*II, 1142.
  - 35) Monophenylester d. Benzol-1,2-Dicarbonsäure. Sm. 103° (B. 35, 4092 C. 1903 [1] 75).
  - 36) Diphenylester d. Oxalsäure. Sm. 136° (130° u. Zers.); Sd. 320—325° (J. pr. [2] 25, 283, 284; B. 35, 3437 C. 1902 [2] 1303). — II, 666.
  - 37) Acetylderivat d. Naphtalin-1-Carbonsäure-8-Carbonsäurealdehyd. Sm. 140° (A. 276, 13). — II, 1694.
- $C_{14}H_{10}O_5$
- 1)  $\alpha\beta$ -Diketo- $\alpha$ -[P-Trioxyphenyl]- $\beta$ -Phenyläthan. Sm. 143° (B. 39, 2059 C. 1906 [2] 246).
  - 2) 2,3,7-Trioxy-9-Methylfluoron (B. 37, 1177 C. 1904 [1] 1161; B. 37, 2731 C. 1904 [2] 541).
  - 3) 3-Methyläther d. 1,3,7-Trioxyxanthon (Gentianin; Gentisin). Sm. 267°; subl. bei 300—400° u. Zers. Na + 2H<sub>2</sub>O, 3 + Na<sub>2</sub>O, 7 + 2Na<sub>2</sub>O, K + H<sub>2</sub>O, K + 2(16)H<sub>2</sub>O, Ba + H<sub>2</sub>O, Pb (A. 21, 134; 25, 202; 62, 106; 175, 62; 180, 343; M. 15, 7; 16, 920). — III, 209.
  - 4) Gentienin. Sm. 225° (C. r. 141, 263 C. 1905 [2] 771).
  - 5) Genistein (Soc. 75, 833). — \*III, 489.
  - 6) Machromin + 3H<sub>2</sub>O (J. 1864, 558). — III, 207.
  - 7) 2-[2-Oxybenzoxyl]benzol-1-Carbonsäure. Sm. 147° (C. 1908 [2] 1460; D.R.P. 211403 C. 1909 [2] 320; D.R.P. 214044 C. 1909 [2] 1285).
  - 8) 4-[4-Oxybenzoxyl]benzol-1-Carbonsäure. Sm. 261° (270°). Na, Ba, Ba + xH<sub>2</sub>O (J. pr. [2] 28, 208; B. 42, 217 C. 1909 [1] 650). — II, 1528.
  - 9) 2-Naphtoxyfumarsäure. Sm. 236° u. Zers. (Soc. 81, 422 C. 1902 [1] 757, 999).
  - 10) 4-Oxybiphenyl-2,2'-Dicarbonsäure. Sm. 245—246° (B. 38, 3770 C. 1906 [1] 37).



- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>**
- 11) Diphenyläther-2,2'-Dicarbonsäure (Salicylosalicylsäure) (A. 87, 159; 124, 249; 150, 13; 163, 219; M. 4, 125). — II, 1498.
  - 12) 2',4'-Dioxydiphenylketon-2-Carbonsäure (Resorcinphtalein). Sm. 200° (A. 183, 24; B. 30, 970). — II, 1972; \*II, 1143.
  - 13) Säure (aus Diazoamidobenzolcarbonsäure) (A. 117, 37). — II, 1972.
  - 14) α,2'-Lakton d. α-Oxy-1,2,3-Trioxydiphenylmethan-2'-Carbonsäure + H<sub>2</sub>O (Pyrogallolphthalid). Sm. 175—177° (wasserfrei) (B. 27, 2638). — II, 2021.
  - 15) α,2-Lakton d. 2,4,2',4'-Tetraoxydiphenylessigsäure. Na<sub>3</sub> (Soc. 69, 1267; 71, 1085). — \*II, 1178.
  - 16) Verbindung (aus 3-Oxybenzol-1-Carbonsäure; Di-3-Oxybenzoid). Sm. 130—135° B. 15, 2588). — II, 1518.
  - 17) Verbindung (aus Sennesblättern) (C. 1900 [2] 871).  
C 61,3 — H 3,6 — O 35,1 — M. G. 274.
- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>**
- 1) 1,2,5,8,9,10-Hexaoxyanthracen (D.R.P. 90722; D.R.P. 148792 C. 1904 [1] 557). — \*II, 703.
  - 2) αβ-Diketo-αβ-Di[3,4-Dioxyphenyl]äthan + 2H<sub>2</sub>O. Sm. 236° (Soc. 93, 737 C. 1908 [1] 2036).
  - 3) Dimethyläther d. 4,4'-Dioxy-2,5,2',5'-Tetraketo-2,5,2',5'-Tetrahydrobiphenyl. Zers. bei 205° (Ar. 245, 281 C. 1907 [2] 808).
  - 4) Phenanthrendiozonid (A. 343, 373 C. 1906 [1] 547).
  - 5) Eichenroth + 1/2 H<sub>2</sub>O (oder C<sub>34</sub>H<sub>26</sub>O<sub>15</sub>) (A. 145, 3; 202, 270; 240, 340; J. 1876, 903; M. 1, 270). — III, 587.
  - 6) Olenitol. Sm. 265° (Soc. 93, 914 C. 1908 [2] 256).
  - 7) 4-[3,4-Dioxybenzoxyl]benzol-1-Carbonsäure. Sm. 270° u. Zers. (B. 42, 1484 C. 1909 [1] 1992).
  - 8) 4,4'-Dioxybiphenyl-2,2'-Dicarbonsäure + H<sub>2</sub>O. Sm. 272—273° (278 bis 280° wasserfrei). Ba, Ag<sub>2</sub> (B. 38, 3772 C. 1906 [1] 37).
  - 9) 4,4'-Dioxybiphenyl-3,3'-Dicarbonsäure. Sm. 302—305° (B. 31, 2577). — \*II, 1181.
  - 10) 4,4'-Dioxybiphenyl-*p*-Dicarbonsäure. Sm. 131° (B. 20, 2703). — II, 2022.
  - 11) αδ-Di[2-Furanyl]-αγ-Butadien-βγ-Dicarbonsäure. Sm. 227—228° u. Zers. (Sm. 185—187°). Na<sub>2</sub>, Ca + 2H<sub>2</sub>O, Ba + 3H<sub>2</sub>O, Ag<sub>2</sub> (B. 34, 1628; Soc. 85, 190 C. 1904 [1] 645, 925; B. 38, 4079 C. 1906 [1] 351). — \*III, 516.
  - 12) 2,5-Dimethyl-*o*-Benzdifuran-1,6-Dicarbonsäure. Ba + 2H<sub>2</sub>O (B. 20, 1337). — III, 734.
  - 13) 2,4-Dimethyl-*m*-α-Benzdifuran-1,5-Dicarbonsäure. Sm. oberhalb 310° u. Zers. (B. 19, 2933). — III, 734.
  - 14) 2,6-Dimethyl-*m*-β-Benzdifuran-1,5-Dicarbonsäure. Sm. oberhalb 310° u. Zers. (B. 19, 2933). — III, 735.
  - 15) 2,3-Dimethyl-*p*-α-Benzdifuran-1,4-Dicarbonsäure + H<sub>2</sub>O. Sm. oberhalb 360°. Ba + 2H<sub>2</sub>O, Ag<sub>2</sub> (B. 20, 1336). — III, 735.
  - 16) Gardeniasäure. Sm. 223° u. Zers. (A. 200, 316). — III, 633.
  - 17) Rufohydroellagsäure + xH<sub>2</sub>O. Sm. bei 300° (wasserfrei) u. Zers. (B. 8, 1497; M. 1, 672). — II, 2022.
  - 18) Diacetat d. 2,3-Dioxy-1,4-Naphtochinon. Sm. 105° (B. 11, 1324; A. 307, 13). — III, 386; \*III, 279.
  - 19) Diacetat d. 5,6-Dioxy-1,4-Naphtochinon (D. d. Naphtazarin). Sm. 189° (191°) (A. 286, 36, 1457; 311, 348; B. 28, 1457). — III, 386; \*III, 280.
  - 20) Diacetat d. 6,7-Dioxy-1,4-Naphtochinon. Sm. 65—67° (C. 1902 [1] 934; M. 23, 533 C. 1902 [2] 745). — \*III, 280.
  - 21) Verbindung (aus 1,3-Dioxybenzol). Sm. 253—256° u. Zers. (J. pr. [2] 35, 510). — II, 915.
- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>**
- 1) Calluxanthin (J. 1852, 683). — II, 2090.
  - 2) Salitannol (Verb. aus Gallussäure u. Salicylsäure). Sm. 210° u. Zers. (C. 1898 [1] 229). — \*II, 1111.
  - 3) 4-[3,4,5-Trioxybenzoxyl]benzol-1-Carbonsäure + 1 1/2 H<sub>2</sub>O. Sm. 260° (wasserfrei) (B. 41, 2888 C. 1908 [2] 1430).
  - 4) Bis-3,4-Dioxybenzol-1-Carbonsäure (Diprotokatechusäure) (B. 15, 2589). — II, 1744.

- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>**
- 5) **Katellagsäure** (B. 15, 2590). — II, 2050.
  - 6) **Säure** (aus Methyl-4,6-Dioxyphenylketon-2-Carbonsäureäthylester u. Äthoxymethylenacetessigsäureäthylester). Sm. 201–203° u. Zers. Ba, Cu (B. 42, 1396 C. 1909 [1] 1885).
  - 7) **Anhydrid d. 2,4-Diacetoxylphenylmaleinsäure**. Sm. 121–122° (B. 34, 384). — \*II, 1169.
  - 8) **Verbindung** (aus Äthylxanthophansäure). Sm. 185° u. Zers. (B. 39, 2087 C. 1906 [2] 424).
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>**
- 9) **Verbindung** (aus Rufigallussäure) (B. 9, 1258). — III, 439.  
C 54,9 — H 3,3 — O 41,8 — M. G. 306.
  - 1) **Tetrahydroellagsäure**. Subl. bei 200–220°; Zers. oberhalb 230° (M. 2, 50). — II, 2079.
  - 2) **Hydrorufigallussäure**. Zers. oberhalb 180° (B. 9, 135; J. 1879, 684). — II, 2079.
  - 3) **P-Tetraoxybiphenyl-P-Dicarbonsäure** (Dehydrodiprotokatechusäure). Sm. oberhalb 300° (B. 18, 3495). — II, 2079.
  - 4) **P-Tetraoxybiphenyl-P-Dicarbonsäure** (Diresorcindicarbonsäure). Zers. oberhalb 300°. K<sub>2</sub>, Ba + 6H<sub>2</sub>O, Ag<sub>2</sub> (B. 17, 2105). — II, 2079.  
C 52,2 — H 3,1 — O 44,7 — M. G. 322.
- C<sub>14</sub>H<sub>10</sub>O<sub>9</sub>**
- 1) **α-Digallussäure**. Erweicht bei 110–115° (A. 170, 54; B. 11, 2033; 12, 33, 1576; 13, 454; 15, 2591; 31, 3168; B. 41, 2890 C. 1908 [2] 1430). — II, 1924; \*II, 1113.
  - 2) **β-Digallussäure + 2H<sub>2</sub>O**. Sm. unter 100° (B. 17, 1476). — II, 1925.
  - 3) **Galläpfelgerbsäure** (Tannin). Salze meist bekannt. Lit. bedeutend. — II, 1925; \*II, 1113.
  - 4) **Dipyrogallocarbonsäure**. Ba (A. 245, 37). — II, 1918.
  - 5) **Diphloroglucincarbonsäure** (A. 245, 40). — II, 1918.
  - 6) **Gallaktinsäure**. Fl. Ca<sub>2</sub> + 3H<sub>2</sub>O, Hg<sub>2</sub> + 3H<sub>2</sub>O, Pb<sub>2</sub> + 6H<sub>2</sub>O (A. 100, 267). — II, 2090.
  - 7) **Heptaoxyfluorencarbonsäure** (M. 1, 631). — II, 2091.  
C 49,7 — H 2,9 — O 47,3 — M. G. 338.
- C<sub>14</sub>H<sub>10</sub>O<sub>10</sub>**
- 1) **Ellagengerbsäure**. 2 + 5PbO (Fr. 14, 40, 44; Soc. 69, 1306). — II, 2085.
- C<sub>14</sub>H<sub>10</sub>N**
- 1) **Verbindung** (aus αβ-Dibenzylidenamido-αβ-Diphenylhydrazin) = (C<sub>14</sub>H<sub>10</sub>N)<sub>x</sub>. Sm. 211,5–212,5° (G. 26 [1] 452; 27 [2] 286).  
C 81,6 — H 4,8 — N 13,6 — M. G. 206.
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>**
- 1) **Benzylidenbenzenylamidin**. Sm. 175° (B. 22, 1610; 23, 2925). — IV, 849.
  - 2) **Diimidotolan**. Subl. bei 250°; Sm. bei 380° (J. r. 16, 577). — III, 282.
  - 3) **Phenanthrendiimid**. Sm. oberhalb 285° (M. 1, 146). — III, 445.
  - 4) **7-[3-Pyridyl]chinolin**. Sm. 104°. (2HCl, PtCl<sub>4</sub>) (B. 19, 2475). — IV, 1022.
  - 5) **4-Phenyl-1,2-Benzdiazin**. Sm. 67–67,5°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), (2HCl, AuCl<sub>3</sub>), HJ, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat, + AgNO<sub>3</sub> (B. 42, 3124 C. 1909 [2] 1354).
  - 6) **2-Phenyl-1,3-Benzdiazin**. Sm. 101°; Sd. oberhalb 300°. HCl, Pikrat (B. 23, 2810; 28, 288). — IV, 1022.
  - 7) **4-Phenyl-1,3-Benzdiazin**. Pikrat (B. 25, 3093). — IV, 1023.
  - 8) **2-Phenyl-1,4-Benzdiazin**. Sm. 78° (A. 292, 246; B. 39, 2243 C. 1906 [2] 442; B. 41, 2350 C. 1908 [2] 526). — IV, 1023.
  - 9) **1-Phenyl-2,3-Benzdiazin**. Sm. 142–143°. (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (B. 38, 3923 C. 1906 [1] 247).
  - 10) **Dihydroacenenaphtendiazin**. Sm. 143°. (2HCl, PtCl<sub>4</sub>), Pikrat (C. 1899 [2] 339). — \*IV, 686.
  - 11) **o-Benzylbenzimidazol**. Sm. 210°. (2HCl, PtCl<sub>4</sub>) (A. 347, 125 C. 1906 [2] 777).
  - 12) **Bisanhydro-2-Amidobenzaldehyd**. Sm. 81°; Sd. 212–216°. (2HCl, PtCl<sub>4</sub>) (C. r. 136, 371 C. 1903 [1] 635).
  - 13) **Nitril d. α-Phenylimido-α-Phenylelessigsäure**. Sm. 72° (B. 34, 499; B. 35, 3329 C. 1902 [2] 1192). — \*II, 941.  
C 71,8 — H 4,3 — N 23,9 — M. G. 234.
- C<sub>14</sub>H<sub>10</sub>N<sub>4</sub>**
- 1) **3-Amido-1,5-2,3-Diphenylen-2,3-Dihydro-1,2,4-Triazol**. Sm. 221° (B. 28, 153). — IV, 1292.

- C<sub>14</sub>H<sub>10</sub>N<sub>4</sub>** 2) 3,6-Diphenyl-1,2,4,5-Tetrazin. Sm. 192° (B. 26, 2133; 31, 312; A. 297, 264; 298, 98). — II, 1215; \*II, 762.  
 3) Azimid d. 5[oder 6]-Methyl-2-[2-Amidophenyl]benzimidazol. Sm. 187—188° (B. 31, 317). — IV, 1293.  
 4) Azimid d. 2-[2-Amido-4-Methylphenyl]benzimidazol. Sm. 185° (2HCl, PtCl<sub>4</sub>) (B. 31, 317). — IV, 1293.  
 5) Anhydrooxanilid. Sm. noch nicht bei 300°. 2HCl + 2H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (A. 209, 370). — IV, 1292.  
 6) Fluoflavin. Sm. oberhalb 360°. 2HCl (B. 29, 784; A. 319, 267 C. 1902 [1] 359). — IV, 1292; \*IV, 960.
- C<sub>14</sub>H<sub>10</sub>N<sub>6</sub>** C 64,1 — H 3,8 — N 32,1 — M. G. 262.  
 1) 3,3'-Azindazol. Sm. 229,5°. + C<sub>2</sub>H<sub>6</sub>O, 2HNO<sub>3</sub> (B. 39, 4279 C. 1907 [1] 479).  
 2) 6-Cyanamido-3-Imido-2-Phenyl-2,3-Dihydro-1,2,4-Benztriazin. Sm. 290°. HCl (C. 1908 [2] 1589).
- C<sub>14</sub>H<sub>10</sub>Cl<sub>2</sub>** 1) ββ-Dichlor-αα-Diphenyläthen. Sm. 80°; Sd. 316,5° (336° corr.) (B. 6, 223, 987; 7, 1411; 26, 1955; A. 271, 3; 296, 240; 306, 79; J. r. 21, 424). — II, 249; \*II, 119.  
 2) αβ-Dichlor-αβ-Diphenyläthen (α-Tolandichlorid). Sm. 143° (140°); Sd. 183°<sub>18</sub> (B. 4, 289, 379; 12, 1973; 15, 900; 17, 835, 1165; 29, 2906; A. 248, 19; Am. 12, 237; B. 40, 2994 C. 1907 [2] 1069). — II, 270; \*II, 123.  
 3) isom. αβ-Dichlor-αβ-Dichloräthen (β-Tolandichlorid). Sm. 63°; Sd. 178°<sub>18</sub> (B. 4, 289, 379; 12, 1973; 15, 900; 29, 2906; A. 248, 19; Am. 12, 237). — II, 270; \*II, 123.  
 4) Dichlorstilben. Sm. 170° (J. pr. [2] 19, 446). — II, 248.  
 5) αα-Di[β-Chlorphenyl]äthen (Dichlordiphenyläthylen). Sd. 280—285° (B. 7, 1419). — II, 249.  
 6) αβ-Di[2-Chlorphenyl]äthen (oo-Dichlorstilben). Sm. 97°; Sd. bei 220° (B. 26, 651). — II, 248.  
 7) Anthracenchlorid (A. 122, 306; Bl. 27, 465). — II, 260.
- C<sub>14</sub>H<sub>10</sub>Cl<sub>4</sub>** 1) αβββ-Tetrachlor-αα-Diphenyläthan. Sm. 85° (B. 26, 1956; A. 296, 265). — II, 231; \*II, 112.  
 2) ααββ-Tetrachlor-αβ-Diphenyläthan (Tolantetrachlorid). Sm. 163° (B. 12, 1971; 15, 901; 17, 833; J. r. 21, 426; Z. 1868, 718; B. 40, 2994 C. 1907 [2] 1069). — II, 271.  
 3) αβ-Dichlor-αβ-Di[2-Chlorphenyl]äthan. Sm. 170,5° (B. 26, 651). — II, 233.  
 4) 4,4'-Dichlor-3,3'-Di[Chlormethyl]biphenyl. Sm. 137° (B. 21, 1098; A. 352, 126 C. 1907 [1] 1797). — II, 236.
- C<sub>14</sub>H<sub>10</sub>Br<sub>2</sub>** 1) cis-β-Brom-α-Phenyl-α-[4-Bromphenyl]äthen. Sm. 43° (B. 37, 4168 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).  
 2) trans-β-Brom-α-Phenyl-α-[4-Bromphenyl]äthen. Sm. 107° (B. 37, 4168 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).  
 3) αβ-Di[4-Bromphenyl]äthen. Sm. 208—210° (B. 41, 4130 C. 1909 [1] 168).  
 4) ββ-Dibrom-αα-Diphenyläthen. Sm. 83°; Sd. oberhalb 300° u. Zers. (B. 6, 986). — II, 250.  
 5) αβ-Dibrom-αβ-Diphenyläthen (α-Tolandibromid). Sm. 200—205° (205 bis 206°) (A. 145, 348; 279, 329; J. pr. [2] 53, 10; B. 4, 379; J. pr. [2] 70, 439 C. 1905 [1] 85). — II, 272; \*II, 123.  
 6) isom. αβ-Dibrom-αβ-Diphenyläthen (β-Tolandibromid). Sm. 64° (62°) (B. 4, 379; J. pr. [2] 53, 8; Soc. 71, 222). — II, 272; \*II, 123.  
 7) 9-Brom-9-Brommethylfluoren. Sm. 158° (A. 337, 201 C. 1905 [1] 235).  
 8) Anthracendibromid (Bl. 27, 464). — II, 260.  
 9) Phenanthrendibromid. Sm. 98° u. Zers. (A. 166, 364; 167, 180; B. 11, 1219; A. 321, 331 C. 1902 [2] 60). — II, 268.
- C<sub>14</sub>H<sub>10</sub>Br<sub>4</sub>** 1) αβ-Dibrom-αβ-Di[4-Bromphenyl]äthan. Sm. 235—240° u. Zers. (B. 41, 4130 C. 1909 [1] 168).
- C<sub>14</sub>H<sub>10</sub>J<sub>2</sub>** 1) αβ-Dijod-αβ-Diphenyläthen (Tolandijodid) (A. 211, 233). — II, 272.
- C<sub>14</sub>H<sub>10</sub>S** 1) 2-Merkaptoanthracen. Zers. oberhalb 220°. HgCl (B. 28, 2263). — \*II, 541.  
 2) 9-Methylthioxanthen. Fl. (B. 38, 2511 C. 1905 [2] 636).



- C<sub>14</sub>H<sub>10</sub>S** 3) Tolansulfid (Dithiooxylepiden). Sm. 172—173°; Sd. 350—360° (A. 136, 94; 140, 239; 153, 352; 178, 374). — III, 226.
- C<sub>14</sub>H<sub>10</sub>S<sub>2</sub>** 4) Tolallylhydrosulfid. Sm. 143—144° (A. 167, 192). — III, 226.  
1) Tolandisulfid. Sm. 174—175° (B. 40, 2867 C. 1907 [2] 594).  
2) ?-Phenylbithiophen (Phenylbithienyl). Sm. 209° (Bl. [3] 5, 278). — III, 769.
- C<sub>14</sub>H<sub>10</sub>S<sub>4</sub>** 1) Tolantetrasulfid. Sm. 164° (B. 40, 2863 C. 1907 [2] 594).  
2) Disulfid d. Benzoldithiocarbonsäure. Sm. 92,5° (117°) (B. 39, 3226 C. 1906 [2] 1493; B. 40, 2866 C. 1907 [2] 594; D.R.P. 214888 C. 1909 [2] 1780).
- C<sub>14</sub>H<sub>10</sub>S<sub>12</sub>** 1) Verbindung (aus Benzol u. Schwefelkohlenstoff) (B. 41, 2686 C. 1908 [2] 1256).
- C<sub>14</sub>H<sub>11</sub>N** C 87,0 — H 5,7 — N 7,2 — M. G. 193.  
1) 1-Amidoanthracen. Sm. 130° (119°). HCl (B. 38, 2865 C. 1905 [2] 1094; B. 41, 1434 C. 1908 [1] 1978).  
2) 9-Amidoanthracen (Mesoanthramin). Zers. bei 115°. HCl (B. 23, 2523; 33, 3548). — II, 640; \*II, 351.  
3) ?-Amidoanthracen. Sm. 238°. HCl, H<sub>2</sub>SO<sub>4</sub> (B. 15, 223, 226, 852; A. 212, 56; D.R.P. 21178). — II, 639; \*II, 351.  
4) 2-Amidophenanthren. Sm. 85° (B. 34, 2527; A. 321, 318 C. 1902 [2] 60; Soc. 93, 1765 C. 1908 [2] 2014).  
5) α-3-Amidophenanthren. Sm. 143° (B. 12, 1158; 34, 2525; A. 321, 313 C. 1902 [2] 59).  
6) β-3-Amidophenanthren. Sm. 87,5° (B. 12, 1158; 34, 2526, 3533; A. 321, 314 C. 1902 [2] 59).  
7) 9-Amidophenanthren. Sm. 139° (137—138°). HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (Soc. 71, 1123; B. 34, 1463; B. 35, 2728 C. 1902 [2] 643; B. 36, 2515 C. 1903 [2] 506; A. 330, 165 C. 1904 [1] 891; B. 37, 3575 C. 1904 [2] 1404; Soc. 93, 1762 C. 1908 [2] 2014). — \*II, 351.  
8) α-Amidophenanthren. HCl, H<sub>2</sub>SO<sub>4</sub> (B. 12, 1156). — II, 640.  
9) β-Amidophenanthren. HCl (B. 12, 1157). — II, 640.  
10) 1-[1-Naphtyl]pyrrol. Sm. 42°; Sd. oberhalb 360° (B. 37, 2795 C. 1904 [2] 531).  
11) 1-[2-Naphtyl]pyrrol. Sm. 107°; Sd. oberhalb 360° (B. 37, 2795 C. 1904 [2] 531).  
12) 2-[2-Naphtyl]pyrrol. Sm. 155° (B. 37, 2796 C. 1904 [2] 531).  
13) 1-Phenylindol. Sd. 326—327°<sub>757</sub> (B. 17, 568; A. 239, 221). — IV, 219.  
14) 2-Phenylindol. Sm. 186°; Sd. oberhalb 360°. Pikrat (B. 15, 2480; 18, 165; 19, 1065; 21, 1072, 1811, 2596; 25, 2869; 26, 2452; 28, 587; A. 236, 133; G. 32 [2] 462; Bl. 39, 531; D.R.P. 127245 C. 1902 [1] 154). — IV, 412; \*IV, 250.  
15) 3-Phenylindol. Sm. 88—89°. Pikrat (B. 21, 1811; A. 253, 36; B. 38, 1365 C. 1905 [1] 1387). — IV, 414.  
16) 1-Methylakridin. Sm. 88°. Pikrat (A. 279, 279). — IV, 415.  
17) 3-Methylakridin. Sm. 134° (131,5°). (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (A. 279, 273; J. pr. [2] 36, 265; A. 332, 92 C. 1904 [1] 1570). — IV, 414.  
18) 5-Methylakridin. Sm. 114° (117—118°); Sd. 359—360°<sub>740</sub> + C<sub>2</sub>H<sub>5</sub>O (Sm. 92—94°), HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 16, 74, 768; 19, 427; 32, 3607; A. 192, 29; 224, 34; B. 38, 2502 C. 1905 [2] 634). — IV, 415; \*IV, 251.  
19) 1-Methylphenanthridin. Sm. 70°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (A. 266, 160). — IV, 416.  
20) 3-Methylphenanthridin. Sm. 131°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (A. 266, 157). — IV, 416.  
21) 9-Methylphenanthridin. Sm. 85°; Sd. oberhalb 360°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Pikrat (B. 29, 1184). — IV, 416.  
22) 2-Methyl-α-Naphtochinolin (Naphtochinaldin). Sd. oberhalb 300°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (B. 17, 1711). — IV, 411.  
23) 1-Methyl-β-Naphtochinolin. Sm. 112°. Pikrat (J. pr. [2] 35, 316). — IV, 412.  
24) 3-Methyl-β-Naphtochinolin. Sm. 82°; Sd. oberhalb 300°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (B. 17, 1711; 22, 255; 27, 353, 2021). — IV, 411.

- C<sub>14</sub>H<sub>11</sub>N** 25) isom. Methylnaphtochinolin. Sm. 91—92°. (2HCl, PtCl<sub>4</sub>) (B. 17, 544). — IV, 412.
- 26) Nitril d. Diphenylessigsäure. Sm. 71—72° (75—76°); Sd. 181—184°<sub>12</sub> (B. 33, 590; A. 233, 349; 250, 142; B. 23, 2845; 25, 1615). — II, 1464.
- 27) Nitril d. Diphenylmethan-2-Carbonsäure. Sm. 19°; Sd. 313—314° (B. 25, 3021; 27, 2789). — II, 1465.
- 28) Nitril d. Diphenylmethan-4-Carbonsäure. Sm. 50—51° (B. 33, 2627). — \*II, 870.
- 29) Verbindung (aus d. Verb. C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>N). Sm. 172° (G. 36 [2] 270 C. 1906 [2] 1499).
- C<sub>14</sub>H<sub>11</sub>N<sub>3</sub>** C 76,0 — H 5,0 — N 19,0 — M. G. 221.
- 1) α-Cyan-α-Phenyl-β-Benzylidenhydrazin. Sm. 103° (G. 37 [1] 620 C. 1907 [2] 803).
- 2) ?-[1-Naphtyl]azopyrrol. Sm. 103° (B. 19, 2255). — IV, 1483.
- 3) ?-[2-Naphtyl]azopyrrol. Sm. 101° (B. 19, 2255). — IV, 1483.
- 4) 1,5-Diphenyl-1,2,3-Triazol. Sm. 113—114°. HCl (B. 35, 4048 C. 1903 [1] 169). — \*IV, 809.
- 5) 1,3-Diphenyl-1,2,4-Triazol. Sm. 96—97° (A. 343, 229 C. 1906 [1] 923).
- 6) 1,5-Diphenyl-1,2,4-Triazol. Sm. 91°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O), Pikrat (Soc. 67, 1068; B. 29, 2673). — IV, 1156.
- 7) 3,4-Diphenyl-1,2,5-Triazol. Sm. 138°. Ag (J. pr. [2] 70, 440 C. 1905 [1] 85).
- 8) 1,2-Diphenyl-1,3,4-Triazol. Sm. 142°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 29, 2919). — IV, 1156.
- 9) 2,5-Diphenyl-1,3,4-Triazol + H<sub>2</sub>O. Sm. 192° (188°); Sd. 280° u. Zers. Ag (B. 27, 997, 1003, 1006; 32, 798; A. 297, 255; 298, 97; Soc. 77, 1189; Stollé, Habilit. Schrift. Heidelberg 1899; J. pr. [2] 69, 160 C. 1904 [1] 1274; J. pr. [2] 73, 290 C. 1906 [1] 1783; B. 42, 4203 C. 1909 [2] 1922). — II, 1214; IV, 1187; \*IV, 845.
- 10) 4-Phenylamido-1,2-Benzdiazin. Sm. 232°. HCl (B. 25, 2851). — IV, 1155.
- 11) 6-Methyl-3-Phenyl-1,2,4-Benztriazin. Sm. 95—96° (B. 27, 1692). — IV, 1186.
- 12) Cyanmethylat d. Pseudophenanthrolin. + Fe(CN)<sub>3</sub> + 3H<sub>2</sub>O (B. 42, 2617 C. 1909 [2] 542).
- 13) Nitril d. Phenylimidophenylamidoessigsäure (Hydrocyanarbodiphenylimid). Sm. 137° (B. 13, 2155; 28, 1008; C. 1900 [2] 1140). — II, 452; \*II, 240.
- 14) Nitril d. α-Phenylhydrazon-α-Phenylessigsäure. Sm. 152° (B. 34, 122). — \*IV, 455.
- 15) Nitril d. β-Benzyliden-α-Phenylhydrazin-β<sup>3</sup>-Carbonsäure. Sm. 120° (B. 24, 2422). — IV, 753.
- C<sub>14</sub>H<sub>11</sub>N<sub>5</sub>** C 67,5 — H 4,4 — N 28,1 — M. G. 249.
- 1) Nitril d. Formazylcarbonsäure (Formazylcyanid). Sm. 158—159° (B. 27, 689; 30, 2994; J. pr. [2] 67, 400 C. 1903 [1] 1346). — IV, 1228; \*IV, 893.
- C<sub>14</sub>H<sub>11</sub>N<sub>7</sub>** C 60,6 — H 4,0 — N 35,4 — M. G. 277.
- 1) 3,3'-Diazoamidoindazol. Zers. bei 183° (A. 305, 355). — \*IV, 1140.
- C<sub>14</sub>H<sub>11</sub>Cl** 1) β-Chlor-αα-Diphenyläthen. Sm. 42°; Sd. 298° (A. 279, 325). — \*II, 119.
- 2) α-Chlor-αβ-Diphenyläthen (Chlorstilben). Sm. 54°; Sd. 320—324°<sub>760</sub> (B. 25, 2237; Soc. 71, 220). — II, 248; \*II, 118.
- 3) isom. α-Chlor-αβ-Diphenyläthen (isom. Chlorstilben). Fl. (A. 149, 376; Berx. J. 25, 620). — II, 248.
- 4) α-Phenyl-β-[2-Chlorphenyl]äthen. Sm. 40°; Sd. 195°<sub>22</sub> (B. 35, 3970 C. 1903 [1] 31).
- 5) α-Phenyl-β-[4-Chlorphenyl]äthen. Sm. 129° (127°) (J. pr. [2] 61, 196; J. pr. [2] 65, 283 C. 1902 [1] 1216). — \*II, 118.
- C<sub>14</sub>H<sub>11</sub>Cl<sub>3</sub>** 1) βββ-Trichlor-αα-Diphenyläthan. Sm. 64° (B. 5, 1099; J. pr. [2] 47, 77). — II, 231.
- 2) ααβ-Trichlor-αβ-Diphenyläthan. Sm. 102—103° (Soc. 71, 221). — \*II, 113.
- 3) αββ-Trichlor-αβ-Diphenyläthan (Chlorstilbenchlorid). Sm. 85° (Berx. J. 25, 620). — II, 233.
- 4) β-Chlor-αα-Di[β-Chlorphenyl]äthan (B. 7, 1419). — II, 231.

- C<sub>14</sub>H<sub>11</sub>Br**
- 1)  $\beta$ -Brom- $\alpha\alpha$ -Diphenyläthen. Sm. 50° (40°); Sd. oberhalb 300° (165 bis 175°<sub>1</sub>) (B. 7, 1411; A. 235, 160). — II, 249; \*II, 119.
  - 2) 4-Brom- $\alpha\alpha$ -Diphenyläthen. Sd. 199–201°<sub>19</sub> (B. 37, 4168 C. 1904 [2] 1643).
  - 3)  $\alpha$ -Brom- $\alpha\beta$ -Diphenyläthen ( $\alpha$ -Bromstilben). Sm. 31° (A. 145, 340; 155, 72; B. 26, 664; 28, 2699). — II, 248; \*II, 118.
  - 4) isom.  $\alpha$ -Brom- $\alpha\beta$ -Diphenyläthen ( $\beta$ -Bromstilben). Sm. 19° (B. 28, 2699; C. 1901 [1] 464). — \*II, 118.
- C<sub>14</sub>H<sub>11</sub>Br<sub>3</sub>**
- 1)  $\beta\beta\beta$ -Tribrom- $\alpha\alpha$ -Diphenyläthan. Sm. 89° (B. 6, 985). — II, 231.
  - 2)  $\alpha\beta\beta$ -Tribrom- $\alpha\beta$ -Diphenyläthan (Bromstilbenbromid). Sm. 100° (A. 145, 341). — II, 234.
  - 3) ?-Tribrom- $\alpha\beta$ -Diphenyläthan. Sm. 207–211° (A. 151, 365). — II, 234.
  - 4) ?-Tribrom- $\alpha\beta$ -Diphenyläthan. Zers. bei 170° (A. 137, 268). — II, 234.
- C<sub>14</sub>H<sub>12</sub>O**
- C 85,7 — H 6,1 — O 8,2 — M. G. 196.
- 1) 2-Oxy- $\alpha\alpha$ -Diphenyläthen. Sd. 180°<sub>22</sub> (B. 36, 3999, 4003 C. 1904 [1] 174).
  - 2)  $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]äthen. Sm. 135–136° (147°) (Am. 1, 315; J. pr. [2] 61, 178; B. 42, 825 C. 1909 [1] 1162). — II, 899; \*II, 540.
  - 3)  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]äthen. Sm. 180° (B. 28, 1999). — \*II, 540.
  - 4)  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthen. Sm. 189° (A. 349, 111 C. 1906 [2] 1257).
  - 5) Phenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen (Phenoxystyrol). Sd. 151°<sub>14</sub> (Soc. 77, 987). — \*II, 651.
  - 6) Phenyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthen. Sd. 180°<sub>16</sub> (B. 36, 4010 Anm. C. 1904 [1] 176; B. 38, 1962 C. 1905 [2] 133).
  - 7)  $\alpha\alpha$ -Diphenyl- $\alpha\beta$ -Äthanoxyd. Sm. 56° (54–55°); Sd. oberhalb 300° (B. 39, 1754 C. 1906 [2] 53; B. 39, 2063 C. 1906 [2] 242).
  - 8) 9-Oxy-9-Methylfluoren. Sm. 174,5° (173°) (B. 38, 4107 C. 1906 [1] 365; Bl. [4] 1, 1234 C. 1908 [1] 849).
  - 9) Methyläther d. 2-Oxyfluoren. Sm. 106–108° (A. 322, 168 C. 1902 [2] 283).
  - 10) 1-Oxy-9,10-Dihydroanthracen. Sm. 94° (B. 35, 2926 C. 1902 [2] 1050).
  - 11) 2-Oxy-9,10-Dihydroanthracen. Sm. 129,5° (B. 26, 3069). — II, 900.
  - 12) 10-Oxy-9,10-Dihydroanthracen. Sm. 76° (J. pr. [2] 23, 137; B. 14, 800; A. 212, 100). — II, 900.
  - 13) 2-Methyldiphenylketon. Sd. 315–316° (B. 6, 754; 12, 2301; 24, 2805, 4046). — III, 211; \*III, 160.
  - 14) 3-Methyldiphenylketon. Sd. 314–316°<sub>745</sub> (310–320°) (B. 12, 2300; A. 220, 251; B. 37, 3360 C. 1904 [2] 1127). — III, 212.
  - 15) 4-Methyldiphenylketon. Sm. 59–60° (55°); Sd. 326,5°. + AlCl<sub>3</sub> (J. 1876, 2; A. 189, 84; B. 6, 538, 810, 1243; 7, 19, 982; 12, 2299; 20, 2470; 32, 1053; 33, 468; J. pr. [2] 35, 466; R. 19, 22; Bl. [3] 15, 945; R. 27, 354 C. 1908 [2] 2013). — III, 213; \*III, 161.
  - 16)  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (Phenylbenzylketon; Desoxybenzoïn). Sm. 60°; Sd. 320–322°. Na. Lit. bedeutend. — III, 217; \*III, 162.
  - 17) 4-Acetylbiphenyl (Methyl-4-Biphenylketon). Sm. 121°; Sd. 325–327° (A. ch. [6] 15, 255; B. 40, 4535 C. 1908 [1] 191). — III, 217.
  - 18) 3-Acetylnaphten. Sm. 75°; Sd. 361°. Pikrat (A. 327, 91 C. 1903 [1] 1228).
  - 19) 2,7-Dimethylbiphenylenoxyd. Sm. 82° (B. 34, 3336).
  - 20) 1-Phenyl-1,2-Dihydrobenzofuran. Sm. 32–33° (B. 36, 3982 C. 1904 [1] 171).
  - 21) 2-Phenyl-1,2-Dihydrobenzofuran. Sm. 38,5°; Sd. 167°<sub>14</sub> (B. 36, 3984 C. 1904 [1] 171; B. 36, 4008 C. 1904 [1] 175).
  - 22) Aldehyd d. Diphenylelessigsäure. Sd. 315° u. ger. Zers. + NaHSO<sub>3</sub> (A. 198, 182; 248, 38; 279, 330; B. 28, 3181; 30, 950; C. r. 138, 91 C. 1904 [1] 505; Bl. [3] 31, 307 C. 1904 [1] 1133; B. 39, 1755 C. 1906 [2] 53; C. 1907 [1] 874). — III, 64.
  - 23) Aldehyd d. 4-Methylbiphenyl-4'-Carbonsäure. Sm. 105–106° (B. 32, 1053). — \*III, 48.
  - 24) Verbindung (aus  $\alpha$ -Bromstilben). Sm. 115–120° (Soc. 91, 1393 C. 1907 [2] 1244).



- C<sub>14</sub>H<sub>12</sub>O** 25) Verbindung (aus 9-Oxy-9-Methylfluoren). Sm. 85—86° (*Bl.* [4] 1, 1235 *C.* 1908 [1] 850).
- 26) Verbindung (aus Eberwurzelöl). Sd. 158—160°<sub>16-17</sub> (*Ar.* 241, 46 *C.* 1903 [1] 713).
- 27) Verbindung (aus d. Phenylhydrazid d. Phenylessigsäure). Sd. 340° (*B.* 27 [2] 592).
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>** 28) Verbindung (aus Zimtaldehyd) (*A.* 34, 160). — III, 58.  
C 79,3 — H 5,6 — O 15,1 — M. G. 212.
- 1)  $\alpha\alpha$ -Di[2-Oxyphenyl]äthen. Sm. 95° (*B.* 24, 3178; *A.* 277, 354). — II, 998.
  - 2)  $\alpha\beta$ -Di[2-Oxyphenyl]äthen. Sm. 197° (*A.* 277, 352). — II, 998.
  - 3)  $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 280° u. Zers. (*B.* 7, 1202; *J. pr.* [2] 39, 500; [2] 47, 66; *A.* 277, 359; *A.* 325, 26 *C.* 1903 [1] 460; *A.* 335, 187 *C.* 1904 [2] 1131). — II, 998; \*II, 605.
  - 4) Diphenyläther d.  $\alpha\alpha$ -Dioxyäthen. Sm. 95—96° (*G.* 21, 261). — II, 655.
  - 5) 1,9-Dioxy-9,10-Dihydroanthracen (o-Oxyhydroanthranol). Sm. 99°. K, Ba, Pb (*A.* 212, 15; *B.* 10, 609; 11, 1611; *B.* 35, 2925 *C.* 1902 [2] 1049). — II, 1111.
  - 6) 9,10-Dioxy-1,2-Dihydroanthracen. Sm. 159° (*C. r.* 140, 251 *C.* 1905 [1] 679; *Bl.* [4] 1, 720 *C.* 1907 [2] 1172).
  - 7) 9,10-Dioxy-9,10-Dihydrophenanthren? Sm. 113° (*Soc.* 89, 1517 *C.* 1907 [1] 340).
  - 8) d- $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (d-Benzoin). Sm. 131—132,5° (*Soc.* 95, 1584 *C.* 1909 [2] 2006).
  - 9) l- $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (l-Benzoin). Sm. 131—132,5° (*Soc.* 93, 313 *C.* 1908 [1] 1629).
  - 10) r- $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (r-Benzoin). Sm. 129—130° (132,5 bis 133,5°); Sd. 343—344°. Na. Lit. bedeutend. — III, 227; \*III, 163.
  - 11)  $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 142° (*M.* 26, 984 *C.* 1905 [2] 1180).
  - 12)  $\alpha$ -Keto- $\beta$ -[4-Oxyphenyl]- $\alpha$ -Phenyläthan (p-Oxydesoxybenzoin). Sm. 129°. Na (*B.* 21, 2449). — III, 226.
  - 13) p-Benzoyl-2-Oxy-1-Methylbenzol. Sm. 172—172,5° (*G.* 30 [2] 231). — III, 161.
  - 14) p-Benzoyl-3-Oxy-1-Methylbenzol. Sm. 128° (*G.* 30 [2] 226). — \*III, 165.
  - 15) 4-Oxymethyldiphenylketon. Sm. 48,3° (*Bl.* [3] 15, 947). — \*III, 162.
  - 16) 6-Oxy-3-Methyldiphenylketon. Sm. 82—83° (83—83,5°; 84°) (*Ph. Ch.* 32, 41; *B.* 31, 2694; *B.* 36, 3892 *C.* 1904 [1] 93; *B.* 39, 3095 *C.* 1906 [2] 1410). — \*III, 161.
  - 17) 2'-Oxy-4-Methyldiphenylketon. Sm. 61,5° (*B.* 31, 1694; *B.* 35, 2812 *C.* 1902 [2] 1117).
  - 18) 3'-Oxy-4-Methyldiphenylketon? Sm. 120° (*A.* 286, 315).
  - 19) 4'-Oxy-4-Methyldiphenylketon. Sm. 160° (*A.* 286, 328). — III, 215.
  - 20) Methyläther d. 2-Oxydiphenylketon. Sm. 39°; Sd. 210°<sub>27</sub> (*M.* 17, 107; *B.* 41, 333 *C.* 1908 [1] 834). — III, 193.
  - 21) Methyläther d. 3-Oxydiphenylketon. Sm. 37°; Sd. 342—343°<sub>730</sub> (*B.* 35, 2814 *C.* 1902 [2] 1117).
  - 22) Methyläther d. 4-Oxydiphenylketon. Sm. 61—62°; Sd. 354—355°<sub>739</sub>. + AlCl<sub>3</sub> (*Soc.* 41, 227; *B.* 23, 1204; *R.* 19, 22; *B.* 35, 2814 *C.* 1902 [2] 1117; *B.* 37, 226 *C.* 1904 [1] 659). — III, 194; \*III, 153.
  - 23) Phenyläther d. Oxymethylphenylketon. Sm. 72°; Sd. 255—257° (*B.* 15, 2498; 28, 3030; *C.* 1899 [2] 91; *B.* 35, 3563 *C.* 1902 [2] 1312). — III, 132; \*III, 102.
  - 24) Phenyläther d. Methyl-4-Oxyphenylketon. Sm. 45°; Sd. 318—325° (*B.* 38, 2491 *C.* 1905 [2] 619).
  - 25)  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[2-Furanyl]propen (Furalmethyl-p-Tolylketon). Sm. 67°; Sd. 330° (*B.* 29, 2248). — III, 728.
  - 26) 2-[4-Oxyphenyl]-1,2-Dihydrobenzofuran. Sm. 150—154° (*B.* 39, 33 *C.* 1906 [1] 674).
  - 27) 9-Oxy-9-Methylxanthen. Sm. 96—99° (*B.* 38, 2507 *C.* 1905 [2] 635).

- $C_{14}H_{12}O_2$
- 28) Diphenylessigsäure. Sm. 148° (148—149°). Ca + H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Zn, Ag, Chinolinsalz (A. 155, 84; 171, 122; 275, 84; 298, 242; 306, 80; Bl. 33, 590; Soc. 75, 478; Am. 19, 645; B. 24, 3556; A. 356, 113 C. 1907 [2] 1702; B. 40, 4060 C. 1907 [2] 2052; C. 1908 [2] 1100; C. r. 148, 418 C. 1909 [1] 1904). — II, 1463; \*II, 869.
  - 29) Diphenylmethan-2-Carbonsäure + H<sub>2</sub>O. Sm. 93—94° (127—128° wasserfrei). Ca + 2H<sub>2</sub>O, Ba + 5½ H<sub>2</sub>O, Ag (J. 1875, 598; B. 9, 633; 27, 2789; R. NEGRUSZ, Privatmittl.; A. 291, 24). — II, 1465; \*II, 869.
  - 30) Diphenylmethan-3-Carbonsäure. Sm. 107—108° (162,3°). Ca + H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag (A. 220, 244; R. NEGRUSZ, Privatmittl.). — II, 1466.
  - 31) Diphenylmethan-4-Carbonsäure. Sm. 154—155° (157—158°; 193 bis 194°). Ca, Ba + 2H<sub>2</sub>O, Ag (A. 161, 105; B. 8, 1054; 33, 2627; R. NEGRUSZ, Privatmittl.; J. 1875, 599). — II, 1466; \*II, 870.
  - 32) 2-Methylbiphenyl-4'-Carbonsäure. Sm. 179—180° (176°) (J. 1877, 385; Soc. 37, 707). — II, 1466.
  - 33) 3-Methylbiphenyl-3'-Carbonsäure. Sm. 204°. Ag (Bl. [3] 7, 183). — II, 1466.
  - 34) 4-Methylbiphenyl-3'-Carbonsäure. Sm. 193—194° (B. 32, 1063).
  - 35) 4-Methylbiphenyl-4'-Carbonsäure. Sm. 243—244°. Ag (J. 1877, 384). — II, 1466.
  - 36) α-[1-Naphtyl]propen-β-Carbonsäure. Sm. 151° (Bl. [3] 17, 813). — \*II, 870.
  - 37) Aldehyd d. 2-Oxybenzolbenzyläther-1-Carbonsäure. Sm. 46°; Sd. oberhalb 360° (196°<sub>13</sub>) (A. 148, 24; B. 31, 3041). — III, 67; \*III, 50.
  - 38) Aldehyd d. 4-Oxybenzolbenzyläther-1-Carbonsäure. Sm. 72° (B. 29, 142). — III, 82.
  - 39) Methylester d. Biphenyl-2-Carbonsäure. Sd. 308° (A. 279, 260). — II, 1461.
  - 40) Methylester d. Biphenyl-4-Carbonsäure. Sm. 117,5° (A. 368, 304 C. 1909 [2] 1455).
  - 41) Phenylester d. Phenylelessigsäure. Sm. 42° (35°); Sd. 158° (B. 38, 1962 C. 1905 [2] 133; M. 26, 1000 C. 1905 [2] 1181).
  - 42) Phenylester d. 1-Methylbenzol-4-Carbonsäure. Sm. 71—72° (J. 1858, 406). — II, 1340.
  - 43) Benzylester d. Benzolcarbonsäure. Sm. unter 20°; Sd. 345° (323 bis 324° i. D.) (A. 152, 131; Soc. 75, 1155; Gm. 6, 40; B. 20, 647; 27 [2] 312; 31, 2645; C. 1906 [2] 1310). — II, 1143; \*II, 715.
  - 44) 2-Methylphenylester d. Benzolcarbonsäure. Sd. 307° (Z. 1869, 621; B. 7, 1007; Bl. [3] 11, 603). — II, 1147.
  - 45) 3-Methylphenylester d. Benzolcarbonsäure. Sm. 54° (56°); Sd. 313 bis 314° (Bl. [3] 11, 603; G. 30 [2] 224; Z. 1869, 622). — II, 1147; \*II, 718.
  - 46) 4-Methylphenylester d. Benzolcarbonsäure. Sm. 71,5°; Sd. 315,5 bis 316° (Z. 1869, 622; J. 1882, 368; A. 171, 142; Bl. [3] 11, 603; J. pr. [2] 36, 8; G. 28 [1] 217). — II, 1147.
  - 47) Formiat d. α-Oxydiphenylmethan. Sd. 159—160°<sub>10</sub> (Am. 33, 88 C. 1905 [1] 610).
  - 48) Acetat d. 2-Oxybiphenyl (M. 22, 569). — \*II, 538.
  - 49) Acetat d. 4-Oxybiphenyl. Sm. 88—89° (A. 257, 102). — II, 895.
  - 50) Verbindung (aus αβ-Di[4-Oxyphenyl]äthen). Sm. 250° u. Zers. (A. 325, 28 C. 1903 [1] 460).
- $C_{14}H_{12}O_3$
- C 73,7 — H 5,3 — O 21,0 — M. G. 228.
- 1) Di[2,5-Dioxy-1-Methyl]biphenylanhydrid. Sm. 232° (B. 11, 1281; A. 215, 164). — II, 956.
  - 2) 1,4,9-Trioxo-9,10-Dihydroanthracen. Sm. 89—90° (A. 212, 14; B. 30, 2923 C. 1902 [2] 1049). — II, 1114.
  - 3) 1,5,9-Trioxo-9,10-Dihydroanthracen. Sm. 241° (B. 35, 2927 C. 1902 [2] 1050).
  - 4) α-Keto-αβ-Di[4-Oxyphenyl]äthan. Sm. 214—215° (A. 325, 75 C. 1903 [1] 463).
  - 5) α-Keto-α-[2,4-Dioxyphenyl]-β-Phenyläthan (Phenylresacetophenon). Sm. 115° (B. 35, 1527 C. 1902 [1] 1210; M. 26, 1123 C. 1905 [2] 1181). — \*III, 164.
  - 6) α-Keto-α-[2,5-Dioxyphenyl]-β-Phenyläthan. Sm. 170° (M. 26, 1135 C. 1905 [2] 1182).

- $C_{14}H_{12}O_3$  7)  $\alpha$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -Phenyläthan. Sm. 173° (M. 26, 1133 C. 1905 [2] 1181).
- 8) 4,4'-Dioxy-3-Methyldiphenylketon. Sm. 200° (A. 179, 196). — III, 211.
- 9) 6,4'-Dioxy-3-Methyldiphenylketon. Sm. 150—151° (B. 40, 3520 C. 1907 [2] 1410).
- 10) 2-Dioxy-2-Methyldiphenylketon (Benzomethylresorcin). Sm. 176° (B. 28, 2305 Ann.). — III, 216.
- 11) 5-Oxy-1-Keto-2-Acetyl-3-Methyl-4-Phenyl-R-Penten. Sm. 170° u. Zers. (Soc. 87, 1390 C. 1905 [2] 1542; Soc. 89, 686 C. 1906 [2] 45).
- 12) 4-Methyläther d. 2,4-Dioxydiphenylketon. Sm. 66° (B. 39, 4028 C. 1907 [1] 263).
- 13) 5-Methyläther d. 2,5-Dioxydiphenylketon. Sm. 78° (82—85°) (B. 38, 796 C. 1905 [1] 866; A. 344, 47 C. 1906 [1] 1097; B. 40, 3516 C. 1907 [2] 1410; B. 41, 144 C. 1908 [1] 1058).
- 14) Monomethyläther d. 3,4-Dioxydiphenylketon? (Benzogujajakol). Sm. 131—133° (G. 26 [2] 436; 27 [1] 280). — III, 155.
- 15) Monomethyläther d. 2,2'-Dioxydiphenylketon. Sm. 69° (J. pr. [2] 28, 287). — III, 195.
- 16) Monomethyläther d. 4,4'-Dioxydiphenylketon. Sm. 151—152° (B. 36, 3900 C. 1904 [1] 94).
- 17) Methyläther d. 2-[4-Oxybenzyl]-1,4-Benzochinon. Sm. 43° (B. 37, 3488 C. 1904 [2] 1301).
- 18) 2-Oxyphenyläther d.  $\alpha$ -Oxymethylphenylketon. Sm. 111° (Bl. [4] 5, 502 C. 1909 [2] 21).
- 19) 3-Keto-4-Acetyl-5-Methyl-2-Benzyliden-2,3-Dihydrofuran. Sm. 152 bis 153° (Soc. 87, 1390 C. 1905 [2] 1542).
- 20) 5-Acetyl-6-Methyl-4-Phenyl-1,2-Pyron. Sm. 128°; Sd. 210—220°<sub>20</sub> (Soc. 75, 415, 780). — \*II, 1085.
- 21) Amyrolin. Sm. 117° (C. 1900 [2] 1274). — \*III, 416.
- 22) Salireton. Sm. 121,5° (J. pr. [2] 21, 221). — II, 1109.
- 23)  $\alpha$ -Oxydiphenylelessigsäure (Diphenylglykolsäure; Benzilsäure). Sm. 150°. K, Ba + 6H<sub>2</sub>O, Pb, Ag (A. 25, 25; 31, 329; 155, 77; 171, 131; 298, 242; B. 14, 326; 19, 1863, 1868; 22, 1212; Ph. Ch. 5, 422; A. 356, 71 C. 1907 [2] 1700; B. 41, 1644 C. 1908 [2] 171). — II, 1696; \*II, 993.
- 24) 2-Oxydiphenylelessigsäure. Sm. 85—87°. Ba + 4H<sub>2</sub>O, Ag (B. 28, 990; 30, 126; B. 36, 3999 C. 1904 [1] 174). — II, 1698; \*II, 995.
- 25) 4-Oxydiphenylelessigsäure. Sm. 173° (B. 30, 125; 31, 2812). — \*II, 996.
- 26)  $\alpha$ -Oxydiphenylmethan-2-Carbonsäure (o-Benzhydrylbenzoëssäure). K, Ba (J. 1875, 596; B. 21, 2005; A. 291, 23). — II, 1697; \*II, 994.
- 27)  $\alpha$ -Oxydiphenylmethan-3-Carbonsäure. Sm. 121°. Na + 4H<sub>2</sub>O, Ca + 5H<sub>2</sub>O, Ag + H<sub>2</sub>O (A. 220, 242). — II, 1697.
- 28)  $\alpha$ -Oxydiphenylmethan-4-Carbonsäure. Sm. 164—165°. NH<sub>4</sub>, Na, K, Ca + 5H<sub>2</sub>O, Ba, Ag (A. 161, 102; J. 1875, 598). — II, 1697.
- 29) 4'-Oxydiphenylmethan-2-Carbonsäure. Sm. 145—146°. Ag (B. 31, 2792). — \*II, 994.
- 30) 4-Oxydiphenylmethan-3-Carbonsäure (4-Oxy-1-Benzylbenzol-3-Carbonsäure). Sm. 139—140°. Ag (J. 1873, 440). — II, 1698.
- 31) 3-Oxybiphenylmethyläther-2-Carbonsäure. Fl. Ag (B. 31, 3035; J. pr. [2] 59, 461). — \*II, 992.
- 32) 2-Methyldiphenyläther-2'-Carbonsäure. Sm. 130° (D.R.P. 158998 C. 1905 [1] 843; B. 38, 2113 C. 1905 [2] 245).
- 33) 3-Methyldiphenyläther-2'-Carbonsäure. Sm. 95° (B. 38, 2114 C. 1905 [2] 246).
- 34) 4-Methyldiphenyläther-2'-Carbonsäure. Sm. 118,5° (117°) (D.R.P. 158998 C. 1905 [1] 843; B. 38, 2115 C. 1905 [2] 246).
- 35)  $\alpha$ -Oxyphenylelessigphenyläthersäure. Sm. 108°. Na + 3H<sub>2</sub>O, Cu, Ag (A. 220, 51). — II, 1551.
- 36) 2-Oxybenzolbenzyläther-1-Carbonsäure. Sm. 75°. Ag (A. 148, 28). — II, 1496.
- 37)  $\beta$ -[4-Methoxyl-1-Naphtyl]akrylsäure. Sm. 214° (Bl. [3] 17, 814). — \*II, 993.
- 38) 4-Acetyl-1-Methyl-2-Phenyl-R-Buten-3-Carbonsäure. Sm. 212°. Ag (Soc. 87, 1391 C. 1905 [2] 1542).



- $C_{14}H_{12}O_8$
- 39) Aldehyd d. 3,4-Dioxybenzol-3-Benzyläther-1-Carbonsäure. Sm. 113 bis 114° (D.R.P. 82816). — \*III, 74.
  - 40) Aldehyd d. 3,4-Dioxybenzol-4-Benzyläther-1-Carbonsäure. Sm. 122° (D.R.P. 82816). — \*III, 74.
  - 41) Methylester d. 3-Oxybiphenyl-2-Carbonsäure. Fl. (B. 31, 3035; J. pr. [2] 59, 459). — \*II, 992.
  - 42) Methylester d. 6-Oxybiphenyl-2-Carbonsäure. Sm. 84–85° (A. 284, 322). — II, 1695.
  - 43) Methylester d. Diphenyläther-2-Carbonsäure. Sd. oberhalb 360° (312°) (A. 257, 79; B. 37, 2368 C. 1904 [2] 344). — II, 1495.
  - 44) Äthylester d. Naphtalin-1-Ketocarbonsäure. Sd. 213–215°<sub>23</sub>. Pikrat (C. 1896 [2] 382; Bl. [3] 17, 301). — \*II, 992.
  - 45) Äthylester d. Naphtalin-2-Ketocarbonsäure. Sd. 212–215°<sub>20</sub> (C. 1896 [2] 382; Bl. [3] 17, 304). — \*II, 992.
  - 46) Phenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 48° (D.R.P. 46756). — \*II, 919.
  - 47) Phenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 92–93° (D.R.P. 46756; B. 35, 3646 C. 1902 [2] 1456). — \*II, 920.
  - 48) Phenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 49° (47°) (B. 25, 1743; D.R.P. 46756). — II, 1550; \*II, 922.
  - 49) Phenylester d. 2-Oxybenzoldimethyläther-1-Carbonsäure. Sm. 59° (J. pr. [2] 31, 474; B. 39, 1559 C. 1906 [2] 105). — II, 1494.
  - 50) Phenylester d. 4-Oxybenzoldimethyläther-1-Carbonsäure. Sm. 75 bis 76° (D.R.P. 46756). — \*II, 906.
  - 51) Phenylester d. Oxyessigphenyläthersäure. Sm. 58°; Sd. 320–325° (C. 1898 [1] 988; D.R.P. 85490; Bl. [3] 21, 967). — \*II, 362.
  - 52) Benzylester d. 2-Oxybenzol-1-Carbonsäure. Sd. 208°<sub>28</sub> (C. 1901 [1] 922; D.R.P. 144002 C. 1903 [2] 1040).
  - 53) 2-Methylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 35° (B. 22 [2] 267). — II, 1493.
  - 54) 3-Methylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 74° (170°?) (B. 22 [2] 267; J. pr. [2] 61, 550). — II, 1493.
  - 55) 4-Methylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 39° (B. 22 [2] 267). — II, 1493.
  - 56) Phenyl-4-Methylphenylester d. Kohlensäure. Sm. 94° (Bl. [3] 21, 825). — \*II, 434.
  - 57) Phenylbenzylester d. Kohlensäure. Sd. 180–190°<sub>30</sub> (Bl. [3] 21, 820). — \*II, 638.
  - 58) Monacetat d. 7,8-Dioxyacenaphten. Sm. 122–122,5° (Soc. 55, 579). — II, 1100.
  - 59) Acetat d. 2-Oxydiphenyläther. Sd. 358–360° (Am. 29, 127 C. 1903 [1] 705).
  - 60) Acetat d. Methyl-1-Oxy-2-Naphtylketon. Sm. 103,5° (107,5°) (B. 30, 1467; B. 39, 3096 C. 1906 [2] 1410). — \*III, 142.
  - 61) Acetat d. Methyl-4-Oxy-2-Naphtylketon. Sm. 108–109° (A. 254, 200). — III, 175.
  - 62) Monobenzoat d. 2,4-Dioxy-1-Methylbenzol. Sm. 115–116° (Ar. 244, 566 C. 1907 [1] 547).
  - 63) Benzoat d. 1,2-Dioxybenzolmonomethyläther. Sm. 57° (50–52°; 58 bis 59°) (J. pr. [2] 53, 254; D.R.P. 55280, 57941; C. 1895 [1] 801; 1896 [2] 350; A. 301, 103). — \*II, 719.
  - 64) Benzoat d. Verb.  $C_7H_5O_2$ . Sm. 103° (Ar. 244, 105 C. 1906 [1] 1891).
  - 65) Verbindung (aus 1,3-Dioxybenzol). Sm. 261° (263°) (B. 10, 1469; Bl. [3] 13, 900; B. 36, 3051 C. 1903 [2] 1008; B. 40, 1451 C. 1907 [1] 1416). — II, 917.
- $C_{14}H_{12}O_4$
- C 68,8 — H 4,9 — O 26,2 — M. G. 244.
- 1) 1,2,9,10-Tetraoxy-9,10-Dihydroanthracen (Bl. [3] 35, 73 C. 1906 [1] 939).
  - 2) Benzyl-2,3,4-Trioxyphenylketon. Sm. 141–142° (D.R.P. 50450, 50451; B. 39, 2057 C. 1906 [2] 246). — \*III, 165.
  - 3) 3[oder 4]-Methyläther d. 2,3,4-Trioxydiphenylketon. Sm. 165° (A. 289, 301; B. 42, 3151 C. 1909 [2] 1347). — III, 202.
  - 4) 4-Monomethyläther d. 2,4,6-Trioxydiphenylketon (Cotoïn). Sm. 130–131°.  $Pb_2$  (A. 199, 23; 282, 192; B. 26, 2794; 27, 409, 1183; 28, 1553; M. 22, 996 C. 1902 [1] 200). — III, 202; \*III, 156.

- $C_{14}H_{12}O_4$
- 5) 4'-Methyläther d. 2,4,4'-Trioxydiphenylketon. Sm. 165° (B. 27, 2000).
  - 6) p-Dioxy-p-Dimethylbiphenyldioxyd (M. 10, 174). — II, 955.
  - 7) Dibenzaldiperoxyd. Sm. 202° u. Zers. (B. 33, 2484). — \*III, 5.
  - 8)  $\gamma^4$ -Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[2-Furanyl]propen. Sm. 112° (B. 39, 4032 C. 1907 [1] 265).
  - 9)  $\gamma^5$ -Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2,5-Dioxyphenyl]- $\alpha$ -[2-Furanyl]propen. Sm. 75° (B. 39, 4033 C. 1907 [1] 265).
  - 10) Oreoselin (Oroselon). Sm. 177° (156°) (A. 51, 321; 174, 70; 176, 73; J. 1854, 639; M. 19, 274; C. 1899 [1] 431). — III, 620; \*III, 458.
  - 11) Uvinon. Sm. 247,5° (B. 20, 1086). — III, 709.
  - 12) Xanthoxylin S. Sm. 119—120° (C. 1907 [1] 170).
  - 13) Dimethylparacotoin. Sm. 141° (G. 23 [2] 203). — III, 640.
  - 14) 4-Methoxyldiphenyläther-2-Carbonsäure. Sm. 156° (B. 38, 2122 C. 1905 [2] 247).
  - 15) 5-Methoxyldiphenyläther-2-Carbonsäure. Sm. 177° (A. 355, 369 C. 1907 [2] 1511).
  - 16) 2-Methoxyldiphenyläther-2-Carbonsäure. Sm. 112° (D.R.P. 158998 C. 1905 [1] 843; B. 38, 2117 C. 1905 [2] 246).
  - 17) Dioxyessigdiphenyläthersäure. Sm. 91°. Ag (B. 27, 2796). — \*II, 364.
  - 18) 4-Oxynaphtalinäthyläther-1-Ketocarbonsäure. Sm. 160° (Bl. [3] 17, 811). — \*II, 1088.
  - 19) Methyl-2-Naphtylketon-1-Oxyessigsäure. Sm. 130° (B. 42, 907 C. 1909 [1] 1338).
  - 20) Anhydrid d.  $\alpha$ -Phenyl- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 115—116° (B. 38, 3895 C. 1906 [1] 191).
  - 21) Dilakton d.  $\delta\delta$ -Dioxy- $\alpha$ -Phenyl- $\alpha$ -Penten- $\beta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure. Sm. 162° (A. 314, 28, 39). — \*II, 1139.
  - 22) Methylester d. 4-Oxynaphtalinmethyläther-1-Ketocarbonsäure. Sm. 87° (Bl. [3] 17, 306). — \*II, 1088.
  - 23) Methylester d. 3-Acetoxylnaphtalin-2-Carbonsäure. Sm. 101° (B. 27, 2624). — II, 1691.
  - 24) Dimethylester d. Naphtalin-1,5-Dicarbonsäure. Sm. 114—115° (G. 26 [1] 96). — \*II, 1087.
  - 25) Dimethylester d. Naphtalin-1,8-Dicarbonsäure. Sm. 102—103° (A. 172, 273). — II, 1879.
  - 26) Dimethylester d. Naphtalin-2,6-Dicarbonsäure. Sm. 191° (B. 40, 3258 C. 1907 [2] 1072).
  - 27) Dimethylester d. Naphtalin-2,7-Dicarbonsäure. Sm. 135—136° (B. 40, 3259 C. 1907 [2] 1073).
  - 28) Äthylester d. 6-Phenyl-1,2-Pyron-3-Carbonsäure. Sm. 107—108° (B. 36, 3670 C. 1903 [2] 1313).
  - 29) 2-Methoxyphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 65° (J. pr. [2] 61, 550; C. 1895 [1] 801). — \*II, 888.
  - 30) 2-Methoxyphenylester d. 4-Oxybenzol-1-Carbonsäure. Sm. 143° (D.R.P. 57941). — \*II, 906.
  - 31) 3-Methoxyphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 68° (D.R.P. 46756). — \*II, 888.
  - 32) Phenyl-2-Methoxyphenylester d. Kohlensäure. Sm. 82° (Bl. [3] 21, 825). — \*II, 550.
  - 33) Diacetat d. 1,2-Dioxynaphtalin. Sm. 104—106° (B. 17, 3025). — II, 981.
  - 34) Diacetat d. 1,3-Dioxynaphtalin. Sm. 56° (55°) (B. 29, 1610; A. 298, 390). — \*II, 594.
  - 35) Diacetat d. 1,4-Dioxynaphtalin. Sm. 128—130° (125°) (B. 17, 3025; J. pr. [2] 62, 37). — II, 982; \*II, 595.
  - 36) Diacetat d. 1,5-Dioxynaphtalin. Sm. 159—160° (B. 20, 938). — II, 983.
  - 37) Diacetat d. 1,6-Dioxynaphtalin. Sm. 73° (J. pr. [2] 39, 317). — II, 983.
  - 38) Diacetat d. 1,7-Dioxynaphtalin. Sm. 108° (A. 241, 372). — II, 983.
  - 39) Diacetat d. 1,8-Dioxynaphtalin. Sm. 147—148° (A. 247, 359). — II, 983.
  - 40) Diacetat d. 2,6-Dioxynaphtalin. Sm. 175° (173°) (A. 241, 370; B. 40, 1415 C. 1907 [1] 1498). — II, 984.

- $C_{14}H_{12}O_4$
- 41) Diacetat d. 2,7-Dioxynaphtalin. Sm. 136° (129°) (B. 14, 2209; 23, 520). — II, 984.
  - 42) Diacetat d. 9-Dioxynaphtalin. Sm. 173° (B. 30, 2202). — \*III, 285.
  - 43) Acetylderivat d. 2-Methyl-5-Phenylfuran-3-Carbonsäure. Sm. 80 bis 83° (B. 17, 2763). — III, 712.
  - 44) Verbindung (aus d. 4,4'-Diamido-3,3'-Dioxybiphenyldimethyläther) (Soc. 83, 692 C. 1903 [2] 39).
  - 45) Verbindung (aus Santelholz) (Z. 1870, 84). — III, 672.
  - 46) Verbindung (aus Benzoylessigsäureäthylester, Salpetrigsäureanhydrid u. Essigsäureanhydrid). Sm. 62–63° (Bl. [4] 1, 464 C. 1907 [2] 233).  
C 64,6 — H 4,6 — O 30,8 — M. G. 260.
- $C_{14}H_{12}O_5$
- 1) Coccinin (oder  $C_{16}H_{14}O_6$ ?). +  $NH_3$  (A. 141, 341). — II, 2098.
  - 2) Jacarandin. Sm. 243–245° u. Zers. K (Soc. 81, 217 C. 1902 [1] 532, 822). — \*III, 486.
  - 3) Pimpinellin. Sm. 106° (C. 1898 [2] 114). — \*III, 472.
  - 4) 1-Acetoxy-4-Methoxynaphtalin-2-Carbonsäure. Sm. 172° u. Zers. (J. pr. [2] 62, 40). — \*II, 1082.
  - 5)  $\epsilon$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]hexan-3,4-Methylenäther- $\zeta$ -Carbonsäure (Methylsticinsäure). Sm. 180° u. Zers. (183–184,5°) (M. 10, 786; Ar. 246, 351 C. 1908 [2] 888). — II, 1968.
  - 6) Dimethylphthalidtetronsäure. Sm. 289° (A. 322, 383 C. 1902 [2] 736).
  - 7)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ ,2-Dicarbonsäure- $\beta$ -Äthylester (Äthylester d. Phthalylacetessigsäure). Sm. 124° (B. 16, 651; A. 236, 185). — II, 2018.
  - 8) 1-Methylester d. Inden-1-Ketocarbonsäure-3-Methylcarbonsäure. Sm. 190° u. Zers. (A. 347, 283 C. 1906 [2] 959).
  - 9) Äthylester d. 1,2-Benzpyron-3- $[\beta$ -Ketopropionsäure]. Sm. 104° (B. 37, 4492 C. 1905 [1] 249).
  - 10) 2-Methoxyphenylester d. 3,4-Dioxybenzol-1-Carbonsäure. Sm. 194° (Soc. 93, 570 C. 1908 [1] 1690).
  - 11) Acetat d. 7-Oxy-3-Acetyl-2-Methyl-1,4-Benzpyron (Acetyldehydrodiacetylresacetophenon). Sm. 127° (B. 25, 1301; 34, 105). — III, 136; \*III, 107.
  - 12) Verbindung (aus Gründeliharz). Sm. 227–228° (C. 1908 [1] 1401).
  - 13) Verbindung (aus Maklurin) (J. 1864, 559). — III, 208.  
C 60,9 — H 4,3 — O 34,8 — M. G. 276.
- $C_{14}H_{12}O_6$
- 1) Baptigenin (C. 1897 [2] 429, 709). — \*III, 432.
  - 2) Gardenin. Sm. 163–164° (A. 98, 316; 200, 311). — III, 632.
  - 3) Kinoïn (B. 11, 1879). — III, 687.
  - 4) Dimethyläther d. Tetraoxybiphenylchinon (A. 169, 249). — II, 1042.
  - 5) Aponsäure (oder  $C_{14}H_{10}O_6$ ). Sm. 252° u. Zers. Ca, Ba,  $Ag_2$  (B. 23, 323). — II, 1036.
  - 6) Dibrenzcatechinessigsäure + 3  $H_2O$  (C. 1895 [1] 530).
  - 7)  $\alpha$ -Diresorcinessigsäure. Sm. oberhalb 279° (C. 1895 [1] 530).
  - 8)  $\beta$ -Diresorcinessigsäure + 1½  $H_2O$  (C. 1895 [1] 530).
  - 9) Di[2,4-Dioxyphenyl]essigsäure. Ba, 3  $PbO$ , Zn (Soc. 69, 1268; 71, 1089). — \*II, 1178.
  - 10) Dioxyessigdi[3-Oxyphenyl]äthersäure? (Resorcinglyoxylsäure). Zers. bei 250° (A. ch. [7] 1, 107; Soc. 69, 1265; 71, 1084). — II, 918; \*II, 566.
  - 11) Parininsäure. Zers. bei 225°. 3 + 2  $H_2O$ , Ba + 4  $H_2O$  (J. pr. [2] 73, 174 C. 1906 [1] 1105).
  - 12) Äthylester d. 7-Acetoxy-1,2-Benzpyron-4-Carbonsäure. Sm. 118 bis 119° (B. 34, 383). — \*II, 1170.
  - 13) Diacetat d. 5,7-Dioxy-4-Methyl-1,2-Benzpyron (Diacetoxylmethylcumin). Sm. 138–140° (B. 17, 2190). — II, 1953.
  - 14) Diacetat d. 7,8-Dioxy-4-Methyl-1,2-Benzpyron (Diacetoxyl- $\beta$ -Methylcumin). Sm. 176° (J. pr. [2] 26, 69). — II, 1953.
  - 15) Diacetat d. 5,7-Dioxy-2-Methyl-1,4-Benzpyron. Sm. 149° (B. 37, 2101 C. 1904 [2] 122).
  - 16) Diacetat d. 7,8-Dioxy-2-Methyl-1,4-Benzpyron. Sm. 120° (B. 36, 2192 C. 1903 [2] 384).



- C<sub>14</sub>H<sub>12</sub>O<sub>7</sub>** C 57,5 — H 4,1 — O 38,4 — M. G. 292.  
 1) Thujigenin (*J.* 1858, 515). — III, 614.  
 2) Rothsäure. Ca, Pb (*Z.* 1869, 668). — III, 590.  
 3) Säure + 2H<sub>2</sub>O (aus 4-Oxybenzol-1-Carbonsäure u. 3,4-Dioxybenzol-1-Carbonsäure). Sm. 188—190° (194°) (*A.* 134, 278; *G.* 32 [2] 13 *C.* 1902 [2] 50; *C.* 1906 [2] 1623). — II, 1740.  
 4) Triäthylester d. 5-Methyl-2,3-Dihydrofuran-2,3,4-Tricarbonsäure. Sd. 188—189°<sub>15</sub> (*Soc.* 69, 532). — III, 720.
- C<sub>14</sub>H<sub>12</sub>O<sub>8</sub>** C 54,5 — H 3,9 — O 41,6 — M. G. 308.  
 1) 1,2,3,4-Tetrahydronaphtalin-2,2,3,3-Tetracarbonsäure. Fl.; Zers. bei 185° (*B.* 17, 450, 452; *Soc.* 53, 12). — II, 2077.  
 2) Dipyrogallolessigsäure + 3H<sub>2</sub>O (*C.* 1895 [1] 530).
- C<sub>14</sub>H<sub>12</sub>O<sub>9</sub>** C 51,8 — H 3,7 — O 44,4 — M. G. 324.  
 1) Gem. Anhydrid d. Essigsäure u. 5-Acetoxy-1-Methylbenzol-2,3,4-Tricarbonsäure. Sm. 230° u. Zers. (*B.* 35, 2913 *C.* 1902 [2] 1042).
- C<sub>14</sub>H<sub>12</sub>O<sub>10</sub>** C 49,4 — H 3,5 — O 47,0 — M. G. 340.  
 1) bim. Anhydrid d.  $\alpha\epsilon$ -Diketopentan- $\alpha\epsilon$ -Dicarbonsäure. Fl. (*Bl.* [4] 1, 81 *C.* 1907 [1] 1183).  
 2) Tetramethylester d. 1,4-Diketo-1,4-Dihydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 208°. + 2CH<sub>4</sub>O (*A.* 258, 318). — II, 2096.
- C<sub>14</sub>H<sub>12</sub>O<sub>13</sub>** C 43,3 — H 3,1 — O 53,6 — M. G. 388.  
 1) Galsäure. Ba<sub>3</sub> + 4H<sub>2</sub>O, Pb<sub>3</sub> + 7H<sub>2</sub>O (*A.* 260, 338). — II, 2108.
- C<sub>14</sub>H<sub>12</sub>O<sub>16</sub>** C 38,5 — H 2,7 — O 58,7 — M. G. 436.  
 1) Hexahydrobenzol-1,1,2,2,4,4,5,5-Oktocarbonsäure. Sm. 218—220° u. Zers. Ag<sub>8</sub> (*Soc.* 83, 783 *C.* 1903 [2] 201, 439).  
 2) Verbindung (aus Acetondioxaläthylester). Zers. oberhalb 250° (*B.* 39, 3663 *C.* 1907 [1] 49).
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>** C 80,8 — H 5,8 — N 13,4 — M. G. 208.  
 1)  $\alpha\beta$ -Di[4-Amidophenyl]äthin. Sm. 235°. 2HCl, H<sub>2</sub>SO<sub>4</sub> (*A.* 325, 72 *C.* 1903 [1] 463). — \*IV, 677.  
 2)  $\alpha$ -Imido- $\alpha$ -Benzylidenamido- $\alpha$ -Phenylmethan. Sm. 175°. HCl, Ag (*B.* 22, 1610; 23, 2925; 34, 3030). — IV, 849; \*IV, 568.  
 3) Phenylimido-[2-Methylphenyl]imidomethan. Sm. 71° (*B.* 19, 2410). — II, 474.  
 4) Phenylimido-[4-Methylphenyl]imidomethan. Fl. (*B.* 19, 2407). — II, 512.  
 5) 1,4-Diamidoanthracen. H<sub>2</sub>SO<sub>4</sub> (*B.* 41, 1435 *C.* 1908 [1] 1978).  
 6) 9,10-Diamidophenanthren. Sm. 160—166°. 2HCl (*B.* 35, 2738 *C.* 1902 [2] 645; *B.* 41, 3683 *C.* 1908 [2] 1869). — \*IV, 677.  
 7) 9-Hydrazidophenanthren. Sm. 220—221° u. Zers. (*B.* 36, 2515 *C.* 1903 [2] 506).  
 8) Dibenzylidenhydrazin (Benzalazin). Sm. 93°. HCl, 2HBr, Pikrat (*J. pr.* [2] 39, 44; [2] 44, 537; [2] 58, 391; *B.* 28, 2347; 30, 1878; 33, 2740, 3197; *G.* 36 [2] 97 *C.* 1906 [2] 1054). — III, 38; \*III, 29.  
 9) Azodiphenyläthan. Sm. 112,5° (*C. r.* 149, 402 *C.* 1909 [2] 1451).  
 10) 5-Methyl-1-[2-Naphtyl]pyrazol. Sm. 65°; Sd. 320—330°. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 3368). — \*IV, 334.  
 11) 3-Amido-2-Phenylindol. Sm. 174° (180° u. Zers.) (*B.* 21, 1074; *G.* 36 [2] 59 *C.* 1906 [2] 1128; *C.* 1905 [2] 899; 1907 [1] 732). — IV, 413.  
 12) 6-Amido-2-Phenylindol. Sm. 240° (*B.* 42, 611 *C.* 1909 [1] 999).  
 13) 2-Benzylindazol. Sm. 73°. Pikrat (*B.* 35, 2318 *C.* 1902 [2] 453). — \*IV, 580.  
 14) 2-[2-Methylphenyl]indazol. Sm. 80—81° (*J. pr.* [2] 51, 273). — IV, 867.  
 15) 2-[4-Methylphenyl]indazol. Sm. 105° (*B.* 25, 3169; *C. r.* 138, 1276 *C.* 1904 [2] 120). — IV, 867.  
 16) 1-[4-Methylphenyl]benzimidazol. Fl. (HCl, HgCl<sub>2</sub>), Pikrat (*A.* 303, 378). — \*IV, 583.  
 17) 2-[4-Methylphenyl]benzimidazol. Sm. 268°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (*A.* 205, 116; 210, 328). — IV, 1012.  
 18) 2-Benzylbenzimidazol. Sm. 187°. HCl, (2HCl, PtCl<sub>4</sub>), (HJ, J<sub>2</sub>), HNO<sub>3</sub>, Pikrat (*J. pr.* [2] 59, 253). — \*IV, 677.

- $C_{14}H_{12}N_2$
- 19) 6-Methyl-1-Phenylbenzimidazol. Fl. (2 + HCl, 2HgCl<sub>2</sub>), Pikrat (A. 303, 375). — \*IV, 585.
  - 20) 1-Methyl-2-Phenylbenzimidazol. Sm. 170—171° (B. 25, 2842). — IV, 1006.
  - 21) 5-Methyl-2-Phenylbenzimidazol. Sm. 238—240°. HCl, H<sub>2</sub>SO<sub>4</sub> (A. 208, 316; B. 12, 952; 24, 633; 30, 3064; Am. 17, 402). — IV, 1013.
  - 22) 2-Methyl-5-Phenylbenzimidazol. Sm. 116° (B. 37, 882 C. 1904 [1] 1143).
  - 23) 2-Phenyl-3,4-Dihydro-1,3-Benzdiazin. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>CrO<sub>4</sub> (B. 25, 3032). — IV, 1015.
  - 24) 3-Phenyl-3,4-Dihydro-1,3-Benzdiazin (Orexin). Sm. 95°. HCl + 2H<sub>2</sub>O, (HCl, SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (B. 22, 2686; D.R.P. 51712, 52647; C. 1899 [1] 847; 1900 [2] 615). — IV, 872; \*IV, 584.
  - 25) 4-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 165—166°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 29, 1311). — IV, 1016.
  - 26) 2-Propenyl-*peri*-Naphtimidazol. Sm. 140° (B. 42, 3677 C. 1909 [2] 1664).
  - 27) 2,3-Dimethyl-5,10-Naphtdiazin. Sm. 173° (B. 42, 2922 C. 1909 [2] 1324).
  - 28) 2,8-Dimethyl-5,10-Naphtdiazin (Ditolazin). Sm. 156° (B. 27, 2781). — IV, 1016.
  - 29) 3,9-Dimethyl-4,10-Naphtisodiazin + 2H<sub>2</sub>O (Dimethylphenanthrolin). Sm. 76° (97—98° wasserfrei) (B. 24, 1740). — IV, 1015.
  - 30) 7,9-Dimethyl-4,10-Naphtisodiazin (Dimethylphenanthrolin). Sm. 106 bis 107°. (2HCl, PtCl<sub>4</sub>), Pikrat (A. 274, 373). — IV, 1015.
  - 31) 6,8-Dimethyl-5,9-Naphtisodiazin (Dimethylchinochinolin). Sm. 104°; Sd. oberhalb 360°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (A. 279, 22). — IV, 1014.
  - 32) 3,8-Dimethyldiphenazon (Tolazon; Ditolylenazon). Sm. 187° (188°); Sd. oberhalb 360°. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (B. 26, 2239; B. 37, 26 C. 1904 [1] 523). — IV, 1402.
  - 33) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -Phenylelessigsäure. Sm. 85° (B. 11, 246; 15, 2028; 31, 2700; 34, 501; B. 35, 3329 C. 1902 [2] 1190; D.R.P. 142559 C. 1903 [2] 81; B. 37, 4079 C. 1904 [2] 1722; B. 37, 4084 C. 1904 [2] 1723; D.R.P. 157909 C. 1905 [1] 477; D.R.P. 157617 C. 1905 [1] 316; B. 39, 992 C. 1906 [1] 1341). — II, 1324; \*II, 819.
  - 34) Nitril d. Phenylbenzylamidoameisensäure (Phenylbenzylecyanamid). Sm. 64° (60°); Sd. 185—195°<sub>12</sub> (B. 33, 1384; B. 35, 1284 C. 1902 [1] 1094). — \*II, 302.
  - 35) Nitril d. 1-Phenylamidomethylbenzol-2-Carbonsäure (2-Cyanbenzyl-anilin). Sm. 124—126°. HCl, (2HCl, PtCl<sub>4</sub>), Chlorat, Pikrat (B. 31, 2882). — \*II, 824.
  - 36) Nitril d. 1-Phenylamidomethylbenzol-3-Carbonsäure. Sm. 70°. HCl (J. pr. [2] 80, 107 C. 1909 [2] 1328).
  - 37) Nitril d. 1-Phenylamidomethylbenzol-4-Carbonsäure. Sm. 86°. HCl (J. pr. [2] 80, 106 C. 1909 [2] 1328).
  - 38) Nitril d.  $\beta$ -[1-Naphtyl]imidobuttersäure. Sm. 112° (J. pr. [2] 78, 501 C. 1908 [2] 591).
  - 39) Nitril d.  $\beta$ -[2-Naphtyl]imidobuttersäure. Sm. 172° (J. pr. [2] 78, 501 C. 1908 [2] 591).
  - 40) Verbindung (Base aus Hydrobenzamid). Sm. 220° (A. 112, 171; 122, 324). — III, 21.  
C 71,2 — H 5,1 — N 23,7 — M. G. 236.
- $C_{14}H_{12}N_4$
- 1) Benzidincyanid (B. 3, 723). — IV, 961.
  - 2) isom. Benzidincyanid. Sm. 200° (J. pr. [2] 61, 472). — \*IV, 640.
  - 3) 4-Cyanamido-2-Methylazobenzol. Sm. 118—119° (C. r. 143, 342 C. 1906 [2] 1055).
  - 4) 4-Cyanamido-3-Methylazobenzol. Sm. 159° (C. r. 143, 342 C. 1906 [2] 1055).
  - 5) 5-Amido-1,4-Diphenyl-1,2,3-Triazol. Sm. 179°. HCl (B. 35, 4058 C. 1903 [1] 171; B. 40, 2388 [C. 1907 [2] 315; A. 364, 218 C. 1909 [1] 1008). — \*IV, 942.
  - 6) 4-Amido-1,5-Diphenyl-1,2,3-Triazol. Sm. 124° (B. 39, 3924 C. 1907 [1] 115).

- C<sub>14</sub>H<sub>11</sub>N<sub>4</sub>**
- 7) 4-Phenylamido-1-Phenyl-1,2,3-Triazol. Sm. 142° (A. 364, 225 C. 1909 [1] 1008).
  - 8) 5-Phenylamido-4-Phenyl-1,2,3-Triazol. Sm. 167° (A. 364, 219 C. 1909 [1] 1008).
  - 9) 3-Amido-1,5-Diphenyl-1,2,4-Triazol. Sm. 154,5°. HCl, Pikrat (Am. 29, 76 C. 1903 [1] 523; Z. Kr. 32, 528). — \*IV, 941.
  - 10) 3-Imido-1,5-Diphenyl-2,3-Dihydro-1,2,4-Triazol. Sm. 156° (G. 29 [1] 98).
  - 11) 5-Phenylimido-4-Phenyl-4,5-Dihydro-1,2,4-Triazol (2-Phenylamido-1-Phenyl-1,3,4-Triazol). Sm. 213° (214°) (B. 33, 1067; B. 35, 1714 C. 1902 [2] 29). — \*IV, 897.
  - 12) 1-Amido-3,4-Diphenyl-1,2,5-Triazol (5,6-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin). Sm. 135°. HCl (J. pr. [2] 70, 437 C. 1905 [1] 85; J. pr. [2] 78, 545 C. 1909 [1] 446).
  - 13) 2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin (Glyoxalosotetrazon). Sm. 152° u. Zers. (A. 262, 291; B. 21, 2756; 30, 2461; B. 38, 2988 C. 1905 [2] 1454). — IV, 1307.
  - 14) 3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 192° (B. 26, 2132; 27, 1002; 31, 312; A. 297, 258; J. pr. [2] 73, 294 C. 1906 [1] 1784). — II, 1214; \*II, 762.
  - 15) 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 179—180°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 30, 1263; G. 26 [2] 431; Soc. 53, 850; 55, 244). — IV, 1233.
  - 16) 3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 258° (263°). (HCl, AuCl<sub>3</sub>) (B. 26, 2131; 27, 1004; J. pr. [2] 50, 256; [2] 52, 272; A. 297, 261; Soc. 77, 1188; J. pr. [2] 71, 33 C. 1905 [1] 442). — II, 1214; \*II, 762.
  - 17) 3-[2-Methylphenylazo]indazol. Sm. 211—211,5° (A. 305, 341). — \*IV, 1081.
  - 18) 4-Hydrazon-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 204° (B. 22, 2629). — IV, 874.
  - 19) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>N<sub>2</sub> aus 3-Amidobenzol-1-Carbonsäure). Sm. 116° (Soc. 69, 1516). — \*II, 789.
- C<sub>14</sub>H<sub>13</sub>N<sub>6</sub>**
- C 63,6 — H 4,5 — N 31,8 — M. G. 264.
  - 1) 3,6-Di[3-Amidophenyl]-1,2,4,5-Tetrazin. Sm. 266—267°. 2HNO<sub>3</sub> + 3H<sub>2</sub>O (B. 35, 3937 C. 1903 [1] 38). — \*IV, 993.
  - 2) 2,2'-Bi[4-Amidobenzimidazol]. Sm. oberhalb 300° (D. R. P. 74058). — \*IV, 993.
- C<sub>14</sub>H<sub>11</sub>Cl<sub>2</sub>**
- 1) ββ-Dichlor-αα-Diphenyläthan. Sm. 74° (80°); Sd. 295—305° u. Zers. (B. 6, 223; A. 279, 324; A. ch. [6] 12, 271; Bl. [3] 13, 858). — II, 231; \*II, 112.
  - 2) αβ-Dichlor-αβ-Diphenyläthan (α-Stilbenchlorid). Sm. 191—193° (A. 168, 74; 198, 131; Berx. J. 25, 620; B. 16, 638; 17, 835). — II, 233.
  - 3) isom. αβ-Dichlor-αβ-Diphenyläthan (β-Stilbenchlorid). Sm. 93—94° (A. 168, 77; 198, 134). — II, 233.
  - 4) αβ-Di[2-Chlorphenyl]äthan. Sm. 65° (A. 305, 100). — \*II, 113.
  - 5) αβ-Di[4-Chlorphenyl]äthan. Sm. 112° (J. pr. [2] 19, 462). — II, 233.
  - 6) Phenyl-4-Methylphenyldichlormethan. Fl. (B. 26, 26). — II, 237.
  - 7) 4,4'-Di[Chlormethyl]biphenyl. Sm. 136—138° (B. 32, 1052). — \*II, 114.
  - 8) 4,4'-Dichlor-3,3'-Dimethylbiphenyl. Sm. 51° (52—53°) (B. 21, 1097; A. 352, 124 C. 1907 [1] 1797). — II, 236.
- C<sub>14</sub>H<sub>11</sub>Br<sub>2</sub>**
- 1) αβ-Dibrom-αβ-Diphenyläthan (α-Stilbenbromid). Sm. 237° (A. 145, 336; 151, 364; 182, 261; 198, 127; R. 12, 185; B. 24, 1779; 28, 2694). — II, 234; \*II, 113.
  - 2) isom. αβ-Dibrom-αβ-Diphenyläthan (β-Stilbenbromid). Sm. 110—110,5° (B. 28, 2694). — \*II, 113.
  - 3) αβ-Di[4-Bromphenyl]äthan. Sm. 114—115° (B. 9, 17; A. 137, 267; G. 18, 237). — II, 234.
  - 4) p-Dibrom-4-Äthylbiphenyl. Sm. 102—103° (Bl. 47, 689; 49, 101). — II, 237.
  - 5) p-Dibrom-2,4'-Dimethylbiphenyl. Sm. 152° (Soc. 47, 591). — II, 235.
  - 6) p-Dibrom-3,3'-Dimethylbiphenyl. Sm. 58—59° (B. 21, 1099). — II, 236.
  - 7) Dibromtetrahydroanthracen. Sm. 169° (C. r. 142, 1204 C. 1906 [2] 249).



- $C_{14}H_{12}J_2$  1) **?**-Dijod - 3,3'-Dimethylbiphenyl. Sm. 99—100° (B. 21, 1099). — \*II, 236.
- 2) **4,4'**-Dimethylbiphenylenjodoniumjodid. Sm. 206° u. Zers. (C. 1909 [2] 2005).
- $C_{14}H_{12}S$  1) **Phenyläther d.  $\alpha$ -Merkapto- $\alpha$ -Phenyläthen.** Sd. 174—175°<sub>14</sub> (Soc. 77, 1182) — \*II, 652.
- 2) **Stilbensulfid.** Sm. 168—169° (J. 1876, 421). — II, 1102.
- 3) **9-Methylthioxanthen.** Sm. 74° (B. 38, 2511 C. 1905 [2] 636).
- $C_{14}H_{12}S_2$  1) **4,4'-Dimethyldiphenylendisulfid (2,6-Dimethylthianthren).** Sm. 116° (117—118°; 123°); Sd. 230—235°<sub>80</sub>. + FeCl<sub>3</sub> (B. 22, 911; 29, 438; Bl. [3] 15, 425; Soc. 75, 890; B. 42, 1173 C. 1909 [1] 1575). — II, 959; \*II, 584.
- $C_{14}H_{16}O_4$  1) **Acetat d. Chekenin = (C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>)<sub>x</sub>.** Sm. 142° (B. 21 [2] 481). — III, 627.
- $C_{14}H_{16}N$  C 86,1 — H 6,7 — N 7,2 — M. G. 195.
- 1) **2-Amido- $\alpha\beta$ -Diphenyläthen.** Sm. 106° (B. 39, 904 C. 1906 [1] 1168).
- 2)  **$\alpha$ -[2 - Amidophenyl]- $\alpha$ -Phenyläthen.** Sm. 76—77,5°. H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 42, 3119 C. 1909 [2] 1353).
- 3) **Benzylidenamidomethylbenzol (Benzylidenbenzylamin).** Sd. 200 bis 202°<sub>10-20</sub> (Soc. 65, 191). — III, 30.
- 4) **2-Benzylidenamido-1-Methylbenzol.** Sd. 314° (309—310°<sub>745</sub>) (Bl. 39, 530; C. r. 95, 730; M. 9, 698; B. 19, 1063; 31, 2603). — III, 30; \*III, 22.
- 5) **4-Benzylidenamido-1-Methylbenzol.** Sm. 35°; Sd. 326°<sub>723</sub> (A. 140, 96; B. 34, 825; J. 1880, 566; B. 19, 1063). — III, 30; \*III, 22.
- 6) **Phenyl - 3 - Methylbenzylidenamin (3 - Phenylimidomethyl-1-Methylbenzol).** Sd. 313—314° (B. 17, 1468). — III, 53.
- 7) **1-Amido-9,10-Dihydroanthracen.** Sm. 60—70°. HCl (B. 38, 2866 C. 1905 [2] 1094).
- 8) **2-Amido-9,10-Dihydroanthracen.** Sm. oberhalb 100°. HCl (B. 15, 853; 26, 3071; D. R. P. 21178). — II, 638; \*II, 351.
- 9) **9-Amido-9,10-Dihydroanthracen.** Sm. 92°. HCl (B. 23, 2525). — II, 638.
- 10) **2,2'-Bitolyimid.** Sm. 183—184°; Sd. 364° (B. 29, 2594). — IV, 398.
- 11)  **$\alpha$ -[3-Methylphenyl]- $\beta$ -[2-Pyridyl]äthen.** Sd. 220°<sub>45</sub>. (2HCl, PtCl<sub>4</sub>, (HCl, AuCl<sub>3</sub>), Pikrat (B. 39, 2836 C. 1906 [2] 1326).
- 12)  **$\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Pyridyl]äthen.** Sm. 82°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, HgCl<sub>2</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 35, 2774 C. 1902 [2] 992). — \*IV, 238.
- 13)  **$\alpha$  - [3 - Methylphenyl] -  $\beta$  - [4 - Pyridyl]äthen.** Sd. 220—225°<sub>85</sub>. (HCl, AuCl<sub>3</sub>), Pikrat (B. 39, 2834 C. 1906 [2] 1326).
- 14)  **$\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Pyridyl]äthen.** Sm. 101—102°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr (B. 38, 165 C. 1905 [1] 452).
- 15) **4-Methyl-2-[ $\beta$ -Phenyläthenyl]pyridin (4-Methylstilbazol).** Sd. 321 bis 326° u. Zers. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HJ, Pikrat (B. 21, 3072). — IV, 397.
- 16) **6-Methyl-2-[ $\beta$ -Phenyläthenyl]pyridin (6-Methyl-2-Stilbazol).** Sm. 123°. HCl + H<sub>2</sub>O, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 25, 2398). — IV, 397.
- 17) **2-Phenyl- $\beta$ -Dihydroindol.** Sm. 46° (B. 21, 1075). — IV, 398.
- 18) **2-Phenyl-1,3-Dihydroisindol.** Sm. 170—171° (B. 17, 1826; 31, 421, 628). — \*IV, 139.
- 19) **1-Äthyl- $\beta\beta$ -Naphtindol.** Sm. 73° (B. 27, 3256). — IV, 389.
- 20) **2,3-Dimethyl- $\alpha$ -Naphtindol.** Sm. 150° (B. 21, 3365). — IV, 396.
- 21) **1,2-Dimethyl- $\beta$ -Naphtindol.** Sm. 132°; Sd. oberhalb 360°. Pikrat (B. 21, 3363). — IV, 397.
- 22) **2,3-Dimethyl- $\beta\beta$ -Naphtindol.** Sm. 126° (A. 242, 370). — IV, 396.
- 23) **3-Methyl-3,4-Dihydro- $\beta$ -Naphtochinolin.** Sd. oberhalb 300° (B. 31, 694). — \*IV, 237.
- 24) **9-Äthylcarbazol.** Sm. 67—68°. Pikrat (A. 202, 24). — IV, 392.
- 25) **1,3-Dimethylcarbazol.** Sm. 95°. Pikrat (A. 332, 91 C. 1904 [1] 1570).
- 26) **2,6-Dimethylcarbazol.** Sm. 208—209° (A. 359, 77 C. 1908 [1] 1551).
- 27) **2,7-Dimethylcarbazol.** Sm. 283° (B. 34, 3335). — \*IV, 237.
- 28) **3,6-Dimethylcarbazol.** Sm. 219°. Pikrat (B. 24, 2598). — IV, 397.
- 29) **3,7-Dimethylcarbazol.** Sm. 224° (B. 31, 1697). — \*IV, 237.

$C_{14}H_{13}N$ 

- 30) *o*-Imidobibenzyl. Sm. 110° (A. 305, 100). — \*IV, 237.  
 31) 3-Methyl-5,10-Dihydroakridin. Sm. 157° (A. 279, 274). — IV, 398.  
 32) 10-Methyl-5,10-Dihydroakridin. Sm. 96° (B. 35, 2536 C. 1902 [2] 458; B. 39, 2722 C. 1906 [2] 1205). — \*IV, 236.  
 33) 10-Methyl-9,10-Dihydrophenanthridin. Sm. 108° (B. 35, 2535 C. 1902 [2] 458). — \*IV, 236.  
 34) Base (aus 4-Benzylidenamido-1-Methylbenzol). Sm. 120—125°. (2HCl, PtCl<sub>4</sub>) (A. 140, 96; J. 1880, 566). — III, 30.

 $C_{14}H_{13}N_3$ 

- C 75,3 — H 5,8 — N 18,8 — M. G. 223.  
 1) 3,9,10-Triamidophenanthren (B. 41, 3690 C. 1908 [2] 1869).  
 2) 4-Amido-4'-Cyanmethyramidobiphenyl. Sm. 142—144° (B. 39, 2806 C. 1906 [2] 1490).  
 3) 1-[3-Äthylenphenyl]amidodiazobenzol. Sm. 90—91° (B. 26 [2] 677). — IV, 1574.  
 4) 3,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol + 2H<sub>2</sub>O. Sm. 137° (127°). HCl, (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> + 2H<sub>2</sub>O (B. 26, 2134; 27, 1008; 30, 1876; A. 297, 266). — II, 1215; IV, 1184; \*IV, 842.  
 5) 5-Amido-2-Methyl-1-Phenylbenzimidazol. Sm. 145—146°. Pikrat (J. pr. [2] 69, 42 C. 1904 [1] 521; J. pr. [2] 74, 196 C. 1906 [2] 1436).  
 6) 7-Amido-5-Methyl-2-Phenylbenzimidazol. Sm. 182—183°. HCl, H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (B. 8, 877). — IV, 1183.  
 7) 7-Amido-2-Methyl-5-Phenylbenzimidazol. Sm. 94° (B. 37, 883 C. 1904 [1] 1143).  
 8) 2-Methyl-1-[4-Amidophenyl]benzimidazol. (2HCl, PtCl<sub>4</sub>) (B. 28, 2978). — IV, 1169.  
 9) 2-[2-Amido-4-Methylphenyl]benzimidazol. Sm. 203°. HCl (B. 30, 3068). — IV, 1183.  
 10) 5-Methyl-2-[2-Amidophenyl]benzimidazol. Sm. 189°. Ag, 2HCl (B. 30, 3068; 32, 1469, 1472, 1483). — IV, 1183; \*IV, 842.  
 11) 5-Methyl-2-[3-Amidophenyl]benzimidazol + H<sub>2</sub>O. Sm. 238°. HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 1½ H<sub>2</sub>O (A. 210, 336; B. 26, 2762). — IV, 1183.  
 12) 5-Methyl-2-[4-Amidophenyl]benzimidazol. Sm. 113—114°. H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (B. 26, 2760). — IV, 1184.  
 13) 2-Phenylimido-5-Methyl-2,3-Dihydrobenzimidazol (Phenyltoluylenguanidin). Sm. 166—167°. HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> (B. 19, 3057; 24, 2514). — IV, 623.  
 14) 2-[4-Methylphenyl]imido-2,3-Dihydrobenzimidazol (p-Tolyl-o-Phenylenguanidin). Sm. 209°. HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> (B. 24, 2509). — IV, 566.  
 15) 5-Methyl-1-Benzyl-1,2,3-Benztriazol. Sm. 102—103° (A. 240, 130). — IV, 1146.  
 16) 5[oder 6]-Methyl-1-[4-Methylphenyl]-1,2,3-Benztriazol. Sm. 93° (95°) (B. 25, 1023; 31, 1697). — IV, 1569; \*IV, 795.  
 17) 2-[2,5-Dimethylphenyl]-2,1,3-Benztriazol. Sm. 136° (J. pr. [2] 71 406 C. 1905 [2] 41).  
 18) 5-Methyl-2-[4-Methylphenyl]-2,1,3-Benztriazol. Sm. 125—126° (B. 18, 3143; 19, 1456; 20, 1178; 28, 2200). — IV, 1147.  
 19) 4,6-Dimethyl-2-Phenyl-2,1,5-Benztriazol + H<sub>2</sub>O. Sm. 150° (154° wasserfrei) (B. 36, 521 C. 1903 [1] 649). — \*IV, 798.  
 20) 3-[2-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 165°. HCl, Oxalat, Pikrat (J. pr. [2] 54, 269). — IV, 873.  
 21) 3-[3-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 147°. 2HCl, (2HCl, 2SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Oxalat, Pikrat (J. pr. [2] 48, 563). — IV, 873.  
 22) 3-[4-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 175°. 2HCl + 2H<sub>2</sub>O, (2HCl, SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), 2HBr, Oxalat, Pikrat (J. pr. [2] 54, 273). — IV, 873.  
 23) 3-Benzyl-3,4-Dihydro-1,2,3-Benztriazin. Sm. 91° u. Zers. (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 51, 260). — IV, 627.  
 24) 3-[4-Methylphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 151° u. Zers. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 25, 450; J. pr. [2] 51, 269). — IV, 1148.  
 C 66,9 — H 5,2 — N 27,9 — M. G. 251.  
 1) 2,3'-Dimethyl-4'-Diazoazobenzolimid. Sm. 58—60° (B. 20, 1181). — IV, 1532.

 $C_{14}H_{13}N_5$

- $C_{14}H_{13}N_5$  2) 3,4'-Dimethyl-6-Diazoazobenzolimid. Sm.  $85^\circ$  (B. 19, 1455). — IV, 1532.
- 3) 3-Amido-5-Phenylamido-1-Phenyl-1,2,4-Triazol. Sm.  $166^\circ$ . HCl (A. 355, 214 C. 1907 [2] 1327; A. 356, 193 C. 1907 [2] 1798).
- 4) 5-Amido-3-Phenylamido-1-Phenyl-1,2,4-Triazol. Sm.  $148^\circ$ . HCl (A. 355, 213 C. 1907 [2] 1327; A. 356, 194 C. 1907 [2] 1798).
- 5)  $\beta$ -Amido-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm.  $188^\circ$ . HCl (B. 30, 2870). — IV, 1234.
- 6) Verbindung (aus d. Säure  $C_{14}H_{16}O_8N_4S$ ). Sm.  $65^\circ$  (J. pr. [2] 72, 519 C. 1906 [1] 343).
- $C_{14}H_{13}Cl$  1)  $\beta$ -Chlor- $\alpha\alpha$ -Diphenyläthan (B. 6, 1439). — II, 231.
- 2)  $\alpha$ -Chlor- $\alpha\beta$ -Diphenyläthan. Sd.  $178-187_{13}^\circ$  (B. 32, 1054).
- 3) 4'-Chlormethyl-4-Methylbiphenyl. Sm.  $109^\circ$  (B. 32, 1052). — \*II, 114.
- $C_{14}H_{13}Br$  1)  $\alpha$ -Brom- $\alpha\alpha$ -Diphenyläthan. Fl. (C. 1902 [2] 578).
- 2)  $\alpha$ -Brom- $\alpha\beta$ -Diphenyläthan (A. 151, 363). — II, 233.
- 3)  $\alpha$ -Phenyl- $\beta$ -[ $\beta$ -Bromphenyl]äthan. Sd. oberhalb  $320^\circ$  (A. 137, 266). — II, 233.
- 4)  $\alpha$ -Brom-4-Methyldiphenylmethan. Fl. (C. 1902 [2] 789).
- 5) 4-Brom-2,4'-Dimethylbiphenyl. Fl. (Soc. 47, 590). — II, 235.
- 6) 2'-Brom-2,4'-Dimethylbiphenyl. Sm.  $93-95^\circ$  (Soc. 47, 590). — II, 235.
- $C_{14}H_{13}J_3$  1)  $\beta$ -Joddi[2-Methylphenyl]jodoniumjodid (B. 28, 1814). — \*II, 42.
- 2)  $\beta$ -Joddi[3-Methylphenyl]jodoniumjodid. Sm.  $105^\circ$  (A. 327, 283 C. 1903 [2] 351).
- 3)  $\beta$ -Joddi[4-Methylphenyl]jodoniumjodid (B. 28, 98). — \*II, 42.
- $C_{14}H_{14}O$  C 84,8 — H 7,1 — O 8,1 — M. G. 198.
- 1)  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenyläthan. Sm.  $81^\circ$  (B. 35, 2646 C. 1902 [2] 587; C. r. 135, 533 C. 1902 [2] 1209; D.R.P. 166899 C. 1906 [1] 720; C. 1907 [1] 1579).
- 2)  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan (Toluylenhydrat). Sm.  $63^\circ$  ( $66-67^\circ$ ) (A. 155, 62; 174, 332; G. 23 [2] 228; Soc. 67, 605; B. 35, 1987 C. 1902 [2] 366; B. 37, 456 C. 1904 [1] 949). — II, 1079.
- 3) 2-Oxy- $\alpha\alpha$ -Diphenyläthan. Sd.  $177-178_{12}^\circ$  (B. 36, 4009 C. 1904 [1] 175).
- 4) d-4-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm.  $64^\circ$  (Soc. 89, 469 C. 1906 [1] 1829).
- 5) l-4-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm.  $58^\circ$  (Soc. 89, 470 C. 1906 [1] 1829).
- 6) r-4-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm.  $57-58^\circ$ ; Sd.  $200_{30}^\circ$ . Na (B. 23, 3145; 24, 3894; B. 36, 4012 C. 1904 [1] 176; Soc. 89, 468 C. 1906 [1] 1828). — II, 899.
- 7) 2-Oxy- $\alpha\beta$ -Diphenyläthan. Sm.  $83,5^\circ$  ( $81^\circ$ ) (B. 36, 3982 C. 1904 [1] 171; B. 38, 943 C. 1905 [1] 1020).
- 8) 4-Oxy- $\alpha\beta$ -Diphenyläthan. Sm.  $100-101^\circ$  (B. 36, 4009 C. 1904 [1] 175).
- 9)  $\alpha$ -Oxy-3-Methyldiphenylmethan. Sm.  $52-53^\circ$  (A. 194, 265). — II, 1080.
- 10)  $\alpha$ -Oxy-4-Methyldiphenylmethan. Sm.  $52^\circ$  (C. 1902 [2] 1199).
- 11) 4-Oxy- $\beta$ -Methyldiphenylmethan. Sd.  $240_{40}^\circ$  (J. 1878, 591). — II, 898.
- 12)  $\beta$ -Oxy- $\beta$ -Methyldiphenylmethan. Sd.  $250-255_{8-10}^\circ$  (J. 1879, 521). — II, 899.
- 13) 3-Oxy- $\beta$ -Benzyl-1-Methylbenzol. Sm.  $93-93,5^\circ$ ; Sd.  $240_{80}^\circ$  (G. 31 [1] 472).
- 14) 3-[ $\alpha$ -Oxyäthyl]biphenyl. Sm.  $85-86^\circ$  (Bl. 49, 101). — II, 1080.
- 15) Methyläther d.  $\alpha$ -Oxydiphenylmethan. Sd.  $270-271^\circ$  (B. 39, 4019 C. 1907 [1] 261).
- 16) Methyläther d. 4-Oxydiphenylmethan. Sd.  $305^\circ$  ( $177_{10}^\circ$ ) (J. 1871, 468; 1872, 405; Soc. 41, 37, 227). — II, 897.
- 17) Methyläther d. 3-Oxymethylbiphenyl. Fl. (A. ch. [6] 15, 244). — II, 1079.
- 18) Methyläther d.  $\alpha$ -[4-Oxy-1-Naphtyl]propen. Sd.  $170-171^\circ$ . Pikrat (Bl. [3] 17, 814). — \*II, 539.
- 19) Äthyläther d. 2-Oxybiphenyl. Sm.  $34^\circ$ ; Sd.  $276^\circ$  (M. 22, 569). — \*II, 538.
- 20) Äthyläther d. 3-Oxybiphenyl. Sm.  $34^\circ$ ; Sd.  $305^\circ$  ( $310^\circ$ ) (B. 36, 4075 C. 1904 [1] 267; B. 36, 4085 C. 1904 [1] 268).
- 21) Äthyläther d.  $\alpha$ -Oxy- $\alpha$ -[1-Naphtyl]äthen. Sd.  $190-195^\circ$  (Bl. [3] 6, 386). — II, 1077.



- C<sub>14</sub>H<sub>14</sub>O**
- 22) Dibenzyläther. Sd. 295—298° (A. 92, 115; 139, 313; 241, 374; G. 31 [1] 349; B. 38, 1752 C. 1905 [1] 1633). — II, 1050.
  - 23) Di[2-Methylphenyl]äther (o-Kresyläther). Sd. 272—278° (Soc. 49, 27). — II, 737.
  - 24) Di[3-Methylphenyl]äther. Sd. 284—288° (290,5—291,5°<sub>760</sub>) (Soc. 41, 11; Am. 36, 543 C. 1907 [1] 545). — II, 737.
  - 25) Di[4-Methylphenyl]äther. Sm. 50° (Soc. 41, 9). — II, 748.
  - 26) isom. p-Di[4-Methylphenyl]äther (p-Ditolyloxyd?). Sm. 165° (B. 17, 2638). — II, 748.
  - 27) Phenyläther d. β-Oxyäthylbenzol. Sd. 166°<sub>14</sub> (C. r. 138, 1049 C. 1904 [1] 1493).
  - 28) 2-Methylphenyläther d. Oxymethylbenzol. Sd. 285—290° (A. 217, 45; B. 14, 898). — II, 1049.
  - 29) 3-Methylphenyläther d. Oxymethylbenzol. Sm. 43°; Sd. 300—305° (A. 217, 46; B. 15, 1129). — II, 1049.
  - 30) 4-Methylphenyläther d. Oxymethylbenzol. Sm. 41° (A. 217, 44; B. 14, 898). — II, 1049.
  - 31) Propyl-1-Naphtylketon. Sd. 316—318° (Bl. [3] 15, 65; C. 1908 [2] 948). — III, 176.
  - 32) Propyl-2-Naphtylketon. Sm. 50—51° (52°); Sd. 322—324°. Pikrat (Bl. [3] 15, 65, 322; [3] 17, 313; C. 1908 [2] 948). — III, 176; \*III, 143.
  - 33) Isopropyl-1-Naphtylketon. Sd. 308—310°. Pikrat (Bl. [3] 15, 66). — III, 176.
  - 34) Isopropyl-2-Naphtylketon. Sd. 312—314° (Bl. [3] 15, 68). — III, 176.
  - 35) Phenol (aus 2-Phenyl-1,2-Dihydrobenzofuran). Sm. 63° (B. 36, 3985 C. 1904 [1] 171).  
C 78,5 — H 6,5 — O 15,0 — M. G. 214.
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>**
- 1) αβ-Dioxy-αα-Diphenyläthan. Sm. 121° (122°) (B. 39, 2063 C. 1906 [2] 242; C. r. 142, 1537 C. 1906 [2] 430; B. 39, 2292 C. 1906 [2] 523).
  - 2) αβ-Dioxy-αβ-Diphenyläthan (i-Hydrobenzoin). Sm. 138° (134°); Sd. oberhalb 300°. Lit. bedeutend. — II, 1100; \*II, 674.
  - 3) Isohydrobenzoin. Sm. 95—96° (119,5°; 121° wasserfrei) (A. 168, 75; 182, 279; 198, 150; 307, 130; B. 17, 909; 28, 1867, 3181; 30, 1531; 34, 1539; J. pr. [2] 25, 262; Soc. 69, 1279). — II, 1101; \*II, 674.
  - 4) isom. Isohydrobenzoin. Sm. 124—125° (A. 226, 80). — II, 1102.
  - 5) α-Oxy-α[4-Oxyphenyl]-α-Phenyläthan. Sm. 186—187° (A. 363, 277 C. 1909 [1] 176).
  - 6) αα-Di[4-Oxyphenyl]äthan. Sm. 122,9° (126°). + C<sub>6</sub>H<sub>6</sub>O (B. 11, 283; 19, 3009; A. 325, 29 C. 1903 [1] 460; C. 1904 [1] 1650; A. 363, 255 C. 1909 [1] 174). — II, 994.
  - 7) αβ-Di[2-Oxyphenyl]äthan. Sm. 115° (A. 305, 99). — \*II, 604.
  - 8) αβ-Di[p-Oxyphenyl]äthan. Sm. 185° (189°) (B. 7, 239; 20, 914). — II, 993.
  - 9) p-Dioxy-2-Methyldiphenylmethan. Sm. 138—139° (B. 26, 1855). — II, 994.
  - 10) 4,4'-Dioxy-3-Methyldiphenylmethan. Sm. 133° (A. 356, 153 C. 1907 [2] 1699).
  - 11) 4,4'-Dioxy-2,2'-Dimethylbiphenyl. Sm. 114° (C. 1902 [2] 1448).
  - 12) 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 157° (160—161°) (B. 21, 749, 1067; Am. 31, 127 C. 1904 [1] 809). — II, 993.
  - 13) 6,6'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 143° (A. 270, 366). — II, 993.
  - 14) 2-Methyläther d. α,2-Dioxydiphenylmethan. Sm. 141° (B. 41, 332 C. 1908 [1] 834).
  - 15) 4-Methyläther d. α,4-Dioxydiphenylmethan. Sm. 58° (J. pr. [2] 77, 20 C. 1908 [1] 630).
  - 16) 3-Methyläther d. 3,4-Dioxydiphenylmethan (Benzylguajakol). Sd. 269—270°<sub>733</sub> (C. 1898 [1] 207). — \*II, 604.
  - 17) Dimethyläther d. 2,2'-Dioxybiphenyl. Sm. 155°; Sd. 299,5—301° (307—308°<sub>766</sub>) (B. 31, 1745; B. 35, 304 C. 1902 [1] 586; A. 332, 62 C. 1904 [2] 41). — \*II, 601.
  - 18) Dimethyläther d. 3,3'-Dioxybiphenyl. Sm. 36°; Sd. 310—320° (328°) (B. 27, 2109; J. pr. [2] 59, 226; A. 156, 99; B. 39, 3343 C. 1906 [2] 1645). — II, 987; \*II, 601.
  - 19) Dimethyläther d. isom. p,3,3'-Dioxybiphenyl (B. 11, 1337).

- $C_{14}H_{14}O_2$
- 20) Dimethyläther d. 4,4'-Dioxybiphenyl. Sm. 172° (B. 30, 2849; Am. 31, 127 C. 1904 [1] 809; A. 332, 67 C. 1904 [2] 42). — \*II, 602.
  - 21) Dimethyläther d. p-Dioxybiphenyl. Sm. 146° (A. 156, 99).
  - 22) Diphenyläther d.  $\alpha\alpha$ -Dioxyäthan. Sm. 10°; Sd. 174—176°<sub>27</sub> (Bl. [3] 23, 515). — \*II, 356.
  - 23) Diphenyläther d.  $\alpha\beta$ -Dioxyäthan. Sm. 98,5° (95°) (Z. 1869, 165, 447; C. 1895 [1] 825; 1899 [1] 25; Soc. 69, 166). — II, 655; \*II, 356.
  - 24) Methylbenzyläther d. 1,2-Dioxybenzol. Sm. 62° (C. 1898 [1] 857).
  - 25) 3,5-Diketo-1-[ $\beta$ -Phenyläthenyl]hexahydrobenzol (Cinnamenylhydroresorcin). Sm. 188° u. Zers. (186°) (A. 294, 312; B. 36, 2339 C. 1903 [2] 438; A. 345, 208 C. 1906 [1] 1493). — \*III, 218.
  - 26) Propyl-1-Oxy-2[ $\beta$ ]-Naphthylketon. Sm. 78° (J. pr. [2] 43, 97). — III, 176.
  - 27) Isopropyl-1-Oxy-2[ $\beta$ ]-Naphthylketon. Sm. 79° (J. pr. [2] 43, 97). — III, 176.
  - 28) Methyläther d. Äthyl-1-Oxy-2[ $\beta$ ]-Naphthylketon. Sm. 58° (B. 23, 1209). — III, 176.
  - 29) Äthyläther d. Methyl-2[oder 3]-Oxy-1-Naphthylketon. Sm. 62—63° (B. 23, 1210). — III, 174.
  - 30) Äthyläther d. Methyl-4-Oxy-1-Naphthylketon. Sm. 78—79°; Sd. 320° u. ger. Zers. (B. 23, 1209; 28, 1947). — III, 174; \*III, 141.
  - 31)  $\epsilon$ -Keto- $\delta$ -Acetyl- $\alpha$ -Phenyl- $\alpha\gamma$ -Hexadien (Cinnamylidenacetylaceton). Sm. 103—104°; Sd. 304° (Soc. 85, 1458 C. 1905 [1] 171; B. 37, 4483 C. 1905 [1] 248).
  - 32) 1,4-Di[ $\gamma$ -Keto- $\alpha$ -Butenyl]benzol (p-Phenylendiakrylmethylketon). Sm. 156° (A. 231, 379). — III, 280.
  - 33) 2,4-Diketooktohydrophenanthren. Sm. 160° u. Zers. (B. 31, 1900). — \*III, 218.
  - 34) Äthylester d. Benznorcaradiäncarbonsäure. Sd. 163—164°<sub>11</sub> (B. 36, 3504 C. 1903 [2] 1273).
  - 35) 2-Naphtylester d. Isobuttersäure. Sm. 43° (A. 301, 113). — \*II, 521.
  - 36) Acetat d. 1-[ $\beta$ -Oxyäthyl]naphtalin. Sd. 183°<sub>12</sub> (D.R.P. 164883 C. 1905 [2] 1752).
  - 37) Acetat d. 2-Oxy-1,4-Dimethylnaphtalin. Sm. 78° (B. 12, 1575; G. 34 [2] 324 C. 1905 [1] 98). — II, 894.
- $C_{14}H_{14}O_3$
- 38) Verbindung (aus Benzoylamidoessigsäure) (A. 113, 337). — II, 1189.  
C 73,1 — H 6,1 — O 20,8 — M. G. 230.
  - 1) 4'-Methyläther d. 2,5,4'-Trioxydiphenylmethan. Sm. 126°; Sd. 271°<sub>18</sub> (B. 37, 3487 C. 1904 [2] 1301).
  - 2) Dimethyläther d. 2,2'-Dioxydiphenyläther. Sm. 78°; Sd. 330—331° (B. 39, 623 C. 1906 [1] 1012).
  - 3) 2-[2-Oxybenzyl]äther d. 2-Oxy-1-Oxymethylbenzol (Saliretin) (A. 56, 46; 117, 90; 156, 123; A. ch. [3] 7, 215; C. 1900 [1] 771). — II, 1109; \*II, 680.
  - 4) Isopropyl-1,8-Dioxy-2-Naphthylketon. Sm. 88° (C. 1901 [2] 1287). — \*III, 143.
  - 5) 2-Acetyl-1,8-Dioxy-3,6-Dimethylnaphtalin. Sm. 183—184°. Ba + 3H<sub>2</sub>O (Soc. 63, 127, 334). — III, 176; \*III, 143.
  - 6) 3,4-Methylenäther d. 1-Keto-5-Methyl-3-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 84—85°; Sd. 234°<sub>14</sub> (A. 303, 230). — \*III, 139.
  - 7) 5-Acetyl-4,6-Diketo-2-Phenylhexahydrobenzol. Sm. 104°. Cu (B. 37, 3382 C. 1904 [2] 1219).
  - 8)  $\alpha$ -Oxybutter-1-Naphthyläthersäure. Sm. 113—114° (B. 33, 1388). — \*II, 504.
  - 9)  $\alpha$ -Oxybutter-2-Naphthyläthersäure. Sm. 126,5° (B. 33, 1391). — \*II, 522.
  - 10)  $\alpha$ -Oxyisobutter-1-Naphthyläthersäure. Sm. 130—131°. Ba + H<sub>2</sub>O (D.R.P. 80986; B. 33, 1388; C. 1906 [2] 327). — \*II, 504.
  - 11)  $\alpha$ -Oxyisobutter-2-Naphthyläthersäure. Sm. 123°. Ba + H<sub>2</sub>O (D.R.P. 80986; B. 33, 1391; C. 1906 [2] 327). — \*II, 522.
  - 12) 2-Oxynaphtalinpropyläther-1-Carbonsäure. Sm. 79°; Zers. bei 145° (C. r. 136, 618 C. 1903 [1] 881; Bl. [3] 31, 33 C. 1904 [1] 519).
  - 13)  $\epsilon$ -Keto- $\alpha$ -Phenyl- $\alpha\gamma$ -Heptadien- $\eta$ -Carbonsäure (Cinnamallävulinsäure). Sm. 161°. Ca + 4H<sub>2</sub>O, Ba, Ag (B. 38, 1116 C. 1905 [1] 1241).

- C<sub>14</sub>H<sub>14</sub>O<sub>3</sub>** 14) Äthylester d.  $\alpha$ -Oxy- $\alpha$ -[2-Naphtyl]essigsäure. Sm. 87° (B. 24, 548). — II, 1692.
- 15) Äthylester d. Oxyessig-1-Naphtyläthersäure. Sm. 173—174° (G. 16, 438). — II, 858.
- 16) Äthylester d. Oxyessig-2-Naphtyläthersäure. Sm. 48—49° (G. 16, 441). — II, 878.
- 17) Äthylester d. 2-Methyl-5-Phenylfuran-3-Carbonsäure. Fl. (B. 17, 917). — III, 712.
- 18) Äthylester d. 2-Methyl-5-Phenylfuran-4-Carbonsäure. Sd. 193 bis 194°<sub>20</sub> (B. 39, 1923 C. 1906 [2] 118).
- 19) Äthylester d. 3-Methylinden-1-Ketocarbonsäure. Sm. 92—94° (A. 347, 286 C. 1906 [2] 959).
- 20) Acetat d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sd. 200°<sub>14</sub> (B. 37, 3382 C. 1904 [2] 1219).
- 21) Acetat d. 7-Oxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran (B. 37, 1792 C. 1904 [1] 1612).
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>** 22) Verbindung (aus Dibenzoyldiacetylaceton) (B. 28, 1825). — \*III, 250. C 68,3 — H 5,7 — O 26,0 — M. G. 246.
- 1) 1,3,1',3'-Tetraoxy- $\beta$ -Äthylbiphenyl (M. 11, 418). — II, 1038.
- 2) s-Di[2,5-Dioxy-1-Methyl]- $\beta$ -Biphenyl? Sm. 202° u. Zers. (M. 10, 175). — II, 955.
- 3)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[2-Oxyphenyl]äthan (Soc. 89, 1516 C. 1907 [1] 340).
- 4)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 222° (B. 10, 1268). — II, 1118.
- 5) isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 197,5° (B. 10, 1268). — II, 1118.
- 6)  $\alpha\beta$ -Di[2,4-Dioxyphenyl]äthan? (J. pr. [2] 54, 417). — \*II, 632.
- 7) Di[3-Oxyphenyläther] d.  $\alpha\alpha$ -Dioxyäthan. Sm. 285—286° (Bl. [3] 23, 519; A. ch. [7] 1, 99). — II, 918; \*II, 567.
- 8) Di[4-Oxyphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 219—220° u. Zers. (A. 280, 202). — II, 940.
- 9) Diphenylformalsuperoxyhydrat (Dibenzalperoxyd). Sm. 60—62° (B. 33, 2485; A. 298, 292). — \*III, 4.
- 10) 1,4-Di[ $\alpha\gamma$ -Diketobutyl]benzol (1,4-Phtalyldiaceton). Sm. 184° (J. pr. [2] 74, 130 C. 1906 [2] 1123).
- 11) Äthyläther d. 4-Oxy-3-Acetyl-7-Methyl-1,2-Benzpyron. Sm. 133° (A. 367, 236 C. 1909 [2] 1238).
- 12) Äthyläther d. 7-Oxy-3-Acetyl-2-Methyl-1,4-Benzpyron. Sm. 130° (B. 34, 107). — \*III, 568.
- 13) Curcumin (oder C<sub>21</sub>H<sub>20</sub>O<sub>6</sub>). Sm. 178° (183°). K, K<sub>2</sub>, Ca, Ba, Zn, Ag (B. 3, 609, 624, 713; 5, 1103; 6, 196; 14, 485; 15, 1761; 16, 572; 30, 192; Am. 4, 77; 6, 80; B. 38, 2712 C. 1905 [2] 1096; B. 39, 2269 C. 1906 [2] 432). — III, 659.
- 14) Rubrocurcumin (Am. 39, 711 C. 1908 [2] 513).
- 15) Rosocyanin. NH<sub>4</sub>, K, Ba (B. 38, 2711 C. 1905 [2] 1096; Am. 39, 703 C. 1908 [2] 512).
- 16)  $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadien-3,4-Methylenäther- $\delta$ -Carbonsäure ( $\alpha$ -Äthylpiperinsäure). Sm. 179° (B. 28, 1188). — II, 1871.
- 17)  $\alpha$ -Phenyl- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 213—214° (B. 38, 3895 C. 1906 [1] 191).
- 18) 5-Methyl-8-Isopropyl-1,4-Benzpyron-2-Carbonsäure. Sm. 245° u. Zers. (Soc. 79, 920). — \*III, 554.
- 19) 8-Methyl-5-Isopropyl-1,4-Benzpyron-2-Carbonsäure. Sm. 237—238° u. Zers. (Soc. 79, 921). — \*III, 554.
- 20)  $\alpha$ -Ketodilakton d. Benzyl- $\beta$ -Acetylglutarsäure. Sm. 134° (A. 314, 35). — \*II, 1137.
- 21)  $\beta$ -Ketodilakton d. Benzyl- $\beta$ -Acetylglutarsäure. Sm. 169° (A. 314, 37). — \*II, 1137.
- 22) Methylester d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 162° (A. 294, 275). — \*II, 1084.
- 23) Dimethylester d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta\delta$ -Dicarbonsäure. Sm. 67° (A. 306, 253). — \*II, 1083.
- 24) Äthylester d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\epsilon$ -Phenyl- $\alpha\delta$ -Pentadien- $\alpha$ -Carbonsäure. Sm. 84° (B. 31, 1309; Soc. 95, 116 C. 1909 [1] 1236). — \*II, 1083.



- $C_{14}H_{14}O_4$  25) Äthylester d.  $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Butadien-3,4-Methylenäther- $\delta$ -Carbonsäure (Ä. d. Piperinsäure). Sm. 77—78° (*J.* 1857, 414; *A.* 152, 31). — II, 1869.
- 26) Monäthylester d. Benzol-1,4-Di[Äthenyl- $\beta$ -Carbonsäure]. Sm. 200° (*A.* 231, 377). — II, 1876.
- 27) Acetat d. 7-Oxy-2-Propyl-1,4-Benzpyron. Sm. 64—65° (*B.* 34, 1698). — \*III, 559.
- $C_{14}H_{14}O_5$  28) Verbindung (aus Guajakharz). Sm. 200° (*J.* 1862, 466). — III, 558.  
C 64,1 — H 5,3 — O 30,5 — M. G. 262.
- 1) Trimethyläther d. Purpurogallin. Sm. 174—177° (*Soc.* 83, 196 *C.* 1903 [1] 401, 639).
- 2) Monoäthyläther d. Phloroglucid. Sm. 165—168° (*M.* 29, 681 *C.* 1908 [2] 1443).
- 3) Danaïn (*J.* 1885, 1815). — III, 579.
- 4)  $\delta$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Penten- $\beta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure (Benzyliden- $\beta$ -Acetylglutarsäure). Ca +  $1\frac{1}{2}H_2O$ , Ba +  $H_2O$ , Ag<sub>2</sub> (*A.* 314, 31). — \*II, 1138.
- 5) Dimethyldihydrophthalidtetronsäure. Sm. 250° u. Zers. (*A.* 315, 171).
- 6) Äthylbergaptensäure. Sm. 142° (*M.* 12, 385). — II, 2014.
- 7)  $\alpha$ -Salylsäure. Sm. 100—101°. Ag<sub>2</sub> (*A. Spl.* 7, 165). — III, 78.
- 8) Yangonasäure. Sm. 126—126,5° (*Ar.* 246, 360 *C.* 1908 [2] 889).
- 9) Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenylpropan- $\beta$ -Ketocarbonsäure- $\beta$ -Carbonsäure-äthylester. Fl. (*B.* 31, 196). — \*II, 1172.
- 10) Methylester d. Methylbergaptensäure. Sm. 52° (*M.* 12, 384). — II, 2014.
- 11) Äthylester d.  $\gamma$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha$ -Buten-3,4-Methylenäther- $\beta$ -Carbonsäure. Sm. 83° (*B.* 37, 1703 *C.* 1904 [1] 1497).
- 12) Äthylester d. 7-Oxy-3-Methyl-1,2-Benzpyron-4-Methylcarbonsäure. Sm. 140° (*B.* 24, 4103). — II, 2015.
- 13) Äthylester d. 4-Oxy-7-Methyl-1,2-Benzpyron-4-Methyläther-3-Carbonsäure. Sm. 126° (*A.* 367, 223 *C.* 1909 [2] 1236).
- 14) Äthylester d. 4-Oxy-1,2-Benzpyron-4-Äthyläther-3-Carbonsäure. Sm. 124° (*A.* 367, 183 *C.* 1909 [2] 703).
- 15) Verbindung (Äthyläthersäure aus Diacetylaceton). Sm. 197° (*B.* 28, 1827). — II, 1968.  
C 60,4 — H 5,0 — O 34,5 — M. G. 278.
- $C_{14}H_{14}O_6$  1)  $\alpha\beta$ -Diphenyläther d. Hexaoxyäthan? (Diphenylester d. Orthooxalsäure?). Sm. 126—127° (*Soc.* 43, 360; *B.* 17, 1740). — II, 666.
- 2) Benzosuccinin (*J.* 1856, 603). — II, 1142.
- 3) Phöniceïn. Zers. bei 190° (*C.* 1901 [2] 858, 1085). — \*III, 491.
- 4) Oxyfumareugenoläthersäure. Sm. 172—173° u. Zers. (*Soc.* 79, 1186).
- 5)  $\alpha\delta$ -Di[2-Furanyl]butan- $\beta\gamma$ -Dicarbonsäure. Sm. 173° (*B.* 34, 1630). — \*III, 516.
- 6) Dimethyldicumarinsäure (*B.* 20, 1329). — II, 2019.
- 7) Hydrogardeniasäure. Sm. 190° (*A.* 200, 321). — III, 633.
- 8) Pyrousnetinsäure. Sm. 183—186° (*G.* 12, 238; *A.* 324, 156 *C.* 1902 [2] 1511). — II, 2058; \*II, 1206.
- 9) Secalonsäure. Sm. 244° (*Ar.* 244, 344 *C.* 1906 [2] 1571).
- 10) Usnidinsäure +  $1\frac{1}{2}H_2O$  (Usnetinsäure). Sm. 195° u. Zers. (197°). Na +  $2H_2O$ , Ba +  $3H_2O$  (*B.* 9, 1460; *J. pr.* [2] 63, 526; *A.* 319, 393 *C.* 1902 [1] 434; *J. pr.* [2] 65, 541 *C.* 1902 [2] 380).
- 11)  $\beta\delta$ -Lakton d.  $\delta$ -Oxy- $\gamma$ -Benzoxyl- $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 209° (*Soc.* 75, 421). — \*II, 724.
- 12)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -[4-Methoxyphenyl]propan- $\beta\gamma$ -Dicarbonsäure- $\beta$ -Äthylester. Sm. 96°. Diäthylaminsalz (*Bl.* [3] 35, 1267 *C.* 1907 [1] 740).
- 13) Äthylester d.  $\alpha$ -[3,4-Dioxybenzoyl]acetessig-3,4-Methylenäthersäure. Fl. Na, Cu (*C.* 1906 [1] 346).
- 14) Äthylester d. 4,5-Dioxy-1,3-Diketo-2,3-Dihydroinden-4,5-Dimethyläther-2-Carbonsäure. Sm. 58° u. Zers. Na (*B.* 31, 2091, 2544). — \*II, 1173.
- 15)  $\beta$ -Äthylester d.  $\alpha\gamma$ -Diketo- $\alpha$ -Phenylbutan- $\beta$ ,2-Dicarbonsäure. Fl. (*J. pr.* [2] 35, 452). — II, 2018.

- C<sub>14</sub>H<sub>14</sub>O<sub>6</sub>** 16) Diäthylester d. 1-Oxymethylbenzol-2,3,6-Tricarbonsäure- $\alpha$ ,2-Lakton. Sm. 112° (A. 311, 140). — \*II, 1197.
- 17) Diacetat d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 120° (C. 1908 [2] 308).
- 18) Verbindung (aus Citronenöl). Sm. 115—116° (Soc. 57, 326). — III, 636.
- C<sub>14</sub>H<sub>14</sub>O<sub>7</sub>** C 57,1 — H 4,8 — O 38,1 — M. G. 294.
- 1) Eichengerbsäure, siehe C<sub>17</sub>H<sub>16</sub>O<sub>8</sub>. — III, 586.
- 2) Methylester d. 5,6,7-Triox-1,2-Benzpyron-5,6,7-Trimethyläther-4-Carbonsäure. Sm. 105—106° (G. 25 [2] 370). — \*II, 1206.
- 3) Äthylester d. 5,6,7-Triox-1,2-Benzpyron-5,7-Dimethyläther-4-Carbonsäure. Sm. 199—200° (G. 25 [2] 366). — \*II, 1216.
- 4) Triacetat d. Methyl-2,3,4-Trioxphenylketon (Tr. d. Gallacetophenon). Sm. 85° (83°) (Bl. [3] 6, 159; B. 30, 1465). — III, 139; \*III, 109.
- 5) Farbstoff (aus Heidelbeeren) (C. 1895 [2] 1084).
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>** C 54,2 — H 4,5 — O 41,3 — M. G. 310.
- 1) Rhodoxantin (J. 1852, 686).
- 2) Thujetin (J. 1858, 514). — III, 614.
- 3) Rhodotannsäure (J. 1852, 686). — II, 2076.
- 4) Benzoldi-1,4-[Äthyl- $\beta$ - $\beta$ -Dicarbonsäure] (p-Xylylendimalonsäure). Sm. 195° u. Zers. Ag<sub>4</sub> (B. 21, 39). — II, 2076.
- 5) Methylester d. 2,4,6-Triacetoxybenzol-1-Carbonsäure. Sm. 77 bis 79° (M. 22, 225).
- 6) Dimethylester d. 5-Acetoxy-1-Methylbenzol-2,3,4-Tricarbonsäure. Sm. 149° (B. 35, 2912 C. 1902 [2] 1042).
- 7) Tetramethylester d. Benzol-1,2,3,4-Tetracarbonsäure. Sm. 104 bis 108° (A. 166, 332). — II, 2073.
- 8) Tetramethylester d. Benzol-1,2,4,5-Tetracarbonsäure. Sm. 138° (A. 166, 339). — II, 2073.
- 9) Tetraacetat d. 1,2,3,4-Tetraoxybenzol. Sm. 136° (B. 37, 120 C. 1904 [1] 586).
- 10) Tetraacetat d. 1,2,4,5-Tetraoxybenzol. Sm. 217° (B. 21, 2378). — II, 1032.
- C<sub>14</sub>H<sub>14</sub>O<sub>9</sub>** C 51,5 — H 4,3 — O 44,2 — M. G. 326.
- 1) Hamamelitannin + 2 $\frac{1}{2}$ (5)H<sub>2</sub>O. Sm. 115—117° (C. 1898 [2] 374). — \*III, 496.
- 2) Callutansäure (J. 1852, 682). — II, 2090.
- C<sub>14</sub>H<sub>14</sub>O<sub>10</sub>** C 49,1 — H 4,1 — O 46,8 — M. G. 342.
- 1) Chebulinsäure (J. 1884, 1443). — II, 2109.
- 2) Tetramethylester d. 3,6-Dioxybenzol-1,2,4,5-Tetracarbonsäure. Sm. 207° (A. 258, 318). — II, 2095.
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>** C 80,0 — H 6,7 — N 13,3 — M. G. 210.
- 1) 2,4-Diamido- $\alpha$ - $\beta$ -Diphenyläthen. Sm. 119—120°. 2HCl + 2H<sub>2</sub>O (B. 34, 2843). — \*IV, 668.
- 2) cis- $\alpha$ - $\beta$ -Di[2-Amidophenyl]äthen. Sm. 123°. 2HCl (B. 28, 1413). — IV, 994.
- 3) trans- $\alpha$ - $\beta$ -Di[2-Amidophenyl]äthen. Sm. 176° (168°). 2HCl + 2H<sub>2</sub>O (B. 21, 2078; 28, 1413; A. 305, 97). — IV, 994; \*IV, 667.
- 4)  $\alpha$ - $\beta$ -Di[4-Amidophenyl]äthen (Diamidostilben). Sm. 227—228°. 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 6, 330; 16, 943; 19, 3237; Z. El. Ch. 9, 419; J. pr. [2] 39, 502; C. 1900 [2] 1167). — IV, 994; \*IV, 667.
- 5)  $\beta$ -Imido- $\beta$ -Phenylamido- $\alpha$ -Phenyläthan (Phenacetphenylamidin). Sm. 139°. HCl (A. 184, 343; J. pr. [2] 54, 128). — IV, 850.
- 6)  $\alpha$ -Imido- $\alpha$ -Methylphenylamido- $\alpha$ -Phenylmethan (Benzenylmethylphenylamidin). Sm. 85°. HJ, Pikrat (B. 30, 1782). — IV, 842.
- 7)  $\alpha$ -Imido- $\alpha$ -Benzylamido- $\alpha$ -Phenylmethan (Benzylbenzenylamidin). Sm. 77—78°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 2, 648; 6, 334; 25, 1583). — IV, 843.
- 8)  $\alpha$ -Methylimido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan (Benzenylphenylamidmethylimidin). Sm. 134°. HJ, Pikrat (B. 28, 2371; A. 365, 207 C. 1909 [1] 1812). — IV, 841.
- 9)  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Amido- $\alpha$ -Phenylmethan (Benzenyl-2-Methylphenylamidin). Sm. 105—108° (J. pr. [2] 54, 124). — IV, 844.
- 10)  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Amido- $\alpha$ -Phenylmethan (Benzenyl-4-Methylphenylamidin). Sm. 99—99,5°. HCl, (2HCl, PtCl<sub>4</sub>), Oxalat (A. 184, 355; J. pr. [2] 54, 126). — IV, 844.

- $C_{14}H_{14}N_2$
- 11)  $\alpha$ -Imido- $\alpha$ -Phenylamido- $\alpha$ -[2-Methylphenyl]methan (2-Methylbenzenylphenylamidin). Sm. 121–123° (*J. pr.* [2] 54, 128). — IV, 850.
  - 12)  $\alpha$ -Imido- $\alpha$ -Phenylamido- $\alpha$ -[4-Methylphenyl]methan (4-Methylbenzenylphenylamidin). Sm. 149° (*J. pr.* [2] 54, 129). — IV, 851.
  - 13)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamidoäthan (Diphenyläthanamidin). Sm. 131 bis 132°. Ag, HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Pikrat (*J.* 1865, 414; *C.* 1900 [1] 1128; *A.* 184, 362; 273, 300; *Soc.* 77, 738; *B.* 7, 539, 541; 15, 208; 19, 1071; 22, 3305; 23, 2059; 30, 2792, 2879; *G.* 24 [1] 448; *B.* 40, 4297 *C.* 1907 [2] 1838). — II, 346; \*II, 160.
  - 14) Isodiphenyläthanamidin. Sm. 62–63°. (2HCl, PtCl<sub>4</sub>), CHNS (*A.* 192, 25). — II, 347.
  - 15)  $\beta$ -Phenylimido- $\alpha$ -Phenylamidoäthan. Sm. 103–105° (*M.* 8, 189; D.R.P. 40889). — II, 443; \*II, 235.
  - 16)  $\alpha$ -Phenylimido- $\alpha$ -Methylphenylamidomethan (Methyldiphenylformamidin). Sd. 214°<sub>22</sub>. HCl, (HCl, AuCl<sub>3</sub>) (*Am.* 13, 519; 20, 859; *J. pr.* [2] 57, 217). — II, 346; \*II, 159.
  - 17)  $\alpha$ -Phenylimido- $\alpha$ -Benzylamidomethan (Phenylbenzylformamidin) (*Am.* 13, 528). — II, 523.
  - 18)  $\alpha$ -Phenylimido-2-Methylphenylamidomethan. Sm. 100°. (2HCl, PtCl<sub>4</sub>, Sm. 206–207°), (Pikrat, Sm. 170°) (*J. pr.* [2] 57, 226). — \*II, 249.
  - 19)  $\alpha$ -Phenylimido-4-Methylphenylamidomethan (Phenyl-4-Methylphenylformamidin). Sm. 86° (*B.* 32, 36; *Am.* 20, 856). — \*II, 267.
  - 20) isom.  $\alpha$ -Phenylimido-4-Methylphenylamidomethan? Sm. 120°. (2HCl, PtCl<sub>4</sub>, Sm. 213°), (Pikrat, Sm. 178°) (*J. pr.* [2] 55, 41; [2] 57, 210; *Am.* 19, 367; *B.* 32, 36). — \*II, 267.
  - 21) isom.  $\alpha$ -Phenylimido-4-Methylphenylamidomethan? Sm. 98°. (2HCl, PtCl<sub>4</sub>, Sm. 207°), (Pikrat, Sm. 196°) (*J. pr.* [2] 55, 43; [2] 57, 214; *Am.* 19, 367; *B.* 32, 36). — \*II, 267.
  - 22) 2-Methylphenylimido- $\alpha$ -Phenylamidomethan. Sm. 109–110°. (2HCl, PtCl<sub>4</sub>, Sm. 209–210°), (Pikrat, Sm. 176°) (*J. pr.* [2] 57, 229). — \*II, 249.
  - 23) 4-Methylphenylimido- $\alpha$ -Phenylamidomethan? Sm. 132°. (2HCl, PtCl<sub>4</sub>, Sm. 127°), (Pikrat, Sm. 209°) (*J. pr.* [2] 55, 42; [2] 57, 212; *Am.* 19, 367; *B.* 32, 36).
  - 24) isom. 4-Methylphenylimido- $\alpha$ -Phenylamidomethan? Sm. 102°. (2HCl, PtCl<sub>4</sub>, Sm. 218°), (Pikrat, Sm. 193°) (*J. pr.* [2] 55, 44; [2] 57, 214; *Am.* 19, 367; *B.* 32, 36).
  - 25)  $\alpha$ -Imido- $\alpha$ -Diphenylmethylanidomethan (Benzhydrylformamidin). Sm. 118–120°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 31, 1772). — IV, 994.
  - 26) 4-Benzylidenamido-2-Amido-1-Methylbenzol. Sm. 90–91° (*B.* 32, 2358). — \*IV, 402.
  - 27) 4-[4-Amidobenzyliden]amido-1-Methylbenzol (D.R.P. 106719). — \*III, 23.
  - 28)  $\alpha$ -Äthyliden- $\beta$ - $\beta$ -Diphenylhydrazin. Sm. 60–61° (*B.* 25, 2063; *B.* 39, 3584 *C.* 1907 [1] 18). — IV, 746.
  - 29)  $\alpha$ -Methylen- $\beta$ -Phenyl- $\beta$ -Benzylhydrazin. Sm. 41° (*B.* 32, 3237). — \*IV, 541.
  - 30)  $\beta$ -Benzyliden- $\alpha$ -Methyl- $\alpha$ -Phenylhydrazin. Sm. 106° (104,5°) (*A.* 227, 352; *B.* 27, 373; 29, 814). — IV, 749.
  - 31)  $\alpha$ -Benzyliden- $\beta$ -Benzylhydrazin. Sm. 65° (69–70°). HCl, Pikrat (*J. pr.* [2] 39, 48; [2] 58, 374; [2] 62, 90, 96; *B.* 28, 2345; 33, 2738). — IV, 811, 979; \*IV, 539.
  - 32)  $\alpha$ -Benzyliden- $\beta$ -[2-Methylphenyl]hydrazin. Sm. 100–102° (*C.* 1903 [2] 1432).
  - 33)  $\alpha$ -Benzyliden- $\beta$ -[3-Methylphenyl]hydrazin. Sm. 96° (D.R.P. 163035 *C.* 1905 [2] 1299).
  - 34)  $\alpha$ -Benzyliden- $\beta$ -[4-Methylphenyl]hydrazin. Sm. 114° (125°) (*C.* 1903 [2] 1432; *J. pr.* [2] 78, 56 *C.* 1908 [2] 689).
  - 35) 3-Methylbenzylidenphenylhydrazin. Sm. 91° (87–88°; 84°) (*A.* 248, 100; *B.* 17, 1468; 32, 2533; *C.* 1905 [1] 359). — IV, 754; \*IV, 488.
  - 36) 4-Methylbenzylidenphenylhydrazin. Sm. 108° (114°; 112–113°) (*B.* 32, 1286; *C.* 1905 [1] 360; *B.* 38, 1364 *C.* 1905 [1] 1387; *C.* 1906 [2] 1003; *A.* 347, 353 *C.* 1906 [2] 603). — \*IV, 488.
  - 37)  $\alpha$ -Hydrazon- $\alpha$ - $\beta$ -Diphenyläthan (Benzylphenylmethylenhydrazin). Sm. 62° (*J. pr.* [2] 52, 136). — III, 218.



- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>** 38)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenyläthan. Sm. 105° (99°) (B. 16, 662; 19, 1206; 30, 737; 32, 434; A. 308, 16). — IV, 770; \*IV, 502.
- 39)  $\beta$ -Phenylhydrazon- $\alpha$ -Phenyläthan. Sm. 58° (62–63°) (B. 21, 1072; B. 38, 1365 C. 1905 [1] 1387). — IV, 754.
- 40) 2,4-Dimethylazobenzol. Sd. 205–215°<sub>50</sub> (B. 28, 2557; 31, 993; B. 40, 2269 C. 1907 [2] 593). — IV, 1387.
- 41) 2,2'-Dimethylazobenzol. Sm. 55° (75°) (B. 11, 1203; 17, 467; 18, 2555; 31, 992; D. R. P. 100234; J. r. 12, 360; 19, 406; A. 320, 127; C. 1898 [2] 775; 1904 [2] 1383). — IV, 1376; \*IV, 1019.
- 42) 2,3'-Dimethylazobenzol. Fl. (B. 17, 470; 31, 993). — IV, 1377.
- 43) 2,4'-Dimethylazobenzol. Sm. 71° (B. 31, 989). — IV, 1377.
- 44) 3,3'-Dimethylazobenzol. Sm. 54–55° (A. 207, 114; 320, 127; B. 10, 2097; 11, 1625; 31, 992; C. 1899 [1] 422). — IV, 1377; \*IV, 1020.
- 45) 3,4'-Dimethylazobenzol. Sm. 55° (56–58°) (B. 19, 1459; 28, 2557). — IV, 1378.
- 46) 4,4'-Dimethylazobenzol. Sm. 144° (J. 1864, 527; Z. 1866, 269; C. 1898 [2] 27; 1906 [1] 27; B. 3, 550; 6, 556; 11, 1205; 14, 1384; 16, 1048; 17, 472; 31, 991; 32, 2920; A. 207, 103; 320, 128; C. 1898 [2] 775; 1904 [2] 1383; Soc. 37, 553; M. 9, 829; J. pr. [2] 18, 198; B. 42, 391 C. 1909 [1] 844). — IV, 1378; \*IV, 1021.
- 47) 3-Methyl-1,2-Diphenyl-1,2-Dihydro-R-Azimethylen. Sm. 150–151° (J. pr. [2] 64, 155). — \*IV, 1088.
- 48) Toluolazimidotoluol. Sm. 56–58° (B. 19, 1459). — IV, 1260.
- 49)  $\alpha$ -[2-Amidophenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen. Sm. 136–137°. 2HCl, (2HCl, 2HgCl<sub>2</sub>), (2HCl, 2SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>CO<sub>3</sub> (B. 40, 3403 C. 1907 [2] 1343).
- 50)  $\alpha$ -[4-Amidophenyl]- $\beta$ -[4-Methyl-2-Pyridyl]äthen. Sm. 119°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, HgCl<sub>2</sub>) (B. 35, 2793 C. 1902 [2] 995). — \*IV, 668.
- 51)  $\alpha$ -[4-Amidophenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen. Sm. 139–140°. 2HCl, (2HCl, 2SnCl<sub>2</sub>), (2HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (B. 40, 3404 C. 1907 [2] 1343).
- 52) 2-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 101–102° (99 bis 101°) (B. 25, 3033; J. pr. [2] 51, 126). — IV, 637.
- 53) 3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin (Phenyltetrahydrochinazolin). Sm. 119° (117°) (J. pr. [2] 48, 554; [2] 52, 376; [2] 53, 420; B. 22, 2693; 25, 2858; 27, 2902; C. 1899 [1] 847). — IV, 636; \*IV, 409.
- 54) 4-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. HCl (B. 29, 1308). — IV, 973.
- 55) 1-Phenyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 38, 3924 C. 1906 [1] 247).
- 56) 2-Methyl-1-Äthyl- $\alpha$ -Naphtimidazol. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> + H<sub>2</sub>O, Chromat, Pikrat (Soc. 83, 1197 C. 1903 [2] 1445; Soc. 85, 1606 C. 1905 [1] 615).
- 57) 2-Methyl-3-Äthyl- $\beta$ -Naphtimidazol. Sm. 84°. (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (Soc. 83, 1193 C. 1903 [2] 1444; Soc. 85, 1599 C. 1905 [1] 614).
- 58) 2-Propyl-peri-Naphtimidazol. Sm. 157°. HCl (A. 365, 93 C. 1909 [1] 1411).
- 59) 2-Isopropyl-peri-Naphtimidazol (2-Isopropylperimidin). Sm. 87°. HCl, HNO<sub>3</sub> (B. 42, 3676 C. 1909 [2] 1663).
- 60) Nitril d.  $\beta$ -[1-Naphtyl]amidoisobuttersäure. Sm. 63–64° (B. 39, 1007 C. 1906 [1] 1343).
- 61) Nitril d.  $\beta$ -[2-Naphtyl]amidoisobuttersäure. Sm. 106–107° (B. 39, 1008 C. 1906 [1] 1343).
- 62) Verbindung + H<sub>2</sub>O (aus d. Verb. C<sub>7</sub>H<sub>7</sub>N) (C. 1906 [1] 1415). C 70,6 — H 5,9 — N 23,5 — M. G. 238.
- 1)  $\alpha\beta$ -Diamido- $\alpha\beta$ -Di[Phenylimido]äthan (Cyananilin; Diphenyldiamido-diimidoäthan). Sm. 214° (210–220°). 2HCl, (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>), 2HBr, 2HNO<sub>3</sub> (A. 66, 131; 73, 180; 287, 277; J. pr. [2] 35, 515; [2] 61, 452, 459; B. 40, 2654 C. 1907 [2] 223). — II, 448; \*II, 239.
- 2) Benzylidenamidophenylguanidin. Sm. 133°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Pikrat (G. 26 [2] 181). — IV, 1223.
- 3) 1,2-Di[ $\beta$ -Cyanisopropylidenamido]benzol. Sm. 136° (J. pr. [2] 78, 502 C. 1908 [2] 592).

**C<sub>14</sub>H<sub>14</sub>N<sub>4</sub>**

- C<sub>13</sub>H<sub>14</sub>N<sub>4</sub>**
- 4) 1,3-Di[ $\beta$ -Cyanisopropylidenamido]benzol. Sm. 185° (*J. pr.* [2] 78, 502 *C.* 1908 [2] 592).
  - 5) 1,4-Di[ $\beta$ -Cyanisopropylidenamido]benzol. Sm. 222° (*J. pr.* [2] 78, 502 *C.* 1908 [2] 592).
  - 6) 1,4-Di[Methylenhydrazido]biphenyl. Sm. 220° (*B.* 32, 1961). — \*IV, 945.
  - 7) Di[ $\alpha$ -Amidobenzyliden]hydrazin (Dibenzenyldiazidin). Sm. 202° (203°). 2HCl, 2HNO<sub>3</sub>, Pikrat (*B.* 26, 2130; 27, 996; *A.* 297, 249). — II, 1214; \*II, 762.
  - 8) Di[2-Amidobenzyliden]hydrazin. Sm. 244—245° (248°). HCl (*B.* 31, 2187; *M.* 25, 374 *C.* 1904 [2] 322; *G.* 35 [1] 513 *C.* 1905 [2] 471). — \*III, 30.
  - 9) Di[4-Amidobenzyliden]hydrazin. Sm. 245° (248°) (*J. pr.* [2] 56, 114; *B.* 39, 808 *C.* 1906 [1] 1246). — \*III, 30.
  - 10)  $\alpha\beta$ -Di[Phenylhydrazon]äthan (Phenylosazon d. Glyoxal). Sm. 179°. HCl (*B.* 17, 575, 2001; 25, 2553; 26, 97; 27, 182; 30, 2460, 2877; 31, 294, 299; 33, 3106; *J. pr.* [2] 49, 404; *G.* 23 [1] 532; *A.* 232, 231; *C.* 1896 [2] 891; *B.* 41, 960 *C.* 1908 [1] 1681). — IV, 755; \*IV, 490.
  - 11)  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazonäthan (Methylformazyl). Sm. 120—121° (123—123,5°) (*B.* 27, 154; 30, 2998; *J. pr.* [2] 64, 213; *B.* 36, 54, 87 *C.* 1903 [1] 452). — IV, 1227; \*IV, 893.
  - 12)  $\alpha$ -Phenylazo- $\alpha$ -[4-Methylphenyl]hydrazonmethan. Sm. 116—117° (*B.* 27, 1699).
  - 13)  $\alpha$ -[4-Methylphenyl]azo- $\alpha$ -Phenylhydrazonmethan. Sm. 116—117° (*B.* 27, 1699).
  - 14) Diphenylbishydrazimethylen. Sm. 147° (*J. pr.* [2] 44, 183; [2] 52, 135). — III, 287.
  - 15) 1,4-Di[3-Methyl-5-Pyrazolyl]benzol + H<sub>2</sub>O. Sm. 332° (*J. pr.* [2] 74, 132 *C.* 1906 [2] 1123).
  - 16) 5-Amido-2-[4-Äthylphenyl]-2,1,3-Benztriazol. Sm. 155°. (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 71, 415 *C.* 1905 [2] 42).
  - 17) 5-Amido-2-[2,5-Dimethylphenyl]-2,1,3-Benztriazol. Sm. 195°. (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 71, 405 *C.* 1905 [2] 40).
  - 18) 6-Methyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,3,4-Benztetrazin. Sm. 168° (*B.* 19, 1457). — IV, 1260.
  - 19) 2,3,7,8-Tetramethyl-1,4,6,9-Naphttetrazin (Tetramethyldichinoxalin). Sm. oberhalb 300° (*B.* 22, 444). — IV, 1244.
  - 20) 2,3,8,9-Tetramethyl-1,4,7,10-Naphtisotetrazin. Sm. 218° (*B.* 22, 1649). — IV, 1243.
  - 21) Diamidodimethyldiphenylenazon. Sm. 276° u. Zers. (*B.* 26, 2240). — IV, 1288.
  - 22) Toluylenviolett. (*B.* 12, 938). — IV, 608.
- C<sub>14</sub>H<sub>14</sub>N<sub>6</sub>**
- C 63,1 — H 5,3 — N 31,6 — M. G. 266.
- 1)  $\alpha$ -Imidoamidomethyl- $\beta$ -[ $\alpha$ -Phenylazobenzyliden]hydrazin (Guanazylbenzol). Sm. 199° (*B.* 30, 446). — IV, 1494.
  - 2) 3,6-Di[3-Amidophenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 179—190° (*B.* 35, 3936 *C.* 1903 [1] 38). — \*IV, 993.
  - 3) 7-Phenylazo-1,5-Dimethyl-1,2,3-Benztriazol. Sm. 202° (*J. pr.* [2] 63, 363). — \*IV, 935.
- C<sub>14</sub>H<sub>14</sub>Cl<sub>2</sub>**
- 1) 9,10-Dichlor-1,2,3,4,9,10-Hexahydroanthracen. Sm. 159° (*C. r.* 139, 606 *C.* 1904 [2] 1574; *Bl.* [4] 1, 708 *C.* 1907 [2] 1172).
- C<sub>14</sub>H<sub>14</sub>Br<sub>2</sub>**
- 1) 9,10-Dibrom-1,2,3,4,9,10-Hexahydroanthracen. Sm. 162° (*C. r.* 139, 606 *C.* 1904 [2] 1574; *Bl.* [4] 1, 706 *C.* 1907 [2] 1172).
  - 2) Verbindung (aus *s*-Diphenyläthan). Zers. bei 200° (*A.* 137, 273; *A. Spl.* 4, 117). — II, 233.
- C<sub>14</sub>H<sub>14</sub>J<sub>2</sub>**
- 1) 4-Äthyldiphenyljodoniumjodid. Sm. 160° (*A.* 327, 292 *C.* 1903 [2] 352).
  - 2) 2,2'-Dimethyldiphenyljodoniumjodid. Sm. 152°. + J<sub>2</sub> (*B.* 28, 1815). — \*II, 42.
  - 3) 2,3'-Dimethyldiphenyljodoniumjodid. Sm. 150° (*A.* 327, 279 *C.* 1903 [2] 351).
  - 4) 3,3'-Dimethyldiphenyljodoniumjodid. Sm. 155° (*A.* 327, 274 *C.* 1903 [2] 350).

- C<sub>14</sub>H<sub>14</sub>J<sub>2</sub>** 5) 3,4'-Dimethyldiphenyljodoniumjodid. Sm. 143° (A. 327, 281 C. 1903 [2] 351).  
6) 4,4'-Dimethyldiphenyljodoniumjodid. Sm. 146° (143—156°) (B. 28, 97; Soc. 81, 1358 C. 1902 [2] 1197). — \*II, 42.
- C<sub>14</sub>H<sub>14</sub>J<sub>4</sub>** 1) 2,2'-Dimethyldiphenyljodoniumtriiodid. Sm. 155° (B. 28, 1815). — \*II, 42.  
2) 4,4'-Dimethyldiphenyljodoniumtriiodid. Sm. 156° (B. 28, 97). — \*II, 42.
- C<sub>14</sub>H<sub>14</sub>S** 1) Dibenzylsulfid. Sm. 49°. Platinsalze, + HgJ<sub>2</sub> (A. 136, 88; 140, 87; 178, 371; J. pr. [2] 38, 521; Soc. 69, 1244; 77, 164; B. 36, 538 C. 1903 [1] 706; B. 38, 2815 C. 1905 [2] 1234). — II, 1054; \*II, 641.  
2) 2,4-Dimethyldiphenylsulfid (Phenyläther d. 4-Merkapto-1,3-Dimethylbenzol). Sd. 172,5°<sub>11</sub> (B. 28, 2324). — \*II, 488.  
3) 2,5-Dimethyldiphenylsulfid (Phenyläther d. 2-Merkapto-1,4-Dimethylbenzol). Sd. 171°<sub>11</sub> (B. 28, 2324). — \*II, 488.  
4) 3,4-Dimethyldiphenylsulfid. Sd. 181,5°<sub>11</sub> (B. 28, 2324). — \*II, 488.  
5) 2,2'-Dimethyldiphenylsulfid (o-Tolylsulfid). Sm. 64°; Sd. 285° (175°<sub>10</sub>) (G. 20, 30; B. 28, 1674; B. 39, 3595 C. 1907 [1] 29). — II, 820; \*II, 482.  
6) 2,3'-Dimethyldiphenylsulfid. Sd. 170°<sub>11</sub> (B. 39, 3595 C. 1907 [1] 29).  
7) 2,4'-Dimethyldiphenylsulfid. Sd. 173°<sub>11</sub> (B. 28, 2325). — \*II, 487.  
8) 3,3'-Dimethyldiphenylsulfid. Sd. 174°<sub>12</sub> (B. 39, 3595 C. 1907 [1] 29).  
9) 3,4'-Dimethyldiphenylsulfid. Sm. 27,8°; Sd. 179°<sub>11</sub> (B. 28, 2325). — \*II, 487.  
10) 4,4'-Dimethyldiphenylsulfid. Sm. 57,3°; Sd. 186°<sub>18</sub> (B. 12, 1176; 28, 1674, 2325; G. 20, 30). — II, 825; \*II, 487.
- C<sub>14</sub>H<sub>14</sub>S<sub>2</sub>** 1) 4,4'-Dimerkapto-3,3'-Dimethylbiphenyl. Sm. 113° (J. pr. [2] 41, 215). — II, 994.  
2) Dimethyläther d. 4,4'-Dimerkaptobiphenyl. Sm. 185—186° (B. 20, 2928). — II, 989.  
3) Diphenyläther d. αα-Dimerkaptoäthan. Fl. (B. 28, 1121).  
4) Diphenyläther d. αβ-Dimerkaptoäthan. Sm. 65° (B. 4, 717). — II, 783.  
5) Dibenzyldisulfid. Sm. 71—72°. + AgNO<sub>3</sub> (A. 70, 40; 136, 86; 140, 86, 234; R. 20, 137; B. 10, 1878; 12, 1053; 15, 861; 20, 15; 29, 2150; B. 36, 539 C. 1903 [1] 707; B. 40, 2870 C. 1907 [2] 594; Soc. 91, 2030 C. 1908 [1] 1174; Soc. 95, 1490 C. 1909 [2] 1739). — II, 1055; \*II, 642.  
6) isom. Dibenzylisulfid. Sm. 69—70°. + CH<sub>4</sub>O (B. 41, 632 C. 1908 [1] 1267).  
7) Di[2-Methylphenyl]disulfid. Sm. 38° (38—39°) (J. pr. [2] 54, 520; C. 1908 [2] 1351). — \*II, 483.  
8) Di[3-Methylphenyl]disulfid. Sd. etwa 150° u. Zers. (A. 169, 51). — II, 822.  
9) Di[4-Methylphenyl]disulfid. Sm. 46° (A. 136, 88; B. 11, 2066; J. pr. [2] 41, 190; Bl. [3] 27, 690 C. 1902 [2] 447; B. 41, 3409 C. 1908 [2] 1809; J. pr. [2] 79, 450 C. 1909 [2] 120). — II, 826.
- C<sub>14</sub>H<sub>14</sub>S<sub>3</sub>** 1) Di[2-Methylphenyl]trisulfid. Fl. (J. pr. [2] 60, 135). — \*II, 483  
2) Di[4-Methylphenyl]trisulfid. Sm. 76—77° (J. pr. [2] 60, 135). — \*II, 487.  
3) Dimethyläther d. Di[4-Merkaptophenyl]sulfid. Sm. 89° (R. 22, 362 C. 1904 [1] 23).
- C<sub>14</sub>H<sub>14</sub>S<sub>4</sub>** 4) Hydrat d. Thiobenzaldehyd. Fl. (B. 15, 864). — III, 19.  
1) Di[2-Methylphenyl]tetrasulfid. Fl. (J. pr. [2] 54, 522). — \*II, 483.  
2) Di[4-Methylphenyl]tetrasulfid. Sm. 75° (J. pr. [2] 37, 211; B. 20, 3414). — II, 826.
- C<sub>14</sub>H<sub>14</sub>S<sub>5</sub>** 1) Di[2-Methylphenyl]pentasulfid. Fl. (J. pr. [2] 54, 522).  
**C<sub>14</sub>H<sub>14</sub>As<sub>2</sub>** 1) 3,3'-Dimethylarsenobenzol. Sm. 106° (A. 320, 327 C. 1902 [1] 922). — \*IV, 1196.  
2) 4,4'-Dimethylarsenobenzol. Sm. 184° (A. 320, 301 C. 1902 [1] 920). — \*IV, 1192.
- C<sub>14</sub>H<sub>14</sub>Hg** 1) Quecksilberdi[2-Methylphenyl]. Sm. 107°; Sd. 219°<sub>14</sub> (A. 173, 165; 293, 291; B. 28, 1670; 31, 1529). — IV, 1710.  
2) Quecksilberdi[3-Methylphenyl]. Sm. 102° (B. 28, 588). — IV, 1710.  
3) Quecksilberdi[4-Methylphenyl]. Sm. 238° (A. 154, 171; 173, 163; B. 31, 1528; 32, 761). — \*IV, 1711.



- C<sub>14</sub>H<sub>14</sub>Se**
- 1) Dibenzylselenid. Sm. 45,5°. HNO<sub>3</sub>, 2 + PtCl<sub>4</sub> (A. 179, 8). — II, 1056.
  - 2) Di[2-Methylphenyl]selenid. Sm. 61—62°; Sd. 186°<sub>16</sub> (B. 28, 1671). \*II, 487.
  - 3) Di[4-Methylphenyl]selenid. Sm. 69—69,5°; Sd. 196—196,5°<sub>18</sub> (B. 28, 1672). — \*II, 488.
  - 4) Benzyl-4-Methylphenylselenid. Sm. 32—33° (Bl. [3] 35, 672 C. 1906 [2] 1120).
- C<sub>14</sub>H<sub>14</sub>Se<sub>2</sub>**
- 1) Dibenzyldiselenid. Sm. 90° (A. 179, 11; C. 1909 [1] 1861). — II, 1056.
  - 2) Di[4-Methylphenyl]diselenid. Sm. 47° (Bl. [3] 35, 671 C. 1906 [2] 1120).
- C<sub>14</sub>H<sub>14</sub>Te**
- 1) Di[2-Methylphenyl]tellurid. Sm. 37—38°; Sd. 202,5°<sub>16</sub> (B. 28, 1670). — \*II, 488.
  - 2) Di[4-Methylphenyl]tellurid. Sm. 63—64°; Sd. 210°<sub>18</sub> (B. 28, 1670). — \*II, 488.
- C<sub>14</sub>H<sub>15</sub>N**
- C 85,3 — H 7,6 — N 7,1 — M. G. 197.
- 1) β-Amido-α-Diphenyläthan. Fl. HCl, (2HCl, PtCl<sub>4</sub>) (B. 23, 2845). — II, 636.
  - 2) α-Amido-αβ-Diphenyläthan. Sd. 309—310°<sub>787</sub>. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Oxalat, Pikrat (B. 22, 1409; 28, 1860; G. 23 [2] 226; J. pr. [2] 77, 12 C. 1908 [1] 630). — II, 636; \*II, 350.
  - 3) α-[4-Amidophenyl]-α-Phenyläthan. Sm. 206—207° (B. 38, 1763 C. 1905 [1] 1599).
  - 4) 2-Amidomethyldiphenylmethan (o-Benzylbenzylamin). HCl, (2HCl, PtCl<sub>4</sub>) (B. 25, 3024). — II, 636.
  - 5) α-Methylamidodiphenylmethan. Sm. 40°. HCl, HNO<sub>3</sub> (J. pr. [2] 77, 22 C. 1908 [1] 631).
  - 6) Äthyldiphenylamin. Sd. 285—287° (295—297°) (Bl. 23, 3; M. 4, 797). — II, 342.
  - 7) Methylphenylbenzylamin. Sd. 305—306° (J. 1883, 702; B. 30, 1789; 32, 519; B. 35, 1283 C. 1902 [1] 1094). — II, 517; \*II, 291.
  - 8) Dibenzylamin. Sm. 255,5°; Sd. oberhalb 300°. HCl, (2HCl, PtCl<sub>4</sub>), HBr, HJ, HNO<sub>3</sub>, HNO<sub>2</sub>, Rhodanid (A. 144, 313; 151, 133; 241, 329; 274, 39; B. 19, 1632, 2128, 3287; 24, 2727; 34, 557; G. 19, 428; 23 [2] 41; Ph. Ch. 16, 218; Soc. 69, 1245; J. pr. [2] 62, 99; C. 1902 [1] 3; B. 38, 1416 C. 1905 [1] 1385; B. 42, 1557 C. 1909 [1] 1803; Ar. 247, 355 C. 1909 [2] 1440). — II, 518; \*II, 292.
  - 9) 2,4-Dimethyldiphenylamin. Sm. 52° (44°); Sd. 278—282°<sub>485</sub> (318°<sub>724</sub>) (Bl. 18, 69; A. 355, 326 C. 1907 [2] 1506; B. 40, 4544 C. 1908 [1] 244). — II, 548.
  - 10) Di[2-Methylphenyl]amin. Sd. 312°<sub>727,5</sub> (Bl. 25, 248; B. 20, 547; A. 238, 363). — II, 458.
  - 11) Di[3-Methylphenyl]amin. Sd. 319—320° (B. 13, 1091; 20, 549). — II, 477.
  - 12) Di[4-Methylphenyl]amin. Sm. 79°; Sd. 330,5° (A. 140, 346; 238, 363; B. 6, 446; 20, 546; 34, 1277; J. pr. [2] 48, 463). — II, 486.
  - 13) Benzyl-[2-Methylphenyl]amin. Sm. 56—57°; Sd. 200—210°<sub>15—25</sub> (Bl. [3] 5, 742). — II, 518.
  - 14) Benzyl-[4-Methylphenyl]amin. Sd. 312—313° (317—320°) (A. 241, 360; Bl. [3] 5, 742; B. 33, 3524). — II, 518; \*II, 292.
  - 15) Methylphenyl-2-Methylphenylamin (o-Homobenzhydrylamin). Sd. 299°<sub>731</sub>. HCl (B. 24, 2806). — II, 637.
  - 16) Methylphenyl-3-Methylphenylamin. Sd. 299°<sub>724</sub>. HCl (B. 24, 2807). — II, 637.
  - 17) Methylphenyl-4-Methylphenylamin. Sd. 296°<sub>723</sub>. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Tartrat, Bitartrat (B. 24, 2800). — II, 637.
  - 18) α-Phenylamidoäthylbenzol. Sd. 183°<sub>30</sub>. HCl, H<sub>2</sub>SO<sub>4</sub> (B. 37, 2691 C. 1904 [2] 519; B. 38, 1763 C. 1905 [1] 1599).
  - 19) 5-Methyl-1-Allyl-2-Phenylpyrrol. Sm. 52°; Sd. 277—278° (B. 18, 2595). — IV, 333.
  - 20) α-[3-Methylphenyl]-β-[2-Pyridyl]äthan. Sd. 220°<sub>35</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 39, 2836 C. 1906 [2] 1326).
  - 21) α-[4-Methylphenyl]-β-[2-Pyridyl]äthan. Sd. 294—296°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 35, 2776 C. 1902 [2] 992). — \*IV, 227.

$C_{14}H_{15}N$ 

- 22)  $\alpha$ -[3-Methylphenyl]- $\beta$ -[4-Pyridyl]äthan. Sd.  $220^{\circ}_{60}$ . (2HCl, PtCl<sub>4</sub>), Pikrat (B. 39, 2835 C. 1908 [2] 1326).
- 23)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Pyridyl]äthan. Sd.  $220^{\circ}_{60}$ . HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ (B. 38, 165 C. 1905 [1] 452).
- 24)  $\alpha$ -Phenyl- $\beta$ -[5-Methyl-2-Pyridyl]äthan (Methyldihydrostilbazol). Sd.  $290-295^{\circ}$ . HCl, HgCl<sub>2</sub> + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 21, 3076). — IV, 380.
- 25)  $\alpha$ -[8-Methyl-2-Chinolyl]- $\alpha$ -Buten. HCl, (2HCl, HgCl<sub>2</sub>), (HCl, AuCl<sub>3</sub>) (B. 38, 3714 C. 1906 [1] 53).
- 26) 2,3-Dimethyl-2,3-Dihydro- $\beta\beta$ -Naphtindol? Fl. (A. 242, 370). — IV, 380.
- 27) 3-Methyl-1,2,3,4-Tetrahydro- $\beta$ -Naphtochinolin. Sm.  $51,5-52^{\circ}$ . HCl (B. 24, 2646). — IV, 379.

 $C_{14}H_{16}N_3$ 

- C 74,6 — H 6,7 — N 18,7 — M. G. 225.
- 1) 2,4,2'-Triamido- $\alpha\beta$ -Diphenyläthen. Sm.  $156-157^{\circ}$  (B. 34, 2848). — \*IV, 832.
- 2) 2,4,3'-Triamido- $\alpha\beta$ -Diphenyläthen. Sm.  $112-113^{\circ}$  (B. 34, 2847). — \*IV, 832.
- 3) 2,4,4'-Triamido- $\alpha\beta$ -Diphenyläthen. Sm.  $176-177^{\circ}$  (B. 34, 2847). — \*IV, 832.
- 4)  $\alpha$ -Imido- $\alpha$ -[3-Amido-4-Methylphenyl]amido- $\alpha$ -Phenylmethan. Sm.  $211,5-212^{\circ}$ . HCl, (2HCl, PtCl<sub>4</sub>), Chromat (B. 11, 1758). — IV, 844.
- 5) 2-Methyldiphenylguanidin. Sm.  $123-125^{\circ}$  (J. pr. [2] 65, 384 C. 1902 [1] 1330).
- 6) 4-Methyldiphenylguanidin. Sm.  $120-122^{\circ}$  (J. pr. [2] 65, 385 C. 1902 [1] 1330).
- 7)  $\beta$ -Phenylhydrazon- $\beta$ -Amido- $\alpha$ -Phenyläthan. Sm.  $70^{\circ}$ . HCl (B. 36, 2485 C. 1903 [2] 490).
- 8)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Amidophenyl]äthan. Sm.  $108^{\circ}$  (B. 24, 2382). — IV, 771.
- 9)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Amidophenyl]äthan. HCl (B. 20, 512). — IV, 771.
- 10) 3-Phenylhydrazonmethyl-1-Amidomethylbenzol. Sm.  $253^{\circ}$  u. Zers. (B. 28, 603). — IV, 754.
- 11) 4-Phenylhydrazonmethyl-1-Amidomethylbenzol. Sm.  $278^{\circ}$  (B. 28, 605). — IV, 754.
- 12) Phenyl-2-Methylamidobenzylidenhydrazin. Sm.  $124,5-125,5^{\circ}$  (123 bis  $124^{\circ}$ ) (B. 36, 4187 C. 1904 [1] 279; B. 37, 984 C. 1904 [1] 1079).
- 13) Phenyl-4-Methylamidobenzylidenhydrazin. Sm.  $170^{\circ}$  (B. 41, 1997 C. 1908 [2] 600).
- 14)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Imidobenzyl]hydrazin (Methylphenylbenzenylhydrazidin). Sm.  $105^{\circ}$  (J. pr. [2] 54, 168). — IV, 1136.
- 15) Phenylazo-4-Methylphenylazomethylamin. Sm.  $76^{\circ}$  (u.  $84,5^{\circ}$ ) (B. 40, 2398 C. 1907 [2] 317).
- 16) 1-Äthylldiazoamidobenzol. Fl. (C. r. 140, 1039 C. 1905 [1] 1539).
- 17) 2,2'-Dimethylldiazoamidobenzol. Sm.  $51^{\circ}$  (B. 20, 1583; A. 311, 95). — IV, 1568.
- 18) 2,3'-Dimethylldiazoamidobenzol. Sm.  $74^{\circ}$  (J. pr. [2] 65, 446 C. 1902 [2] 38). — \*IV, 1134.
- 19) 2,4'-Dimethylldiazoamidobenzol. Sm.  $119-120^{\circ}$  (J. pr. [2] 65, 432 C. 1902 [2] 37). — \*IV, 1134.
- 20) 3,3'-Dimethylldiazoamidobenzol. Sm.  $50-52^{\circ}$  (J. pr. [2] 65, 444 C. 1902 [2] 38). — \*IV, 1134.
- 21) 4,4'-Dimethylldiazoamidobenzol. Sm.  $115-116^{\circ}$ . (2HCl, PtCl<sub>4</sub>), + Benzoësäure (A. 121, 277; 311, 92; B. 17, 78; 20, 928; C. r. 116, 355). — IV, 1568; \*IV, 1134.
- 22) 3',4'-Dimethylldiazoamidobenzol. Sm.  $96-97^{\circ}$  (J. pr. [2] 65, 425 C. 1902 [2] 36). — \*IV, 1134.
- 23) 1-[2-Methylbenzyl]amidodiazobenzol. Sm.  $85^{\circ}$  (B. 23, 1028). — IV, 1573.
- 24) 1-Benzylamido-2-Methylldiazobenzol. Fl. (B. 21, 1019). — IV, 1569.
- 25) 1-Benzylamido-4-Methylldiazobenzol. Sm.  $77^{\circ}$  (B. 21, 1018). — IV, 1569.

- C<sub>14</sub>H<sub>15</sub>N<sub>3</sub>** 26) 1-[4-Methylbenzyl]amidodiazobenzol. Sm. 60—61° (B. 23, 1032). — IV, 1573.
- 27) 4-Äthylamidoazobenzol. HJ (Z. 1866, 135; J. 1883, 786). — IV, 1356.
- 28) 4-Dimethylamidoazobenzol. Sm. 117° (115°). HCl, 3HCl, HNO<sub>3</sub>, Oxalat (B. 10, 528; 17, 1402, 1491; A. 303, 353; B. 41, 1179 C. 1908 [1] 1884; B. 41, 4380 C. 1909 [1] 443). — IV, 1356; \*IV, 1010.
- 29) 4-Amido-2,3-Dimethylazobenzol. Sm. 98°. HCl (A. 263, 333). — IV, 1386.
- 30) 4-Amido-2,2'-Dimethylazobenzol. Sm. 116—117° (J. pr. [2] 65, 447 C. 1902 [2] 38). — \*IV, 1019.
- 31) 4-Amido-2,3'-Dimethylazobenzol. Sm. 80°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 10, 1155; J. pr. [2] 65, 442 C. 1902 [2] 38). — IV, 1377; \*IV, 1020.
- 32) 4'-Amido-2,3'-Dimethylazobenzol. Sm. 100°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 10, 663; 17, 470; 28, 2195; J. pr. [2] 69, 321 C. 1904 [2] 34). — IV, 1377.
- 33) 4-Amido-2,4'-Dimethylazobenzol. Sm. 127°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 10, 1156; J. pr. [2] 65, 427 C. 1902 [2] 36). — IV, 1377; \*IV, 1020.
- 34) 4-Amido-3,3'-Dimethylazobenzol. Sm. 124° (J. pr. [2] 65, 445 C. 1902 [2] 38). — \*IV, 1020.
- 35) 4-Amido-3,4'-Dimethylazobenzol. Sm. 127—128°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 10, 665, 832; 28, 2195; J. pr. [2] 65, 434 C. 1902 [2] 37; B. 41, 1182 C. 1908 [1] 1884). — IV, 1378; \*IV, 1020.
- 36) 6-Amido-3,4'-Dimethylazobenzol. Sm. 118,5°. HCl (B. 17, 78; 19, 1453; 30, 2603; 33, 2968; D.R.P. 37932, 75911). — IV, 1378; \*IV, 1020.
- 37) α-[2,9-Diamidophenyl]-β-[6-Methyl-2-Pyridyl]äthen. Sm. 148—149°. 3HCl, (3HCl, 3SnCl<sub>2</sub>), (3HCl, 3HgCl<sub>2</sub>), (6HCl, 3PtCl<sub>4</sub>) (B. 40, 3405 C. 1907 [2] 1343).
- 38) 2-[α-Phenylhydrazonpropyl]pyridin. Sm. 142° (B. 24, 2531; B. 34, 4243 C. 1902 [1] 208). — IV, 799.
- 39) 3-[α-Phenylhydrazonpropyl]pyridin. Sm. 145° (B. 24, 2540). — IV, 799.
- 40) 4-Benzylidenhydrazido-2,6-Dimethylpyridin. Sm. 220—224° u. Zers. HCl, HNO<sub>3</sub> (B. 36, 1117 C. 1903 [1] 1185). — \*IV, 780.
- 41) 3-[3-Amidophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 156°. 2HCl, (2HCl, SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 48, 567). — IV, 636.
- 42) 3-[4-Amidophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 138° (J. pr. [2] 54, 276). — IV, 636.
- 43) 2,7-Diamido-3,6-Dimethylcarbazol. Sm. 271° u. Zers. (B. 24, 1033; D.R.P. 58165). — IV, 1175; \*IV, 832.
- 44) Nitril d. α-[4-Diäthylamidophenyl]äthen-β-β-Dicarbonensäure. Sm. 130° (B. 39, 2169 C. 1906 [2] 234).  
C 66,4 — H 5,9 — N 27,7 — M. G. 253.
- C<sub>14</sub>H<sub>15</sub>N<sub>5</sub>** 1) α-Diphenylguanylguanidin. Sm. 167°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (B. 13, 1584; 34, 2597). — II, 353.
- 2) β-Diphenylguanylguanidin. Sm. 160—162° u. Zers. HNO<sub>3</sub>, 2 + 3H<sub>2</sub>SO<sub>4</sub> (M. 12, 20). — II, 353.
- 3) Bis-4-Diazo-1-Methylbenzolahamid. Zers. bei 82—83° (B. 27, 899; 29, 459). — IV, 1531; \*IV, 1113.
- C<sub>14</sub>H<sub>15</sub>N<sub>7</sub>** 4) Di[Phenylazo]äthylamin. Sm. 70—71° (B. 22, 939). — IV, 1567.  
C 59,8 — H 5,3 — N 34,9 — M. G. 281.
- C<sub>14</sub>H<sub>15</sub>P** 1) α-Imidoamidomethyl-β-[α-3-Amidophenylazobenzyliden]hydrazin (m<sup>2</sup>-Amidoguanazybenzol). Sm. 193° (B. 30, 448). — IV, 1494.
- 1) Äthylidiphenylphosphin. Sd. 293° (A. 207, 214). — IV, 1658.
- 2) Dibenzylphosphin. Sm. 205° (B. 5, 103). — IV, 1664.
- 3) Isobenzyl-4-Methylphenylphosphin (oder C<sub>27</sub>H<sub>25</sub>P<sub>2</sub>). Sm. 187° (B. 15, 1963). — IV, 1672.
- 4) 4-[β-Phenyläthyl]phenylphosphin. Sm. 75°; Sd. 190°<sub>45</sub> (A. 315, 51). — \*IV, 1184.
- C<sub>14</sub>H<sub>16</sub>As** 1) Äthylidiphenylarsin. Sd. 320° (i. CO<sub>2</sub>) (A. 201, 235; 207, 196). — IV, 1688.
- C<sub>14</sub>H<sub>16</sub>O** C 84,0 — H 8,0 — O 8,0 — M. G. 200.
- 1) Äthyläther d. 2-Oxy-1,4-Dimethylnaphtalin. Fl. (B. 12, 1575; 16, 428). — II, 894.



- $C_{14}H_{16}O$
- 2) Isobutyläther d. 2-Oxynaphtalin. Sm. 33°. Pikrat (*Bl* [3] 19, 367). — \*II, 520.
  - 3)  $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -Oktin (Benzoylönanthylden). Sm. — 5°; Sd. 177 bis 179°<sub>19</sub> (*C.* 1900 [2] 1231, 1263; *Bl.* [3] 25, 306). — \*III, 139.
  - 4) 4-Keto-6-Methyl-2-[4-Methylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 46°; Sd. 198—202°<sub>16</sub> (*B.* 34, 790). — \*III, 140.
  - 5) 3-Keto-4-Benzyliden-1-Methylhexahydrobenzol. Sm. 59°; Sd. 190 bis 200°<sub>13</sub> (*B.* 29, 1596, 2960; *Bl.* [3] 27, 304 *C.* 1902 [1] 1221; *C. r.* 136, 1225 *C.* 1903 [2] 116). — \*III, 140.
  - 6) 2-Keto-3-Benzyliden-1,1-Dimethyl-R-Pentamethylen. Sm. 36° (*Bl.* [4] 3, 781 *C.* 1908 [2] 776).
  - 7) 3-Keto- $\beta$ -Benzyliden-1,1-Dimethyl-R-Pentamethylen. Sm. 66—67° (*A.* 324, 111 *C.* 1902 [2] 1201).
  - 8) 9-Ketooktohydroanthracen. Sm. 45,5°; Sd. 222—225°<sub>35</sub> (*C. r.* 140, 251 *C.* 1905 [1] 679; *Bl.* [4] 1, 710 *C.* 1907 [2] 1172).
  - 9) Verbindung (aus d. Benzylester d.  $\alpha$ -Benzylisobuttersäure). Sd. 350 bis 355° (*A.* 201, 174). — II, 1394.
- $C_{14}H_{16}O_2$
- 10) Verbindung (aus d. Stearopten  $C_{28}H_{30}O_5$ ) (*J.* 1854, 590). — III, 58. *C* 77,8 — *H* 7,4 — *O* 14,8 — *M. G.* 216.
  - 1) Diäthyläther d. 1,7-Dioxynaphtalin. Sm. 67° (*A.* 241, 372). — II, 983.
  - 2) Diäthyläther d. 2,3-Dioxynaphtalin. Sm. 96—97° (*M.* 23, 520 *C.* 1902 [2] 744).
  - 3) Diäthyläther d. 2,6-Dioxynaphtalin. Sm. 162° (*A.* 241, 370). — II, 984.
  - 4) Diäthyläther d. 2,7-Dioxynaphtalin. Sm. 104° (*B.* 15, 1428). — II, 984.
  - 5) 6-Oxy-4-Keto-1,5-Dimethyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol (Dimethylphenylhydroresorcin). Sm. 190—192° (*A.* 294, 311; *B.* 30, 2266). — \*III, 218.
  - 6) Methyläther d. 1-Keto-5-Methyl-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 51° (*A.* 303, 252). — \*III, 139.
  - 7) Methyläther d. 1-Keto-5-Methyl-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 65° (*A.* 303, 249). — \*III, 139.
  - 8) Äthyläther d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 43°; Sd. 214°<sub>15</sub> (*A.* 294, 304). — \*III, 217.
  - 9) 2,6-Diketo-1,1-Dimethyl-4-Phenylhexahydrobenzol. Sm. 86° (*B.* 41, 1274 *C.* 1908 [1] 1878).
  - 10) 3,4,5,6,8-Pentamethyl-1,2-Benzpyron. Sm. 127° (*Soc.* 93, 2021 *C.* 1909 [1] 373).
  - 11) Säure (aus Phenylessigsäure). Sd. 310—320° (*A.* 221, 49). — II, 1310.
  - 12) Äthylester d. 1-[ $\beta$ -Phenyläthenyl]-R-Trimethylen-2-Carbonsäure. Sm. 42—43° (*B.* 37, 2104 *C.* 1904 [2] 104).
  - 13) l-Amylester d.  $\beta$ -Phenylakrylsäure. Sd. 210°<sub>55</sub> (*Ph. Ch.* 20, 580). — \*II, 862.
  - 14) Verbindung (aus Anethol). Sm. 65° (*B.* 13, 147). — II, 852. *C* 72,4 — *H* 6,8 — *O* 20,7 — *M. G.* 232.
  - 1) 3,4-Methylenäther d.  $\gamma$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]- $\delta\delta$ -Dimethyl- $\alpha$ -Penten (Piperonalpinakolin). Sm. 96° (*A.* 341, 34 *C.* 1905 [2] 821).
  - 2) cis- $\epsilon$ -Keto- $\alpha$ -Phenyl- $\beta$ -Hepten- $\eta$ -Carbonsäure. Sm. 71°. Ag (*B.* 38, 1123 *C.* 1905 [1] 1242).
  - 3) trans- $\epsilon$ -Keto- $\alpha$ -Phenyl- $\beta$ -Hepten- $\eta$ -Carbonsäure. Sm. 96°. Ag (*B.* 38, 1121 *C.* 1905 [1] 1241).
  - 4) 5-Keto-1-Phenylhexahydrobenzol-3-Methylcarbonsäure. Sm. 118 bis 119°. Na, Ag (*A.* 360, 342 *C.* 1908 [2] 318).
  - 5) Äthylester d.  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Penten- $\epsilon$ -Carbonsäure. Sm. 44 bis 45° (*Bl.* [3] 33, 398 *C.* 1905 [1] 1317).
  - 6) Äthylester d.  $\gamma$ -Keto- $\alpha$ -[4-Methylphenyl]- $\alpha$ -Buten- $\beta$ -Carbonsäure ( $\Delta$  d. 4-Methylbenzylidenacetessigsäure). Sm. 74° (*B.* 34, 788).
  - 7) Äthylester d.  $\delta$ -Benzoyl- $\alpha$ -Buten- $\delta$ -Carbonsäure ( $\Delta$  d. Allylbenzoylessigsäure). Sd. 240—241°<sub>325</sub> (*Soc.* 47, 241). — II, 1683.
  - 8) Äthylester d. 2-Benzoyl-1-Methyl-R-Trimethylen-2-Carbonsäure. Sd. 223—226°<sub>100</sub> (*Soc.* 61, 83). — II, 1684.

- $C_{14}H_{16}O_3$  9) Äthylester d. 6-Phenyl-3,4-Dihydropyran-5-Carbonsäure (A. d. 6-Phenyldehydrohexon-5-Carbonsäure). Sm. 59–60° (Soc. 51, 728). — II, 1683.
- $C_{14}H_{16}O_4$  10) Äthylester d. 2-Acetyl-2,3-Dihydroinden-2-Carbonsäure. Sd. 185 bis 190°<sub>21</sub> (C. 1905 [1] 343).  
C 67,8 — H 6,4 — O 25,8 — M. G. 248.
- 1) Tetramethyläther d. 1,2,5,8-Tetraoxynaphtalin. Sm. 170° (Soc. 89, 1658 C. 1907 [1] 407).
  - 2) Diäthyläther d. 5,7-Dioxy-4-Methyl-2,1-Benzpyron. Sm. 131° (D. R. P. 73700). — \*II, 1126.
  - 3) Dihydrocurcumin. Sm. bei 100° (Am. 4, 360). — III, 660.
  - 4)  $\alpha$ -Acetoxyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ -Methylcarbonsäure (C. 1904 [1] 1258).
  - 5) Artemisininsäure. Sm. 179–181° (C. 1902 [1] 877). — \*III, 457.
  - 6) Dimethylester d.  $\alpha$ -Phenyl- $\beta$ -Buten- $\delta\delta$ -Dicarbonsäure. Sd. 187°<sub>12</sub> (B. 37, 3122 C. 1904 [2] 1217).
  - 7) Dimethylester d. Bis-R-Penten- $\beta$ -Dicarbonsäure. Sm. 85° (B. 34, 70).
  - 8) Äthylester d.  $\delta$ -[3,4-Dioxyphenyl]- $\alpha$ -Buten-3,4-Methylenäther- $\alpha$ -Carbonsäure. Sd. 235–240°<sub>30</sub> (A. 345, 248 C. 1906 [1] 1497).
  - 9) Äthylester d.  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -Buten-3,4-Methylenäther- $\delta$ -Carbonsäure (A. d.  $\alpha$ -Hydropiperinsäure). Sd. 230°<sub>45</sub> (A. 124, 122; A. 345, 246 C. 1906 [1] 1497). — II, 1784.
  - 10) Äthylester d.  $\alpha\delta$ -Diketo- $\alpha$ -Phenylpentan- $\beta$ -Carbonsäure. Fl. (B. 39, 1922 C. 1906 [2] 118).
  - 11) Äthylester d.  $\alpha\delta$ -Diketo- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure. Fl. (B. 16, 2866; B. 39, 1813 C. 1906 [2] 40). — II, 1869.
  - 12) Äthylester d.  $\beta\delta$ -Diketo- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure (Ä. d. Phenylacetylacetyllessigsäure). Sd. 190°<sub>15</sub> u. Zers. Cu (B. 35, 929 C. 1902 [1] 807).
  - 13) Äthylester d.  $\gamma$ -Keto- $\beta$ -Benzoylbutan- $\alpha$ -Carbonsäure. Sd. 194°<sub>44</sub> (C. 1909 [2] 799).
  - 14)  $\gamma$ -Äthylester d.  $\beta$ -Phenyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure (Ä. d.  $\gamma$ -Methyl- $\gamma$ -Phenylisotakonsäure). Sm. 110–112°. Ca + H<sub>2</sub>O, Ag (A. 308, 140). — \*II, 1078.
  - 15) Äthylester d. 2-Keto-1-Isopropyl-1,2-Dihydrobenzofuran-1-Carbonsäure. Sm. 77–78° (B. 33, 1403). — \*III, 528.
  - 16) Äthylester d. 1-Keto-5-Methyl-3-[2-Furanyl]-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 72°; Sd. 194° (A. 303, 245). — \*III, 510.
  - 17) Monäthylester d. 1,2,3,4-Tetrahydronaphtalin-1,8-Dicarbonsäure. Sm. 48° (B. 27, 2695). — II, 1871.
  - 18) Äthylester d. 5-Oxy-2,3-Dimethylbenzofuran-5-Methyläther-1-Carbonsäure. Sm. 115–116° (B. 42, 903 C. 1909 [1] 1337).
  - 19) Diäthylester d.  $\alpha$ -Phenyläthen- $\beta\beta$ -Dicarbonsäure (D. d. Benzylidenmalonsäure). Sm. 27–29° (32°); Sd. 308–312° (190–193°<sub>70</sub>) (B. 14, 348; 27, 289; 30, 959; 31, 2591; Am. 20, 510; A. 218, 131; 279, 25; Soc. 49, 306). — II, 1863; \*II, 1075.
  - 20) Monohexahydrophenylester d. Benzol-1,2-Dicarbonsäure. Sm. 99° (Bl. [3] 33, 274 C. 1905 [1] 1014).
  - 21) Acetat d. Siarsitanol (B. 26 [2] 679). — III, 554.
  - 22) Diacetat d. cis-2,3-Dioxy-1,2,3,4-Tetrahydronaphtalin. Sm. 109,5 bis 110° (B. 26, 1834; A. 288, 98). — \*II, 592.
  - 23) Diacetat d. trans-2,3-Dioxy-1,2,3,4-Tetrahydronaphtalin. Sm. 59° (C. r. 148, 932 C. 1909 [1] 1876).
  - 24) Verbindung (aus 2,6-Dimethyl-1,4-Pyron). Sm. 137–138° (Soc. 63, 116). — I, 1025.  
C 63,6 — H 6,1 — O 30,3 — M. G. 264.
- $C_{14}H_{16}O_5$  1) Mekoninmethyläthylketon. Sm. 128–132° (M. 25, 1052 C. 1904 [2] 1644).
- 2) Gentiogenin (J. 1862, 484). — III, 585.
  - 3) Physalin. Sm. 180–190°. (Pb, 2PbO) (J. 1852, 670). — III, 641.
  - 4) Filixsäure (oder C<sub>35</sub>H<sub>36</sub>O<sub>13</sub>). Sm. 184,5° u. Zers. NH<sub>4</sub>, Cu (A. 54, 119; 143, 279; 253, 342; 302, 173; B. 21, 2963, 3467; G. 24 [1] 512; 26 [2] 441; Ar. 237, 556). — II, 1967; \*II, 1136.
  - 5) Oxyfumar-2-Methyl-5-Isopropylphenyläthersäure. Sm. 175° u. Zers. (Soc. 79, 921).

$C_{14}H_{16}O_5$ 

- 6) Oxyfumar-3-Methyl-6-Isopropylphenyläthersäure. Sm. 215° u. Zers. (Soc. 79, 919).
- 7)  $\alpha$ -[3-Methoxyl-4-Propionoxylphenyl]propen- $\beta$ -Carbonsäure (Propiohomofenylsäure). Sm. 128–129° (B. 15, 2060). — II, 1781.
- 8) Benzyl- $\beta$ -Acetylglutarsäure. Ca + 2H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Ag<sub>2</sub> (A. 314, 36). — \*II, 1137.
- 9) isom. Benzyl- $\beta$ -Acetylglutarsäure. Ca + 2½H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag<sub>2</sub> (A. 314, 38). — \*II, 1137.
- 10) Anhydrid d.  $\alpha$ -Oxybutter-1,2-Phenylenäthersäure. Sd. 240–250°<sub>107</sub> (B. 33, 1674). — \*II, 553.
- 11) Anhydrid d.  $\alpha$ -Oxyisobutter-1,2-Phenylenäthersäure. Sm. 188 bis 188,5°; Sd. 224°<sub>24</sub> (B. 33, 1675). — \*II, 554.
- 12) Methylester d. Mekonindimethylketon. Sm. 72–73° (M. 20, 710). — \*II, 1134.
- 13) Äthylester d.  $\gamma$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha$ -Buten-3-Methyläther- $\beta$ -Carbonsäure (Ä. d. Vanillydenacetessigsäure). Sm. 120–121° (B. 37, 4476 [1] 246).
- 14) Äthylester d.  $\beta$ -Oxy- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäther- $\beta$ -Äthyläthersäure. Sm. 69° (B. 40, 2179 C. 1907 [2] 235).
- 15) Äthylester d. isom.  $\beta$ -Oxy- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäther- $\beta$ -Äthyläthersäure. Sm. 55–56° (B. 40, 2179 C. 1907 [2] 235).
- 16) Äthylester d.  $\alpha\gamma$ -Diketo- $\alpha$ -[4-Methoxylphenyl]butan- $\beta$ -Carbonsäure (Ä. d. Anisoylacetessigsäure). Fl. Cu (C. 1897 [2] 616). — \*II, 1134.
- 17)  $\alpha$ -Äthylester d.  $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\alpha\beta$ -Dicarbonsäure ( $\alpha$ -Ä. d. Phenylacetbernsteinsäure). Sm. 132,5° (B. 17, 71). — II, 1965.
- 18)  $\beta$ -Äthylester d.  $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\alpha\beta$ -Dicarbonsäure ( $\beta$ -Ä. d. Phenylacetbernsteinsäure). Sm. 128°. Ag (B. 18, 790). — II, 1965.
- 19)  $\beta$ -Äthylester d.  $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ ,2-Dicarbonsäure (Ä. d. Benzylacetessig-o-Carbonsäure). Sm. 92° (A. 236, 191). — II, 1966.
- 20) Äthylester d. 3,5-Dioxy-2-Methylbenzofuran-3,5-Dimethyläther-1-Carbonsäure. Sm. 242° u. Zers. (B. 42, 909 C. 1909 [1] 1338).
- 21) Diäthylester d. Oxyfumarphenyläthersäure. Sd. 183–184°<sub>14</sub> (Soc. 77, 1121; G. 32 [2] 55 C. 1902 [2] 902). — \*II, 366.
- 22) Diäthylester d.  $\alpha$ -Carboxy- $\alpha$ -Phenyläthen- $\beta$ -Carbonsäure ( $\beta$ -Carbäthoxyisozimtsäureäthylester). Sd. 200–202°<sub>15</sub> (A. 282, 169). — II, 1644.
- 23) Diäthylester d.  $\alpha$ -Keto- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure (D. d. Benzoylmalonsäure). Sd. 192–193°<sub>18</sub>. Cu (A. 282, 166; 291, 72; B. 31, 2771). — II, 1961; \*II, 1130.
- 24) Diäthylester d.  $\beta$ -Keto- $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure (D. d. Phenylloxallessigsäure). Na, Cu, 2 + Triäthylamin (B. 27, 1092; A. 363, 50 C. 1908 [2] 1722). — II, 1961.
- 25) Diäthylester d.  $\delta$ -Furanyl- $\alpha\gamma$ -Butadien- $\alpha\alpha$ -Dicarbonsäure (D. d. Furfurakroleinmalonsäure). Sd. 210–211°<sub>33</sub> (B. 31, 284). — \*III, 515. C 60,0 — H 5,7 — O 34,3 — M. G. 280.

 $C_{14}H_{16}O_6$ 

- 1)  $\alpha\delta$ -Diketo- $\alpha$ -[2-Oxy-4-Methoxylphenyl]hexan- $\zeta$ -Carbonsäure. Sm. 165–166° (B. 39, 4033 C. 1907 [1] 265).
- 2)  $\alpha\delta$ -Diketo- $\alpha$ -[2-Oxy-5-Methoxylphenyl]hexan- $\zeta$ -Carbonsäure. Sm. 125° (B. 39, 4034 C. 1907 [1] 265).
- 3)  $\alpha$ -[3,4-Dioxyphenyl]butan-3,4-Methylenäther- $\delta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure. Sm. 125° (A. 345, 249 C. 1906 [1] 1497).
- 4)  $\delta$ -Phenyl- $\beta$ -Methylbutan- $\beta\gamma\gamma$ -Tricarbonsäure. Sm. 178° u. Zers. (B. 23, 655; 24, 1063). — II, 2016.
- 5) Säure (aus Filixsäure). K (G. 24 [1] 516).
- 6) Säure (aus Tetronsäure u. Mesityloxyd). Sm. 230° (A. 315, 163).
- 7)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]äthan-3,4-Dimethyläther- $\beta$ ,2-Dicarbonsäure- $\beta$ -Äthylester (Äthylester d. Mekoninessigsäure). Sm. 82,5° (B. 19, 2291). — II, 2045.
- 8)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy-4,6-Diäthoxyphenylmethan- $\alpha$ ,2-Dicarbonsäure- $\alpha$ -Methylester. Sm. 108° (A. 296, 354). — \*II, 1194.
- 9)  $\alpha\gamma$ - $\epsilon\zeta$ -Dilakton d.  $\alpha\beta$ -Dioxy- $\delta$ -Keto- $\zeta$ -Oxymethyl- $\delta\delta$ -Dimethyl- $\beta\epsilon$ -Nonadien- $\gamma\epsilon$ -Dicarbonsäure + H<sub>2</sub>O (Acetonilpropylidenbistetronsäure). Sm. 120° (u. 165–167°) (A. 315, 165).
- 10) Dimethylester d.  $\alpha$ -[2-Methylbenzoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 214–225°<sub>12</sub> (Soc. 75, 342). — \*II, 822.



$C_{14}H_{16}O_6$ 

- 11) Dimethylester d.  $\alpha$ -[3-Methylbenzoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 215—225°<sub>12</sub> (Soc. 75, 343). — \*II, 825.
- 12) Dimethylester d.  $\alpha$ -[4-Methylbenzoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 200—225°<sub>13</sub> (Soc. 75, 344). — \*II, 826.
- 13) Äthylester d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,4-Dioxyphenyl]propandimethyläther- $\gamma$ -Carbonsäure. Sm. 86—87° (Soc. 93, 505 C. 1908 [1] 1699).
- 14) Äthylester d. 2-Oxy-4-Äthoxylbenzoylbrenztraubensäure. Sm. 99 bis 100° (B. 34, 2477).
- 15) Äthylester d. 2-Oxy-5-Äthoxylbenzoylbrenztraubensäure. Sm. 92° (B. 35, 2547 C. 1902 [2] 597).
- 16)  $\beta\gamma$ -Diacetat d. 3,4-Dioxy-1-[ $\beta\gamma$ -Dioxypropyl]benzol-3,4-Methylenäther. Sd. 240°<sub>15-20</sub> (262°<sub>90</sub>) (B. 24, 2881, 3489). — II, 1117.
- 17) Diacetat d. 3,6-Dioxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 81° (B. 14, 95). — III, 369.
- 18) Diacetat d. 3,6-Dioxy-2,5-Diäthyl-1,4-Benzochinon. Sm. 130° (B. 37, 2386 C. 1904 [2] 307).
- 19) Triacetat d. 2,4,6-Trioxy-1-Äthylbenzol. Sd. 208—209°<sub>15,8</sub> (M. 21, 49). — \*II, 621.
- 20) Triacetat d. 2,4,5-Trioxy-1,3-Dimethylbenzol. Sm. 99° (A. 180, 41). — II, 1023.
- 21) Triacetat d. 2,4,6-Trioxy-1,3-Dimethylbenzol. Sm. 123° (M. 19, 242; 22, 221). — \*II, 622.
- 22) Triacetat d. 4-Oxy-3-Dioxymethyl-1-Methylbenzol. Sm. 97° (B. 11, 786). — III, 88.
- 23) Benzoat d. Adonitdimethylenäther. Sm. 104° (B. 27, 1894; A. 289, 25). — II, 1153; \*II, 721.

 $C_{14}H_{16}O_7$ 

- C 56,8 — H 5,4 — O 37,8 — M. G. 296.
  - 1) Carthamin (A. 58, 362; 136, 115). — III, 656.
  - 2) Linarin. Sm. 265° (Bl. [3] 35, 1216 C. 1907 [1] 574).
  - 3) Phönin (C. 1901 [2] 858, 1085). — \*III, 491.
  - 4) Methylester d. 2,4-Diacetoxyl-6-Methoxyl-1-Methylbenzol-3-Carbonsäure. Sm. 75—77° (M. 23, 101 C. 1902 [1] 1099).
  - 5) Dimethylester d.  $\alpha$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]äthan- $\alpha$ -Methyläther-3,4-Methylenäther- $\beta\beta$ -Dicarbonsäure (D. d.  $\beta$ -Methoxylpiperonylmalonsäure). Na (B. 26, 1878). — II, 2044.
  - 6) Trimethylester d. 5-Oxy-1-Methylbenzylmethyläther-2,3,4-Tricarbonsäure. Sm. 111—113° (B. 33, 2444; 34, 2154). — \*II, 1196.
  - 7) Äthylester d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2-Oxy-4,6-Dimethoxyphenyl]propan- $\gamma$ -Carbonsäure (Ä. d. 2-Oxy-4,6-Dimethoxybenzoylbrenztraubensäure). Sm. 149° (B. 35, 862 C. 1902 [1] 812).
  - 8) 2-Äthylester d. 3-Oxy-1-Methylbenzyläthyläther-2,4,6-Tricarbonsäure. Sm. 195° (B. 32, 2789; G. 31 [1] 156). — \*II, 1196.
  - 9) Diäthylester d. 5-Oxy-1-Methylbenzol-2,3,4-Tricarbonsäure. Sm. 136—137° (B. 30, 1741). — \*II, 1196.
  - 10) Diäthylester d. 3-Oxy-1-Methylbenzol-2,4,6-Tricarbonsäure. Sm. 137—138°. Na + 3½ H<sub>2</sub>O, Ba + 4 H<sub>2</sub>O (B. 32, 2783; G. 30 [1] 148). — \*II, 1195.
  - 11) 1,1,4-Triacetat d. 2,4-Dioxy-1-Dioxymethylbenzol-2-Methyläther (B. 13, 2375). — III, 98.
  - 12) 1,1,2-Triacetat d. 2,5-Dioxy-1-Dioxymethylbenzol-5-Methyläther. Sm. 69—70° (B. 14, 1995). — III, 99.
  - 13) 1,1,4-Triacetat d. 3,4-Dioxy-1-Dioxymethylbenzol-3-Methyläther. Sm. 88—89° (B. 8, 1143). — III, 104.
  - 14) 2,3,6-Triacetat d. 2,3,4,6-Tetraoxy-1-Methylbenzol-4-Methyläther. Sm. 174° (M. 21, 432). — \*II, 629.
  - 15) 1,3,5-Triacetat d. 1,2,3,5-Tetraoxybenzol-2-Äthyläther. Sm. 74°; Sd. 232°<sub>17</sub> (M. 20, 940). — \*II, 629.
- C 53,8 — H 5,1 — O 41,0 — M. G. 312.
- 1) Hydrogalalsäure + H<sub>2</sub>O (C. 1895 [1] 210).
  - 2) Oxypikrotoxinsäure. Sm. 270° u. Zers. (G. 39 [1] 300 C. 1909 [1] 1482).
  - 3) Säure (aus Sadebaumöl). Sm. 181°; Sd. 260° (B. 33, 1211). — \*III, 406.
  - 4) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trioxyphenyl]äthen- $\alpha^3\beta$ -Dicarbonsäure. Sm. 90° (Soc. 71, 1111). — \*II, 1216.

 $C_{14}H_{16}O_8$

- $C_{14}H_{16}O_8$  5) 1,3-Diäthylester d. 4,6-Dioxybenzol-1,3-Dicarbonsäure-2-Methylcarbonsäure. Sm. 183—184° (186—187°) (B. 31, 2016; Soc. 75, 820). — \*II, 1215.
- 6) 1,4-Diäthylester d. 2,6-Dioxybenzol-1,3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 141° (Soc. 75, 815). — \*II, 1215.
- 7) Triäthylester d. 2-Oxy-1-Keto-R-Penten-3,4,5-Tricarbonsäure. Sm. 200° u. Zers. (Soc. 71, 335).
- 8) Triäthylester d. 1,4-Pyron-2,3,6-Tricarbonsäure. Sm. 123° (Soc. 71, 336).
- $C_{14}H_{16}O_9$  C 51,2 — H 4,9 — O 43,9 — M. G. 328.
- 1) Resacetophenonglykuronsäure +  $H_2O$ . Zers. bei 170°.  $Cu + 4H_2O$  (B. 27, 2734). — III, 137.
- 2)  $\alpha\gamma$ -Lakton d.  $\alpha\delta$ -Dioxy- $\alpha\gamma$ -Butadien- $\alpha\beta\gamma\delta$ -Tetracarbonsäure- $\alpha\beta\delta$ -Triäthylester? (Dioxalbernsteinsäurelaktontriäthylester). Sm. 89—90°.  $NH_4$ , Na, Triäthylaminsalz (A. 285, 21; 295, 362). — \*I, 450.
- $C_{14}H_{18}O_{10}$  C 48,8 — H 4,6 — O 46,5 — M. G. 344.
- 1) Tetramethylester d. 1,4-Diketohexahydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 175° (A. 258, 317). — II, 2094.
- $C_{14}H_{16}O_{12}$  C 44,7 — H 4,2 — O 51,1 — M. G. 376.
- 1) Gerbstoff (aus Eutannin) oder  $C_{14}H_{14}O_{11}$ . Zers. bei 260° (C. 1906 [1] 1829).
- $C_{14}H_{16}O_{14}$  C 41,2 — H 3,9 — O 54,9 — M. G. 408.
- 1) Acetylhexaglyoxalhydrat (A. 172, 5). — I, 966.
- $C_{14}H_{16}N_2$  C 79,2 — H 7,5 — N 13,2 — M. G. 212.
- 1) d- $\alpha\beta$ -Diamido- $\alpha\beta$ -Diphenyläthan (B. 28, 3169). — IV, 978.
- 2) l- $\alpha\beta$ -Diamido- $\alpha\beta$ -Diphenyläthan (B. 28, 3169). — IV, 978.
- 3) r- $\alpha\beta$ -Diamido- $\alpha\beta$ -Diphenyläthan. Sm. 90—92°.  $2HCl + 2H_2O$ ,  $2HCl$ ,  $PtCl_4 + 2H_2O$ , Diacetat, Ditartrat, Pikrat (B. 27, 214; 28, 3174; Soc. 77, 638; J. pr. [2] 77, 128 C. 1908 [1] 962). — IV, 978; \*IV, 651.
- 4) meso- $\alpha\beta$ -Diamido- $\alpha\beta$ -Diphenyläthan. Sm. 120—121° (107—110°).  $2HCl$ ,  $(2HCl, PtCl_4)$ ,  $H_2SO_4$  (A. 111, 140; 245, 285; B. 22, 2299; Soc. 77, 639; J. pr. [2] 78, 62 C. 1908 [2] 689). — IV, 978; \*IV, 651.
- 5)  $\alpha\beta$ -Di[2-Amidophenyl]äthan. Sm. 68°.  $2HCl + 2H_2O$ , 2Pikrat (A. 305, 97; B. 33, 2709). — \*IV, 656.
- 6)  $\alpha\beta$ -Di[4-Amidophenyl]äthan. Sm. 132°; subl.  $2HCl$ ,  $(2HCl, PtCl_4)$ ,  $H_2SO_4$ , Oxalat, Dioxalat +  $3H_2O$  (A. 137, 262). — IV, 977.
- 7)  $\alpha\alpha$ -Di[Phenylamido]äthan (Äthylidendiphenamin). Sm. 51° (B. 30, 1445; 33, 617). — \*II, 234.
- 8) isom. Äthylidendiphenamin? ( $2HCl$ ,  $PtCl_4$ ), +  $HgCl_2$  (A. Spl. 3, 346; B. 30, 1449).
- 9)  $\alpha\beta$ -Di[Phenylamido]äthan. Sm. 65° (63°).  $2HCl$ ,  $(2HCl, PtCl_4)$ ,  $2HBr$ ,  $2HNO_3$ , +  $HgCl_2$  (J. 1859, 388; 1873, 698; B. 12, 1794; 22, 1783; 23, 2057; 25, 3255; G. 22, 1783; Soc. 77, 1023). — II, 343; \*II, 158.
- 10) p-Diamido-2-Methyldiphenylmethan. Sm. 59—60°.  $H_2SO_4$  (B. 26, 1854). — IV, 983.
- 11) 4,4'-Diamido-3-Methyldiphenylmethan. Sm. 129°.  $2HCl$  (C. 1898 [2] 158; 1900 [1] 1111; D.R.P. 55565, 83544; B. 27, 1812; 33, 2587). — IV, 977; \*IV, 651.
- 12) 6,4'-Diamido-3-Methyldiphenylmethan. Sm. 68° (C. 1900 [1] 1112). — \*IV, 656.
- 13) p-Diamido-4-Methyldiphenylmethan.  $2HCl$ ,  $H_2SO_4$  (B. 5, 684). — IV, 983.
- 14) Methyl-4-Amidophenylbenzylamin. Sd. 290—295° (B. 31, 2182). — \*IV, 383.
- 15) 2-Amidodibenzylamin (2-Amido-1-Benzylamidomethylbenzol). Fl.  $2HCl$  (J. pr. [2] 51, 259). — IV, 627.
- 16) Benzyl-4-Amido-2-Methylphenylamin (5-Amido-2-Benzylamido-1-Methylbenzol).  $2HCl$  (A. 263, 309). — IV, 609.
- 17) Benzyl-5-Amido-2-Methylphenylamin (4-Amido-2-Benzylamido-1-Methylbenzol). Sm. 81° (B. 35, 339 C. 1902 [1] 595; D.R.P. 128754 C. 1902 [1] 610; D.R.P. 141297 C. 1903 [1] 1163). — \*IV, 400.
- 18) 2-Methylphenyl-2-Amidobenzylamin. Sm. 94°.  $HCl$  (J. pr. [2] 51, 272). — IV, 627.

- $C_{14}H_{16}N_2$  19) 4-Methylphenyl-2-Amidobenzylamin. Sm.  $84^\circ$  (80,5°). 2HCl (B. 19, 1610; 23, 2189; 25, 450; *J. pr.* [2] 51, 271). — IV, 327.
- 20) 4-Methylphenyl-4-Amidobenzylamin. Fl. (C. 1899 [2] 950). — \*IV, 410.
- 21) 4-Dimethylamidodiphenylamin. Sm.  $130^\circ$ ; subl. unter  $100^\circ$  (B. 21, 2612). — IV, 584.
- 22) 4'-Amido-2,3'-Dimethyldiphenylamin. Sm.  $63-64^\circ$  (B. 31, 1518). — \*IV, 403.
- 23) 6-Amido-3,4'-Dimethyldiphenylamin. Sm.  $107^\circ$ .  $H_2SO_4$  (B. 3, 554; 11, 1626; 25, 1022; *J. r.* 10, 60; B. 36, 341 C. 1903 [1] 633). — IV, 612; \*IV, 406.
- 24) 2-Amido-4,4'-Dimethyldiphenylamin. Sm.  $109^\circ$ . Pikrat, Oxalat (B. 23, 3798). — IV, 612.
- 25) 3-Amido-4,4'-Dimethyldiphenylamin. Sm.  $71^\circ$  (B. 28, 1648; D. R. P. 80977). — IV, 601; \*IV, 400.
- 26) 4,4'-Diamido-2,2'-Dimethylbiphenyl. Sm.  $108-109^\circ$  ( $106-107^\circ$ ; 87 bis  $88^\circ$ ). 2HCl,  $H_2SO_4$ , Pikrat (B. 11, 1626; 22, 837; 28, 2554; C. 1902 [2] 1447). — IV, 980; \*IV, 653.
- 27) 4,4'-Diamido-2,3'-Dimethylbiphenyl. 2HCl,  $H_2SO_4$  (B. 17, 471). — IV, 982; \*IV, 656.
- 28) 2,4'-Diamido-3,3'-Dimethylbiphenyl. 2HCl (B. 23, 3253). — IV, 980.
- 29) 4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm.  $129^\circ$  ( $126,5^\circ$ ). HCl, 2HCl,  $H_2SO_4$ , Oxalat, Pikrat, Dipikrat, +  $AgNO_3$  (A. 278, 375; D. R. P. 38795; *Ch. Z.* 25, 739; B. 6, 557; 17, 467; 20, 2017; 23, 3225; *J. pr.* [2] 66, 167 C. 1902 [2] 937; *Bl.* [3] 27, 111 C. 1902 [1] 721; B. 37, 1401 C. 1904 [1] 1443; M. 25, 383 C. 1904 [2] 320; A. 352, 111 C. 1907 [1] 1797; C. 1908 [2] 1169). — IV, 980; \*IV, 654.
- 30) 2,2'-Diamido-4,4'-Dimethylbiphenyl. Sm.  $120^\circ$  (B. 34, 3332). — \*IV, 657.
- 31) p-Diamido-p-Dimethylbiphenyl (p-Tolidin). Sm.  $128-129^\circ$ . 2HCl,  $H_2SO_4$ , 2 $H_2SO_4$  (Z. 1870, 265). — IV, 983.
- 32) 4,4'-Di[Methylamido]biphenyl. Sm.  $74-76^\circ$ . 2HCl (B. 37, 3773 C. 1904 [2] 1548).
- 33) s-Dibenzylhydrazin. Sm. bei  $47^\circ$ . HCl (*J. pr.* [2] 62, 92). — \*IV, 539.
- 34) uns-Dibenzylhydrazin. Sm.  $65^\circ$ . 2HCl (B. 33, 2702; 34, 558). — \*IV, 540.
- 35) s-Di[2-Methylphenyl]hydrazin. Sm.  $165^\circ$  ( $161^\circ$ ) (B. 6, 557; D. R. P. 100234; *J. r.* 19, 409; *J. pr.* [2] 65, 117; C. 1898 [2] 775; B. 35, 1968 Anm. C. 1902 [1] 111; B. 36, 340 C. 1903 [1] 633; C. 1908 [2] 1169). — IV, 1502; \*IV, 1092.
- 36) s-Di[3-Methylphenyl]hydrazin. Fl. (B. 11, 1626; *J. pr.* [2] 65, 120; A. 207, 116). — IV, 1502; \*IV, 1092.
- 37) s-Di[4-Methylphenyl]hydrazin. Sm.  $126^\circ$  ( $133-134^\circ$ ) (*J.* 1864, 527; B. 3, 553; A. 207, 107; M. 9, 829; C. 1898 [2] 775; *J. pr.* [2] 65, 109 C. 1902 [1] 993; B. 35, 1968 Anm. C. 1902 [2] 111; B. 36, 340 C. 1903 [1] 633; C. 1906 [1] 27; B. 38, 2718 C. 1905 [2] 1090). — IV, 1502; \*IV, 1092.
- 38) uns-Di[4-Methylphenyl]hydrazin. Sm.  $171-172^\circ$  ( $93^\circ$ ). HCl (B. 13, 1546; B. 41, 3500 C. 1908 [2] 1823). — IV, 804.
- 39) s-Benzyl-4-Methylphenylhydrazin. Sd.  $212^\circ_{17}$ . HCl +  $H_2O$  (*J. pr.* [2] 78, 56 C. 1908 [2] 689).
- 40) 2,4-Dimethyl-s-Diphenylhydrazin. Sm.  $99,5-100^\circ$  (B. 28, 2558; B. 40, 2269 C. 1907 [2] 593). — IV, 1503.
- 41) 3,4'-Dimethyl-s-Diphenylhydrazin. Sm.  $74^\circ$  (B. 28, 2558). — IV, 1503.
- 42) 4-Methylphenylamido-2,6-Dimethylpyridin +  $xH_2O$ . Sm.  $75^\circ$ ; Sd.  $263-265^\circ$ . HCl +  $H_2O$ , (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ),  $CHNS$ , Pikrat, +  $HgCl_2$  (A. 354, 99 C. 1907 [2] 610).
- 43) 5-[ $\alpha$ -Phenylamidoäthyl]-2-Methylpyridin. Sm.  $145-146^\circ$ . 2HCl +  $H_2O$ , (2HCl,  $PtCl_4$ ) (B. 28, 1761). — IV, 826.
- 44) 2,6,2',6'-Tetramethyl-4,4'-Bipyridyl. Sm.  $148-149^\circ$ . (2HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), 2(HCl,  $AuCl_3$ ), HBr, HJ,  $HNO_3$ ,  $HNO_3$  +  $1\frac{1}{2}H_2O$ , 2 $H_2SO_4$ , +  $AgNO_3$  (B. 31, 2281; 32, 2210). — \*IV, 657.
- 45) Nitril d.  $\beta$ -[1-Piperidyl]- $\beta$ -Phenylakrylsäure. Sm.  $92^\circ$ ; Sd. 218 bis  $220^\circ_{13}$  (C. r. 143, 555 C. 1906 [2] 1842; *Bl.* [3] 35, 1185 C. 1907 [1] 562).



$C_{14}H_{16}N_4$ 

C 70,0 — H 6,7 — N 23,3 — M. G. 240.

- 1)  $\alpha\beta$ -Di[2,4-Diamidophenyl]äthen +  $H_2O$ . Sm. 191° (183—186°) wasserfrei (B. 37, 3600 C. 1904 [2] 1500; Soc. 93, 1725 C. 1908 [2] 1927).
- 2)  $\alpha$ -[4-Amidophenyl]imido- $\alpha$ -[4-Amidophenyl]amidoäthan. Sm. 145° (D.R.P. 95987 C. 1898 [1] 968). — \*IV, 385.
- 3)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylhydrazidoäthan. HCl (B. 36, 2483 C. 1903 [2] 490).
- 4)  $\alpha$ -Phenylhydrazon- $\beta$ -Phenylhydrazidoäthan. Sm. 94—95° (Am. 21, 59). — \*IV, 480.
- 5) 2-Amido-4-Äthylamidoazobenzol. (2HCl, PtCl<sub>4</sub>) (B. 19, 547). — IV, 1360.
- 6) 2,4-Di[Methylamido]azobenzol (B. 10, 657). — IV, 1360.
- 7) 3,3'-Di[Methylamido]azobenzol. Sm. 108° (C. 1901 [1] 105). — \*IV, 1013.
- 8) 3-Amido-4'-Dimethylamidoazobenzol. Sm. 165—166° (A. 234, 363). — IV, 1361; \*IV, 1013.
- 9) 4-Amido-4'-Dimethylamidoazobenzol. Sm. 186—187° (182—183°). (2HCl, PtCl<sub>4</sub>) (B. 17, 257; 20, 2994; Soc. 45, 107). — IV, 1361.
- 10) 4,6-Diamido-2,3-Dimethylazobenzol. Sm. 127° (B. 35, 645 C. 1902 [1] 751). — \*IV, 1025.
- 11) 4,6-Diamido-2,5-Dimethylazobenzol. Sm. 90—91° (B. 35, 647 C. 1902 [1] 751). — \*IV, 1025.
- 12) 4,4'-Diamido-2,5-Dimethylazobenzol. Sm. 160—162° (D.R.P. 72392). — \*IV, 1026.
- 13) 2,6-Diamido-3,4-Dimethylazobenzol. Sm. 171—172° (B. 35, 646 C. 1902 [1] 751). — \*IV, 1025.
- 14) 2,4-Diamido-3,5-Dimethylazobenzol. Sm. 208—209° (97,5—98°) (Soc. 81, 94 C. 1902 [1] 186; B. 35, 646 C. 1902 [1] 751). — \*IV, 1025.
- 15) 2,6-Diamido-3,5-Dimethylazobenzol. Sm. 182—183° (Soc. 81, 95 C. 1902 [1] 186, 416; B. 35, 646 C. 1902 [1] 751). — \*IV, 1026.
- 16) 3,3'-Diamido-2,2'-Dimethylazobenzol. Sm. 175° (Soc. 59, 1016). — IV, 1376; \*IV, 1019.
- 17) 5,5'-Diamido-2,2'-Dimethylazobenzol. Sm. 159° (und 132—133°; 157 bis 158°). 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 11, 1453; D.R.P. 62352; C. 1898 [2] 776; J. pr. [2] 63, 564). — IV, 1376; \*IV, 1019.
- 18) 4,4'-Diamido-2,3'-Dimethylazobenzol. Sm. 100° (D.R.P. 88013). — \*IV, 1020.
- 19) 4,4'-Diamido-3,3'-Dimethylazobenzol. Sm. 218—220° (C. 1901 [1] 1154). — \*IV, 1020.
- 20) ?-Diamido-3,?-Dimethylazobenzol (J. pr. [2] 68, 307 C. 1903 [2] 1143).
- 21) 3,3'-Diamido-4,4'-Dimethylazobenzol. Sm. 203° (197°). 2HCl, (2HCl, PtCl<sub>4</sub>), 2HBr, H<sub>2</sub>SO<sub>4</sub> (A. 229, 350; D.R.P. 62352; Soc. 59, 1016). — IV, 1379; \*IV, 1021.
- 22) uns-?-Diamido-4,4'-Dimethylazobenzol. Sm. 183°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 10, 218). — IV, 1380.
- 23) 4,?-Diamido-?-Dimethylazobenzol (aus 4-Nitrobenzolazo-1,3,4-Xylidin). Sm. 163°. (2HCl, PtCl<sub>4</sub>) (Soc. 43, 432). — IV, 1388.
- 24) Dimethyldiphenyltetrazon. Sm. 137° u. Zers. (A. 190, 172; B. 18, 1744; J. 1882, 367). — IV, 1308.
- 25) Nitril d.  $\alpha$ -[2,4-Di(Dimethylamido)phenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sm. 166° (B. 41, 102 C. 1908 [1] 520).
- 26) Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 210—212° (Soc. 69, 1282). — IV, 744.

 $C_{14}H_{16}N_6$ 

C 62,7 — H 6,0 — N 31,3 — M. G. 268.

- 1)  $\alpha\beta$ -Diphenylhydrazon- $\alpha\beta$ -Diamidoäthan (Cyanphenylhydrazin). Sm. 225° u. Zers. (226°). 2HCl (B. 22, 1934; 26, 2396, 2981; 27, 185; 30, 1193; J. pr. [2] 35, 531; [2] 64, 218). — IV, 743.
- 2) Verbindung (aus 1,4-Diamidobenzol u. Cyan) (J. pr. [2] 61, 473). — \*IV, 378.
- 3) Verbindung (aus  $\alpha\beta$ -Bistriazoäthan u. Phenylmagnesiumbromid). Sm. 128° (C. 1908 [2] 228).

 $C_{14}H_{16}Cl_2$ 

- 1) 9,10-Dichloroktohydroanthracen. Sm. 192° (C. r. 139, 606 C. 1904 [2] 1574; Bl. [4] 1, 707 C. 1907 [2] 1172).

- C<sub>14</sub>H<sub>16</sub>Br<sub>2</sub>** 1) **9,10-Dibromoktohydroanthracen.** Sm. 194° (*C. r.* 139, 605 *C.* 1904 [2] 1574; *Bl.* [4] 1, 704 *C.* 1907 [2] 1171).  
C 84,4 — H 8,5 — N 7,0 — M. G. 199.
- C<sub>14</sub>H<sub>17</sub>N** 1) **1-Diäthylamidonaphtalin.** Sd. 283—285° (290°). (2HCl, PtCl<sub>4</sub>) (*Soc.* 41, 180; *B.* 21, 3130; *Soc.* 77, 823). — II, 599; \*II, 333.  
2) **2-Diäthylamidonaphtalin.** Sd. 316°<sub>717</sub> (310—312°<sub>764</sub>). HCl, (2HCl, PtCl<sub>4</sub>), HJ, d-Campfersulfonat (*B.* 22, 1761; *Soc.* 77, 823; *Bl.* [3] 27, 883 *C.* 1902 [2] 991; *Bl.* [3] 27, 981 *C.* 1902 [2] 1211). — II, 602.  
3) **3-Äthyl-2-Propylchinolin.** Sd. 291°<sub>720</sub>. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*B.* 17, 1718; 18, 3361; *J.* 1885, 1009). — IV, 342.  
4) **?-Äthyl-?-Isopropylchinolin.** Sm. 54°; Sd. 294°<sub>718</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 18, 3372; 20, 1939). — IV, 342.  
5) **3,6,8-Trimethyl-2-Äthylchinolin.** Sm. 62°; Sd. 291°. HCl + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*B.* 23, 2270). — IV, 343.  
6) **Isolin.** Fl. (*Z.* 1867, 429). — IV, 343.  
7) **2,6-Dimethyl-1,2,3,4-Tetrahydrocarbazol.** Sm. 146°. Pikrat (*A.* 359, 63 *C.* 1908 [1] 1549).  
8) **Base** (aus Tetrahydrocarbazol). Sd. 160—165°<sub>14</sub>. HCl, (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (*G.* 24 [2] 113; *C.* 1900 [1] 1027). — IV, 339; \*IV, 209.  
C 74,0 — H 7,5 — N 18,5 — M. G. 227.
- C<sub>14</sub>H<sub>17</sub>N<sub>3</sub>** 1) **4,6,4'-Triamido-3-Methyldiphenylmethan.** Sm. 135° (139—140°) (*C.* 1900 [1] 1111; *B.* 33, 2588). — \*IV, 825.  
2) **4,2',4'-Triamido-3-Methyldiphenylmethan.** Sm. 130° (*C.* 1900 [1] 1111). — \*IV, 825.  
3) **6,2',4'-Triamido-3-Methyltriphenylmethan.** Sm. 140° (*C.* 1900 [1] 1112). — \*IV, 825.  
4) **4,4',6'-Triamido-3,3'-Dimethylbiphenyl** (*B.* 25, 1034). — IV, 1169.  
5) **5-Dimethylamido-2,4'-Diamidobiphenyl.** Sm. 87—89°. 2 Pikrat (*A.* 303, 354). — \*IV, 822.  
6) **Di[2-Amidobenzyl]amin.** Sm. 71°. 3HCl (*J. pr.* [2] 55, 360). — IV, 628.  
7) **Di[4-Amidobenzyl]amin.** Sm. 106°. 3HCl, (3HCl, PtCl<sub>4</sub>) (*B.* 6, 1060). — IV, 639.  
8) **4,4'-Di[Methylamido]diphenylamin.** Sm. 115°. 2HCl (*J. pr.* [2] 73, 4 *C.* 1906 [1] 839).  
9) **4,4'-Diamido-2,2'-Dimethyldiphenylamin** (*Bl.* [3] 33, 1234 *C.* 1906 [1] 232).  
10) **2-Amido-5-Dimethylamidodiphenylamin** (*A.* 306, 360). — \*IV, 775.  
11) **4-Amido-4'-Dimethylamidodiphenylamin.** Sm. 116°. 2HCl, H<sub>2</sub>SO<sub>4</sub>, (*B.* 35, 3088 *C.* 1902 [2] 1116; *J. pr.* [2] 69, 223 *C.* 1904 [1] 1268). — \*IV, 821.  
12) **uns-2-Amidobenzyl-4-Methylphenylhydrazin.** Sm. 66° (*J. pr.* [2] 51, 272). — IV, 1130.  
13) **Di[β-2-Pyridyläthyl]amin.** Fl. 3(2HCl, PtCl<sub>4</sub>) + 2H<sub>2</sub>O, 3 Pikrat (*B.* 37, 173 *C.* 1904 [1] 673).
- C<sub>14</sub>H<sub>17</sub>Cl** 1) **9-Chloroktohydroanthracen** (*C. r.* 139, 606 *C.* 1904 [2] 1574; *Bl.* [4] 1, 707 *C.* 1907 [2] 1172).
- C<sub>14</sub>H<sub>17</sub>Br** 1) **9-Bromoktohydroanthracen.** Fl. (*C. r.* 139, 606 *C.* 1904 [2] 1574; *Bl.* [4] 1, 705 *C.* 1907 [2] 1171).
- C<sub>14</sub>H<sub>17</sub>P** 1) **Diäthyl-1-Naphtylphosphin.** Sd. oberhalb 360° u. Zers. (*B.* 11, 1501). — IV, 1681.  
C 83,2 — H 8,9 — O 7,9 — M. G. 202.
- C<sub>14</sub>H<sub>18</sub>O** 1) **α-Oxy-α-Phenyl-β-Oktin.** Sd. 180—182°<sub>16</sub> (*C. r.* 134, 356 *C.* 1902 [1] 629).  
2) **γ-Oxy-α-Phenyl-γ-Äthyl-α-Hexin.** Sd. 155—157°<sub>16</sub> (*Bl.* [3] 35, 1178 *C.* 1907 [1] 562).  
3) **γ-Oxy-α-Phenyl-γδδ-Trimethyl-α-Pentin.** Sd. 135—136°<sub>10</sub> (*C.* 1905 [2] 1020).  
4) **1-Oxy-3,5-Dimethyl-1-Phenyl-1,2,3,4-Tetrahydrobenzol.** Sm. 111° (*Am.* 37, 381 *C.* 1907 [1] 1540).  
5) **9-Oxy-?-Oktohydroanthracen.** Sm. 81—82° (*C. r.* 142, 1202 *C.* 1906 [2] 248; *Bl.* [4] 1, 712 *C.* 1907 [2] 1172).  
6) **γ-Keto-α-Phenyl-β-Äthyl-α-Hexen** (Benzaldipropylketon). Sd. 176 bis 178° (*B.* 30, 2262). — \*III, 134.

$C_{14}H_{18}O$ 

- 7)  $\delta$ -Keto- $\gamma$ -Phenyl- $\beta\delta$ -Dimethyl- $\beta$ -Hexen. *Sd.* 124—130°<sub>11</sub> (*Bl.* [3] 35, 654 *C.* 1906 [2] 1115).
- 8)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Penten. *Sm.* 32—33°; *Sd.* 170°<sub>17</sub> (*A.* 330, 257 *C.* 1904 [1] 946).
- 9)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. *Sd.* 171,5°<sub>17</sub> (*A.* 330, 261 *C.* 1904 [1] 947).
- 10)  $\gamma$ -Keto- $\alpha$ -[2-Methyl-5-Isopropylphenyl]- $\alpha$ -Buten (*Bl.* [3] 17, 914).
- 11) 3-Keto-1-Methyl-4-Benzylhexahydrobenzol. *Sd.* 164°<sub>11</sub> (*Bl.* [3] 27, 305 *C.* 1902 [1] 1221; *A.* 348, 103 *C.* 1906 [2] 782). — \*III, 134.
- 12) 2-Acetyl-1-Phenylhexahydrobenzol. *Sm.* 78—79°; *Sd.* 187—190°<sub>40</sub> (*Soc.* 57, 320). — III, 167.  
*C* 77,2 — *H* 8,2 — *O* 14,7 — *M. G.* 218.

 $C_{14}H_{18}O_2$ 

- 1) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\delta\delta$ -Dimethyl- $\alpha$ -Penten (Anisalpinakolin). *Sm.* 34°. 2 Pikrat (*A.* 341, 34 *C.* 1905 [2] 821).
- 2) Äthyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Hexen. *Sd.* 155—158°<sub>10</sub> (*C. r.* 139, 206 *C.* 1904 [2] 649).
- 3)  $\alpha\gamma$ -Diketo- $\alpha$ -Phenylloktan. *Sd.* 185—186°<sub>18</sub> (*C.* 1900 [2] 1231; *Bl.* [3] 25, 307). — \*III, 211.
- 4) 1,3-Di[ $\gamma$ -Ketobutyl]benzol. *Sd.* 202—207°<sub>28</sub> (*C.* 1905 [1] 343).
- 5) 1,4-Di[ $\gamma$ -Ketobutyl]benzol. *Sm.* 53—54° (*C.* 1905 [1] 342).
- 6) 4,6-Diacetyl-1,2,3,5-Tetramethylbenzol. *Sm.* 121°; *Sd.* 312—317° (*B.* 28, 3213; 29, 848). — III, 274.
- 7) 3,6-Diacetyl-1,2,4,5-Tetramethylbenzol. *Sm.* 178°; *Sd.* 323—326° (*B.* 28, 3213; 29, 847). — III, 274.
- 8) 2-Oxy-3-Äthyl-2-Propylbenzpyran. *Sm.* 74—76° (*A.* 364, 31 *C.* 1909 [1] 542).
- 9) Cyclamiretin (*C.* 1897 [1] 230). — \*III, 435.
- 10)  $\beta$ -Phenyl- $\alpha$ -Hepten- $\alpha$ -Carbonsäure +  $H_2O$ . *Sm.* 79—80,5° (*B.* 40, 1603 *C.* 1907 [1] 1628).
- 11)  $\alpha$ -[ $p$ -Methylphenyl]- $\delta$ -Methyl- $\beta$ -Penten- $\delta$ -Carbonsäure (Gemisch). *Sd.* 199°<sub>16</sub> (*Bl.* [3] 35, 372 *C.* 1906 [2] 320).
- 12)  $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Buten- $\beta$ -Carbonsäure (Cumenylangelika-säure). *Sm.* 123° (*J.* 1877, 791). — II, 1435.
- 13) Eudesmiasäure. *Sm.* 160° (*C.* 1901 [1] 1007). — \*II, 410.
- 14) Rhizopogonsäure. *Sm.* 127°. *K* (*R.* 2, 155). — II, 2113.
- 15) Urushinsäure. *Pb, Fe* (*Soc.* 43, 475). — II, 1435.
- 16) Lakton d.  $\delta$ -Oxy- $\delta$ -Phenylheptan- $\delta^2$ -Carbonsäure (Dipropylphtalid). *Sm.* 76° (68°); *Sd.* 170°<sub>18</sub> (*Ar.* 247, 223 *C.* 1909 [2] 525; *B.* 42, 3726 *C.* 1909 [2] 1742).
- 17) Lakton d.  $\gamma$ -Oxy- $\gamma$ -Phenyl- $\beta\delta$ -Dimethylpentan- $\gamma^2$ -Carbonsäure (Di-isopropylphtalid). *Sm.* 83—84° (*Ar.* 247, 224 *C.* 1909 [2] 525).
- 18) Methylester d.  $\alpha$ -Phenyl- $\delta$ -Methyl- $\beta$ -Penten- $\delta$ -Carbonsäure. *Sm.* 154°<sub>17</sub> (*Bl.* [3] 35, 369 *C.* 1906 [2] 320).
- 19) Methylester d. 1-Phenylhexahydrobenzol-4-Carbonsäure. *Sm.* 28 bis 30° (*A.* 282, 146).
- 20) Äthylester d.  $\beta$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. *Sd.* 132°<sub>10</sub> (*Bl.* [3] 35, 357 *C.* 1906 [2] 318).
- 21) Amylester d.  $\beta$ -Phenylakrylsäure. *Sd.* 186—188°<sub>20</sub> (*Soc.* 79, 1307 *C.* 1902 [1] 195).
- 22) act. Amylester d.  $\beta$ -Phenylakrylsäure. *Sd.* 192°<sub>29</sub> (*Ph. Ch.* 20, 579). — \*II, 850.
- 23) Acetat d.  $\delta$ -Oxy- $\beta$ -Phenyl- $\gamma\gamma$ -Dimethyl- $\alpha$ -Buten. *Sd.* 145°<sub>15</sub> (*Bl.* [3] 35, 360 *C.* 1906 [2] 318).
- 24) Acetat d. 2-[ $\alpha$ -Oxypropyl]-2,3-Dihydroinden. *Sd.* 210°<sub>80</sub> (*Soc.* 65, 245). — II, 1071.
- 25) Benzoat d.  $\alpha$ -Oxy- $\alpha$ -Hepten. *Sd.* 195°<sub>50</sub> (*Soc.* 83, 153 *C.* 1903 [1] 72, 436).
- 26) Benzoat d. 2-Oxy-1-Methylhexahydrobenzol. *Sd.* 200°<sub>55</sub> (*C.* 1904 [1] 1346; 1909 [1] 851).
- 27) Benzoat d. 3-Oxy-1-Methylhexahydrobenzol. *Sm.* 66—67° (*Bl.* [3] 33, 971 *C.* 1905 [2] 1180; *C.* 1909 [1] 1236).  
*C* 71,8 — *H* 7,7 — *O* 20,5 — *M. G.* 234.
- 1) Apocynamarin +  $H_2O$ . *Sm.* 170—175° u. Zers. (*Soc.* 95, 745 *C.* 1909 [2] 42).

 $C_{14}H_{18}O_3$



$C_{14}H_{18}O_3$ 

- 2)  $\beta$ -[4-Methoxyl-2-Methyl-5-Isopropylphenyl]akrylsäure. Sm. 141° (B. 16, 2105). — II, 1669.
- 3)  $\alpha$ -Keto- $\alpha$ -Phenylheptan-9-Carbonsäure. Sm. 78° (C. 1896 [2] 1091). \* — II, 977.
- 4)  $\gamma$ -Keto- $\epsilon$ -Phenyl- $\beta$ -Methylhexan- $\zeta$ -Carbonsäure. Sm. 106—107° (B. 41, 1273 C. 1908 [1] 1878).
- 5)  $\beta$ -[2-Methyl-5-Propylbenzoyl]propionsäure. Fl. Pb (B. 20, 1378). — II, 1670.
- 6)  $\beta$ -[p-Methylisopropylbenzoyl]propionsäure. Sm. 70° (B. 28, 3217). — \*II, 977.
- 7)  $\beta$ -[2,3,5,6-Tetramethylbenzoyl]propionsäure. Sm. 117° (B. 28, 3217). — \*II, 977.
- 8) 5-Pseudobutyl-1,3-Dimethylbenzol-4-Ketocarbonsäure. Sm. 90 bis 110° (B. 31, 1346; D.R.P. 94019). — \*II, 977.
- 9) Gem. Anhydrid d. Önanthsäure u. Benzolcarbonsäure. Fl. (A. 91, 102). — II, 1158.
- 10) Äthylester d.  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Penten- $\delta$ -Carbonsäure (C. 1906 [1] 349).
- 11) Äthylester d.  $\beta$ -Phenylpentan- $\alpha\beta$ -Oxyd- $\alpha$ -Carbonsäure. Sd. 155 bis 158°<sub>18</sub> (C. r. 139, 1216 C. 1905 [1] 347).
- 12) Äthylester d.  $\delta$ -Phenyl- $\beta$ -Methylbutan- $\alpha\beta$ -Oxyd- $\alpha$ -Carbonsäure. Sd. 175—180°<sub>16</sub> (C. r. 139, 1216 C. 1905 [1] 347).
- 13) Äthylester d.  $\beta$ -[4-Äthylphenyl]propan- $\alpha\beta$ -Oxyd- $\alpha$ -Carbonsäure. Sd. 210—215°<sub>19</sub> (C. r. 139, 1216 C. 1905 [1] 347).
- 14) Äthylester d.  $\delta$ -Keto- $\beta$ -Phenylpentan- $\alpha$ -Carbonsäure. Sd. 186 bis 189°<sub>20</sub> (A. 204, 323). — \*II, 974.
- 15) Äthylester d.  $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure (Ä. d. Methylbenzylacetessigsäure). Sd. 287° (163°<sub>14</sub>) (A. 204, 180; B. 42, 2556 C. 1909 [2] 511). — II, 1668.
- 16) Äthylester d.  $\gamma$ -Keto- $\delta$ -Phenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sd. 164—165°<sub>16</sub> (C. 1901 [1] 724). — \*II, 976.
- 17) Äthylester d.  $\alpha$ -Benzoylbutan- $\beta$ -Carbonsäure. Fl. (B. 21, 3457). — II, 1667.
- 18) Äthylester d.  $\gamma$ -Keto- $\alpha$ -[3-Methylphenyl]butan- $\beta$ -Carbonsäure. Sd. 195°<sub>26</sub> (B. 31, 2129). — \*II, 976.
- 19) Äthylester d.  $\alpha$ -Benzoylvaleriansäure. Sd. 238—239°<sub>225</sub> (Soc. 49, 160). — II, 1667.
- 20) Äthylester d.  $\alpha$ -Benzoylisovaleriansäure. Sd. 236—237°<sub>225</sub> (Soc. 49, 164). — II, 1667.
- 21) Äthylester d.  $\beta$ -Benzoylvaleriansäure. Sd. 175°<sub>20</sub> (C. 1904 [1] 1258).
- 22) Äthylester d.  $\alpha$ -[4-Methylbenzoyl]isobuttersäure. Sd. 169—172°<sub>25</sub> (C. 1901 [1] 724). — \*II, 976.
- 23) Äthylester d.  $\alpha$ -[2,5-Dimethylbenzoyl]propionsäure. Sd. 190 bis 195°<sub>18</sub> (Bl. [3] 33, 551 C. 1905 [2] 31).
- 24) Äthylester d. 1-Methyl-4-Isopropylbenzol-2-Ketocarbonsäure. Sd. 237°<sub>760</sub> u. Zers. (Bl. [3] 17, 911).
- 25) Äthylester d. 1-Methyl-4-Isopropylbenzol-2[oder 3]-Ketocarbonsäure. Sd. 180°<sub>10</sub> (C. 1896 [2] 92; Bl. [3] 17, 942, 1020; [3] 19, 139). — \*II, 975.

 $C_{14}H_{18}O_4$ 

- 26) Acetat d. Oxymethyl-5-Isopropyl-2-Methylphenylketon. Sd. 175 bis 180°<sub>25</sub> (C. 1899 [1] 959). — \*III, 125.  
C 67,2 — H 7,2 — O 25,6 — M. G. 250.
- 1) Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2,4,5-Trioxyphenyl- $\alpha$ -Penten. Sm. 155° (B. 39, 1215 C. 1906 [1] 1659).
- 2) Diäthyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,4-Dioxyphenyl]butan. Sm. 90°. Cu (B. 33, 472; B. 37, 355 C. 1904 [1] 670). — \*III, 208.
- 3) Diäthyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,5-Dioxyphenyl]butan. Sm. 60° (B. 33, 2513). — \*III, 208.
- 4) Diäthyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 156° (152°) (J. pr. [2] 53, 39; C. 1905 [1] 815). — III, 137.
- 5) Methylpropyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 125,5° (C. 1905 [1] 815).
- 6) Methylisopropyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 97° (C. 1905 [1] 815).

- $C_{14}H_{18}O_4$
- 7) Monobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 63° (C. 1905 [1] 815).
  - 8) Monoisobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 88° (C. 1905 [1] 815).
  - 9) Oxalylidimesityloxyd. Sm. 149—150° (A. 291, 136). — \*I, 545.
  - 10) Rhinacanthin (J. 1881, 1022). — III, 647.
  - 11)  $\alpha$ -Phenylhexan- $\beta$ -Dicarbonsäure (Äthylbenzylglutarsäure). Fl. (B. 23, 3185). — II, 1859.
  - 12) 1-Phenylhexahydrobenzol-2,2-Dicarbonsäure. Fl. (Soc. 57, 315). — II, 1859.
  - 13) Benzol-1,4-Di[Propyl- $\beta$ -Carbonsäure] (p-Phenylendiisobuttersäure). Sm. 169° (B. 34, 2789).
  - 14)  $\alpha$ -Commiphorsäure. Sm. 201—203° (Ar. 245, 446 C. 1907 [2] 1913).
  - 15)  $\beta$ -Commiphorsäure. Sm. 205° u. Zers. (Ar. 245, 447 C. 1907 [2] 1913).
  - 16) Säure (aus Cyklopentanon u. Bernsteinsäurediäthylester). Sm. 135° (B. 32, 3356).
  - 17) Laktone d.  $\gamma$ -Oxy- $\gamma$ -[3,4- oder 5,6-Dimethoxyphenyl]pentan-2-Carbonsäure. Sd. 200—205°<sub>13</sub> (B. 42, 3727 C. 1909 [2] 1742).
  - 18) Dimethylester d. Benzol-1,3-Di[Äthyl- $\beta$ -Carbonsäure]. Sm. 51° (B. 21, 38). — II, 1858.
  - 19) Dimethylester d. Benzol-1,4-Di[Äthyl- $\beta$ -Carbonsäure]. Sm. 115° (B. 21, 41). — II, 1858.
  - 20) Äthylester d. Oxyessig-[2-Methoxyl-4-Allylphenyl]äthersäure. Sm. 36—37°; Sd. 200—205°<sub>19</sub> (D.R.P. 65393; M. 22, 130). — \*II, 589.
  - 21) Diäthylester d.  $\alpha$ -Phenyläthan- $\alpha\alpha$ -Dicarbonsäure. Sd. 165—166°<sub>18</sub> (B. 28, 815). — II, 1851.
  - 22) Diäthylester d.  $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure (D. d. Benzylmalonsäure). Sd. 300° (A. 204, 175; 256, 92; B. 24, 1060; 31, 555; J. pr. [2] 71, 330 C. 1905 [1] 1597). — II, 1848; \*II, 1069.
  - 23) Diäthylester d. Benzol-1,4-Di[Methylcarbonsäure]. Sm. 57,5—58° (B. 9, 1768). — II, 1852.
  - 24) Dipropylester d. Benzol-1,4-Dicarbonsäure. Sm. 31° (B. 10, 1742). — II, 1832.
  - 25) Diisopropylester d. Benzol-1,2-Dicarbonsäure (G. 28 [2] 503). — \*II, 1047.
  - 26) Diisopropylester d. Benzol-1,4-Dicarbonsäure. Sm. 55—56° (B. 10, 1742). — II, 1832.
  - 27) Isobutylester d. l- $\alpha$ -Benzoxylpropionsäure. Sd. 163—164°<sub>11</sub> (C. 1903 [2] 1419).
  - 28) Mono[6-Isopropyl-3-Methylphenyl]ester d. Bernsteinsäure. Sm. 121—122° (Soc. 75, 664; C. 1900 [2] 550). — \*II, 464.
  - 29) Äthyl-2-Methyl-5-Isopropylphenylester d. Oxalsäure. Sd. 170°<sub>10</sub> (B. 35, 3447 C. 1902 [2] 1303).
  - 30) Äthyl-3-Methyl-6-Isopropylphenylester d. Oxalsäure. Sd. 168°<sub>10</sub> (B. 35, 3447 C. 1902 [2] 1303).
  - 31) Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -Phenylbutan. Sd. 156—160°<sub>10</sub> (M. 27, 1116 C. 1907 [1] 628).
  - 32) Diacetat d.  $\alpha\delta$ -Dioxy- $\alpha$ -Phenylbutan (A. ch. [5] 26, 476). — II, 1099.
  - 33) Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Sd. 287—290° (M. 22, 98). — \*II, 672.
  - 34) Diacetat d.  $\alpha\alpha$ -Dioxy- $\alpha$ -[4-Isopropylphenyl]methan (Cumylendiacetat) (A. 106, 258). — III, 55.
  - 35) Diacetat d. 5-Oxy-6-Oxymethyl-1,2,4-Trimethylbenzol. Sm. 50,5 bis 51,5° (A. 353, 362 C. 1907 [2] 401).
  - 36) Diacetat d. 3,6-Dioxy-1,2,4,5-Tetramethylbenzol. Sm. 202—203° (B. 29, 2175). — \*II, 586.
  - 37) Diacetat d. 4,5-Di[Oxymethyl]-1,2-Dimethylbenzol. Sm. 65° (B. 35, 871 C. 1902 [1] 804).
  - 38) 4-Äthylcarbonat d. 4-Oxy-1-tert. Butylbenzol-3-Carbonsäure. Sm. 63° (Am. 16, 642). — III, 91.
  - 39) Verbindung (aus Maynasharz) (A. ch. [3] 10, 374). — III, 560.  
C 63,1 — H 6,8 — O 30,1 — M. G. 266.
- $C_{14}H_{18}O_5$
- 1) Olivil + H<sub>2</sub>O. Sm. 118—120° (A. 6, 31; 54, 68; B. 11, 1251). — III, 638.

- $C_{14}H_{18}O_5$
- 2)  $\zeta$ -Oxyhexanphenyläther- $\gamma\gamma$ -Dicarbonsäure. Sm. 89—90° (B. 31, 2137). — \*II, 366.
  - 3) 6-Ketododekahydrobiphenylen-3,4'-Dicarbonsäure. Sm. 170° (Soc. 85, 429 C. 1904 [1] 1082, 1439).
  - 4) Hydroxydibenzoësäure (A. 134, 331). — II, 1959.
  - 5) Acetylcampheroxalsäure. Sm. 133,5—134,5° (Am. 20, 324). — \*I, 352.
  - 6) Chiodectonsäure (J. pr. [2] 70, 497 C. 1905 [1] 260).
  - 7) Säure (aus Hydrobenzylsäure) (A. 134, 318). — II, 1189.
  - 8) Diäthylester d. Benzol-1-Methylcarbonsäure-2-Oxyessigsäure. Sm. 48—49° (B. 42, 830 C. 1909 [1] 1163).
  - 9) Diäthylester d. 5-Oxy-1,3-Dimethylbenzol-2,6-Dicarbonsäure. Sm. 148°; Sd. 258°<sub>80</sub> u. Zers. (A. 281, 108). — II, 1954.
  - 10) Diäthylester d.  $\alpha$ -Oxypropionphenyläthersäure-2-Carbonsäure. Sd. 214—215°<sub>55</sub> (B. 33, 1401). — \*II, 890.
  - 11) Diäthylester d.  $\alpha$ -Oxypropionphenyläthersäure-4-Carbonsäure. Sd. 210—215°<sub>20</sub> (B. 33, 1406). — \*II, 907.
  - 12) Diäthylester d. Anemonsäure. Sm. 47°; Sd. 252° (M. 17, 289). — III, 619.
  - 13)  $\beta$ -Ketopropylester d. 3,5-Dioxybenzoldiäthyläther-1-Carbonsäure. Sm. 65° (D.R.P. 73700). — \*II, 1030.
  - 14) Isoamylester d. Hämatommsäure. Sm. 54° (J. pr. [2] 57, 292). — \*II, 1220.
  - 15)  $\alpha\beta$ -Diacetat d. 4-Oxy-1-[ $\alpha\beta$ -Dioxypropyl]benzol-4-Methyläther. Sd. 210°<sub>41</sub> (B. 35, 2997 C. 1902 [2] 1048; C. r. 140, 593 C. 1905 [1] 1013; C. r. 144, 1355 C. 1907 [2] 594; C. 1907 [2] 50).
- $C_{14}H_{18}O_6$
- 16) Diacetat d. 3,4,5-Trioxyl-1-Propylbenzolmonomethyläther. Sm. 82,5—83° (M. 4, 185). — II, 1024.  
C 59,6 — H 6,4 — O 34,0 — M. G. 282.
  - 1) Benzyliden- $\alpha$ -Methylgalaktosid. Sm. 152° (R. 25, 158 C. 1906 [2] 23).
  - 2) Benzyliden- $\alpha$ -Methylglykosid. Sm. 158° (R. 25, 157 C. 1906 [2] 23).
  - 3) Benzyliden- $\beta$ -Methylglykosid. Sm. 194° (R. 25, 157 C. 1906 [2] 23).
  - 4) Benzyliden- $\alpha$ -Methylmannosid. Sm. 110° (R. 25, 158 C. 1906 [2] 23).
  - 5)  $\beta$ -[p-Tetraoxyphenyl]propentetramethyläther -  $\alpha$ -Carbonsäure.  $\alpha$ -Säure, Sm. 148—149°;  $\beta$ -Säure, Sm. 132—133° (G. 23 [2] 616). — II, 2007.
  - 6)  $\alpha$ -Oxybutter-1,2-Phenylenäthersäure. Fl. (B. 33, 1674). — \*II, 553.
  - 7)  $\alpha$ -Oxybutter-1,3-Phenylenäthersäure. Sd. 220—230°<sub>150</sub>. (+  $\frac{1}{2}$  H<sub>2</sub>O, Sm. 111°). Ca + 3H<sub>2</sub>O (B. 33, 1681). — \*II, 566.
  - 8)  $\alpha$ -Oxybutter-1,4-Phenylenäthersäure. Sm. 198—199° (B. 33, 1689). — \*II, 573.
  - 9) isom.  $\alpha$ -Oxybutter-1,4-Phenylenäthersäure. Fl. (B. 33, 1689).
  - 10)  $\alpha$ -Oxyisobutter-1,3-Phenylenäthersäure +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 88—90° (B. 33, 1682).
  - 11) isom.  $\alpha$ -Oxyisobutter-1,3-Phenylenäthersäure. Sm. 109—110° (B. 33, 1682). — \*II, 566.
  - 12)  $\alpha$ -Oxyisobutter-1,4-Phenylenäthersäure. Sm. 189° (B. 33, 1690). — \*II, 573.
  - 13)  $\alpha$ -[3,4,5-Trimethoxylbenzoyl]acetessigsäure. Sm. 95° (Soc. 89, 1656 C. 1907 [1] 407).
  - 14) Diäthylester d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (D. d. Hemipinsäure). Sm. 72°; Sd. oberhalb 300° (M. 11, 539; B. 31, 2090). — II, 1996; \*II, 1160.
  - 15) Diäthylester d. 4,5-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Fl. (M. 12, 489). — II, 1999.
  - 16) Diäthylester d. 2,5-Dioxybenzoldimethyläther-1,4-Dicarbonsäure. Sm. 101,5° (A. 258, 297). — II, 2002.
  - 17) Diäthylester d. Oxyessig-1,2-Phenylenäthersäure. Sd. 230—232°<sub>32</sub> (Soc. 77, 1223). — \*II, 552.
  - 18) Diäthylester d. Oxyessig-1,3-Phenylenäthersäure. Sm. 42° (39°); Sd. 228°<sub>32</sub> (Soc. 77, 1225; B. 40, 2793 C. 1907 [2] 533). — \*II, 566.
  - 19) Diäthylester d. Oxyessig-1,4-Phenylenäthersäure. Sm. 72° (Soc. 77 1227). — \*II, 573.



- C<sub>14</sub>H<sub>18</sub>O<sub>6</sub>** 20) Diäthylester d. Oxymalon-2-Methoxyphenyläthersäure. *Sd.* 205°<sub>13</sub> (*B.* 33, 1396). — \*II, 554.
- 21) Diäthylester d. 2-Methylfuran-3-Carbonsäure-5-[β-Ketopropyl-α-Carbonsäure] (D. d. Sylvancarbonsäureessigsäure). α-Modif. *Sm.* 139°; β-Modif. *Fl.* (*A.* 246, 18). — III, 720.
- 22) 2,5-Diacetat d. 2,3,5,6-Tetraoxy-1,4-Diäthylbenzol. *Sm.* 205° (*B.* 37, 2387 *C.* 1904 [2] 307).
- 23) Diacetat d. 1,2,4,5-Tetraoxybenzol-2-Diäthyläther. *Sm.* 148° (*B.* 23, 1214). — II, 1031.
- C<sub>14</sub>H<sub>18</sub>O<sub>7</sub>** C 56,4 — H 6,0 — O 37,6 — *M. G.* 298.
- 1) 2-Oxybenzyliden-α-Methylglykosid. *Sm.* 182° (*R.* 25, 160 *C.* 1906 [2] 24).
- 2) Picein + H<sub>2</sub>O. *Sm.* 194° (wasserfrei). Pb<sub>2</sub> (*Bl.* [3] 11, 944). — III, 601; \*III, 447.
- 3) Ipecacuanhasäure. Pb + 3H<sub>2</sub>O (*J.* 1850, 390). — II, 2046.
- 4) Anhydrid d. Mesakonsäure-α-Äthylester. *Sd.* 202–203°<sub>13</sub> (*A.* 353, 164 *C.* 1907 [2] 137).
- 5) Anhydrid d. Mesakonsäure-β-Äthylester. *Sd.* 200–205°<sub>14</sub> (*A.* 353, 164 *C.* 1907 [1] 137).
- 6) Diäthylester d. 6-Oxy-1,4-Dihydrobenzol-1,3-Dicarbonsäure-4-Methylcarbonsäure. *Sm.* 112–113° (*B.* 37, 2118 *C.* 1904 [2] 438).
- 7) Diäthylester d. Glutakonylglutakonsäure. *Sm.* 98–99° (*C. r.* 136, 693 *C.* 1903 [1] 960).
- 8) Diäthylester d. Ketodimethyldicyklopentantricarbonsäure. *Sm.* 75° (*K<sub>2</sub>* (*Soc.* 79, 777; *C.* 1900 [2] 320)).
- 9) Di[Äthylcarbonat] d. 2,4,6-Trioxy-1,3-Dimethylbenzol. *Sm.* 35 bis 40°; *Sd.* 242–243°<sub>16</sub> (*M.* 19, 243). — \*II, 622.
- C<sub>14</sub>H<sub>18</sub>O<sub>8</sub>** C 53,5 — H 5,7 — O 40,8 — *M. G.* 314.
- 1) Glykovanillin + 2H<sub>2</sub>O. *Sm.* 192° (*B.* 18, 1596; *D. R. P.* 27992; *B.* 42, 1475 *C.* 1909 [1] 1985). — III, 577; \*III, 435.
- 2) Gaultherin + H<sub>2</sub>O. Zers. bei 120° (*B.* 27 [2] 883). — III, 585.
- 3) Benzyliden-α-Glykoheptonsäure. *Sm.* 210° (*R.* 18, 307). — \*III, 7.
- 4) Chinäthonsäure. *Sm.* 146°. K + H<sub>2</sub>O, Ba, Ag + H<sub>2</sub>O (*H.* 4, 296; 7, 292, 424; 13, 181). — II, 2069.
- 5) Chinovagerbsäure (*A.* 79, 130; 143, 273). — III, 586.
- 6) Helianthsäure (*J.* 1859, 590; *Ar.* 247, 436). — II, 2069.
- 7) Tetramethylester d. Hydropyromellithsäure. *Sm.* 156° (*A.* 166, 339). — II, 2069.
- 8) Diäthylester d. βε-Diketohehexan-αζ-Diketocarbonsäure. *Sm.* 100 bis 101° (*B.* 33, 1220).
- 9) Triäthylester d. 1,2-Diketo-R-Pentamethylen-3,4,5-Tricarbonsäure. *Sm.* 122–123°. Na<sub>2</sub> + 3½H<sub>2</sub>O, Ba + 1½H<sub>2</sub>O (*A.* 297, 105, 108). — \*I, 446.
- 10) Verbindung (aus d. Pentaacetat d. Inositbromhydrin). *Sm.* 95° (*Soc.* 91, 1792 *C.* 1908 [1] 269).
- C<sub>14</sub>H<sub>18</sub>O<sub>9</sub>** C 50,9 — H 5,4 — O 43,6 — *M. G.* 330.
- 1) Dhurrinsäure (*C.* 1902 [2] 288). — \*III, 435.
- 2) Glykovanillinsäure + H<sub>2</sub>O. *Sm.* 210–212° (wasserfrei) (*B.* 8, 515). — III, 578.
- 3) βδ-Lakton d. β-Oxy-δ-Ketobutan-αβγδ-Tetracarbonsäure-αβγ-Triäthylester (Triäthylester d. Oxalcitronensäurelakton). *Sd.* 210°<sub>30</sub>. NH<sub>4</sub>, Na, Ca + 2H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Pb, Äthylaminsalz, Diäthylaminsalz, Triäthylaminsalz, Piperidinsalz, + FeCl<sub>3</sub> (*B.* 24, 124; 28, 790; *A.* 295, 347, 351; *Soc.* 73, 348). — I, 869; \*I, 449.
- 4) Tetraacetat d. Cellulose (*B.* 29 [2] 312, 461). — \*I, 585.
- C<sub>14</sub>H<sub>18</sub>O<sub>10</sub>** C 48,6 — H 5,2 — O 46,2 — *M. G.* 346.
- 1) Lakton d. d-Tetraacetylgalaktonsäure (*B.* 39, 2830 *C.* 1906 [2] 1183).
- 2) Lakton d. d-Tetraacetylglykonsäure (*B.* 39, 1363 *C.* 1906 [1] 1653; *B.* 39, 2824 *C.* 1906 [2] 1182).
- 3) Pentamethylester d. α-Buten-ααβγγ-Pentacarbonsäure. *Sm.* 86°; *Sd.* 208–210°<sub>12</sub> (*A.* 347, 9 *C.* 1906 [2] 422).
- 4) Monäthylester d. Triacetylschleimsäurelakton. *Sm.* 122° (*M.* 14, 474; 15, 207). — \*I, 438.

- $C_{14}H_{18}O_{11}$  C 46,4 — H 5,0 — O 48,6 — M. G. 362.  
 1) Glykurovanillinsäure. Ba (*H.* 45, 322 *C.* 1905 [2] 690).  
 2) Saccharumsäure. Ba + 2H<sub>2</sub>O, Pb<sub>2</sub> + H<sub>2</sub>O, Pb<sub>3</sub>, Cu + 2H<sub>2</sub>O (*J.* 1870, 843). — I, 871.
- $C_{14}H_{18}O_{12}$  C 44,5 — H 4,7 — O 50,8 — M. G. 378.  
 1) Cyclopiofluorescin (*J.* 1881, 1019). — III, 629.  
 2) Tetracetylisorisozuckersäure + H<sub>2</sub>O. Sm. 101° (*B.* 19, 1270; 27, 125, 128). — I, 853; \*I, 436.  
 3) Tetracetyl Schleimsäure + 2H<sub>2</sub>O. Sm. 242—243° (266°) (*Bl.* 48, 720; *M.* 14, 488). — I, 856; \*I, 438.
- $C_{14}H_{18}O_{15}$  C 39,4 — H 4,2 — O 56,3 — M. G. 426.  
 1) Glykosediwinsäure. Ca + H<sub>2</sub>O (BERTHELOT, *Chim. org.* 2, 295). — I, 1049.
- $C_{14}H_{18}N_2$  C 78,5 — H 8,4 — O 13,1 — M. G. 214.  
 1) 1-Phenylhydrazon-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 76 bis 78°; Sd. 210—215°<sub>20</sub> (*A.* 281, 116).  
 2) Acetonylpyrrol. Sm. 291°. 2 + AgNO<sub>3</sub> (*B.* 19, 2184; 20, 2450; *B.* 40, 2504 *C.* 1907 [2] 704). — IV, 943.  
 3) 5-Amyl-3-Phenylpyrazol. Sm. 76° (*Bl.* [3] 25, 307; *C. r.* 136, 1264 *C.* 1903 [2] 122). — \*IV, 624.  
 4) Bilutidin (Bi-3-Äthylpyridin). (HCl, PtCl<sub>4</sub>) (*J.* 1881, 430). — IV, 132.  
 5) isom. Bilutidin. Sd. oberhalb 360°. (3 HCl, PtCl<sub>4</sub>) (*J.* 1881, 430). — IV, 132.  
 6) Äthylparanilin (*J.* 1862, 344). — IV, 943.  
 7) Nitril d.  $\gamma$ -[2-Methylphenyl]imido- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sd. 266° (*Bl.* [3] 4, 646). — II, 473.  
 C 69,4 — H 7,4 — N 23,1 — M. G. 242.
- $C_{14}H_{18}N_4$  1)  $\alpha\beta$ -Di[3-Amidophenylamido]äthan + H<sub>2</sub>O. Sm. 107° u. Zers. 4HCl (*B.* 17, 779). — IV, 574.  
 2)  $\alpha\beta$ -Di[4-Amidophenylamido]äthan. Sm. 150°. 4HCl (*Soc.* 71, 423). — IV, 587.  
 3) 4,6,4',6' - Diamido - 3,3' - Dimethylbiphenyl. Sm. 176° (*C.* 1898 [2] 777). — IV, 1277.  
 4) 2,4-Diamido-4'-Dimethylamidodiphenylamin? Sm. 70—75° (*J. pr.* [2] 69, 230 *C.* 1904 [1] 1269).  
 5)  $\alpha\beta$ -Di[ $\alpha$ -Phenylhydrazido]äthan (uns-Äthylenphenylhydrazin). Sm. 90,5°. 2HCl, 2HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Oxalat (*A.* 254, 116; 310, 156). — IV, 659.  
 6)  $\alpha\beta$ -Di[ $\beta$ -Phenylhydrazido]äthan. Sm. 100° (*Am.* 21, 60). — \*IV, 423.  
 7)  $\alpha\alpha$ -Di[2-Amidobenzyl]hydrazin. Sm. 64—65°. 4HCl (*B.* 35, 1568 *C.* 1902 [1] 1206). — \*IV, 779.  
 8) s-Di[5-Amido-2-Methylphenyl]hydrazin. Sm. 180° (178°) (*B.* 11, 1453; *J. pr.* [2] 63, 567; *C.* 1898 [2] 776). — IV, 1502; \*IV, 1092.  
 9) s-Di[3-Amido-4-Methylphenyl]hydrazin. 2HCl, (2HCl, PtCl<sub>4</sub>), 2HBr, H<sub>2</sub>SO<sub>4</sub> (*A.* 229, 351). — IV, 1503.
- $C_{14}H_{18}Br_4$  1) Tetrabromderivat d. Kohlenw. C<sub>14</sub>H<sub>22</sub> (aus Fichtenteer). Sd. 254 bis 257° (*Bl.* [3] 11, 1151).
- $C_{14}H_{19}N$  C 83,6 — H 9,4 — N 7,0 — M. G. 201.  
 1) 3,5-Diisopropylindol. Sm. 65°; Sd. 295—300° u. ger. Zers. Pikrat (*B.* 21, 3430). — IV, 233.  
 2) Methylen-1,3-Dimethyl-3-Isopropyl-2,3-Dihydroindol. HJ, Pikrat (*C.* 1902 [2] 1322). — \*IV, 171.  
 3) 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. Sd. 270° (268 bis 269°<sub>750</sub>). (HCl, AuCl<sub>3</sub>), HJ, Pikrat (*B.* 23, 2305; *G.* 21 [2] 325; 28 [2] 45, 65, 88, 432). — IV, 230; \*IV, 170.  
 4) 2-Methylen-1-Methyl-3,3-Diäthyl-2,3-Dihydroindol. Sd. 257—260°<sub>755</sub> (*G.* 28 [2] 350). — \*IV, 170.  
 5) 1-Methyl-1,2,3,4,7,8,9,10-Oktahydro- $\alpha$ -Naph tochinolin. Sm. 37—38°. HJ (*B.* 24, 2489). — IV, 231.  
 6) 3-Methyl-1,2,3,4,7,8,9,10-Oktahydro- $\beta$ -Naph tochinolin. Sm. 75°. HNO<sub>3</sub> (*B.* 24, 2662). — IV, 234.  
 7) isom. 3-Methyloktahydro- $\beta$ -Naph tochinolin (*B.* 24, 2662). — IV, 234.  
 8) Äthylcarbazolin. HJ (*A.* 202, 25). — IV, 229.

- $C_{14}H_{19}N$  9) Nitril d.  $\alpha$ -Phenyl- $\beta$ -Methylhexan- $\alpha$ -Carbonsäure. *Sd.* 287° (*B.* 22, 1237). — II, 1400.  
C 73,4 — H 8,3 — O 18,3 — M. G. 229.
- $C_{14}H_{19}N_3$  1) 5-Diäthylamido-3-Methyl-1-Phenylpyrazol. *Sd.* 306—307° (2HCl, PtCl<sub>4</sub>) (*A.* 339, 149 *C.* 1905 [1] 1400).
- $C_{14}H_{20}O$  2) 3-Imido-2-Phenyl-5-Amyl-2,3-Dihydropyrazol. *Sd.* 231—233°<sub>18</sub> (*C. r.* 143, 1242 *C.* 1907 [1] 738).  
C 82,4 — H 9,8 — O 7,8 — M. G. 204.
- 1)  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Hexahydrophenyläthan. *Sd.* 168°<sub>20</sub> (*C. r.* 139, 345 *C.* 1904 [2] 705).
- 2) 3-Oxy-4-Benzyl-1-Methylhexahydrobenzol. *Sm.* 97° (101,5—102°) (*B.* 29, 2961; *Bl.* [3] 33, 972 *C.* 1905 [2] 1180; *C. r.* 140, 626 *C.* 1905 [1] 1100). — \*II, 653.
- 3) isom. 3-Oxy-4-Benzyl-1-Methylhexahydrobenzol. *Sm.* 79—80° (*C. r.* 140, 627 *C.* 1905 [1] 1100).
- 4) 4-Oxy-4-Benzyl-1-Methylhexahydrobenzol. *Sd.* 159°<sub>8</sub> (*C. r.* 142, 440 *C.* 1906 [1] 1096).
- 5) Methyläther d.  $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Hepten. *Sd.* 179°<sub>15</sub> (*B.* 37, 4002 *C.* 1904 [2] 1641).
- 6) Äthyläther d. d- $\alpha$ -[2-Oxyphenyl]- $\gamma$ -Methyl- $\alpha$ -Penten. *Sd.* 135,5 bis 137°<sub>9,2</sub> (*B.* 38, 2314 *C.* 1905 [2] 481).
- 7) Phenyläther d.  $\beta$ -Oxy- $\beta$ -Okten. *Sd.* 282—286° (*C.* 1899 [1] 26). — \*II, 356.
- 8)  $\gamma$ -Keto- $\epsilon$ -Phenyl- $\beta$ -Methylheptan. *Sd.* 138°<sub>15</sub> (*Am.* 38, 535 *C.* 1908 [1] 227).
- 9)  $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -Methyl- $\beta$ -Äthylpentan. *Sd.* 135—136°<sub>11</sub> (*C. r.* 148, 73 *C.* 1909 [1] 648).
- 10)  $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta\beta$ -Diäthylbutan. *Sd.* 145—146°<sub>16</sub> (*C. r.* 148, 73 *C.* 1909 [1] 648).
- 11)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]pentan. *Sd.* 160—164°<sub>17</sub> (*A.* 330, 259 *C.* 1904 [1] 947).
- 12)  $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylbutan. *Sd.* 155,5°<sub>16</sub> (*A.* 330, 263 *C.* 1904 [1] 947).
- 13) Heptylphenylketon. *Sm.* 22°; *Sd.* 164°<sub>15</sub> (*B.* 30, 1943). — \*III, 127.
- 14) Hexyl-4-Methylphenylketon. *Sm.* 42—43° (*Soc.* 67, 504; *B.* 29 [2] 659). — III, 156.
- 15) Isobutyl-2,4,6-Trimethylphenylketon. *Sd.* 151°<sub>20</sub> (*B.* 37, 929 *C.* 1904 [1] 1209).
- 16) Propyl-5-Isopropyl-2-Methylphenylketon. *Sd.* 265—266° (*J. pr.* [2] 43, 536). — III, 157.
- 17) Isopropyl-5-Isopropyl-2-Methylphenylketon. *Sd.* 259° (*J. pr.* [2] 46, 485; *Bl.* [3] 19, 138; *C.* 1899 [1] 959). — III, 157; \*III, 126.
- 18) Isopropyl-3-Propyl-4-Methylphenylketon. *Sd.* 285—287° (*J. pr.* [2] 47, 425). — III, 157.
- 19) Methyl-2,4-Dimethyl-6-Pseudobutylphenylketon. *Sm.* 48°; *Sd.* 265° (*B.* 31, 1346; 33, 2568). — \*III, 127.
- 20) Methyl-2,4,5-Triäthylphenylketon. *Sd.* 146°<sub>13</sub> (*B.* 36, 1635 *C.* 1903 [2] 26).
- 21) Verbindung (aus Dimethylfulven u. Aceton). *Sd.* 120°<sub>15</sub> (*A.* 348, 6 *C.* 1906 [2] 1050).  
C 76,4 — H 9,1 — O 14,5 — M. G. 220.
- $C_{14}H_{20}O_2$  1) 3,4-Dioxy-1-Methyl-4-Benzylhexahydrobenzol. *Sm.* 152—153° (*Bl.* [3] 27, 303 *C.* 1902 [1] 1221; *Bl.* [3] 33, 971 *C.* 1905 [2] 1180).
- 2) 3-Methyl-4-Isobutyläther d. 3,4-Dioxy-1-Allylbenzol. *Sd.* 272—274° (*J.* 1877, 581). — II, 974.
- 3)  $\gamma$ -Oxy- $\delta$ -Keto- $\gamma$ -Phenyl- $\beta\epsilon$ -Dimethylhexan. *Sd.* 137°<sub>11</sub> (*Bl.* [3] 35, 654 *C.* 1906 [2] 1115).
- 4)  $\alpha$ -Oxyisopropyl-2-Methyl-5-Isopropylphenylketon. *Sd.* 157°<sub>16</sub> (*C.* 1899 [1] 959). — \*III, 126.
- 5) 2,5-tert. Dibutyl-1,4-Benzochinon. *Sm.* 150—151° (152,5°) (*B.* 32, 2427; *Bl.* [3] 31, 970 *C.* 1904 [2] 1113). — \*III, 274.
- 6) Isansäure. *Sm.* 42°. Ba, Ag (*C.* 1896 [2] 470; *Bl.* [3] 15, 938, 941). — \*II, 848.



- $C_{14}H_{20}O_2$
- 7)  $\alpha$ -Jeffropinolsäure. Sm. 117—118°. K, Ag (*Ar.* 245, 704 *C.* 1908 [1] 1272).
  - 8)  $\beta$ -Jeffropinolsäure. Sm. 77—78°. K, Ag (*Ar.* 245, 705 *C.* 1908 [1] 1272).
  - 9) Pyrophotosantonsäure. Sm. 94,5°. Ba (*G.* 12, 83; *G.* 32 [1] 310 *C.* 1902 [1] 1404). — II, 1933.
  - 10) Silveolsäure. Sm. 138°. K, Ba (*C.* 1901 [1] 1228). — \*III, 427.
  - 11) Lakton (aus *Asarum canadense*) (*Soc.* 81, 71 *C.* 1902 [1] 120). — \*III, 407.
  - 12) Äthylester d.  $\delta$ -Phenyl- $\beta$ -Methylbutan- $\gamma$ -Carbonsäure. Sd. 274 bis 276° (*C. r.* 146, 1407 *C.* 1908 [2] 507).
  - 13) Äthylester d. 2-Methyl-5-Isopropylphenylelessigsäure. Sd. 155°<sub>15</sub> (*A.* 314, 162).
  - 14) Äthylester d. 3-tert. Butyl-1-Methylbenzol-5-Carbonsäure. Sd. 268 bis 270°<sub>748</sub> (*C.* 1904 [1] 1498).
  - 15) Äthylester d. 3-Methyl-1-Isopropyl-1,2-Dihydrobenzol-5-Methylcarbonsäure. Sd. 154—158°<sub>15</sub> (*A.* 323, 150 *C.* 1902 [2] 842).
  - 16) Isobutylester d.  $\alpha$ -Phenylisobuttersäure. Sd. 260—261° (*C.* 1899 [2] 1048). — \*II, 844.
  - 17) Isoamylester d.  $\beta$ -Phenylpropionsäure. Sd. 291—293°<sub>759,77</sub> (*A.* 137, 335). — II, 1357.
  - 18) act.  $\beta$ -Methylbutylester d.  $\beta$ -Phenylpropionsäure. Sd. 279—281°<sub>738,5</sub> (*Bl.* [3] 15, 293; *Ph. Ch.* 20, 579). — \*II, 833.
  - 19) Phenylester d. Caprylsäure. Sd. 300° (*C. r.* 39, 257). — II, 662.
  - 20) Acetat d.  $\epsilon$ -Oxy- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sd. 137—139°<sub>9</sub> (*C.* 1901 [2] 623).
  - 21) Acetat d.  $\delta$ -Phenyl- $\gamma$ -Oxymethyl- $\beta$ -Methylbutan. Sd. 279—281° (*C. r.* 146, 1407 *C.* 1908 [2] 507).
  - 22) Acetat d. 2,3,4,5,6-Pentamethyl-1-Oxymethylbenzol (*B.* 22, 1217). — II, 1067.
  - 23) Valerianat d.  $\gamma$ -Oxypropylbenzol. Sd. 159—161°<sub>18</sub> (*D. R. P.* 164294 *C.* 1905 [2] 1701).
  - 24) Benzoat d.  $\delta$ -Oxy- $\gamma$ -Methylhexan. Sd. 147°<sub>17</sub> (*C. r.* 145, 437 *C.* 1907 [2] 1321).
- $C_{14}H_{20}O_3$
- C 71,2 — H 8,5 — O 20,3 — M. G. 236.
- 1) Dimethyläther d.  $\alpha\alpha$ -Dioxy- $\gamma$ -Keto- $\alpha$ -Phenylhexan. Sd. 156—158°<sub>17</sub> (*Bl.* [3] 33, 139 *C.* 1905 [1] 604).
  - 2) 3-Methyl-4, $\beta$ -Diäthyläther d.  $\beta$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]propen. Sd. 177,5°<sub>18</sub> (*B.* 28, 2091). — III, 143.
  - 3) Helleboretin (oder  $C_{19}H_{30}O_5$ ). Sm. oberhalb 200° (*A.* 135, 60; *B.* 15, 544; *C.* 1897 [2] 764). — III, 593.
  - 4)  $\alpha$ -Oxy- $\alpha$ -[4-Isopropylphenyl]butan- $\beta$ -Carbonsäure. Sm. 124,5 bis 125,5°. Na, Ba + 4H<sub>2</sub>O, Ca + 4H<sub>2</sub>O, Ag (*C.* 1906 [1] 347).
  - 5)  $\alpha$ -Oxy- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropan- $\beta$ -Carbonsäure (4-Isopropylphenyloxypivalinsäure). Sm. 106°. Na + 3H<sub>2</sub>O, K, Ca + 4H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag (*C.* 1899 [1] 1204). — \*II, 939.
  - 6)  $\alpha$ -Oxy-6-Pseudobutyl-2,4-Dimethylphenylelessigsäure. Sm. 120° (*B.* 31, 1347). — \*II, 939.
  - 7)  $\alpha$ -Oxyheptanphenyläther- $\delta$ -Carbonsäure. Sm. 53—54° (*B.* 28, 1202). — \*II, 364.
  - 8)  $\alpha$ -Oxybutter-5-Isopropyl-2-Methylphenyläthersäure. Sm. 42,5 bis 43,5°; Sd. 224—225°<sub>99</sub> (*B.* 33, 1271). — \*II, 459.
  - 9)  $\alpha$ -Oxybutter-6-Isopropyl-3-Methylphenyläthersäure. Sm. 74—76,5° (*B.* 33, 1273). — \*II, 464.
  - 10)  $\alpha$ -Oxyisobutter-5-Isopropyl-2-Methylphenyläthersäure. Sd. 190 bis 200°<sub>98</sub> (*B.* 33, 1271). — \*II, 459.
  - 11)  $\alpha$ -Oxyisobutter-6-Isopropyl-3-Methylphenyläthersäure. Sm. 69 bis 71° (*B.* 33, 1273; *C.* 1906 [2] 327). — \*II, 464.
  - 12)  $\alpha$ -Citrylidenacetessigsäure. Sm. 138° (SEHLER, Dissertation, Heidelberg 1897; *C.* 1901 [2] 903).
  - 13)  $\beta$ -Citrylidenacetessigsäure. Sm. 175° (SEHLER, Dissertation, Heidelberg 1897).
  - 14)  $\beta$ -Iononcarbonsäure. Sm. 208° (*C.* 1901 [2] 1103).
  - 15) Lakton d.  $\beta$ -Oxypropylcamphocarbonsäure. Sm. 141° (*C. r.* 136, 792 *C.* 1903 [1] 1086).

- $C_{14}H_{20}O_3$  16) Lakton (aus Citral u. Jodessigsäureäthylester). *Sd.* 160°<sub>10</sub> (*Bl.* [3] 27, 602 *C.* 1902 [2] 363).
- 17) Methylester d.  $\alpha$ -Oxy- $\beta$ -Citrylidenakrylmethyläthersäure. *Sd.* 170 bis 200°<sub>20</sub> (*D.R.P.* 178298 *C.* 1907 [1] 197).
- 18) Methylester d.  $\alpha$ -Oxy- $\beta$ -Cyklocitrylidenakrylmethyläthersäure. *Sd.* 165—180°<sub>21</sub> (*D.R.P.* 178298 *C.* 1907 [1] 197).
- 19) Äthylester d.  $\gamma$ -Oxy- $\gamma$ -Phenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. *Sd.* 154°<sub>10</sub> (*Bl.* [3] 35, 356 *C.* 1906 [2] 318).
- 20) Äthylester d.  $\delta$ -Oxy- $\delta$ -Phenyl- $\beta$ -Methylbutan- $\gamma$ -Carbonsäure. *Fl.* (*C.* 1897 [2] 349; 1898 [1] 884). — \*II, 938.
- 21) Äthylester d.  $\alpha$ -Oxy- $\alpha$ -[3-Methylphenyl]butan- $\beta$ -Carbonsäure. *Sd.* 187,5—188°<sub>31</sub> (*C.* 1908 [2] 1434).
- 22) Äthylester d.  $\alpha$ -Oxy- $\alpha$ -[4-Methylphenyl]butan- $\beta$ -Carbonsäure. *Sd.* 190,5—191°<sub>28</sub> (*C.* 1907 [2] 146).
- 23) Äthylester d.  $\alpha$ -Oxy- $\alpha$ -[4-Methylphenyl]- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. *Sd.* 171—173°<sub>15</sub> (*C.* 1902 [1] 1293).
- 24) Äthylester d. 4-Oxy-1-Isoamylbenzol-1-Carbonsäure? *Sm.* 75° (*A.* 319, 340 *C.* 1902 [1] 351).
- 25) Äthylester d.  $\alpha$ -Oxyisovalerian-2-Methylphenyläthersäure. *Sd.* 258 bis 261° (*B.* 33, 1253). — \*II, 424.
- 26) Äthylester d.  $\alpha$ -Oxyisovalerian-3-Methylphenyläthersäure. *Sd.* 265 bis 266°<sub>745</sub> (*B.* 33, 1256). — \*II, 429.
- 27) Äthylester d.  $\alpha$ -Oxyisovalerian-4-Methylphenyläthersäure. *Sd.* 265 bis 271° (*B.* 33, 1259). — \*II, 435.
- 28) Äthylester d.  $\alpha$ -Oxybutter-2,4-Dimethylphenyläthersäure. *Sd.* 267 bis 271°<sub>789</sub> (*B.* 33, 1265). — \*II, 444.
- 29) Äthylester d.  $\alpha$ -Oxybutter-2,5-Dimethylphenyläthersäure. *Sd.* 265 bis 266°<sub>765</sub> (*B.* 33, 1268). — \*II, 446.
- 30) Äthylester d.  $\alpha$ -Oxybutter-3,4-Dimethylphenyläthersäure. *Sd.* 275 bis 280°<sub>773</sub> (*B.* 33, 1262). — \*II, 440.
- 31) Äthylester d.  $\alpha$ -Oxyisobutter-2,4-Dimethylphenyläthersäure. *Sd.* 255—258°<sub>789</sub> (*B.* 33, 1265). — \*II, 444.
- 32) Äthylester d.  $\alpha$ -Oxyisobutter-2,5-Dimethylphenyläthersäure. *Sd.* 265—266°<sub>787</sub> (*B.* 33, 1268). — \*II, 446.
- 33) Äthylester d.  $\alpha$ -Oxyisobutter-3,4-Dimethylphenyläthersäure. *Sd.* 263—268°<sub>774</sub> (*B.* 33, 1263). — \*II, 440.
- 34) Äthylester d.  $\alpha$ -Oxypropion-2,4,5-Trimethylphenyläthersäure. *Sd.* 147—149°<sub>20</sub> (*B.* 33, 1274). — \*II, 449.
- 35) Äthylester d. Oxyessig-[2-Methyl-5-Isopropylphenyl]äthersäure. *Sm.* 100°; *Sd.* 289° (*G.* 10, 345). — II, 767.
- 36) Äthylester d. Oxyessig-[3-Methyl-6-Isopropylphenyl]äthersäure. *Sd.* 290° (*G.* 10, 342). — II, 771.
- 37) Allylester d. Camphocarbonsäure. *Sd.* 160—170°<sub>20</sub> (*C. r.* 136, 240 *C.* 1903 [1] 584).
- 38) Isoamylester d.  $\beta$ -[4-Oxyphenyl]propionsäure (*I.* d. Phloretinsäure). *Sd.* oberhalb 290° (*A.* 102, 154). — II, 1570.
- 39) Heptylphenylester d. Kohlensäure. *Sd.* 136°<sub>25</sub> (*Bl.* [3] 21, 820). — \*II, 361.
- 40) Acetat d. Triäthylresorcin. *Sm.* 63—65° (*M.* 11, 309). — II, 916.
- 41) Verbindung (aus d. Glykol  $C_{14}H_{22}O_4$ ). *Sd.* 193°<sub>20</sub> (*B.* 42, 1064 *C.* 1909 [1] 1656).
- $C_{14}H_{20}O_4$  C 66,7 — H 7,9 — O 25,4 — *M. G.* 252.
- 1) Triäthyläther d. Methyl-2,4,6-Trioxyphenylketon. *Sm.* 75° (*B.* 32, 2262). — \*III, 110.
- 2) Triäthyläther d. Oxymethyl-2,4-Dioxyphenylketon. *Sm.* 66—68° (*M.* 14, 41). — III, 140.
- 3) 3,6-Dioxy-2,5-Dibutyl-1,4-Benzochinon. *Sm.* 175° (*A.* 361, 379 *C.* 1908 [2] 590).
- 4) Oleocutinsäure. *Fl.* (*J.* 1885, 1802). — I, 1079.
- 5) Oxydigitogensäure +  $\frac{1}{2}H_2O$  (oder  $C_{28}H_{42}O_9$ ). *Mg.* (*B.* 24, 344; 32, 2205). — III, 581; \*III, 438.
- 6) Lakton d. Pulegonmalonmethylestersäure. *Sm.* 75—76° (*A.* 345, 164 *C.* 1906 [1] 1490).

- $C_{14}H_{20}O_4$
- 7) Aldehyd d. Säure  $C_{14}H_{20}O_4$ , (aus d. Glykol  $C_{14}H_{22}O_4$ ). Sm. 156—157° (B. 42, 1064 C. 1909 [1] 1656).
  - 8) Methylester d. Camphorformylelessigsäure. Sm. 91° (C. 1907 [1] 1496).
  - 9) Methylester d. Acetylcamphocarbonsäure. Sd. 142°<sub>12</sub> (B. 35, 4032 C. 1903 [1] 81).
  - 10) Äthylester d.  $\alpha$ -Oxy- $\alpha$ -[4-Methoxyphenyl]- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 71° (C. 1903 [2] 566).
  - 11) Äthylester d.  $\alpha$ -Oxyisovalerian-2-Methoxyphenyläthersäure. Sd. 275—285°<sub>751</sub> (B. 33, 1396). — \*II, 554.
  - 12) Äthylester d. 3-Keto-4,5-Dimethyl-1-Isopropyl-2,3-Dihydro-R-Penten-2-Ketocarbonsäure. Sd. 182—184°<sub>11</sub> (A. 348, 115 C. 1906 [2] 783).
  - 13) Äthylester d. 2-Keto-4,5-Methylen-1-Methyl-4-Isopropyl-R-Pentamethylen-3-Ketocarbonsäure. Sd. 168—170°<sub>11</sub> (A. 348, 116 C. 1906 [2] 783).
  - 14) Äthylester d. Campheroxalsäure. Sm. 40,5° (Soc. 57, 653; Am. 19, 397; 20, 331). — I, 734; \*I, 352.
  - 15) d-Monobornylester d. Fumarsäure. Sm. 117—118° (Soc. 91, 1227 C. 1907 [2] 972).
  - 16) l-Monobornylester d. Fumarsäure. Sm. 116,5—117° (Soc. 91, 1222 C. 1907 [2] 972).
- $C_{14}H_{20}O_5$
- C 62,7 — H 7,4 — O 29,8 — M. G. 268.
- 1) Säure (aus d. Glykol  $C_{14}H_{22}O_4$ ). Sm. 171° u. Zers. (B. 42, 1065 C. 1909 [1] 1656).
  - 2) Dimethylester d. Keto- $\beta$ -Santorsäure. Sm. 92—93° (C. 1896 [2] 1115; G. 29 [2] 243). — \*II, 1115.
  - 3) Diäthylester d. 1-Keto-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sd. 225—230° u. Zers. (A. 281, 106; B. 32, 423). — II, 1930; \*II, 1115.
  - 4) Dibutylester d. Furan-2,5-Dicarbonsäure. Sm. 37—38°; Sd. 186 bis 190°<sub>18</sub> (B. 34, 3455). — \*III, 513.
  - 5) Diisobutylester d. Furan-2,5-Dicarbonsäure. Sm. 88°; Sd. 172 bis 174°<sub>19</sub> (B. 34, 3455). — \*III, 513.
- $C_{14}H_{20}O_6$
- C 59,1 — H 7,0 — O 33,8 — M. G. 284.
- 1) 4-Keto-1,3-Diacetyl-1,3,5-Tri[Oxymethyl]-6-Methyl-1,2,3,4-Tetrahydrobenzol + x H<sub>2</sub>O. Sm. 110° (122° wasserfrei) (B. 36, 2176 C. 1903 [2] 371).
  - 2) 2,6-Dimethyl-1,4-Pyron + Malonsäurediäthylester. Na (A. 341, 64 C. 1905 [2] 822).
  - 3) Diäthylester d. 2,5-Diketo-1,4-Dimethylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Dimethylsuccinylbernsteinsäure). Sm. 72,5°; Sd. 192°<sub>14</sub> (B. 25, 2122). — I, 825.
  - 4) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -[2-Furanyl]äthanäthyläther- $\beta\beta$ -Dicarbonsäure. Fl. Na (B. 26, 1878). — III, 720.
- $C_{14}H_{20}O_7$
- C 56,0 — H 6,7 — O 37,3 — M. G. 300.
- 1) Glyko-o-Cumaralkohol + H<sub>2</sub>O. Sm. 119° (wasserfrei) (B. 18, 1962). — II, 1099.
  - 2) Benzyliden- $\alpha$ -Glykoheptit. Sm. 214° u. Zers. (A. 270, 82; B. 27, 1533). — III, 9.
  - 3) isom. Benzyliden- $\alpha$ -Glykoheptit. Sm. 155—156° (B. 27, 1533). — III, 9.
  - 4) Triäthylester d.  $\delta$ -Keto- $\beta$ -Penten- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 188 bis 189°<sub>15</sub> (Soc. 69, 532; 71, 324; 75, 785; 77, 242, 805). — \*I, 433.
  - 5) Triäthylester d. 3-Keto-1-Methyl-R-Tetramethylen-1,2,4-Tricarbonsäure. Sd. 213—214°<sub>17</sub> (B. 33, 3757).
  - 6) Acetat d. trim.  $\beta\gamma$ -Diketobutan. Sm. 93° (B. 35, 3294 C. 1902 [2] 1247).
- $C_{14}H_{20}O_8$
- C 53,2 — H 6,3 — O 40,5 — M. G. 316.
- 1) Glykovanillylalkohol + H<sub>2</sub>O. Sm. 120° (B. 18, 1597). — III, 577.
  - 2) Tetraäthylester d. Äthentetracarbonsäure. Sm. 56—58°; Sd. 325 bis 328° u. Zers. (B. 13, 2161; 14, 619; 15, 1109; 16, 2631; 26, 2357; 28, 2833; 29, 1511; 30, 488; 32, 860; 34, 2079; A. 214, 76; Ph. Ch. 10, 421; Am. 19, 700; J. pr. [2] 68, 159 C. 1903 [2] 759; Soc. 85, 613 C. 1904 [1] 1553; B. 38, 303 C. 1905 [1] 516). — I, 863; \*I, 444.



- $C_{14}H_{20}O_8$  3) Verbindung (aus Äthan- $\alpha\alpha\beta$ -Tricarbonsäuretriäthylester u. Dichlormalonsäurediäthylester). Sd. 160—180°<sub>20</sub> (B. 29, 1744).  
C 50,6 — H 6,0 — O 43,4 — M. G. 332.
- $C_{14}H_{20}O_9$  1) Dulcitantetracetat (A. ch. [4] 27, 160; B. 25, 2564). — I, 418.  
2) Isodulcitantetracetat (Bl. 47, 673). — I, 418.  
3) Mannitantetracetat (A. ch. [5] 6, 110). — I, 417.  
4) Quercitttetracetat (A. 190, 287). — I, 416.  
5) Säure (aus Cholesterin).  $Ca_2 + 2H_2O$  (M. 24, 190 C. 1903 [2] 21).  
6) Diäthylester d. Diacetylisozuckersäure. Sm. 49° (B. 27, 128). — \*I, 437.
- $C_{14}H_{20}O_{10}$  C 48,3 — H 5,7 — O 46,0 — M. G. 348.  
1) Pentamethylester d. Butan- $\alpha\alpha\beta\gamma\gamma$ -Pentacarbonsäure. Sm. 58—59,5°. Na (A. 347, 12 C. 1906 [2] 422).  
2) Pentamethylester d. Butan- $\alpha\alpha\beta\gamma\delta$ -Pentacarbonsäure. Sm. 95—96° (B. 36, 3293 C. 1903 [2] 1167).  
3) Tetraacetat d. Galaktose. Sm. 145° (M. 22, 1046 C. 1902 [1] 181).  
4) Tetraacetat d. d-Glykose. Sm. 117° (B. 42, 2778 C. 1909 [2] 973).  
5) isom. Tetraacetat d. Glykose. Sm. 98° (C. 1908 [1] 1831).  
6) Tetraacetat d. d-Läulose. Sm. 132° (C. 1909 [1] 271).
- $C_{14}H_{20}O_{13}$  C 42,4 — H 5,0 — O 52,5 — M. G. 396.  
1) Bassorinsäure. BaO (Soc. 79, 1182).  
2) Pektinsäure (siehe auch  $C_{16}H_{22}O_{15}$ ). Na, K<sub>2</sub>, Ca, Ba, Ag<sub>2</sub> (A. 51, 360). — I, 1105.
- $C_{14}H_{20}O_{15}$  C 39,2 — H 4,7 — O 56,1 — M. G. 428.  
1) Dulcitweinsäure.  $Ca + 4H_2O$  (J. 1857, 506). — I, 796.
- $C_{14}H_{20}N_2$  C 77,8 — H 9,2 — N 13,0 — M. G. 216.  
1) 6-Methyl-3-Isopropyl-2-Phenyl-2,3,4,5-Tetrahydro-1,2-Diazin. Sd. 192—193°<sub>23</sub> (Bl. [3] 17, 178, 191). — IV, 769.  
2)  $\alpha\beta$ -Di[2,5-Dimethyl-1-Pyrryl]äthan. Sm. 125—126° (B. 19, 3157). — IV, 72.  
3) 5-Methyl-2-Isohexylbenzimidazol. Sm. 119° (J. pr. [2] 74, 325 C. 1906 [2] 1823).  
4) 2,5,7[oder 2,6,8]-Trimethyl-3-Isopropyl-1,4-Dihydro-1,4-Benzodiazin. Sm. 82—83°. 2HCl, 2HBr, 2HJ, 2Pikrat (B. 39, 1647 C. 1906 [2] 61).  
5) Dimethyloktahydro- $\beta$ -Naphtochinolinimidazol. 2HCl (B. 24, 2668). — IV, 889.  
6) Oktohydrodimethylphenanthrolin (B. 24, 1742). — IV, 889.  
7) Nitril d.  $\alpha$ -Phenylamidoönanthsäure. Sm. 39,8° (B. 25, 2051). — II, 436.
- $C_{14}H_{20}Cl_2$  1) 3,6-Dichlor-1,2,4,5-Tetraäthylbenzol. Sd. 296° (A. ch. [6] 6, 485). — II, 56.
- $C_{14}H_{20}Br_2$  1)  $\gamma\delta$ -Dibrom- $\delta$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylbutan. Fl. (B. 37, 930 C. 1904 [1] 1209).  
2) 4,6-Dibrom-2-Isoamyl-1,3,5-Trimethylbenzol. Sm. 44° (B. 37, 1720 C. 1904 [1] 1489).  
3) 5,6-Dibrom-1,2,3,4-Tetraäthylbenzol. Sm. 74,5° (77°); Sd. oberhalb 330° u. Zers. (B. 16, 1745; 21, 2818). — II, 72; \*II, 35.  
4) 3,6-Dibrom-1,2,4,5-Tetraäthylbenzol. Sm. 112,5°; Sd. 325—330° (B. 21, 2821; 31, 1716; B. 36, 1635 C. 1903 [2] 26). — II, 72; \*II, 35.
- $C_{14}H_{20}S$  1) Verbindung (aus Aceton u. Citral). Sd. 150—153°<sub>12</sub> (D. R. P. 162059 C. 1905 [2] 528).
- $C_{14}H_{21}N$  C 82,8 — H 10,3 — N 6,9 — M. G. 203.  
1)  $\alpha$ -[4-Dimethylamidophenyl]- $\delta$ -Methyl- $\alpha$ -Penten. Sd. 164—166°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 40, 4365 C. 1908 [1] 34).  
2) 3-Amido-4-Benzyl-1-Methylhexahydrobenzol. Sd. 235—245°. HCl (B. 29, 2961). — \*II, 329.  
3) 3-Benzylamido-1-Methylhexahydrobenzol. Sd. oberhalb 300°. HCl (A. 343, 67, 72 C. 1906 [1] 357).  
4) 4-Phenylamidomethyl-1-Methylhexahydrobenzol. Sd. 195°<sub>30</sub> (C. 1901 [2] 152).  
5) 6-Diäthylamido-1,2,3,4-Tetrahydronaphtalin. Sd. 298°<sub>709</sub> (B. 22, 1762). — II, 589.

- C<sub>14</sub>H<sub>21</sub>N**
- 6)  $\alpha$ -[3-Methylphenyl]- $\beta$ -[Hexahydro-2-Pyridyl]äthan. *Sd.* 195 bis 197°<sub>35</sub> (*B.* 39, 2837 *C.* 1906 [2] 1326).
  - 7)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[Hexahydro-2-Pyridyl]äthan. *Sd.* 145–148°<sub>11</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 35, 2776 *C.* 1902 [2] 992). — \*IV, 152.
  - 8)  $\alpha$ -[3-Methylphenyl]- $\beta$ -[Hexahydro-4-Pyridyl]äthan. *Sd.* 200°<sub>50</sub> (*B.* 39, 2835 *C.* 1906 [2] 1326).
  - 9)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[Hexahydro-4-Pyridyl]äthan. *Sd.* 215°<sub>50</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 38, 166 *C.* 1905 [1] 452).
  - 10) 2-Methyl-6-[ $\beta$ -Phenyläthyl]hexahydropyridin. *Sm.* 80–81°. HCl, (HCl, HgCl<sub>2</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 25, 2402). — IV, 211.
  - 11) 4-Methyl-2-[ $\beta$ -Phenyläthyl]hexahydropyridin (Methylstilbazolin). *Sd.* 286–291° (*B.* 21, 3078). — IV, 211.
  - 12) 1-2-Methyl-1-Äthyl-6-Phenylhexahydropyridin. *Sd.* 258° (*B.* 40, 687 *C.* 1907 [1] 972).
  - 13) 1,2-Dimethyl-3,3-Diäthyl-2,3-Dihydroindol. *Sd.* 154–158°<sub>25</sub>. (2HCl, PtCl<sub>4</sub>), HJ (*B.* 29, 2481; *G.* 28 [2] 351). — IV, 210; \*IV, 151.
  - 14) 1,3,6-Trimethyl-2-Äthyl-1,2,3,4-Tetrahydrochinolin. *Sd.* 275–280°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*B.* 18, 3388). — IV, 210.
  - 15) 3,6,8-Trimethyl-2-Äthyl-1,2,3,4-Tetrahydrochinolin. *Sd.* 287–289°. Pikrat (*B.* 23, 2272). — IV, 211.
  - 16) 1,2,2,3,4-Pentamethyl-1,2,3,4-Tetrahydrochinolin. *Fl.* Pikrat (*G.* 19, 326). — IV, 210.
- C<sub>14</sub>H<sub>21</sub>N<sub>3</sub>**
- 1) 3-[ $\alpha$ -Phenylhydrazonäthyl]-1-Methylhexahydropyridin. *Fl.* HCl (*B.* 38, 2478 *C.* 1905 [2] 969).
  - 2) 1-[ $\beta$ -Phenylhydrazonpropyl]hexahydropyridin (Piperidoacetonphenylhydrazon). *Sm.* 59–62° (*B.* 28, 1251). — IV, 767.
  - 3) 1-[2,4,5-Trimethylphenyl]azohexahydropyridin. *Sm.* 50° (*A.* 243, 231). — IV, 1580.
  - 4) Nitril d.  $\alpha$ -[ $\beta$ -Phenylhydrazido]capronsäure. *Sm.* 50,8° (*B.* 25, 2052). — IV, 740.
- C<sub>14</sub>H<sub>21</sub>Cl**
- 1)  $\delta$ -Chlor- $\delta$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylbutan. *Fl.* (*B.* 37, 930 *C.* 1904 [1] 1209).
  - 2)  $\rho$ -Chlor-1-[norm.] Oktylbenzol. *Sd.* 270–275° (*B.* 19, 2719). — II, 56.
  - 3)  $\rho$ -Chlor- $\rho$ -Tetraäthylbenzol (Gemisch). *Sd.* 269° (*A. ch.* [6] 6, 427). — II, 56.
- C<sub>14</sub>H<sub>21</sub>Br**
- 1)  $\rho$ -Brom-1-[norm.] Oktylbenzol. *Sd.* 285–290° (*B.* 19, 642, 2719). — II, 72.
  - 2) 5-Brom-1,2,3,4-Tetraäthylbenzol. *Sd.* 284° (*B.* 16, 1745). — II, 72.
- C<sub>14</sub>H<sub>21</sub>J**
- 1)  $\rho$ -Jod-1-[norm.] Oktylbenzol (*B.* 18, 136; 19, 2720). — II, 77.
  - 2) 4-Jod-1-[sec.] Oktylbenzol. *Sd.* 304–305° (*B.* 18, 142). — II, 77.
- C<sub>14</sub>H<sub>22</sub>O**
- 1)  $\beta$ -[4-Oxyphenyl]oktan. *Fl.* (*J. r.* 23, 543). — II, 776.
  - 2)  $\delta$ -Oxy- $\delta$ -[2,4,6-Trimethylphenyl]- $\beta$ -Methylbutan. *Sd.* 164°<sub>11</sub> (*B.* 37, 930 *C.* 1904 [1] 1209).
  - 3)  $\alpha$ -Oxy- $\alpha$ -[2-Methyl-5-Propylphenyl]butan. *Sd.* oberhalb 300° (*J. pr.* [2] 43, 536). — II, 1067.
  - 4) 1-Oxy- $\rho$ -Tetraäthylbenzol. *Sm.* 45°; *Sd.* 270–271° (*B.* 32, 2393). — \*II, 467.
  - 5) 5-[ $\alpha$ -Oxyäthyl]-1,2,4-Triäthylbenzol. *Sm.* 45°; *Sd.* 149°<sub>13</sub> (*B.* 36, 1635 *C.* 1903 [2] 26).
  - 6) Methyläther d.  $\alpha$ -[2-Oxyphenyl]heptan. *Sd.* 153–155°<sub>30</sub> (*B.* 37, 4002 *C.* 1904 [2] 1642).
  - 7) Methyläther d.  $\delta$ -[4-Oxyphenyl]heptan. *Sd.* 267–268° (*J. r.* 23, 540). — II, 776.
  - 8) Methyläther d. 3-Oxy- $\rho$ -Diisopropyl-1-Methylbenzol. *Sd.* 242–245° (*G.* 12, 508). — II, 776.
  - 9) Äthyläther d.  $\delta$ - $\alpha$ -[2-Oxyphenyl]- $\gamma$ -Methylpentan. *Sd.* 260°<sub>733</sub> (*B.* 38, 2315 *C.* 1905 [2] 481).
  - 10) Butyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. *Sd.* 258,3° (*A.* 243, 48). — II, 770.
  - 11) Isobutyläther d. 4-Oxy-1-tert. Butylbenzol. *Sd.* 263–268°<sub>734</sub> (*Am.* 16, 635). — \*II, 458.

- $C_{14}H_{22}O$
- 12) Isoamyläther d. 5-Oxy-1,2,4-Trimethylbenzol. *Sd.* 265—266° (*B.* 17, 1919). — II, 763.
  - 13) norm. Heptyläther d. 2-Oxy-1-Methylbenzol. *Sd.* 277,5° (*A.* 243, 39). — II, 737.
  - 14) norm. Heptyläther d. 3-Oxy-1-Methylbenzol. *Sd.* 238,2° (*A.* 243, 42). — II, 744.
  - 15) norm. Heptyläther d. 4-Oxy-1-Methylbenzol. *Sd.* 283,3° (*A.* 243, 46). — II, 748.
  - 16) norm. Oktyläther d. Oxybenzol. *Sm.* 8°; *Sd.* 282,8° (285,2°) (*A.* 243, 36; *Soc.* 69, 1240). — II, 654; \*II, 355.
  - 17) Bicyklo-Methylhexen-Methylhexanon. *Sd.* 143—144°<sub>10</sub> (*B.* 29, 1595, 2966). — \*I, 529.
  - 18) Pseudocyclocitralidenmethyläthylketon. *Sd.* 133—135°<sub>8</sub> (*D. R. P.* 164505 *C.* 1905 [2] 1749).
  - 19)  $\alpha$ -Methyljonon. *Sd.* 140—150°<sub>20</sub> (*D. R. P.* 79120; *D. R. P.* 127424 *C.* 1902 [1] 235; *D. R. P.* 133758 *C.* 1902 [2] 613; *D. R. P.* 150827 *C.* 1904 [1] 1379). — \*III, 90.
  - 20) isom.  $\alpha$ -Methyljonon. *Sd.* 135—140°<sub>15</sub> (*D. R. P.* 150827 *C.* 1904 [1] 1379).
  - 21)  $\beta$ -Methyljonon. *Sd.* 140—155°<sub>20</sub> (145—151°<sub>15</sub>) (*D. R. P.* 79120; *D. R. P.* 127424 *C.* 1902 [1] 235; *D. R. P.* 133758 *C.* 1902 [2] 613; *D. R. P.* 150827 *C.* 1904 [1] 1379). — \*III, 90.
  - 22) isom.  $\beta$ -Methyljonon. *Sd.* 135—140°<sub>15</sub> (*D. R. P.* 150827 *C.* 1904 [1] 1379).
  - 23) Methylpseudojonon (*D. R. P.* 79120; *D. R. P.* 127424 *C.* 1902 [1] 235; *D. R. P.* 150771 *C.* 1904 [1] 1307). — \*III, 90.
  - 24) d-Isobutylidencampher. *Sd.* 145°<sub>10</sub> (*C. r.* 142, 1310 *C.* 1906 [2] 238).
  - 25) Alstonin. *Sm.* 191—192° (*B.* 37, 4113 *C.* 1904 [2] 1656).
  - 26) Isoalstonin. *Sm.* 163° (*B.* 37, 4113 *C.* 1904 [2] 1656).
  - 27) Morrenol (oder  $C_{15}H_{24}O$ ). *Sm.* 168° (*B.* 24, 1852). — III, 638.
  - 28) Olibanoresen = ( $C_{14}H_{22}O$ )<sub>x</sub>. *Sm.* 62° (*C.* 1898 [2] 985). — \*III, 424.
  - 29) Keton (aus d. Acetat d. 5-Oxy-2-Methyl-1,2,3,4-Tetrahydrobenzol). *Sd.* 157—159°<sub>13</sub> (*B.* 41, 569 *C.* 1908 [1] 1176).
  - 30) Verbindung (aus Aceton). *Sd.* 183—185° (*Am.* 15, 264).
  - 31) Verbindung (aus Pseudoeuphorbon). *Sm.* 60° (*Ar.* 245, 696 *C.* 1908 [1] 1315).
- $C_{14}H_{22}O_2$
- C* 75,6 — *H* 10,0 — *O* 14,4 — *M. G.* 222.
- 1)  $\alpha\beta$ -Dioxy- $\alpha\alpha\beta\beta$ -Tetraäthyläthan. *Fl.* (*B.* 41, 4091 *C.* 1909 [1] 269).
  - 2)  $\delta$ -Oxy- $\delta$ -[2-Oxymethylphenyl]heptan. *Sm.* 107—108° (*B.* 40, 3064 *C.* 1907 [2] 812).
  - 3)  $\alpha\gamma$ -Dioxy- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropan. *Sm.* 58°; *Sd.* 210°<sub>22</sub> (*M.* 24, 252 *C.* 1903 [2] 242).
  - 4) 1,2-Dioxy- $\beta$ -Di[tert. Butyl]benzol. *Sm.* 85—86° (*B.* 32, 2427). — \*II, 587.
  - 5) 1,3-Dioxy- $\beta$ -Di[tert. Butyl]benzol. *Sm.* 116—118° (*B.* 32, 2424; *C.* 1902 [2] 1198). — \*II, 587.
  - 6) isom. 1,3-Dioxy- $\beta$ -Di[tert. Butyl]benzol. *Sm.* 119,5° (*C.* 1902 [2] 1198).
  - 7) Alkohol (aus Heerabolmyrrhe). *Sd.* 264° (*Ar.* 245, 451 *C.* 1907 [2] 1913).
  - 8) Monoäthyläther d. 1,3-Dioxy- $\beta$ -Triäthylbenzol. *Sd.* 160—169°<sub>14—20</sub> (*M.* 11, 298). — II, 916.
  - 9) Diäthyläther d. 4-Isopropyl-1-Dioxymethylbenzol. *Sd.* 257—259° (*B.* 31, 1015). — \*III, 43.
  - 10) Dipropyläther d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenyläthan (*B.* 31, 1012). — \*III, 91.
  - 11) Dipropyläther d. 4,6-Dioxy-1,3-Dimethylbenzol. *Sm.* 33,5° (*B.* 40, 1946 *C.* 1907 [2] 232).
  - 12) Diisobutyläther d. 1,4-Dioxybenzol. *Fest.* *Sd.* 262° (*M.* 3, 681). — II, 940.
  - 13) 3,3'-Diketo-1,1'-Dimethyldodekahydrohydrobiphenyl. *Sm.* 160—161° (*B.* 31, 1806). — \*I, 541.
  - 14) Butyrylcampher. *Sd.* 146°<sub>12</sub> (*B.* 36, 2639 *C.* 1903 [2] 627; *B.* 37, 762 *C.* 1904 [1] 1085).
  - 15) Cyklamiretin. *Sm.* 215° (*B.* 36, 1765 *C.* 1903 [2] 119).
  - 16) Sapogenin. *Sm.* 257—260° (248—250°) (*Z.* 1867, 632; *M.* 10, 170; *C.* 1897 [1] 302). — III, 610.



- $C_{14}H_{22}O_2$
- 17) Pimarinsäure. Sm. 118—119° (*C.* 1900 [2] 1271). — \*II, 712.
  - 18) Lakton d.  $\alpha$ -Oxy- $\alpha\alpha$ -Diallyl- $\beta\beta\gamma$ -Trimethylbutan- $\gamma$ -Carbonsäure. *Sd.* 195—196°<sub>15</sub> (*B.* 41, 4100 *C.* 1909 [1] 270).
  - 19) Methylester d. Santalensäure. *Sd.* 232—234°<sub>35</sub> (*Soc.* 79, 137). — \*II, 711.
  - 20) Äthylester d.  $\beta\beta$ -Dimethyl- $\alpha\gamma\gamma$ -Nonatrien- $\alpha$ -Carbonsäure (Ä. d. Citrylidenessigsäure). *Sd.* 160—162°<sub>24</sub> (*Bl.* [3] 21, 417; *Bl.* [3] 27, 602 *C.* 1902 [2] 363). — \*I, 218.
  - 21) Äthylester d. Cyklocitrylidenessigsäure. *Sd.* 141°<sub>17</sub> (*D.R.P.* 153575 *C.* 1904 [2] 678).
  - 22) Äthylester d. Säure  $C_{12}H_{18}O_2$  (aus Carvenon). *Sd.* 135—137°<sub>16</sub> (*C.* 1902 [1] 1294; *A.* 323, 156 *C.* 1902 [2] 843).
  - 23) Äthylester d. Säure  $C_{12}H_{18}O_2$  (aus Dihydrocarvon). *Sd.* 145—148°<sub>18</sub> (*C.* 1902 [1] 1294).
  - 24) Crotonat d. Borneol. *Sd.* 173°<sub>19</sub> (*C. r.* 136, 238 *C.* 1903 [1] 584; *C. r.* 140, 948 *C.* 1905 [1] 1373).
  - 25) Crotonat d. d-Citronellol. *Sd.* 138—140°<sub>35</sub> (*Bl.* [3] 19, 638).
  - 26) Verbindung (aus Pinen u. Diazoessigsäureäthylester). *Sd.* 140—150°<sub>15</sub> (*J. pr.* [2] 79, 506 *C.* 1909 [2] 343).
  - 27) Verbindung (aus Sapogenin). Sm. 128° (*Z.* 1867, 632). — III, 610.  
 $C$  70,6 —  $H$  9,2 —  $O$  20,2 —  $M. G.$  238.
- $C_{14}H_{22}O_3$
- 1) 1,2,3-Trioxy- $\beta$ -tert. Dibutylbenzol. Sm. 119° (*B.* 32, 2429). — \*II, 625.
  - 2)  $\beta'\gamma$ -Diäthyläther d.  $\beta\gamma$ -Dioxy- $\beta'$ -Oxymethyl- $\alpha$ -Phenylpropan. *Sd.* 174°<sub>14</sub> (*C.* 1907 [1] 873).
  - 3) Diäthyläther d. 1,2,3-Trioxy- $\beta$ -Diäthylbenzol. *Sd.* 149—150°<sub>15</sub> (*M.* 23, 193 *C.* 1902 [1] 1332).
  - 4) Triäthyläther d. 1,2,3-Trioxy- $\beta$ -Äthylbenzol. *Sd.* 143°<sub>15</sub> (*M.* 23, 192 *C.* 1902 [1] 1331).
  - 5) Triäthyläther d. 1,2,4-Trioxy- $\beta$ -Äthylbenzol. Sm. 31—32°; *Sd.* 157 bis 160°<sub>18</sub> (*M.* 22, 599).
  - 6) Triäthyläther d. 2,4,6-Trioxy-1,3-Dimethylbenzol. Sm. 59° (*M.* 21, 871). — \*II, 622.
  - 7) 2,5-Dimethyläther-3-Propyläther d. 2,3,5-Trioxy-1-Propylbenzol. *Sd.* 156—157°<sub>12</sub> (*B.* 36, 1720 *C.* 1903 [2] 114).
  - 8)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2-Methylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxypropan. *Sd.* 139—140°<sub>15</sub> (*A.* 312, 286). — \*II, 423.
  - 9)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[3-Methylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxypropan. *Sd.* 271° (*A.* 312, 286). — \*II, 428.
  - 10)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[4-Methylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxypropan. *Sd.* 272° (*A.* 312, 286). — \*II, 433.
  - 11)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2-Äthylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. *Sd.* 275° (*A.* 312, 299). — \*II, 439.
  - 12)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[4-Äthylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. *Sd.* 288—289° (*B.* 30, 1708; *A.* 312, 298). — \*II, 439.
  - 13)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2,3-Dimethylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. *Sd.* 165°<sub>15</sub> (*A.* 312, 297). — \*II, 440.
  - 14)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2,4-Dimethylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. *Sd.* 273° (*B.* 30, 1708). — \*II, 443.
  - 15)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2,5-Dimethylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. *Sd.* 278—279° (*B.* 30, 1708). — \*II, 446.
  - 16)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[3,4-Dimethylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. *Sd.* 168°<sub>20</sub> (*B.* 30, 1707). — \*II, 440.
  - 17)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[3,5-Dimethylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. *Sd.* 287—288° (*A.* 312, 295). — \*II, 446.
  - 18) 2,4,6-Triketo-1,1,3,3-Tetraäthylhexahydrobenzol. Sm. 209—212°. *Na* (*M.* 9, 884). — II, 1025.
  - 19) Oxyapogenin. Sm. noch nicht bei 290° (*M.* 10, 172). — III, 610.
  - 20) Desoxydigitogensäure +  $\frac{1}{2}H_2O$ . Sm. 240° (*B.* 26 [2] 686). — \*III, 438.
  - 21) Anhydrid d. Hexahydrobenzolcarbonsäure. Sm. 25°; *Sd.* 280—283° (*Soc.* 87, 92 *C.* 1905 [1] 1006).
  - 22) Methylester d.  $\alpha$ -Äthylcamphocarbonsäure. Sm. 60° (*C. r.* 137, 1067 *C.* 1904 [1] 283).
  - 23) Methylester d.  $\beta$ -Äthylcamphocarbonsäure. *Sd.* 162°<sub>10</sub> (*C. r.* 137, 1068 *C.* 1904 [1] 283).

- C<sub>14</sub>H<sub>22</sub>O<sub>8</sub>** 24) Äthylester d. 5-Oxy-3-Methyl-1-Isobutyl-1,2-Dihydrobenzol-6-Carbonsäure. *Sd.* 167—169°<sub>20</sub> (*A.* 288, 334; 297, 144 Anm.). — \*I, 267.
- 25) Äthylester d. 5-Oxy-1,1,3-Trimethyl-1,2-Dihydrobenzol-5-Äthyläther-2-Carbonsäure. *Sd.* 136—137°<sub>8</sub> (*A.* 366, 147 *C.* 1909 [2] 610).
- 26) Äthylester d. 1-Keto-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. *Sd.* 167—169°<sub>20</sub> (*A.* 288, 334). — \*I, 267.
- 27) Äthylester d. 4-Keto-1,1-Dimethyl-1,2,3,4-Tetrahydrobenzol-6-[Propyl- $\alpha$ -Carbonsäure]. *Sd.* 185°<sub>30</sub> (*Soc.* 95, 28 *C.* 1909 [1] 854).
- 28) Äthylester d. Methylcamphocarbonsäure. *Sm.* 60—61° (*Bl.* [3] 7, 75; *A. ch.* [7] 2, 280; *Bl.* [3] 27, 682 *C.* 1902 [2] 431). — I, 629; \*I, 267.
- 29) Propylester d. Camphocarbonsäure. *Sd.* 170°<sub>19</sub> (*C. r.* 136, 240 *C.* 1903 [1] 584).
- C<sub>14</sub>H<sub>22</sub>O<sub>4</sub>** 30) Verbindung (aus Guttapercha). *Sm.* 120—130° (*C.* 1903 [1] 84).  
C 66,1 — H 8,6 — O 25,2 — M. G. 254.
- 1) Glykol (aus Caryophyllen). *Sm.* 120°; *Sd.* 210°<sub>10</sub> (*B.* 42, 1063 *C.* 1909 [1] 1656).
- 2) Glykol (aus Isocaryophyllen). *Sm.* 120° (*A.* 369, 51 *C.* 1909 [2] 2000).
- 3) Tetraäthyläther d. 1,2,4,5-Tetraoxybenzol. *Sm.* 143° (*B.* 23, 1214). — II, 1031.
- 4) Laserol (*A.* 135, 245). — III, 635.
- 5) Sapogenin (*C.* 1908 [1] 746).
- 6) Allylhomocampfersäure. *Sm.* 163° (*B.* 35, 3630 *C.* 1902 [2] 1468).
- 7)  $\beta$ -Oxypropylcamphocarbonsäure (*C. r.* 136, 792 *C.* 1903 [1] 1086).
- 8) Cedrendicarbonsäure. *Fl.* (*B.* 40, 3524 *C.* 1907 [2] 1694).
- 9) Digitogensäure (oder C<sub>28</sub>H<sub>44</sub>O<sub>8</sub>). *Sm.* 150°. *Mg.* *Cd.* (*B.* 24, 342; 26 [2] 686; 27 [2] 881; 32, 341, 2203; 34, 3564; *B.* 37, 1216 *C.* 1904 [1] 1363). — III, 581.
- 10) Äthylester d. Acetylcamphenylsäure. *Sd.* 138,5—139,5°<sub>12</sub> (*A.* 340, 52 *C.* 1905 [2] 553).
- 11) Diäthylester d. Säure C<sub>10</sub>H<sub>14</sub>O<sub>4</sub>. *Sd.* 247—250° (*B.* 14, 336, 337). — I, 733.
- 12) d-Monoborneolester d. Bernsteinsäure. *Sm.* 58° (*B.* 22 [2] 255). — III, 471.
- 13) l-Monoborneolester d. Bernsteinsäure. *Sm.* 50° (*B.* 22 [2] 255). — III, 472.
- 14) Monoisoborneolester d. Bernsteinsäure. *Sm.* 56,5°. Cinchonidinsalz (*B.* 22 [2] 255; *B.* 42, 489 *C.* 1909 [1] 750). — III, 473.
- 15) Diacetat d. cis-2,2-Dioxydekahydronaphtalin. *Sm.* 85° (*C. r.* 148, 1615 *C.* 1909 [2] 534).
- 16) Diacetat d. Pinolhydrat (*D. d.* Sobrerol). *Sd.* 159—161°<sub>14</sub> (*B.* 29, 1197 *C.* 1897 [2] 417; 1905 [2] 483). — III, 508; \*III, 381.
- 17) Diacetat d. 5,7-Dioxy-1-Methylbicyclo-[1,3,3]-Nonan. *Fl.* (*B.* 37, 1674 *C.* 1904 [1] 1607).
- 18) Diacetat d. Glykol C<sub>10</sub>H<sub>18</sub>O<sub>2</sub> (aus Menthan-1,2,8-triol). *Sd.* 154—155° (*i. V.*) (*B.* 29, 1199). — \*I, 96.  
C 62,2 — H 8,1 — O 29,6 — M. G. 270.
- C<sub>14</sub>H<sub>22</sub>O<sub>5</sub>** 1) 2,4,5-Trimethyläther-1,1-Diäthyläther d. 2,4,5-Trioxy-1-Dioxy-methylbenzol. *Sm.* 101,5° (*Ar.* 242, 103 *C.* 1904 [1] 1008).
- 2) Diäthylester d.  $\delta$ -Acetyl- $\alpha$ -Hexen- $\delta\epsilon$ -Dicarbonsäure. *Sd.* 250—255° (*B.* 29, 981). — \*I, 387.
- 3) Diäthylester d. 3-Keto-1-Methylhexahydrobenzol-4-Carbonsäure-4-Methylcarbonsäure. *Sd.* 194—195°<sub>12</sub> (*A.* 350, 243 *C.* 1907 [1] 251).
- 4) Diäthylester d. 4-Keto-1,1,3-Trimethyl-R-Pentamethylen-2,3-Dicarbonsäure. *Sd.* 200—205°<sub>60</sub> (*Soc.* 89, 783 *C.* 1906 [2] 239).
- 5) Diäthylester d. 2-Keto-1,1-Dimethyl-R-Pentamethylen-3-Carbonsäure-3-Methylcarbonsäure. *Sd.* 165°<sub>12</sub> (*C. r.* 146, 77 *C.* 1908 [1] 1056).
- 6) Diäthylester d. Säure C<sub>10</sub>H<sub>14</sub>O<sub>5</sub> (aus Dimethylbutantricarbonsäuretriäthylester). *Sd.* 168—170°<sub>18</sub> (*C.* 1900 [2] 333).
- 7) Diacetat d. cis-Pinolglykol. *Sm.* 97—98°; *Sd.* 127°<sub>18</sub> (151—152°<sub>8,5</sub>) (*A.* 259, 311; *B.* 32, 2067; *C.* 1898 [2] 543). — III, 509; \*III, 382.
- 8) Diacetat d. trans-Pinolglykol. *Sm.* 37—38°; *Sd.* 166—167°<sub>17</sub> (*J. r.* 26, 329; *C.* 1898 [2] 543; *B.* 32, 2067). — III, 509; \*III, 382.  
C 58,7 — H 7,7 — O 33,6 — M. G. 286.
- C<sub>14</sub>H<sub>22</sub>O<sub>6</sub>** 1) Cholecampfersäure. *Sm.* 286° (*B.* 12, 1519; 13, 1052; *H.* 48, 192 *C.* 1906 [2] 607).

$C_{14}H_{22}O_6$ 

- 2) Diäthylester d. 3,5-Dioxy-1,3-Dimethyl-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Sm. 60–61° (60–63°).  $Na + C_2H_5O$  (B. 31, 1388; 32, 89; A. 332, 26 C. 1904 [1] 1566). — \*I, 420.
- 3) Diäthylester d. 5-Keto-1-Oxy-1,3-Dimethylhexahydrobenzol-2,4-Dicarbonsäure (D. d. Äthylidenbisacetessigsäure). Sm. 79–80° (A. 281, 104; B. 31, 1388; 32, 88, 423; A. 323, 100 C. 1902 [2] 784; A. 332, 25 C. 1904 [1] 1566). — \*III, 419.
- 4) Diäthylester d.  $\beta\eta$ -Diketooktan- $\gamma\zeta$ -Dicarbonsäure. Fl.  $Na_2$  (Soc. 57, 215). — I, 821.
- 5) Diäthylester d.  $\gamma\zeta$ -Diketooktan- $\alpha\theta$ -Dicarbonsäure. Sm. 46° (B. 28, 920; A. 294, 167).
- 6) Diäthylester d.  $\beta$ -Keto- $\gamma$ -Äthylpentan- $\alpha$ -Ketocarbonsäure- $\gamma$ -Carbon-säure. Fl. (B. 33, 3438).
- 7) Triäthylester d.  $\alpha$ -Penten- $\alpha\gamma\gamma$ -Tricarbonsäure. Sd. 176–177°<sub>18</sub> (J. pr. [2] 58, 406). — \*I, 418.
- 8) Triäthylester d.  $\alpha$ -Penten- $\delta\delta\epsilon$ -Tricarbonsäure. Sd. 282–283° (B. 16, 333). — I, 820.
- 9) Triäthylester d.  $\beta$ -Penten- $\beta\gamma\epsilon$ -Tricarbonsäure. Sd. 191°<sub>19</sub> (H. 54, 529 C. 1908 [1] 1398).

 $C_{14}H_{22}O_7$ 

- C 55,6 — H 7,3 — O 37,1 — M. G. 302.
- 1) Anhydrid d. Propan- $\alpha\gamma$ -Dicarbonsäuremonoäthylester. Sm. 7 bis 8°; Sd. 150°<sub>15</sub> (B. 26, 398 C. 1908 [1] 350).
- 2) Triäthylester d.  $\delta$ -Ketopentan- $\alpha\alpha\beta$ -Tricarbonsäure. Sd. 188°<sub>11</sub> (J. pr. [2] 53, 310). — \*I, 431.
- 3) Triäthylester d.  $\delta$ -Ketopentan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sd. 197°<sub>20</sub> (Soc. 93, 1786 C. 1909 [1] 153).
- 4) Triäthylester d.  $\delta$ -Ketopentan- $\alpha\beta\gamma$ -Tricarbonsäure (Tr. d.  $\alpha$ -Acet-tricarballysäure). Sd. 175° (B. 23, 3757; Soc. 73, 727). — I, 845; \*I, 431.
- 5) Triäthylester d.  $\alpha$ -Ketopentan- $\alpha\beta\epsilon$ -Tricarbonsäure. Sd. oberhalb 220° (i. V.) (A. 297, 110). — \*I, 431.
- 6) Triäthylester d.  $\gamma$ -Ketobutan- $\alpha\alpha$ -Dicarbonsäure- $\beta$ -Methylcarbon-säure. Sd. 280–285° (B. 17, 2286; 19, 43). — I, 845.
- 7) Triäthylester d.  $\gamma$ -Ketobutan- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Methylcarbon-säure (Tr. d.  $\beta$ -Acettricarballysäure). Sd. 280–300° u. Zers. (A. 190, 323; 295, 104; B. 23, 3755; 29, 969). — I, 845; \*I, 431.
- 8) Dibutyryl d. Glykose (A. ch. [5] 60, 96). — I, 1049.

 $C_{14}H_{22}O_8$ 

- C 52,8 — H 6,9 — O 40,2 — M. G. 318.
- 1)  $\alpha\theta$ -Diacetoxyloktan- $\alpha\theta$ -Dicarbonsäure. Fl. (Soc. 91, 1368 C. 1907 [2] 1237).
- 2) Dimethylester d.  $\delta$ -Dibutyrylweinsäure. Sd. 300–302°<sub>781</sub> (B. 25 [2] 859; Bl. [3] 11, 311). — \*I, 398.
- 3) Dimethylester d. d-Diisobutyrylweinsäure. Sm. 45° (Bl. [3] 11, 368). — \*I, 398.
- 4) Diäthylester d. d-Dipropionylweinsäure. Sd. 202°<sub>18</sub> (B. 25 [2] 859; Bl. [3] 11, 310). — \*I, 398.
- 5) Diäthylester d. Bernsteinsäuredimilchsäure. Sd. 300–304°<sub>729</sub> (A. 133, 262; A. ch. [3] 63, 101). — I, 657.
- 6) Triäthylester d.  $\beta$ -Acetoxylpropan- $\alpha\beta\gamma$ -Tricarbonsäure (Tr. d. Acetyl-citronensäure). Sd. 288° (A. 129, 193; B. 18, 1954; 20, 802). — I, 840.
- 7) Tetraäthylester d. Äthan- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Sm. 76°; Sd. 305° u. Zers.  $Na_2$  (B. 13, 600; 14, 618; 16, 1046, 2632; 17, 449, 2781; 21, 2076; 28, 2831; 29, 1277, 1511; A. 214, 68; 276, 244; 285, 21; 294, 115; Soc. 65, 14; Ph. Ch. 10, 421; C. 1898 [2] 661; 1902 [1] 27; 1905 [2] 324; Am. 15, 526; J. pr. [2] 59, 547; C. 1907 [1] 875; 1909 [2] 2147). — I, 858; \*I, 439.
- 8) Dipropylester d. Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sm. 129° (B. 27, 1124). — \*I, 441.
- 9) Dipropylester d. Diacetyl-d-Weinsäure. Sm. 31°; Sd. 313° u. Zers. (B. 14, 2790; 25 [2] 859; 26 [2] 923; J. 1882, 857; Bl. [3] 11, 309). — I, 796; \*I, 397.
- 10) Diisopropylester d. Diacetylweinsäure. Sm. 33°; Sd. 171–172°<sub>30–40</sub> (Bl. [3] 11, 367). — \*I, 397.
- 11) Triacetat d. Äthylchinovosid (B. 26, 2417).



- C<sub>14</sub>H<sub>22</sub>O<sub>10</sub>** C 48,0 — H 6,3 — O 45,7 — M. G. 350.  
 1)  $\alpha$ -Pseudoeuphorbonsäure. Sm. 112—113° (*Ar.* 245, 697 *C.* 1908 [1] 1316).
- C<sub>14</sub>H<sub>22</sub>N<sub>2</sub>** C 77,1 — H 10,1 — N 12,8 — M. G. 218.  
 1) polym. 3[P]-Isopropylpyrrol. Sd. 285—290° u. ger. Zers. HCl, Pikrat (*B.* 20, 856; 21, 1480). — IV, 74.
- C<sub>14</sub>H<sub>23</sub>N** C 82,0 — H 11,2 — N 6,8 — M. G. 205.  
 1) 2-Amido-1-[norm.]Oktylbenzol. (2HCl, SnCl<sub>4</sub>) (*B.* 19, 2725). — II, 565.  
 2) 4-Amido-1-[norm.]Oktylbenzol. Sm. 19,5°; Sd. 310—311°. HCl, H<sub>2</sub>SO<sub>4</sub>, Oxalat (*B.* 18, 132). — II, 565.  
 3) 4-Amido-1-[sec.]Oktylbenzol. Sd. 290—292°. Oxalat (*B.* 18, 139). — II, 566.  
 4) ?-Dimethylamido-1-Hexylbenzol. Sd. unterhalb 360° (*A.* 242, 344). — II, 565.  
 5) 4-Isobutylamido-1-Isobutylbenzol. Sd. 260—270° (*A.* 211, 240). — II, 557.  
 6) Diisobutylamidobenzol. Sd. 245—250° (*A.* 211, 235). — II, 336.  
 7) Amin (aus d. Kohlenwasserstoff C<sub>14</sub>H<sub>22</sub>). (2HCl, PtCl<sub>4</sub>) (*B.* 22, 510). — II, 566.
- C<sub>14</sub>H<sub>23</sub>Br<sub>3</sub>** 1) 1,6,?-Tribrom-3,3'-Dimethyldodekahydrobiphenyl (*C.* 1904 [1] 1346).
- C<sub>14</sub>H<sub>23</sub>P** 1) Diäthyl-4-Isopropyl-1-Methylphenylphosphin. Sd. 260—270° (*A.* 294, 55). — IV, 1680.
- C<sub>14</sub>H<sub>24</sub>O** C 80,7 — H 11,5 — O 7,7 — M. G. 208.  
 1)  $\kappa$ -Oxy- $\beta\zeta\kappa$ -Trimethyl- $\beta\zeta 9$ -Undekatrien. Sd. 154°<sub>18</sub> (*D.R.P.* 160834 *C.* 1905 [2] 179).  
 2) 6-[ $\gamma$ -Oxy- $\gamma$ -Methylbutenyl]-1,1,5-Trimethyl-1,2,3,4-Tetrahydrobenzol. Sd. 130°<sub>12</sub> (*D.R.P.* 166898, 166899 *C.* 1906 [1] 720).  
 3) 1,1,5-Trimethyl-6-[ $\gamma$ -Oxyisoamenyl]-1,2,3,4-Tetrahydrobenzol. Sd. 131°<sub>18</sub> (*D.R.P.* 160834 *C.* 1905 [2] 179).  
 4) Cyklischer Alkohol (aus  $\kappa$ -Oxy- $\beta\zeta\kappa$ -Trimethyl- $\beta\zeta 9$ -Undekatrien). Sd. 131°<sub>18</sub> (*D.R.P.* 160834 *C.* 1905 [2] 179).  
 5) d-Isobutylcampher. Sm. 28° (*C. r.* 142, 1310 *C.* 1906 [2] 238).  
 6) Gallactucan. Sm. 296° (*B.* 12, 10). — III, 635.
- C<sub>14</sub>H<sub>24</sub>O<sub>2</sub>** C 75,0 — H 10,7 — O 14,3 — M. G. 224.  
 1) bim.  $\gamma$ -Keto- $\beta\delta$ -Dimethyl- $\alpha$ -Penten. Sd. 101—103° (*C.* 1908 [1] 1531; 1909 [2] 687).  
 2) Methylpseudojononhydrat. Sd. 186—192°<sub>12,5</sub> (*D.R.P.* 150771 *C.* 1904 [1] 1307; *D.R.P.* 164366 *C.* 1905 [2] 1748).  
 3) isom. Methylpseudojononhydrat. Sd. 185—195°<sub>13,5</sub> (*D.R.P.* 150771 *C.* 1904 [1] 1307).  
 4) Keton (aus Isocitralhydrat u. Methyläthylketon). Sd. 145—150°<sub>13</sub> (*D.R.P.* 198714 *C.* 1908 [2] 120).  
 5) Caincigenin (*Z.* 1867, 538). — III, 573.  
 6) Melanthigenin (*J.* 1880, 1077). — III, 597.  
 7) Myristolsäure. Sm. 12° (*A.* 202, 175). — I, 534.  
 8)  $\beta$ -Silvinolsäure. Sm. 89—95° (*C.* 1901 [1] 1228). — \*III, 427.  
 9) Säure (aus 2-Keto-1-Methylhexahydrobenzol). Sd. 170—195°<sub>18</sub> (*A.* 369, 102 *C.* 1909 [2] 2004).  
 10) Säure (aus act. 3-Keto-1-Methylhexahydrobenzol). Sd. 185—195°<sub>18</sub>. Ag (*A.* 369, 102 *C.* 1909 [2] 2004).  
 11) Säure (aus 4-Keto-1-Methylhexahydrobenzol). Sd. 170—195°<sub>18</sub> (*A.* 369, 103 *C.* 1909 [2] 2004).  
 12) Säure (aus Capronoinnatrium u. Essigsäureäthylester). Sd. 230—235°<sub>12</sub> (*C. r.* 144, 853 *C.* 1907 [2] 36).  
 13) Säure (aus Myristinsäure). Sm. 36°; Sd. 200—205°<sub>13</sub> (*B.* 25, 486).  
 14) Äthylester d.  $\alpha$ -Undekin- $\alpha$ -Carbonsäure. Sd. 170—174°<sub>25</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825; *D.R.P.* 158252 *C.* 1905 [1] 783).  
 15) Äthylester d.  $\beta\zeta\eta$ -Trimethyl- $\beta\delta$ -Oktadien- $\eta$ -Carbonsäure. Sd. 248 bis 251° (*C. r.* 146, 1155 *C.* 1908 [2] 249).  
 16) Äthylester d. 2-Methyl-5-Isopropyl-1,2,3,4-Tetrahydrobenzol-6-Methylcarbonsäure? Sd. 140—142°<sub>14</sub> (*A.* 323, 153 *C.* 1902 [2] 842).  
 17) Äthylester d. Säure C<sub>13</sub>H<sub>20</sub>O<sub>2</sub> (aus Carvomenthollessigsäureäthylester). Sd. 150—152°<sub>18</sub> (*A.* 323, 155 *C.* 1902 [2] 843).  
 18) Amylester d. Isolauronolsäure. Sd. 260°<sub>780</sub> (*C.* 1899 [2] 831).

- C<sub>14</sub>H<sub>24</sub>O<sub>2</sub>**
- 19) Isoamylester d.  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. *Sd.* 168—172°<sub>27</sub> (*C. r.* 136, 554 *C.* 1903 [1] 825).
  - 20) l-Menthylester d. Propen- $\beta$ -Carbonsäure. *Sd.* 125—126°<sub>14</sub> (*A.* 369, 336 *C.* 1909 [2] 2154).
  - 21) l-Menthylester d. R-Trimethylencarbonsäure. *Sd.* 135—135,5°<sub>14</sub> (*A.* 327, 182 *C.* 1903 [1] 1396).
  - 22) Acetat d. 5-Oxy-3-Isobutenyl-1,1-Dimethylhexahydrobenzol. *Sd.* 244—247° (*B.* 39, 3448 *C.* 1906 [2] 1558).
  - 23) Acetat d. 4-[ $\beta$ -Oxyisobutyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten. *Sd.* 118—122°<sub>19</sub> (*Bl.* [3] 31, 462 *C.* 1904 [1] 1516).
  - 24) Butyrat d. d-Borneol. *Sd.* 120—121°<sub>10-11</sub> (*D. R. P.* 80711). — \*III, 337.
  - 25) Butyrat d. l-Borneol. *Sd.* 246—247° (*B.* 31, 1775; *C. r.* 134, 609 *C.* 1902 [1] 872; *C. r.* 140, 948 *C.* 1905 [1] 1373). — \*III, 339.
  - 26) Butyrat d. Isoborneol. *Sd.* 123°<sub>11</sub> (*C. r.* 136, 239 *C.* 1903 [1] 584).
  - 27) Butyrat d. Campholenalkohol. *Sd.* 252—254° (257—259°) (*C. r.* 138, 280 *C.* 1904 [1] 725; *D. R. P.* 164294 *C.* 1905 [2] 1701).
  - 28) Butyrat d. Geraniol (*B. d.* Rhodinol). *Sd.* 142—143°<sub>18</sub> (*B.* 31, 356; *C.* 1908 [1] 1042). — \*III, 345.
  - 29) Isobutyrat d. l-Borneol. *Sd.* 242—244° (*C. r.* 134, 609 *C.* 1902 [1] 872). — \*III, 339.
  - 30) Isobutyrat d. Isoborneol. *Sd.* 132—133°<sub>19</sub> (*J. pr.* [2] 65, 226 *C.* 1902 [1] 1220; *C. r.* 136, 239 *C.* 1903 [1] 584). — \*III, 340.
  - 31) Isobutyrat d. Geraniol (*I. d.* Rhodinol). *Sd.* 135—137°<sub>13</sub> (*B.* 31, 356). — \*III, 345.
  - 32) Crotonat d. d-Citronellol. *Sd.* 138—140°<sub>35</sub> (*C. r.* 126, 1727). — \*III, 332.
  - 33) Crotonat d. l-Menthol. *Sd.* 140—140,5°<sub>14</sub> (*C.* 1902 [2] 1238; *A.* 327, 172 *C.* 1903 [1] 1396; *A.* 369, 335 *C.* 1909 [2] 2154).
- C<sub>14</sub>H<sub>24</sub>O<sub>8</sub>**
- C 70,3 — H 10,0 — O 20,0 — M. G. 240.
- 1) Lichenstearinsäure (oder C<sub>19</sub>H<sub>32</sub>O<sub>4</sub>). *Sm.* 120°. *Ba.*, *Pb.*, *Ag.* (*A.* 55, 150; 86, 50; *B.* 23, 461). — I, 624; \*I, 263.
  - 2) Äthylester d. 3-Oxy-4-Isopropyl-1-Methylhexahydrobenzol-3-Methylcarbonsäure (*Ä. d.* Pulegolessigsäure). *Sd.* 142° (*Bl.* [3] 27, 601 *C.* 1902 [2] 363).
  - 3) Äthylester d. Dihydrocarveolessigsäure. *Sd.* 282—288° (*A.* 314, 164).
  - 4) Äthylester d. Pulegonessigsäure. *Sd.* 166,5—169°<sub>35</sub> (*A.* 345, 195 *C.* 1906 [1] 1492).
  - 5) Äthylester d. Thujolessigsäure. *Sd.* 154—164°<sub>14</sub> (*A.* 314, 166).
  - 6) l-Bornylester d. r- $\alpha$ -Oxybuttersäure. *Sd.* 157°<sub>17</sub> (*Soc.* 87, 1016 *C.* 1905 [2] 673).
  - 7) Bornylester d. Oxyessigäthyläthersäure. *Sd.* 175—178°<sub>20</sub> (*D. R. P.* 191547 *C.* 1908 [1] 566).
  - 8) Menthylester d.  $\beta$ -Oxycrotonsäure. *Cu.* (*C.* 1902 [2] 208; *Soc.* 81, 1503 *C.* 1903 [1] 138).
  - 9) Menthylester d. Acetessigsäure. *Sm.* 30—32°; *Sd.* 145°<sub>11</sub> (*B.* 33, 731; *C.* 1902 [2] 208; 1906 [2] 518; *M.* 21, 201; *Soc.* 81, 1501 *C.* 1903 [1] 138). — \*III, 334.
- C<sub>14</sub>H<sub>24</sub>O<sub>4</sub>**
- C 65,6 — H 9,4 — O 25,0 — M. G. 256.
- 1) Bilakton d.  $\alpha$ -Oxyhexan- $\alpha$ -Carbonsäure. *Sm.* 88° (*Bl.* [4] 1, 317 *C.* 1907 [1] 1782).
  - 2) Äthylester d.  $\zeta$ -Acetoxyl- $\beta$ - $\zeta$ -Dimethyl- $\beta$ -Hepten- $\eta$ -Carbonsäure. *Sd.* 250° (*C.* 1896 [1] 707).
  - 3) Äthylester d. 2-Acetoxyl-1-Methyl-3-Isopropyl-R-Pentamethylen-2-Carbonsäure. *Sd.* 125—130° (*B.* 39, 1168 *C.* 1906 [1] 1429).
  - 4) Diäthylester d.  $\zeta$ -Methyl- $\alpha$ -Hepten- $\delta\eta$ -Dicarbonsäure. *Sd.* 155°<sub>17</sub> (*C. r.* 136, 1614 *C.* 1903 [2] 440).
  - 5) Diäthylester d.  $\gamma$ -Äthyl- $\gamma$ -Hexen- $\zeta\zeta$ -Dicarbonsäure. *Sd.* 161—162°<sub>23</sub> (*J. pr.* [2] 59, 547; *C.* 1902 [1] 630). — \*I, 346.
  - 6) Diäthylester d.  $\gamma$ -Isopropylidenpentan- $\alpha\epsilon$ -Dicarbonsäure. *Sd.* 168°<sub>13</sub> (*Soc.* 91, 1743 *C.* 1907 [2] 1975).
  - 7) Diäthylester d.  $\alpha$ -Hexahydrophenyläthan- $\beta\beta$ -Dicarbonsäure. *Sd.* 145—155°<sub>12</sub> (*B.* 41, 2676 *C.* 1908 [2] 1178).
  - 8) Diäthylester d. 3-Methylhexahydrophenylmalonsäure. *Sd.* 150 bis 154°<sub>10-12</sub> (*B.* 34, 3885 *C.* 1902 [1] 110).

- C<sub>14</sub>H<sub>24</sub>O<sub>4</sub>**
- 9) Diäthylester d. 4-Methylhexahydrophenylmalonsäure. *Sd.* 163 bis 165°<sub>20</sub> (*Soc.* 95, 1367 *C.* 1909 [2] 1054).
  - 10) Diäthylester d. d-Camphersäure. *Sd.* 285—287° (*A. ch.* [2] 64, 152; *B.* 3, 118; 24, 3408, 3728; 25 [2] 107; *D.R.P.* 189840 *C.* 1908 [1] 424). — *I*, 725.
  - 11) Diäthylester d. i-Camphersäure. *Sd.* 270—275° (*A.* 127, 124). — *I*, 726.
  - 12) Diäthylester d. l-Isocamphersäure. *Sd.* 165°<sub>25–28</sub> (*B.* 25 [2] 107; *Soc.* 77, 388). — *I*, 726.
  - 13) l-Diamylester d. Fumarsäure. *Sd.* 165°<sub>10</sub> (*Ph. Ch.* 20, 379, 576). — *\*I*, 322.
  - 14) β-Diamylester d. Maleinsäure. *Sd.* 170°<sub>29</sub> (*Ph. Ch.* 20, 379). — *\*I*, 323.
  - 15) Diisoamylester d. Fumarsäure. *Sd.* 173°<sub>20</sub> (*C. r.* 140, 947 *C.* 1905 [1] 1373).
  - 16) Diisoamylester d. Maleinsäure. *Sd.* 160°<sub>20</sub> (*C. r.* 140, 947 *C.* 1905 [1] 1373).
  - 17) Monomenthylester d. Bernsteinsäure. *Sm.* 62° (59°) (*A. ch.* [6] 7, 483; *B.* 37, 1379 *C.* 1904 [1] 1441). — *III*, 467.
  - 18) Diacetat d. 3,4-Dioxy-1-Methyl-4-Isopropylhexahydrobenzol (D. d. Menthenylglykol). *Sd.* 165—172°<sub>21</sub> (*B.* 27, 1641; *J. r.* 29, 35). — *\*I*, 147.
  - 19) Diacetat d. 5-Oxy-2-Oxymethyl-1,1,3-Trimethylhexahydrobenzol. *Sd.* 143—153°<sub>10</sub> (*A.* 366, 156 *C.* 1909 [2] 611).
  - 20) Terpindiacetat. *Sd.* 140—141°<sub>10</sub> (*B.* 39, 1750 *C.* 1906 [2] 50).
  - 21) Saures Succinat d. isom. 2-Oxy-4-Isopropyl-1-Methylhexahydrobenzol (*S.* d. β-Carvakromenthol). *Sm.* 74° (*C. r.* 141, 1247 *C.* 1906 [1] 345).
- C<sub>14</sub>H<sub>24</sub>O<sub>5</sub>**
- C* 61,7 — *H* 8,8 — *O* 29,4 — *M. G.* 272.

- 1) Diäthylester d. Hexahydrophenyloxymalonmethyläthersäure. *Sd.* 165°<sub>20</sub> (*Soc.* 95, 1366 *C.* 1909 [2] 1054).
- 2) Diäthylester d. 4-Oxy-1,1,3-Trimethyl-R-Pentamethylen-2,3-Dicarbonsäure. *Sd.* 194—196°<sub>30</sub> (*Soc.* 89, 789 *C.* 1906 [2] 240).
- 3) Diäthylester d. Oxycamphersäure. *Fl.* (*Am.* 28, 481 *C.* 1903 [1] 329).
- 4) Diäthylester d. β-Methylheptan-βζ-Oxyd-γζ-Dicarbonsäure (D. d. Cineolsäure). *Sd.* 155°<sub>11–12</sub> (*A.* 246, 273; *B.* 33, 1133). — *I*, 772.
- 5) Diäthylester d. ζ-Keto-β-Methylheptan-δς-Dicarbonsäure. *Sd.* 161 bis 163°<sub>20</sub> (*A.* 292, 239; *C.* 1898 [1] 107; *Soc.* 73, 49). — *\*I*, 382.
- 6) Diäthylester d. β-Keto-γ-Äthylhexan-γδ-Dicarbonsäure. *Sd.* 280 bis 285° (*B.* 29, 979). — *\*I*, 382.
- 7) Diäthylester d. β-Keto-γ-Propylpentan-γδ-Dicarbonsäure. *Sd.* 285 bis 290° (*B.* 29, 979). — *\*I*, 382.
- 8) Diäthylester d. β-Keto-γ-Isopropylpentan-γδ-Dicarbonsäure. *Sd.* 270—275° (*B.* 29, 981). — *\*I*, 382.
- 9) Diisoamylester d. α-Ketoäthan-αβ-Dicarbonsäure (D. d. Oxalessigsäure). *Sd.* 167°<sub>23</sub>. *Na, Cu* (*A.* 277, 379). — *\*I*, 373.
- 10) Diacetat d. Verbindung vom *Sm.* 137,5° (aus Formisobutyraldol). *Sm.* 87° (*M.* 27, 961 *C.* 1906 [2] 1818).
- 11) β-Acetoxy-α-Äthylpropionat d. δ-Keto-γ-Oxymethylhexan. *Sd.* 172°<sub>10</sub> (*C.* 1909 [1] 638).

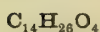
**C<sub>14</sub>H<sub>24</sub>O<sub>6</sub>**

- C* 58,3 — *H* 8,3 — *O* 33,4 — *M. G.* 288.
- 1) Undekan-ααλ-Tricarbonsäure. *Ba* (*B.* 33, 3574).
  - 2) Diäthylester d. l-Caproyläpfelsäure. *Sd.* 182—182,6°<sub>17</sub> (*Ph. Ch.* 36, 142).
  - 3) Diäthylester d. Dimethylmalonyloxypivalinsäure. *Sd.* 156—157°<sub>19</sub> (*Bl.* [3] 31, 163 *C.* 1904 [1] 869).
  - 4) Triäthylester d. Pentan-αββ-Tricarbonsäure. *Sd.* 280° u. Zers. (*A.* 214, 58; *A. ch.* [6] 27, 259). — *I*, 812.
  - 5) Triäthylester d. Pentan-αβγ-Tricarbonsäure. *Sd.* 168—169°<sub>11</sub> (*B.* 33, 3745; *Soc.* 79, 1350 *C.* 1902 [1] 51; *B.* 38, 1523 *C.* 1905 [1] 1568).
  - 6) Triäthylester d. Pentan-αβε-Tricarbonsäure. *Sd.* 188—189°<sub>18</sub> (*A.* 350, 241 *C.* 1907 [1] 251).
  - 7) Triäthylester d. Pentan-αγγ-Tricarbonsäure. *Sd.* 192°<sub>35</sub> (*A.* 292, 213; *Soc.* 79, 128). — *\*I*, 406.
  - 8) Triäthylester d. Pentan-αγδ-Tricarbonsäure. *Sd.* 180—185°<sub>20</sub> (*Soc.* 93, 580 *C.* 1908 [1] 1782).
  - 9) Triäthylester d. Pentan-αγε-Tricarbonsäure. *Sd.* 210°<sub>50</sub> (*Soc.* 89, 1647 *C.* 1907 [1] 344).



- $C_{14}H_{24}O_6$
- 10) Triäthylester d. Pentan- $\alpha\delta\delta$ -Tricarbonsäure. *Sd.* 181—183°<sub>12</sub> (*G.* 26 [2] 265, 278). — \*I, 406.
  - 11) Triäthylester d. Pentan- $\beta\beta\gamma$ -Tricarbonsäure. *Sd.* 281,6° (*B.* 22, 1817; 23, 647). — I, 812.
  - 12) Triäthylester d. Pentan- $\beta\gamma\gamma$ -Tricarbonsäure. *Sd.* 282,8° (*B.* 23, 648). — I, 812.
  - 13) Triäthylester d.  $\beta$ -Methylbutan- $\alpha\alpha\gamma$ -Tricarbonsäure. *Sd.* 166—167°<sub>10</sub> (*B.* 33, 3749).
  - 14) Triäthylester d.  $\beta$ -Methylbutan- $\alpha\gamma\gamma$ -Tricarbonsäure. *Sd.* 160,5 bis 161°<sub>10</sub> (*B.* 33, 3747).
  - 15) Triäthylester d.  $\beta$ -Methylbutan- $\beta\gamma\gamma$ -Tricarbonsäure. *Sd.* 284° (*B.* 23, 649). — I, 812.
  - 16) Triäthylester d.  $\beta$ -Methylbutan- $\beta\gamma\delta$ -Tricarbonsäure. *Sd.* 172—174°<sub>19</sub> (*Soc.* 73, 710). — \*I, 407.
  - 17) Triäthylester d.  $\beta$ -Methylbutan- $\gamma\gamma\delta$ -Tricarbonsäure (*A.* 214, 58). — I, 812.
  - 18) Triäthylester d.  $\beta$ -Methylbutan- $\gamma\delta\delta$ -Tricarbonsäure (Tr. d.  $\alpha$ -Carbonpimelinsäure). *Sd.* 276—278° (*A.* 220, 274; *Soc.* 69, 273). — I, 812; \*I, 406.
  - 19) Triäthylester d.  $\beta\beta$ -Dimethylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. *Sd.* 194°<sub>48</sub> (203°<sub>60</sub>) (*B.* 28, 1131; 29 [2] 660; *Soc.* 69, 1472). — \*I, 407.
  - 20) Dibutylester d. l-Acetyläpfelsäure. *Sd.* 177,4—178,2°<sub>12</sub> (*Ph. Ch.* 16, 495). — \*I, 356.
  - 21) Heptylester d. d- $\alpha\beta$ -Di[Acetoxy]propionsäure. *Sd.* 174°<sub>10</sub> (*Soc.* 65, 751). — \*I, 270.
  - 22) l-Monomenthylester d. l-Weinsäure. *Na* (*Soc.* 89, 1891 *C.* 1907 [1] 712).
  - 23) Triacetat d.  $\delta\zeta\gamma$ -Trioxy- $\beta$ -Methylheptan. *Sd.* 288—290° (*Bl.* [3] 13, 124). — \*I, 149.
  - 24) Triacetat d.  $\alpha\beta\gamma$ -Trioxy- $\delta$ -Methylheptan. *Fl.* (*J. pr.* [2] 40, 413). — I, 416.
  - 25) Triacetat d.  $\beta\delta\epsilon$ -Trioxy- $\beta$ -Äthylhexan. *Fl.* (*J. pr.* [2] 40, 410). — I, 416.
  - 26) Triacetat d.  $\gamma\epsilon\zeta$ -Trioxy- $\beta\gamma$ -Dimethylhexan. *Fl.* (*J. pr.* [2] 64, 352). *C* 55,2 — *H* 7,9 — *C* 36,8 — *M. G.* 304.
- $C_{14}H_{24}O_7$
- 1) Diäthylester d.  $\beta$ -Oxy- $\beta$ -Methylbutan- $\delta$ -Carbonsäure- $\gamma\gamma$ -Dimethylcarbonsäure (D. d. Oxyisobutryltriacetsäure). *Sm.* 62° (*J. pr.* (2) 41, 521). — I, 844.
  - 2) Triäthylester d.  $\beta$ -Oxypropanäthyläther- $\alpha\beta\gamma$ -Tricarbonsäure (Tr. d. Citronenäthyläthersäure). *Sd.* 290° u. Zers. (*B.* 12, 1654). — I, 839.
  - 3) Diisobutylester d. d-Acetylweinsäure (*Bl.* [3] 13, 205). — \*I, 397.
  - 4) Dibutyrat d. Dulcitan (BERTHELOT, *Chim. org. synth.* 2, 210). — I, 424.
  - 5) Dibutyrat d. Mannitan (*A. ch.* [3] 47, 319). — I, 424.
- $C_{14}H_{24}O_{12}$
- 1) Monacetat d. Maltose (*J.* 1881, 984). — I, 1061.
  - 2) Monacetat d. Rohrzuckers (*Bl.* 12, 206). — I, 1069.
- $C_{14}H_{24}N_2$
- 1) 1,4-Di[Diäthylamido]benzol. *Sm.* 52°; *Sd.* 280°. (2HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), 2HJ, (HJ, J<sub>2</sub>) (*M.* 4, 306). — IV, 583.
  - 2) 3,6-Diamido-1,2,4,5-Tetraäthylbenzol. *Sm.* 92° (*B.* 31, 1717). — \*IV, 418.
  - 3) Azin d. 3-Keto-1-Methylhexahydrobenzol. *Sd.* 230°<sub>124</sub> (*C.* 1908 [1] 1177).
  - 4) 2,5-Dimethyl-3,6-Diisobutyl-1,4-Diazin. *Sd.* 242—244°. (2HCl, PtCl<sub>4</sub>) (*B.* 18, 1365). — IV, 832.
  - 5) Base (aus Spartein). *Sd.* 276° (*B.* 21, 826; *M.* 16, 605). — III, 934 \*III, 691.
  - 6) Nitril d.  $\beta$ -[1-Piperidyl]- $\alpha$ -Okten- $\alpha$ -Carbonsäure. *Sd.* 236—238°<sub>27</sub> (*C. r.* 143, 555 *C.* 1906 [2] 1842; *Bl.* [3] 35, 1189 *C.* 1907 [1] 562).
- $C_{14}H_{24}S_4$
- 1) Duplodimethylacetylacetontetrasulfid. *Sm.* 227° (*B.* 39, 3606 *C.* 1907 [1] 21).
- $C_{14}H_{25}N$
- 1) Base (aus d. Ketonoxim  $C_{14}H_{23}ON$ ). *Sm.* 50°; *Sd.* 165—166°<sub>20</sub>. HCl (*B.* 29, 1596). — IV, 79.
- $C_{14}H_{26}O$
- 1) d-Isobutylcamphol. *Sm.* 55° (*C. r.* 142, 1309 *C.* 1906 [2] 238).

- C<sub>14</sub>H<sub>28</sub>O**
- 2) 4-[ $\beta$ -Oxy- $\beta$ -Äthylbutyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten (Di-äthylcamphenol). Sd. 144—148°<sub>28</sub> (Bl. [3] 31, 463 C. 1904 [1] 1516).
  - 3) Amylenvaleron. Sd. 279—285° (A. 202, 302). — I, 1011.
  - 4) Isobutylmenthon. Sd. 124—128°<sub>10</sub> (C. r. 138, 1140 C. 1904 [2] 106).
  - 5) Diönanthylenaldehyd. Sd. 279° + NaHSO<sub>3</sub> (B. 6, 982; 15, 2803; 16, 210, 1034; Soc. 43, 81; Z. 1870, 76). — I, 962.
- C<sub>14</sub>H<sub>26</sub>O<sub>2</sub>**
- C 74,3 — H 11,5 — O 14,2 — M. G. 226.
  - 1) 1,1'-Bi[1-Oxy-R-Heptamethylenyl] (Suberonpinakon). Sm. 74—76° (J. r. 27, 287; C. 1903 [1] 568; A. 327, 66 C. 1903 [1] 1124). — \*I, 96.
  - 2)  $\gamma\delta$ -Dioxy- $\gamma$ -Di[R-Tetramethenyl]hexan. Sm. 95°; Sd. 220—223°<sub>100</sub> (Soc. 61, 58). — I, 271.
  - 3) Pinakon d. 3-Oxy-1-Methylhexahydrobenzol. Sm. 74° (C. 1898 [1] 575). — \*I, 96.
  - 4) Diisomyläther d.  $\alpha\delta$ -Dioxy- $\beta$ -Butin. Sd. 190—192°<sub>15</sub> (C. 1909 [1] 1643).
  - 5) Campheracetal. Sd. 119—120°<sub>16</sub> (C. 1908 [2] 1340).
  - 6) Glutanol. Sm. 76° (B. 40, 4762 C. 1908 [1] 474).
  - 7)  $\zeta$ -Trideken- $\zeta$ -Carbonsäure (Amylhexylakrylsäure). Sd. 270—290°<sub>200</sub> (B. 15, 2803; 16, 211). — I, 524.
  - 8) Säure (aus Cochenillefett). Ba, Pb (M. 6, 895). — I, 524.
  - 9) Isobutylester d. d-Campholsäure. Sd. 250° (Bl. [3] 11, 495). — \*I, 204.
  - 10) Isobutylester d. Isocampholsäure. Sd. 150—151°<sub>40</sub> (Bl. [3] 13, 774). — \*I, 204.
  - 11) Acetat d.  $\theta$ -Oxy- $\beta\zeta$ -Dimethyl- $\beta$ -Deken. Sd. 120—123° (C. 1901 [2] 623).
  - 12) Acetat d. 1-3-Oxy-1-Methyl-4-Isoamylhexahydrobenzol. Sd. 131°<sub>16</sub> (Bl. [3] 33, 706 C. 1905 [2] 326).
  - 13) Butyrat d. 1-Menthol. Sd. 230—240° (126°<sub>12,8</sub>) (A. 120, 351; B. 31, 364; Soc. 95, 1571 C. 1909 [2] 1986; A. 369, 336 C. 1909 [2] 2154). — III, 467; \*III, 333.
  - 14) Isobutyryl d. Menthol. Sd. 116—117°<sub>12</sub> (C. 1902 [2] 1238; A. 369, 337 C. 1909 [2] 2154).
- C<sub>14</sub>H<sub>26</sub>O<sub>3</sub>**
- C 69,4 — H 10,7 — O 18,8 — M. G. 242.
  - 1) Diäthyläther d. Pinolglykol. Sm. 52—53°; Sd. 210° (A. 253, 260). — III, 509.
  - 2) Anhydrid d. Hexan- $\alpha$ -Carbonsäure. Sm. 17°; Sd. 268—271° (255 bis 258°) (A. 90, 102; 185, 371; B. 25 [2] 637; 33, 3576; Soc. 87, 93 C. 1905 [1] 1006). — I, 464; \*I, 166.
  - 3) Anhydrid d.  $\beta$ -Methylpentan- $\varepsilon$ -Carbonsäure. Sd. 154°<sub>15</sub> (Bl. [4] 5, 925 C. 1909 [2] 1633).
  - 4) Äthylester d.  $\zeta$ -Oxy- $\beta\zeta\eta$ -Trimethyl- $\beta$ -Okten- $\eta$ -Carbonsäure. Sd. 160 bis 163°<sub>14</sub> (C. r. 146, 1155 C. 1908 [2] 249).
  - 5) Äthylester d. 2-Oxy-1-Methyl-4-Isopropylhexahydrobenzol-2-Methylcarbonsäure. Sd. 162—164°<sub>16</sub> (A. 323, 154 C. 1902 [2] 843).
  - 6) Äthylester d. 3-Oxy-1-Methyl-4-Isopropylhexahydrobenzol-3-Methylcarbonsäure (Ä. d. Mentholeessigsäure). Sd. 150—152°<sub>14</sub> (A. 323, 152 C. 1902 [2] 842).
  - 7) Äthylester d.  $\gamma$ -Methyldekan- $\beta\gamma$ -Oxyd- $\beta$ -Carbonsäure. Sd. 148 bis 150°<sub>16</sub> (C. r. 141, 767 C. 1906 [1] 22).
  - 8) Äthylester d.  $\beta$ -Ketoundekan- $\alpha$ -Carbonsäure. Sd. 164—165°<sub>13</sub>. Cu (C. r. 136, 755 C. 1903 [1] 1019).
  - 9) Äthylester d.  $\beta$ -Ketoundekan- $\gamma$ -Carbonsäure (Ä. d. Oktylacetessigsäure). Sd. 280—282° (A. 204, 2). — I, 612.
  - 10) Äthylester d.  $\beta$ -Keto- $\delta$ -Methyldekan- $\gamma$ -Carbonsäure. Sd. 147°<sub>12</sub> (Bl. [3] 31, 597 C. 1904 [2] 26; Bl. [3] 31, 759 C. 1904 [2] 309).
  - 11) Äthylester d.  $\varepsilon$ -Keto- $\beta$ -Methyl- $\delta$ -Isobutylhexan- $\delta$ -Carbonsäure (Ä. d. Diisobutylacetessigsäure). Sd. 250—253° (B. 7, 501). — I, 612.
  - 12) Propylester d.  $\beta$ -Oxy- $\alpha$ -Heptenpropyläther- $\alpha$ -Carbonsäure. Sd. 279 bis 280° (C. r. 138, 208 C. 1904 [1] 659; Bl. [3] 31, 513 C. 1904 [1] 1602).
  - 13) 1-Menthylester d. r- $\alpha$ -Oxybuttersäure. Sm. 37°; Sd. 161°<sub>17</sub> (Soc. 87, 1015 C. 1905 [2] 673).
  - 14) 1-Menthylester d. r- $\beta$ -Oxybuttersäure. Sd. 169°<sub>17</sub> (Soc. 87, 1016 C. 1905 [2] 673).



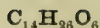
C 65,1 — H 10,1 — O 24,8 — M. G. 258.

- 1) Diisoamylidenäther d. d-Erythrit. Sm. 105–106° (*Bl.* [3] 25, 742).
- 2) Diisoamylidenäther d. l-Erythrit. Sm. 105–106° (*Bl.* [3] 25, 742).
- 3) Diisoamylidenäther d. r-Erythrit. Sm. 72–73° (*Bl.* [3] 25, 744).
- 4) Diisoamylidenäther d. i-Erythrit. Fl. (*Bl.* [3] 25, 745).
- 5)  $\alpha$ -Acetoxylundekan- $\alpha$ -Carbonsäure. Sm. 47° (*Bl.* [3] 29, 1126 *C.* 1904 [1] 261).
- 6) Dodekan- $\alpha\mu$ -Dicarbonsäure. Sm. 123° (124°). K<sub>2</sub>, Mg, Cu, Ag<sub>2</sub> (*A.* 261, 123; *B.* 27, 177; *Soc.* 91, 568 *C.* 1907 [2] 72). — I, 689.
- 7) isom. Dodekandicarbonsäure (*B.* 26 [2] 95).
- 8) Acetylsabininsäure. Sm. 43° (*C.* 1909 [2] 718).
- 9) Monomethylester d. Undekan- $\alpha\lambda$ -Dicarbonsäure (M. d. Brassylsäure). Sm. 36°; Sd. 326–328° (*J. pr.* [2] 48, 73).
- 10) Äthylester d. trans-5-Acetoxy-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. Sd. 137–139°<sub>8</sub> (*A.* 366, 170 *C.* 1909 [2] 613).
- 11) Diäthylester d. Oktan- $\alpha\theta$ -Dicarbonsäure (D. d. Sebacinsäure). Sd. 307–308° (*J.* 1876, 576; *Soc.* 45, 518; *R.* 12, 276; *M.* 24, 621 *C.* 1903 [2] 1236). — I, 686; \*I, 310.
- 12) Diäthylester d. Oktan- $\delta\epsilon$ -Dicarbonsäure. Sd. 130–140°<sub>12,5</sub> (F. H. BETTERIDGE, Dissert. Heidelberg 1898, S. 12).
- 13) Diäthylester d.  $\beta$ -Methylheptan- $\alpha\alpha$ -Dicarbonsäure (D. d. sec. Heptylmalonsäure). Sd. 263–265° (*B.* 13, 1651). — I, 687.
- 14) Diäthylester d.  $\beta$ -Methylheptan- $\alpha\epsilon$ -Dicarbonsäure. Sd. 142–144°<sub>10</sub> (*A.* 357, 204 *C.* 1908 [1] 253).
- 15) Diäthylester d.  $\beta$ -Methylheptan- $\alpha\eta$ -Dicarbonsäure (D. d. Methylazelaensäure). Sd. 212–215°<sub>100</sub> (*Soc.* 53, 218). — I, 687.
- 16) Diäthylester d.  $\beta$ -Methylheptan- $\gamma\zeta$ -Dicarbonsäure. Sd. 158°<sub>10</sub> (*C. r.* 136, 458 *C.* 1903 [1] 696; *C.* 1904 [2] 1045; *C. r.* 146, 139 *C.* 1908 [1] 1169).
- 17) Diäthylester d.  $\beta\gamma\delta$ -Trimethylpentan- $\beta\delta$ -Dicarbonsäure. Sd. 170 bis 180°<sub>18</sub> (*Bl.* [3] 21, 1062).
- 18) Isobutylester d. d- $\alpha$ -Caproxylbuttersäure. Sd. 270° (*Bl.* [3] 15, 491).
- 19) i- $\beta$ -Methylbutylester d. i- $\alpha$ -[d-Valeroxyl]buttersäure. Sd. 254° (*Bl.* [3] 15, 494). — \*I, 224.
- 20) l- $\beta$ -Methylbutylester d. l- $\alpha$ -[i-Valeroxyl]buttersäure. Sd. 252° (*Bl.* [3] 15, 494). — \*I, 225.
- 21) l- $\beta$ -Methylbutylester d. i- $\alpha$ -[i-Valeroxyl]buttersäure. Sd. 258° (*Bl.* [3] 15, 493). — \*I, 224.
- 22) l- $\beta$ -Methylbutylester d. l- $\alpha$ -[d-Valeroxyl]buttersäure. Sd. 250° (*Bl.* [3] 15, 494). — \*I, 225.
- 23) Diisoamylester d. Bernsteinsäure. Sd. 298–299°<sub>765,4</sub> (*B.* 12, 1699; *Ph. Ch.* 1, 382; *C. r.* 140, 947 *C.* 1905 [1] 1373). — I, 656.
- 24) l-Diamylester d. Bernsteinsäure. Sd. 178–180°<sub>25</sub> (*Ph. Ch.* 20, 575). — \*I, 284.
- 25) Oktylester d. l- $\alpha$ -Acetoxylbuttersäure. Sd. 265–270° (*Bl.* [3] 15, 489). — \*I, 224.
- 26) Diacetat d.  $\alpha\kappa$ -Dioxydekan. Sm. 25,5°; Sd. 170,5°<sub>10</sub> (*M.* 24, 630 *C.* 1903 [2] 1237).
- 27) Diacetat d.  $\delta$ -Oxy- $\gamma$ -Oxymethyl- $\beta\zeta$ -Dimethylheptan. Sd. 145°<sub>18</sub> (*M.* 22, 556).
- 28) Diacetat d. Dekylenglykol. Sd. 264–272° u. Zers. (*B.* 25, 479). — I, 414.
- 29) Diacetat d. Diamylenglykol (*J.* 1862, 450). — I, 414.
- 30)  $\gamma$ -Acetat- $\alpha$ -Isobutyryl d.  $\alpha\gamma$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan. Sd. 136°<sub>17</sub> (*M.* 19, 39).
- 31) Verbindung (aus Diäthylmalonsäurediäthylester). Sd. 170°<sub>13</sub> (*A.* 274, 52). — \*I, 300.



C 61,3 — H 9,5 — O 29,2 — M. G. 274.

- 1) Diäthylester d.  $\zeta$ -Oxy- $\beta$ -Methylheptan- $\delta\zeta$ -Dicarbonsäure. Fl. (*Soc.* 73, 56). — \*I, 370.
- 2) Dibutylester d. l- $\alpha$ -Oxyäthanäthyläther- $\alpha\beta$ -Dicarbonsäure. Sd. 161°<sub>15</sub> (*Soc.* 67, 973). — \*I, 358.



C 57,9 — H 8,9 — O 33,1 — M. G. 290.

- 1) Diäthylester d.  $\delta\delta$ -Dioxybutan- $\delta\delta$ -Diäthyläther- $\alpha\alpha$ -Dicarbonsäure. Sd. 170°<sub>20</sub> (*B.* 38, 2886 *C.* 1905 [2] 1256).



- $C_{14}H_{26}O_6$  2) Diäthylester d.  $\delta\delta$ -Dioxybutandiäthyläther- $\beta\beta$ -Dicarbonsäure. *Sd.* 165°<sub>26</sub> (*Soc.* 75, 19). — \*I, 377.
- 3) l-Diamylester d. i-Weinsäure. *Sd.* 203—204° (*Ph. Ch.* 20, 385). — \*I, 400.
- 4) l-Diamylester d. Traubensäure. *Sd.* 201—202°<sub>18</sub> (*Ph. Ch.* 20, 386). — \*I, 399.
- $C_{14}H_{26}O_{10}$  5) Äthyl-sec. Oktylester d. d-Weinsäure. *Sd.* 200—202°<sub>15</sub> (*Soc.* 79, 1105). *C* 47,5 — *H* 7,3 — *O* 45,2 — *M. G.* 354.
- 1) Tetraäthylester d. 1,4-Naphtochinon-2,3-Di[Methyl dicarbonsäure]. *Sm.* 98° (*B.* 33, 576). *C* 45,4 — *H* 7,0 — *O* 47,6 — *M. G.* 370.
- $C_{14}H_{26}O_{11}$  1) Mannitanhemiacetat (*A.* 160, 93; *A. ch.* [5] 6, 113). — I, 417. *C* 43,5 — *H* 6,7 — *O* 49,7 — *M. G.* 386.
- $C_{14}H_{26}O_{12}$  1) Mannitantetracetat (*A. ch.* [5] 6, 102). *C* 75,7 — *H* 11,7 — *N* 12,6 — *M. G.* 222.
- $C_{14}H_{26}N_2$  1) 3-[3-Methylhexahydrophenyl]hydrazon-1-Methylhexahydrobenzol. *Sd.* 214°<sub>90</sub> (*C.* 1908 [1] 1177). *C* 67,2 — *H* 10,4 — *N* 22,4 — *M. G.* 250.
- $C_{14}H_{26}N_4$  1) Triisobutylidendiamindihydrocyanid. 2HCl (*A.* 211, 348; *B.* 14, 1747). — I, 948.
- $C_{14}H_{26}Br_2$  1) Dibromid d. Kohlenwasserstoff  $C_{14}H_{26}$ . *Sm.* 83° (*M.* 25, 126 *C.* 1904 [1] 716). *C* 80,4 — *H* 12,9 — *N* 6,7 — *M. G.* 209.
- $C_{14}H_{27}N$  1)  $\alpha$ -Di[3-Methylhexahydrophenyl]amin. *Sd.* 273°. +  $H_2O$  (*Sm.* 46 bis 48°), HCl,  $HNO_3$  (*A.* 289, 342; *C. r.* 138, 1258 *C.* 1904 [2] 105; *A.* 346, 261 *C.* 1906 [2] 339). — IV, 31.
- 2)  $\beta$ -Di[3-Methylhexahydrophenyl]amin. *Sd.* 273°. HCl, Formiat (*A.* 343, 64 *C.* 1906 [1] 357; *A.* 346, 261 *C.* 1906 [2] 339).
- 3) d-Butylbornylamin. *Sd.* 249—251°<sub>760</sub>. HCl, (2HCl,  $PtCl_4$ ), HJ,  $HNO_2$  (*Soc.* 75, 950). — \*IV, 59.
- 4) d-Diäthylbornylamin. *Sd.* 232—234°<sub>750</sub>. (2HCl,  $PtCl_4$ ) (*Soc.* 75, 947). — \*IV, 59.
- 5) Base (aus Poleiöl) oder  $C_{15}H_{29}N$ . *Sd.* bei 250°. HCl (*A.* 272, 123). — IV, 60.
- 6) Nitril d. Myristinsäure. *Sm.* 19°; *Sd.* 226,5°<sub>109</sub> (86°). 2 + HBr (*B.* 15, 1730; 26, 2847; 29, 1318, 1324). — I, 1467; \*I, 808. *C* 70,9 — *H* 11,4 — *N* 17,7 — *M. G.* 237.
- $C_{14}H_{27}N_8$  1) Nitril d. Propyl-s-Piperidylamylamidoameisensäure. *Fl.* (*B.* 42, 2048 *C.* 1909 [2] 452).
- $C_{14}H_{27}Cl$  1) Chlortetradekanaphthen. *Sd.* 150—155°<sub>13</sub> (*Am.* 25, 295).
- 2) Chlortetradeken (aus Petroleum). *Sd.* 180°<sub>15</sub> (*Am.* 33, 266 *C.* 1905 [1] 1349). *C* 79,2 — *H* 13,2 — *O* 7,5 — *M. G.* 212.
- $C_{14}H_{28}O$  1)  $\zeta$ -Oxymethyl- $\zeta$ -Trideken (Tetradekenylalkohol). *Sd.* 280—283° (*B.* 15, 2810; 16, 211, 1029; *Soc.* 43, 68). — I, 255.
- 2) Methyläther d. 5-Oxy-3-Hexyl-1-Methylhexahydrobenzol. *Sd.* 135 bis 136°<sub>10</sub> (*A.* 289, 152).
- 3) Isopropyläther d. 5-Oxy-3-Isobutyl-1-Methylhexahydrobenzol. *Sd.* 116°<sub>10</sub> (*A.* 289, 151).
- 4) Oxyd (aus Butyrpinakon). *Sd.* 243—244° (*M.* 25, 128 *C.* 1904 [1] 716).
- 5)  $\beta$ -Ketotetradekan (Methyldodekylketon). *Sm.* 33—34°; *Sd.* 205—206°<sub>100</sub> (*B.* 15, 1708). — I, 1005.
- 6)  $\gamma$ -Ketotetradekan. *Sm.* 34°; *Sd.* 152°<sub>18</sub> (*Bl.* [3] 29, 1209 *C.* 1904 [1] 355).
- 7) Amylvaleron (Keton). *Sd.* 208—209° (*A.* 202, 301). — I, 1005.
- 8) Glutinol. *Sm.* 70—71° (*B.* 40, 4761 *C.* 1908 [1] 474).
- 9) Aldehyd d. Myristinsäure. *Sm.* 23,5° (52,5°); *Sd.* 168—169°<sub>22</sub>. +  $NaHSO_3$ , +  $HKSO_3$  (*B.* 13, 1415; 23, 2361; *Bl.* [3] 31, 1311 *C.* 1905 [1] 218; *Soc.* 87, 1900 *C.* 1906 [1] 653). — I, 956.
- 10) Diönanthaldehyd (Aldehyd d. Amylheptylessigsäure). *Sm.* 29,5°; *Sd.* 266 bis 268° (*Soc.* 43, 71). — I, 956.
- 11) Verbindung (aus Önanthol). *Sd.* 260° u. Zers. (*A.* 67, 111; *Soc.* 43, 67). — I, 954.



C 73,7 — H 12,3 — O 14,0 — M. G. 228.

- 1) Myristinsäure. Sm. 53,8°; Sd. 248°<sub>100</sub> (121—122°). Na, K, Mg + 3H<sub>2</sub>O, Ba, Cu, Ag. Lit. bedeutend. — I, 441; \*I, 158.
- 2) Tridekan- $\zeta$ -Carbonsäure (Amylheptylessigsäure; Diönanthsäure). Sd. 300—310° (Soc. 43, 74). — I, 441.
- 3)  $\beta$ -Methyl-dodekan- $\beta$ -Carbonsäure. Sm. 27°; Sd. 184°<sub>12</sub> (C. r. 149, 7 C. 1909 [2] 600).
- 4) Dodekan- $\varepsilon$ -Methylcarbonsäure ( $\beta$ -Diönanthylsäure). Sm. 4°; Sd. 190 bis 191°<sub>13</sub> (Bl. [3] 25, 301; C. r. 134, 469 C. 1902 [1] 743).
- 5) Säure (aus indischem Geraniumöl). Sm. 28,2°. Ca, Cu + H<sub>2</sub>O, Ag (C. 1898 [2] 360). — \*I, 158.
- 6) Äthylester d. Laurinsäure. Sd. 269° (A. 66, 306; 92, 278; R. 12, 277; 14, 187; B. 36, 4340 C. 1904 [1] 433). — I, 441; \*I, 158.
- 7)  $\beta$ -Methylbutylester d. Oktan- $\alpha$ -Carbonsäure. Sd. 262—265°<sub>777</sub> (Bl. [3] 15, 283). — \*I, 157.
- 8) norm. Heptylester d. norm. Heptylsäure. Sd. 270—272° (274,6°; 276,5—278,5°) (B. 10, 1602; A. 233, 284; C. 1906 [2] 1554). — I, 435.
- 9) norm. Oktylester d. norm. Capronsäure. Sd. 275,2° (A. 152, 18, 19; 233, 281). — I, 433.
- 10) norm. Nonylester d. Valeriansäure. Sd. 142—146°<sub>12</sub> (D.R.P. 164294 C. 1905 [2] 1700).
- 11) norm. Dodekylester d. Essigsäure. Sd. 150,5—151,5°<sub>15</sub> (B. 16, 1719; D.R.P. 164294 C. 1905 [2] 1700). — I, 411.
- 12) Acetat d.  $\varepsilon$ -Oxy- $\beta\beta\zeta$ -Trimethylnonan. Sd. 120°<sub>18</sub> (C. 1901 [2] 624).
- 13) Verbindung (aus Terpendihydrochlorid) (J. 1878, 639).



C 68,8 — H 11,5 — O 19,7 — M. G. 244.

- 1)  $\alpha$ -Oxytridekan- $\alpha$ -Carbonsäure. Sm. 81,5—82°. Ag (Soc. 87, 1903 C. 1906 [1] 653).
- 2) Oxymyristinsäure. Sm. 51°. K + H<sub>2</sub>O, Ca, Ba, Pb, Cu, Ag (B. 14, 2480; 22, 1746). — I, 578.
- 3) Äthylester d.  $\alpha$ -Oxyundekan- $\alpha$ -Carbonsäure. Sm. 43° (Bl. [3] 29, 1126 C. 1904 [1] 261).
- 4) Äthylester d.  $\varepsilon$ -Oxy- $\beta\beta\zeta$ -Dimethylnonan- $\varepsilon$ -Carbonsäure. Sd. 262° (A. 142, 9; Z. 1866, 492). — I, 578.
- 5) Äthylester d.  $\delta$ -Oxy- $\beta\zeta$ -Dimethylheptanäthyläther- $\gamma$ -Carbonsäure. Sd. 216—216,5°<sub>720</sub> (B. 20, 2336; A. 249, 64). — I, 578.



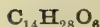
C 64,6 — H 10,8 — O 24,6 — M. G. 260.

- 1) Tetraäthyläther d. 1,1,4,4-Tetraoxyhexahydrobenzol. Sm. 89° (B. 34, 1344).
- 2) Ipurolsäure. Sm. 100—101°. Na + H<sub>2</sub>O, Ag (C. 1908 [2] 887).
- 3) Isobutylester d. Dioxyessigdiisobutyläthersäure. Sd. 250—252° (B. 11, 1478). — I, 631.



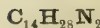
C 60,9 — H 10,1 — O 29,0 — M. G. 276.

- 1) Propylester d. Trioxyessigtripropyläthersäure. Sd. 256—257° (A. 254, 33). — I, 735.



C 57,5 — H 9,6 — O 32,9 — M. G. 292.

- 1) Verbindung (aus Formisobutyraldol u. Essigsäurealdehyd). Sm. 84° (M. 26, 67 C. 1905 [1] 510).

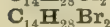


C 75,0 — H 12,5 — N 12,5 — M. G. 224.

- 1)  $\alpha\delta$ -Di[1-Piperidyl]butan. Sd. 290—300°. (2HCl, PtCl<sub>4</sub>) (B. 28, 2218). — IV, 10.



- 2) Base (aus Piperidin). Sd. 175—180°<sub>28</sub>. Pikrat (C. 1907 [2] 468).



- 1) Dichlortetradekan. Sd. 175—180°<sub>17</sub> (Am. 28, 173 C. 1902 [2] 1081)
- 1) Dibromtetradekan. Sd. 203—204°<sub>15</sub> (B. 17, 1372; 25, 2249). — I, 180.



- 1) Tetradekylthiophan. Sd. 266—268°<sub>750</sub> (Am. 35, 413 C. 1906 [2] 77).
- 2) Verbindung (aus Petroleum). Sd. 168—170°<sub>50</sub> (C. 1900 [2] 454).



- 1) C 79,6 — H 13,7 — N 6,6 — M. G. 211.

- 1) 1-Diäthylmenthylamin. Sd. 240,5—241°. (2HCl, PtCl<sub>4</sub>) (J. r. 27, 528; C. 1902 [2] 1238). — IV, 42.



- 1) Chlortetradekan (Tetradekylchlorid). Sd. 280° (J. 1863, 530). — I, 157.
- 2) isom. Chlortetradekan. Sd. 150—153°<sub>20</sub> (Am. 28, 172 C. 1902 [2] 1081).

- $C_{14}H_{30}O$  C 78,5 — H 14,0 — O 7,5 — M. G. 214.
- 1)  $\alpha$ -Oxytetradekan (norm. Tetradekylalkohol). Sm. 38°; Sd. 167°<sub>15</sub> (B. 16, 1720; 23, 2360; C. r. 137, 61 C. 1903 [2] 551; D.R.P. 164294 C. 1905 [2] 1701). — I, 240.
  - 2) isom. Oxytetradekan (Amylheptyläthylalkohol). Sd. 270—275° (B. 15, 2811; Soc. 43, 76). — I, 240.
  - 3)  $\varepsilon$ -[ $\beta$ -Oxyäthyl]dodekan ( $\beta$ -Diönanthylalkohol). Sd. 286—289° (Bl. [3] 25, 302; C. r. 134, 469 C. 1902 [1] 743).
  - 4) norm. Heptyläther d.  $\alpha$ -Oxyheptan (norm. Diheptyläther). Sd. 261,9° (A. 243, 9; G. 31 [1] 334; B. 30, 1495). — I, 300; \*I, 112.
- $C_{14}H_{30}O_2$  C 73,0 — H 13,0 — O 13,9 — M. G. 230.
- 1)  $\varepsilon\zeta$ -Dioxy- $\beta\epsilon\zeta\iota$ -Tetramethyldekan (Diisobutylpinakon). Sm. 30°; Sd. 240—260° (268°) (A. 190, 311; Soc. 39, 468). — I, 267.
  - 2)  $\delta\epsilon$ -Dioxy- $\delta\epsilon$ -Dipropyloktan (Butyronpinakon). Sm. 68°; Sd. 260° (A. 161, 215). — I, 267.
  - 3)  $\alpha$ -Äthyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Methylundekan. Sd. 153—155°<sub>17</sub> (D.R.P. 180202 C. 1907 [1] 681; C. 1907 [1] 873).
  - 4)  $\zeta$ -Äthyläther d.  $\varepsilon\zeta$ -Dioxy- $\beta$ -Methyl- $\epsilon$ -Isoamylhexan. Sd. 143—144°<sub>26</sub> (C. r. 138, 91 C. 1904 [1] 505; Bl. [3] 31, 304 C. 1904 [1] 1133).
  - 5) Diäthyläther d.  $\alpha\alpha$ -Dioxydekan. Sd. 133,5°<sub>14</sub> (Bl. [4] 1, 359 C. 1907 [2] 34).
  - 6) Diamyläther d.  $\alpha\delta$ -Dioxybutan. Sd. 260—261°<sub>750</sub> (C. 1901 [1] 613).
- $C_{14}H_{30}O_3$  C 68,3 — H 12,2 — O 19,5 — M. G. 246.
- 1) Propyldiisomyläther d. Trioxymethan (Orthoameisensäurepropyldiisomyläther). Sd. 254—255° (B. 16, 1647). — I, 312.
  - 2) Diisobutylisomyläther d. Trioxymethan (Orthoameisensäurediisobutylisomyläther). Sd. 230—235° (B. 16, 1647). — I, 312.
  - 3) Diisomyläther d.  $\alpha\alpha'$ -Dioxydiäthyläther. Sd. 226—227° (A. 218, 30). — I, 924.
- $C_{14}H_{30}O_4$  C 64,1 — H 11,4 — O 24,4 — M. G. 262.
- 1) Tetraäthyläther d.  $\alpha\alpha\zeta\zeta$ -Tetraoxyhexan. Sd. 155°<sub>20</sub> (B. 39, 893 C. 1906 [1] 1230).
- $C_{14}H_{30}O_5$  C 60,4 — H 10,8 — O 28,8 — M. G. 278.
- 1) Verbindung (aus Majoranöl) (A. 31, 69). — III, 543.
- $C_{14}H_{30}N_2$  C 74,3 — H 13,3 — N 12,4 — M. G. 226.
- 1) Myristinamidin. HCl, (2HCl, PtCl<sub>4</sub>) (B. 26, 2842). — \*I, 635.
- $C_{14}H_{30}S$  Sd. 298° (J. 1887, 1280). — I, 363.
- $C_{14}H_{30}S_2$  1) Verbindung (aus Amylenchlorosulfid). Sd. 240—250° (A. 121, 121). — I, 118.
- $C_{14}H_{30}S_4$  1) Tetraäthyläther d.  $\beta\beta\epsilon\epsilon$ -Tetramerkaptohexan (B. 33, 2992).
- $C_{14}H_{30}S_6$  1) Hexaäthyläther d. Hexamerkaptoäthan (Dikohlenhexamerkaptid) (J. pr. [2] 15, 213). — I, 888.
- $C_{14}H_{31}N$  C 78,9 — H 14,4 — N 6,6 — M. G. 213.
- 1)  $\alpha$ -Amidotetradekan. Sm. 37°; Sd. 162°<sub>15</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (B. 23, 2361; C. 1903 [1] 826; J. pr. [2] 67, 419 C. 1903 [1] 1405). — I, 1138.
  - 2) Diheptylamin. Sm. 30°; Sd. 271°<sub>750</sub>. HCl (C. r. 140, 1692 C. 1905 [2] 392).
- $C_{14}O_2Cl_8$  1) Oktochlor-9,10-Anthrachinon. Sm. 210—235° (B. 17, 1170). — III, 408.

### $C_{14}$ -Gruppe mit drei Elementen.

- $C_{14}HO_2Br_7$  1) Heptabrom-9,10-Anthrachinon. Sm. 350° (C. 1900 [1] 1177, 1180; 1902 [1] 1384). — \*III, 295.
- $C_{14}H_2O_5Br_8$  1) Verbindung (aus Tribrom-1,2-Benzochinon) oder  $C_{14}O_5Br_8$ . Sm. 230° (Am. 26, 43). — \*III, 255.
- $C_{14}H_3O_3Cl_5$  1)  $\beta$ -Pentachlor-9,10-Anthrachinon. Subl. (B. 11, 181). — III, 408.
- $C_{14}H_3O_3Br_6$  1)  $\beta$ -Pentabrom-9,10-Anthrachinon. Subl. (B. 11, 183). — III, 409.
- $C_{14}H_4O_3Cl_4$  1) 1,2,3,4-Tetrachlor-9,10-Anthrachinon. Sm. 191° (A. 238, 344). — III, 408.
- 2) isom.  $\beta$ -Tetrachlor-9,10-Anthrachinon. Sm. 320—330° (B. 11, 180). — III, 408.
- $C_{14}H_4O_2Cl_6$  1) Di[ $\alpha$ ,3,5-Trichlorbenzyliden]chinon. Sm. 249° (J. pr. [2] 59, 231; A. 325, 85 C. 1903 [1] 464; A. 338, 252 C. 1905 [1] 1150). — \*II, 606.



- $C_{14}H_4O_2Cl_8$  1)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,3,5-Trichlor-4-Keto-3,4-Dihydrophenyl]äthan. Sm. 185° (*J. pr.* [2] 59, 234; *A.* 325, 91 *C.* 1903 [1] 465). — \*II, 606.
- $C_{14}H_4O_2Cl_{12}$  1) Ketochlorid (aus  $\alpha\beta$ -Di[4-Amidophenyl]äthin). Sm. 191° (*A.* 325, 80 Anm. *C.* 1903 [1] 464).
- $C_{14}H_4O_2Cl_{14}$  1) Ketochlorid (aus pp-Diamidostilben). Sm. 150° u. Zers. (*A.* 325, 47 Anm. *C.* 1903 [1] 462). — \*IV, 667.
- $C_{14}H_4O_2Br_4$  1)  $\beta$ -Tetrabrom-9,10-Anthrachinon. Sm. noch nicht bei 370° (*B.* 10, 1213; 19, 1107). — III, 409.
- 2)  $\beta$ -Tetrabrom-9,10-Anthrachinon. Sm. 295—300° (*B.* 11, 182). — III, 409.
- 3) isom. Tetrabrom-9,10-Anthrachinon. Sm. 295° (*C.* 1900 [1] 1177). — \*III, 295.
- $C_{14}H_4O_4Cl_4$  1)  $\beta$ -Tetrachlor-1,2-Dioxy-9,10-Anthrachinon. Sm. bei 260° (*B.* 11, 189). — III, 422.
- $C_{14}H_4O_4Br_4$  1)  $\beta$ -Tetrabrom-1,2-Dioxy-9,10-Anthrachinon (*B.* 11, 191). — III, 423.
- 2)  $\beta$ -Tetrabrom-1,6-Dioxy-9,10-Anthrachinon. Sm. 295° (*B.* 36, 2937, 2942 *C.* 1903 [2] 885).
- 3)  $\beta$ -Tetrabrom-2,6-Dioxy-9,10-Anthrachinon (*B.* 9, 382). — III, 430.
- 4)  $\beta$ -Tetrabrom-2,7-Dioxy-9,10-Anthrachinon (*B.* 9, 382). — III, 431.
- $C_{14}H_4O_4Br_8$  1) Oktobromuvinon (*B.* 20, 1087). — III, 709.
- $C_{14}H_4O_6Cl_8$  1) Verbindung (aus 3,4,5,6-Tetrachlor-1,2-Benzochinon u. Essigsäure). Sm. 250—252° (*Am.* 38, 172 *C.* 1907 [2] 1163).
- $C_{14}H_4O_6Br_4$  1) 2,4,6,8-Tetrabrom-1,3,5,7-Tetraoxy-9,10-Anthrachinon (*D. R. P.* 155633 *C.* 1904 [2] 1487).
- $C_{14}H_4O_8Br_8$  1) Verbindung (aus 3,4,5,6-Tetrabrom-1,2-Benzochinon u. Essigsäure). Zers. bei 220—230° (*Am.* 31, 111 *C.* 1904 [1] 803).
- $C_{14}H_4O_{10}N_4$  C 43,3 — H 1,0 — O 41,2 — N 14,4 — M. G. 388.
- 1) Alöetinsäure + H<sub>2</sub>O (Tetranitroanthrachinon). K, Ba, Ag (*A.* 39, 1; 72, 286; 134, 236; *J.* 1849, 330; *C.* 1906 [2] 882). — III, 617.
- $C_{14}H_4O_{12}N_4$  C 40,0 — H 1,0 — O 45,7 — N 13,3 — M. G. 420.
- 1)  $\beta$ -Tetranitro-1,5-Dioxy-9,10-Anthrachinon. Na<sub>2</sub> + 4H<sub>2</sub>O, K + H<sub>2</sub>O, Mg + 6H<sub>2</sub>O (*B.* 12, 188). — III, 427.
- 2)  $\beta$ -Tetranitro-1,8-Dioxy-9,10-Anthrachinon (Chryssaminsäure). Salze meist bekannt. + 2C<sub>10</sub>H<sub>8</sub> (*J.* 1847/48, 541; 1850, 164; 1872, 481; *R.* 19, 388; *A.* 39, 5, 21; 142, 86; 183, 193; *B.* 12, 187; 15, 1863). — III, 427; \*III, 308.
- 3)  $\beta$ -Tetranitro-2,6-Dioxy-9,10-Anthrachinon. Explod. bei 307,6°. + 2 (3 u. 4) NH<sub>3</sub>, Ag<sub>2</sub> (*B.* 8, 1487). — III, 430.
- 4)  $\beta$ -Tetranitro-2,7-Dioxy-9,10-Anthrachinon. Sm. noch nicht bei 300°. Na<sub>2</sub>, K<sub>2</sub> + 2H<sub>2</sub>O, Ag<sub>2</sub> (*B.* 15, 1045). — III, 431.
- $C_{14}H_4O_{14}N_4$  C 37,2 — H 0,9 — O 49,5 — N 12,4 — M. G. 452.
- 1) 2,4,6,8-Tetranitro-1,3,5,7-Tetraoxy-9,10-Anthrachinon. Zers. bei 280—300° (*D. R. P.* 72552, 73605, 101486, 108420). — \*III, 313.
- $C_{14}H_4O_{14}N_8$  C 33,1 — H 0,8 — O 44,1 — N 22,0 — M. G. 508.
- 1) 2,4,6,8-Tetranitro-1,5-Di[Nitramido]-9,10-Anthrachinon (*B.* 37, 4446 *C.* 1905 [1] 181).
- $C_{14}H_4O_{15}N_6$  C 33,9 — H 0,8 — O 48,4 — N 16,9 — M. G. 496.
- 1) Anhydrid d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 270° u. Zers. (*Soc.* 67, 600). — \*II, 778.
- $C_{14}H_4Cl_2Br_4$  1) Dichlortetrabromanthracen (*B.* 19, 1107). — II, 264.
- $C_{14}H_5OCl_7$  1) Chlorid d. 3,4,5,6-Tetrachlordiphenyldichlormethan-2-Carbonsäure. Sm. 143—144° (*Bl.* [3] 27, 184 *C.* 1902 [1] 934).
- $C_{14}H_5O_2Cl_3$  1) 1,2,4-Trichlor-9,10-Anthrachinon. Sm. 185,5° (*B.* 34, 2113). — \*III, 294.
- 2) 1,4,6-Trichlor-9,10-Anthrachinon. Sm. 237° (*D. R. P.* 214714 *C.* 1909 [2] 1603).
- 3) isom. 1,4,6-Trichlor-9,10-Anthrachinon. Sm. 253—254° (*D. R. P.* 214714 *C.* 1909 [2] 1603).
- 4)  $\beta$ -Trichlor-9,10-Anthrachinon. Sm. 284—290° (*B.* 11, 180). — III, 408.
- $C_{14}H_5O_2Cl_5$  1) Pentachloroxytoliden. Sm. 187—190° (*A.* 153, 128). — III, 296.
- 2) Chlorid d. 3,4,5,6-Tetrachlordiphenylketon-2-Carbonsäure. Sm. 183° (179—180°) (*A.* 238, 342; *Bl.* [3] 27, 185 *C.* 1902 [1] 934; *M.* 25, 1190 *C.* 1905 [1] 365). — II, 1704.
- $C_{14}H_5O_2Cl_{11}$  1) Ketochlorid (aus pp-Diamidostilben). Sm. 217° u. Zers. (*A.* 325, 47 Anm. *C.* 1903 [1] 462). — \*IV, 667.

- $C_{14}H_5O_2Cl_{13}$  1) **Ketochlorid** (aus  $\alpha\beta$ -Di[4-Amidophenyl]äthin). Sm. 258° (A. 325, 79 Anm., 85 C. 1903 [1] 464).  
 2) **isom. Ketochlorid** (aus  $\alpha\beta$ -Di[4-Amidophenyl]äthin). Sm. 212° (A. 325, 79 Anm., 85 C. 1903 [1] 464).
- $C_{14}H_5O_2Br_3$  1) **p-Tribrom-9,10-Anthrachinon**. Sm. 186° (B. 11, 181). — III, 409.  
 2) **p-Tribrom-9,10-Anthrachinon**. Sm. 365° (B. 10, 1213). — III, 409.
- $C_{14}H_5O_2Br_5$  1) **Pentabromoxytoliden**. Sm. 206° (A. 153, 127). — III, 297.
- $C_{14}H_5O_4Cl_3$  1) **p-Trichlor-2,6-Dioxy-9,10-Anthrachinon** (D.R.P. 152175 C. 1904 [2] 168).  
 2) **p-Trichlor-2,6-Dioxy-9,10-Anthrachinon** (D.R.P. 179916 C. 1907 [1] 1366; D.R.P. 181659 C. 1907 [1] 1651).
- $C_{14}H_5O_4Br_3$  1) **p-Tribrom-2,6-Dioxy-9,10-Anthrachinon** (D.R.P. 175663 C. 1906 [2] 1699).
- $C_{14}H_5O_5Br_3$  1) **p-Tribrom-1,2,6-Trioxy-9,10-Anthrachinon**. Sm. 284° u. Zers. (B. 10, 1823). — III, 435.
- $C_{14}H_5O_{11}N_5$  C 40,1 — H 1,2 — O 42,0 — N 16,7 — M. G. 419.  
 1) **p-Tetranitro-8[oder 1]-Amido-1[oder 8]-Oxy-9,10-Anthrachinon** (Chrysammidsäure). K, Ba, Pb (A. 65, 236; A. Spl. 7, 311; J. 1847/48, 541). — III, 428.
- $C_{14}H_5N_4Br_5$  1) **p-Pentabrom-3,3'-Biindazolyl**. Sm. 200—200,5° (B. 32, 1790). — \*IV, 960.
- $C_{14}H_5Cl_3S_2$  1) **Trichlortotalyldisulfid** (A. 167, 193). — III, 226.
- $C_{14}H_6O_2Cl_2$  1) **1,2-Dichlor-9,10-Anthrachinon**. Sm. 161° (A. 238, 348). — III, 408.  
 2) **1,5-Dichlor-9,10-Anthrachinon**. Sm. 232° (D.R.P. 131538 C. 1902 [1] 1342; D.R.P. 205195 C. 1908 [2] 414). — \*III, 294.  
 3) **1,8-Dichlor-9,10-Anthrachinon** (D.R.P. 131538 C. 1902 [1] 1342). — \*III, 294.  
 4) **2,6-Dichlor-9,10-Anthrachinon**. Sm. 280—282° (D.R.P. 197554 C. 1908 [1] 1814).  
 5) **2,7-Dichlor-9,10-Anthrachinon**. Sm. 208—210° (D.R.P. 197554 C. 1908 [1] 1814).  
 6) **isom. p-Dichlor-9,10-Anthrachinon**. Sm. 205° (A. Spl. 7, 290; B. 11, 179; 19, 1109). — III, 408.  
 7) **p-Dichlor-9,10-Phenanthrenchinon**. Sm. 209° (Soc. 65, 327).
- $C_{14}H_6O_2Cl_4$  1)  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthin. Sm. 226° (A. 325, 77 C. 1903 [1] 463; A. 338, 242 C. 1905 [1] 1149).  
 2) **3,5,3',5'-Tetrachlorstilbenchinon** (J. pr. [2] 59, 236; A. 325, 54 C. 1903 [1] 462). — \*II, 606.
- $C_{14}H_6O_2Cl_6$  1)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 248° (J. pr. [2] 59, 231; A. 325, 78 C. 1903 [1] 464; A. 338, 251 C. 1905 [1] 1150). — \*II, 605.
- $C_{14}H_6O_2Cl_8$  1) **Dimethyläther d. Oktochlor-p-Dioxybiphenyl**. Sm. 226° (B. 16, 884). — II, 990.  
 2)  $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 222° u. Zers. + 2 Molec. Essigsäure (J. pr. [2] 59, 231; A. 325, 82 C. 1903 [1] 464). — \*II, 606.
- $C_{14}H_6O_2Cl_{12}$  1) **Ketochlorid** (aus 4,4'-Dioxystilben). Sm. 223—224° (A. 325, 51 Anm. C. 1903 [1] 462).
- $C_{14}H_6O_2Br_2$  1) **1,2[p]-Dibrom-9,10-Anthrachinon**. Sm. 265° (274—275°) (B. 19, 1107; A. Spl. 7, 288; Soc. 37, 555). — III, 409; \*III, 295.  
 2) **1,5-Dibrom-9,10-Anthrachinon** (D.R.P. 205195 C. 1909 [1] 414).  
 3) **2,6-Dibrom-9,10-Anthrachinon**. Sm. 289—290° (B. 37, 4707 C. 1905 [1] 368).  
 4) **2,7-Dibrom-9,10-Anthrachinon**. Sm. 323° (D.R.P. 197554 C. 1908 [1] 1814; B. 40, 4562 C. 1908 [1] 135).  
 5) **isom. p-Dibrom-9,10-Anthrachinon**. Sm. 236,5° (245°) (A. Spl. 7, 288; B. 11, 181; Soc. 37, 555). — III, 409; \*III, 294.  
 6) **2,7-Dibrom-9,10-Phenanthrenchinon**. Sm. 323° (B. 37, 3559 C. 1904 [2] 1400; B. 37, 3567 C. 1904 [2] 1402).  
 7) **p-Dibrom-9,10-Phenanthrenchinon**. Sm. 230° (A. 167, 185). — III, 441.  
 8) **Verbindung** (aus 2,4'-Dimethylbiphenyl). Sm. 166° (Soc. 47, 591). — II, 235.

- $C_{14}H_6O_2Br_4$  1) 3,5,3',5'-Tetrabromstilbenchinon (Tetrabromdibenzylidenchinon). Zers. oberhalb 300°. NaOH, KOH (A. 325, 34 C. 1903 [1] 460).  
 2) Tetrabromoxytoliden. Sm. 150° (A. 153, 127). — III, 297.
- $C_{14}H_6O_2Br_8$  1)  $\alpha\alpha$ -Di[2,3,5,6-Tetrabrom-4-Oxyphenyl]äthan. Sm. 227—228° (A. 363, 259 C. 1909 [1] 175).
- $C_{14}H_6O_3Cl_4$  1) 3,4,5,6-Tetrachlordiphenylketon-2-Carbonsäure. Sm. 200° (201°). Na + 4H<sub>2</sub>O, K + 1½H<sub>2</sub>O, Cu + 2H<sub>2</sub>O (A. 238, 338; M. 25, 1189 C. 1905 [1] 365). — II, 1704.  
 2) Anhydrid d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 186 bis 187° (A. 346, 307 C. 1906 [2] 332).
- $C_{14}H_6O_3Br_2$  1) 2,4-Dibrom-1-Oxy-9,10-Anthrachinon. Sm. 233° (C. 1902 [1] 287). — \*III, 300.  
 2) 1,3-Dibrom-2-Oxy-9,10-Anthrachinon. Sm. 207—208° (A. 202, 136). — III, 419.  
 3) *p*-Dibrom-2-Oxy-9,10-Anthrachinon (D.R.P. 175663 C. 1906 [2] 1699). C 63,2 — H 2,2 — O 24,0 — N 10,6 — M. G. 266.
- $C_{14}H_6O_4N_2$  1) N-Anhydrid d. 2-Diazo-1,3-Dioxy-9,10-Anthrachinon (M. 26, 583 C. 1905 [2] 333).  
 2) Diimid d. Naphtalin-1,4,5,8-Tetracarbonsäure (A. 240, 188). — II, 2082.
- $C_{14}H_6O_4Cl_2$  1) *p*-Dichlor-1,2-Dioxy-9,10-Anthrachinon. Sm. 208—210° (B. 11, 188). — III, 422.  
 2) 6,7-Dichlor-1,4-Dioxy-9,10-Anthrachinon. Sm. 255° (D.R.P. 172105 C. 1906 [2] 478).  
 3) 4,8-Dichlor-1,5-Dioxy-9,10-Anthrachinon (*p*-Dichloranthrarufin) (D.R.P. 127699 C. 1902 [1] 338; D.R.P. 167743 C. 1906 [1] 1071). — \*III, 305.  
 4) *p*-Dichlor-1,8-Dioxy-9,10-Anthrachinon (*p*-Dichlorechrysazin) (D.R.P. 127699 C. 1902 [1] 339; D.R.P. 172300 C. 1906 [2] 478). — \*III, 307.  
 5) *p*-Dichlor-2,6-Dioxy-9,10-Anthrachinon. Sm. 362—364° (D.R.P. 152175 C. 1904 [2] 168; D.R.P. 187685 C. 1907 [2] 1465).  
 6) isom. *p*-Dichlor-2,6-Dioxy-9,10-Anthrachinon. Sm. 362—364° (D.R.P. 179916 C. 1907 [1] 1366; D.R.P. 187685).  
 7) *p*-Dichlor-2,7-Dioxy-9,10-Anthrachinon (D.R.P. 152175 C. 1904 [2] 168).
- $C_{14}H_6O_4Cl_4$  1)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[2,5-Dichlor-4-Oxyphenyl]äthan. Sm. 275° (J. pr. [2] 59, 233). — \*III, 224.  
 2)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. noch nicht bei 300° (A. 325, 88 C. 1903 [1] 464).
- $C_{14}H_6O_4Br_2$  1) *p*-Dibrom-1,2-Dioxy-9,10-Anthrachinon. Sm. 168—170° (B. 11, 190). — III, 423.  
 2) 2,4-Dibrom-1,3-Dioxy-9,10-Anthrachinon. Sm. 227—230°. (NH<sub>4</sub>)<sub>2</sub> (B. 9, 1205; 28, 315). — III, 425.  
 3) 2,3-Dibrom-1,4-Dioxy-9,10-Anthrachinon. Subl. bei 350° (i. V.) (B. 33, 1658). — \*III, 305.  
 4) 4,8-Dibrom-1,5-Dioxy-9,10-Anthrachinon (*p*-Dibromanthrarufin) (D.R.P. 127699 C. 1902 [1] 339). — \*III, 305.  
 5) *p*-Dibrom-1,6-Dioxy-9,10-Anthrachinon. Sm. 210—213° (B. 36, 2937 C. 1903 [2] 885).  
 6) *p*-Dibrom-1,8-Dioxy-9,10-Anthrachinon (*p*-Dibromchrysazin) (D.R.P. 127699 C. 1902 [1] 339). — \*III, 307.  
 7) *p*-Dibrom-2,3-Dioxy-9,10-Anthrachinon. Sm. 127—129° (B. 36, 2939 C. 1903 [2] 886).  
 8) *p*-Dibrom-2,6-Dioxy-9,10-Anthrachinon (D.R.P. 175663 C. 1906 [2] 1699).  
 9) Verbindung (aus 2,4'-Dimethylbiphenyl). Sm. 197—198° (Soc. 47, 591). — II, 235.
- $C_{14}H_6O_4Br_4$  1)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. noch nicht bei 270° (A. 325, 90 C. 1903 [1] 465).
- $C_{14}H_6O_5Cl_4$  1) Anhydrid d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 186 bis 187° (B. 30, 223). — \*II, 894.
- $C_{14}H_6O_5Cl_6$  1) Äthyläther d. Hexachloroxyorthochinonbrenzkatechinemiäther. Sm. 210° u. Zers. (B. 42, 1866 C. 1909 [2] 194).
- $C_{14}H_6O_5Br_4$  1) Tetrabromgenistein. Sm. oberhalb 290° (Soc. 75, 834). — \*III, 489.



- C<sub>14</sub>H<sub>6</sub>O<sub>6</sub>Br<sub>8</sub>** 1)  $\alpha$ -Verbindung (aus Äthylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Sm. 180—185° (*Am.* **34**, 429 *C.* **1906** [1] 28).  
 2)  $\beta$ -Verbindung (aus Äthylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Sm. 228° u. Zers. (*Am.* **34**, 430 *C.* **1906** [1] 28).  
**C<sub>14</sub>H<sub>6</sub>O<sub>6</sub>N<sub>2</sub>** 1) 1,5-Dinitro-9,10-Anthrachinon. Sm. oberhalb 330° (*B.* **16**, 364; **29**, 2935; D.R.P. 72685; D.R.P. 167699 *C.* **1906** [1] 1070). — **III**, 411; \***III**, 295.  
 2) 1,6-Dinitro-9,10-Anthrachinon. Sm. 256° (D.R.P. 167699 *C.* **1906** [1] 1070).  
 3) 1,7-Dinitro-9,10-Anthrachinon. Sm. 293° (D.R.P. 167699 *C.* **1906** [1] 1070).  
 4) 1,8-Dinitro-9,10-Anthrachinon. Sm. 312° (D.R.P. 167699 *C.* **1906** [1] 1070).  
 5) 1,8-[ $\beta$ ]-Dinitro-9,10-Anthrachinon. Sm. 256—260° (*A.* **160**, 145; **166**, 154; D.R.P. 72685; *B.* **3**, 905; **15**, 1801; **16**, 54; *J. pr.* [2] **9**, 261; [2] **19**, 211). — **III**, 410; \***III**, 295.  
 6) 2,6-Dinitro-9,10-Anthrachinon. Sm. oberhalb 330° (D.R.P. 167699 *C.* **1906** [1] 1070).  
 7) 2,7-Dinitro-9,10-Anthrachinon. Sm. 280° (262°) (*Z.* **1869**, 114; *J. pr.* [2] **9**, 261; *A.* **122**, 302; D.R.P. 167699 *C.* **1906** [1] 1070; *B.* **39**, 642 *C.* **1906** [1] 1025; D.R.P. 167699 *C.* **1906** [1] 1070). — **III**, 410.  
 8) isom.  $\beta$ -Dinitro-9,10-Anthrachinon. Sm. bei 300° (D.R.P. 72685). — \***III**, 296.  
 9) 2,7-Dinitro-9,10-Phenanthrenchinon. Sm. 290° (278—280°; 301 bis 303°) (*A.* **167**, 144; **203**, 108; *B.* **9**, 548; **10**, 324; **16**, 2346; *C.* **1900** [2] 117; *B.* **35**, 3122 *C.* **1902** [2] 1212; *A.* **321**, 336 *C.* **1902** [2] 61; *B.* **36**, 3739 *C.* **1904** [1] 36; *B.* **37**, 3085 *C.* **1904** [2] 1056; *B.* **38**, 3744 *Anm.* *C.* **1906** [1] 41). — **III**, 441; \***III**, 316.  
 10) 4,5-Dinitro-9,10-Phenanthrenchinon. Sm. 228° (*B.* **35**, 3122 *C.* **1902** [2] 1212; *B.* **36**, 3745 *C.* **1904** [1] 37).  
 11) isom.  $\beta$ -Dinitro-9,10-Phenanthrenchinon (*A.* **203**, 107). — **III**, 441.  
 12) 8-Nitro-4-Nitroso-1-Oxy-9,10-Anthrachinon. Sm. 250° u. Zers. (*C.* **1899** [2] 923). — \***III**, 300.  
**C<sub>14</sub>H<sub>6</sub>O<sub>6</sub>N<sub>6</sub>** *C* 47,5 — H 1,7 — O 27,1 — N 23,7. — M. G. 354.  
 1) Verbindung (aus ?-Diamido-9,10-Anthrachinon) (*A.* **160**, 153). — **III**, 414.  
**C<sub>14</sub>H<sub>6</sub>O<sub>6</sub>Cl<sub>4</sub>** 1) Diacetat d. 2,3,7,8-Tetrachlor-5,6-Dioxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 244° (*A.* **286**, 48). — **III**, 387.  
**C<sub>14</sub>H<sub>6</sub>O<sub>6</sub>Br<sub>2</sub>** 1)  $\beta$ -Dibrom-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 78642, 81962). — \***III**, 312.  
**C<sub>14</sub>H<sub>6</sub>O<sub>7</sub>N<sub>2</sub>** *C* 53,5 — H 1,9 — O 35,7 — N 8,9 — M. G. 314.  
 1) 2,4-Dinitro-1-Oxy-9,10-Anthrachinon. Sm. 243° (D.R.P. 183332 *C.* **1907** [2] 766).  
 2) 1,3-Dinitro-2-Oxy-9,10-Anthrachinon. Sm. 268—270°. K, Mg + 5H<sub>2</sub>O, Cu + 2H<sub>2</sub>O, Ag (*B.* **14**, 464; **15**, 692; D.R.P. 119755 *C.* **1901** [1] 979). — **III**, 419; \***III**, 300.  
 3)  $\beta$ -Dinitro-3-Oxy-9,10-Phenanthrenchinon. Sm. 227—228° (*B.* **41**, 3699 *C.* **1908** [2] 1871).  
**C<sub>14</sub>H<sub>7</sub>O<sub>7</sub>S** 1) Sulfonsäure d. Verb. C<sub>14</sub>H<sub>6</sub>O<sub>4</sub>. Na (*Soc.* **53**, 841). — **III**, 415.  
**C<sub>14</sub>H<sub>6</sub>O<sub>8</sub>N<sub>2</sub>** *C* 50,9 — H 1,8 — O 38,8 — N 8,5 — M. G. 330.  
 1)  $\beta$ -Dinitro-1,3-Dioxy-9,10-Anthrachinon. Sm. 249—250°. NH<sub>4</sub>, Ba (*B.* **9**, 1205). — **III**, 425.  
 2) isom.  $\beta$ -Dinitro-1,3-Dioxy-9,10-Anthrachinon. Sm. 249° (*B.* **9**, 1206). — **III**, 426.  
 3) 4,8-Dinitro-1,5-Dioxy-9,10-Anthrachinon (*C.* **1901** [2] 1189; D.R.P. 89090; D.R.P. 163042 *C.* **1905** [2] 1062; D.R.P. 170728 *C.* **1906** [2] 474). — \***III**, 305.  
 4) 4,5-Dinitro-1,8-Dioxy-9,10-Anthrachinon (*C.* **1898** [2] 949; D.R.P. 163042 *C.* **1905** [2] 1062; D.R.P. 170728 *C.* **1906** [2] 474). — \***III**, 307.  
 5) 1,4-Dinitro-2,3-Dioxy-9,10-Anthrachinon. Ca, Ba (*B.* **36**, 2940 *C.* **1903** [2] 886).  
 6)  $\beta$ -Dinitro-2,6-Dioxy-9,10-Anthrachinon (Dinitroanthraflavinsäure). Sm. oberhalb 300° (*C.* **1900** [2] 700). — \***III**, 309.

- $C_{14}H_8O_8N_4$  C 46,9 — H 1,7 — O 35,7 — N 15,6 — M. G. 358.  
 1) 1,3-Dinitro-2-Nitramido-9,10-Anthrachinon. Zers. bei 99° (B. 37, 4436 C. 1905 [1] 179).  
 2) p-Trinitroakridin-5-Carbonsäure (A. 224, 40). — IV, 422.  
 3) 2,4,6-Trinitrophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 259° (H. 11, 275). — II, 1804.
- $C_{14}H_6O_9N_4$  C 44,9 — H 1,6 — O 38,5 — N 15,0 — M. G. 374.  
 1) p-Trinitro-4-Oxyphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 210° (G. 16, 253). — II, 1809.
- $C_{14}H_6O_{10}N_2$  C 46,4 — H 1,6 — O 44,2 — N 7,7 — M. G. 362.  
 1) 4,8-Dinitro-1,3,5,7-Tetraoxy-9,10-Anthrachinon. Zers. oberhalb 300° (C. 1901 [2] 1189; D.R.P. 71964, 81741).
- $C_{14}H_6O_{10}N_6$  C 40,2 — H 1,4 — O 38,3 — N 20,1 — M. G. 418.  
 1) 2,4,6,8-Tetranitro-1,5-Diamido-9,10-Anthrachinon (D.R.P. 148109 C. 1904 [1] 230; B. 37, 4447 C. 1905 [1] 182; D.R.P. 171588 C. 1906 [2] 469).  
 2) 2,4,5,7-Tetranitro-1,8-Diamido-9,10-Anthrachinon (D.R.P. 171588 C. 1906 [2] 469).  
 3) 4,8-Dinitro-1,5-Di[Nitramido]-9,10-Anthrachinon (D.R.P. 156803 C. 1905 [1] 314).
- $C_{14}H_6O_{12}N_4$  C 39,8 — H 1,4 — O 45,5 — N 13,3 — M. G. 422.  
 1) 4,6,4',6'-Tetranitrobiphenyl-2,2'-Dicarbonsäure. Sm. 284° u. Zers. (A. 366, 88 C. 1909 [2] 122).
- $C_{14}H_6O_{14}N_8$  C 32,9 — H 1,2 — O 43,9 — N 22,0 — M. G. 510.  
 1) s-Di[2,4,6-Trinitrophenylamid] d. Oxalsäure. Sm. 256–260° u. Zers. (300°) (Am. 9, 356; Soc. 61, 462; 63, 1067). — II, 410.
- $C_{14}H_6N_2Cl_2$  1) Nitril d. 3,3'-Dichlorbiphenyl-4,4'-Dicarbonsäure. Sm. 152–153° (Soc. 85, 9 C. 1904 [1] 376, 729).
- $C_{14}H_6Cl_2Br_2$  1) Dichlordibromanthracen. Sm. 251–252° (B. 10, 377). — II, 264.
- $C_{14}H_6Cl_2Br_6$  1) Dichlordibromanthracentetrabromid. Sm. 212° (B. 19, 1107). — II, 264.
- $C_{14}H_6Br_2S_2$  1) Dibromtolallyldisulfid. Sm. noch nicht bei 250° (A. 167, 190). — III, 226.
- $C_{14}H_7ON$  C 82,0 — H 3,4 — O 7,8 — N 6,8 — M. G. 205.  
 1) Nitril d. 9-Ketofluoren-4-Carbonsäure. Sm. 244° (A. 284, 314; M. 23, 891 Anm.). — II, 1718.
- $C_{14}H_7OCl_3$  1) Chlorid d. 9,9-Dichlorfluoren-4-Carbonsäure. Sm. 95° (A. 247, 279). — II, 1719.
- $C_{14}H_7O_2N$  C 76,0 — H 3,2 — O 14,5 — N 6,3 — M. G. 221.  
 1) Farbstoff (aus 2-Amido-9,10-Anthrachinon) (D.R.P. 129845 C. 1902 [1] 839).
- $C_{14}H_7O_2Cl$  1) 1-Chlor-9,10-Anthrachinon (D.R.P. 131538 C. 1902 [1] 1342; D.R.P. 205195 C. 1909 [1] 414). — \*III, 294.  
 2) 2-Chlor-9,10-Anthrachinon. Sm. 204° (208–209°) (A. 233, 240; D.R.P. 75288; B. 37, 62 C. 1904 [1] 520; B. 41, 3638 C. 1908 [2] 1929; D.R.P. 205195 C. 1909 [1] 414). — III, 408; \*III, 294.  
 3) 2-Chlor-9,10-Phenanthrenchinon. Sm. 235–237° (B. 39, 3893 C. 1907 [1] 166).  
 4) Chlorid d. 9-Ketofluoren-1-Carbonsäure. Sm. 140° (M. 23, 890 C. 1902 [2] 1472).  
 5) Chlorid d. 9-Ketofluoren-4-Carbonsäure. Sm. 128° (B. 13, 1304; A. 247, 279; M. 23, 32 C. 1902 [1] 875). — II, 1719.
- $C_{14}H_7O_2Cl_3$  1) Trichloroxytoliden. Sm. 87° (A. 153, 128). — III, 296.
- $C_{14}H_7O_2Cl_5$  1)  $\alpha$ -Chlor- $\alpha$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 197° (A. 338, 254 C. 1905 [1] 1150).
- $C_{14}H_7O_2Br$  1) 1-Brom-9,10-Anthrachinon. Sm. 188° (B. 12, 2127; D.R.P. 131538 C. 1902 [1] 1342; D.R.P. 205195 C. 1909 [1] 414). — III, 409; \*III, 294.  
 2) 2-Brom-9,10-Anthrachinon. Sm. 202–204° (187°?) (A. Spl. 7, 290; B. 37, 61 C. 1904 [1] 520; B. 37, 4708 C. 1905 [1] 368). — III, 409.  
 3) 2-Brom-9,10-Phenanthrenchinon. Sm. 233–234° (B. 37, 3558 C. 1904 [2] 1400).  
 4) 3-Brom-9,10-Phenanthrenchinon. Sm. 268° (B. 37, 3571 C. 1904 [2] 1403; B. 39, 3118 C. 1906 [2] 1330).

- C<sub>14</sub>H<sub>7</sub>O<sub>2</sub>Br** 5) 4-Brom-9,10-Phenanthrenchinon. Sm. 126° (A. 321, 334 C. 1902 [2] 61; A. 322, 170 C. 1902 [2] 283; B. 37, 3554 C. 1904 [2] 1399). — \*III, 316.
- C<sub>14</sub>H<sub>7</sub>O<sub>2</sub>J** 1) 1-Jod-9,10-Anthrachinon. Sm. 177° (B. 40, 3566 C. 1907 [2] 1417).  
2) 2-Jod-9,10-Anthrachinon. Sm. 175—176° (B. 36, 60 C. 1904 [1] 520).  
C 70,9 — H 2,9 — O 20,2 — N 5,9 — M. G. 237.
- C<sub>14</sub>H<sub>7</sub>O<sub>3</sub>N** 1) Nitril d. 4-Oxy-1,2- $\alpha$ -Naphtopyron-3-Carbonsäure. Sm. 235°. K, Ag (A. 368, 45 C. 1909 [2] 1443).  
2) Nitril d. 4-Oxy-1,2- $\beta\beta$ -Naphtopyron-3-Carbonsäure. Sm. 276°. Na, Cu (A. 367, 259 C. 1909 [2] 1239).  
C 63,4 — H 2,6 — O 18,1 — N 15,9 — M. G. 265.
- C<sub>14</sub>H<sub>7</sub>O<sub>3</sub>N<sub>3</sub>** 1) Oximanhydrid d. 3-Nitro-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 230—231° (B. 41, 3688 C. 1908 [2] 1869).
- C<sub>14</sub>H<sub>7</sub>O<sub>3</sub>Cl** 1) 4-Chlor-1-Oxy-9,10-Anthrachinon (D.R.P. 202770 C. 1908 [2] 1752).  
2) 1-Chlor-2-Oxy-9,10-Anthrachinon. Sm. 226° (B. 39, 113 C. 1906 [1] 676).  
3) 3-Chlor-2-Oxy-9,10-Anthrachinon. Sm. 258—260° (D.R.P. 148110 C. 1904 [1] 329).  
4)  $\beta$ -Chlor-2-Oxy-9,10-Anthrachinon (D.R.P. 152175 C. 1904 [2] 168).
- C<sub>14</sub>H<sub>7</sub>O<sub>3</sub>Cl<sub>3</sub>** 1) 3,4,6[oder 3,5,6]-Trichlor-2-Benzoylbenzol-1-Carbonsäure. Sm. 177° (B. 34, 2112).
- C<sub>14</sub>H<sub>7</sub>O<sub>3</sub>Cl<sub>5</sub>** 1) Benzylester-Pentachlorphenylester d. Kohlensäure. Sm. 116° (Bl. [3] 23, 821). — \*II, 638.
- C<sub>14</sub>H<sub>7</sub>O<sub>3</sub>Br** 1) 3-Brom-2-Oxy-9,10-Anthrachinon. Sm. 249—252° (D.R.P. 148110 C. 1904 [1] 329).
- C<sub>14</sub>H<sub>7</sub>O<sub>3</sub>Br<sub>5</sub>** 1) Acetat d. Methyl- $\beta$ -Pentabrom-4-Oxy-2-Naphtylketon. Sm. 110 bis 111,5° (A. 275, 295). — III, 175.  
C 66,4 — H 2,8 — O 25,3 — N 5,5 — M. G. 253.
- C<sub>14</sub>H<sub>7</sub>O<sub>4</sub>N** 1) 1-Nitro-9,10-Anthrachinon. Sm. 220° (228°; 230°) (B. 12, 1570; 14, 978; 15, 1786; 16, 54; 30, 1117; A. 166, 147). — III, 410; \*III, 295.  
2) 2-Nitro-9,10-Anthrachinon. Sm. 184—185° (180—181°) (B. 37, 63 C. 1904 [1] 520; B. 37, 4434 C. 1905 [1] 179; B. 38, 295 C. 1905 [1] 617; M. 29, 436 C. 1908 [2] 1028).  
3)  $\beta$ -Nitro-9,10-Anthrachinon (B. 12, 1570; 14, 978; A. 166, 147).  
4) 2-Nitro-9,10-Phenanthrenchinon. Sm. 257° (B. 9, 1404; A. 321, 336 C. 1902 [2] 61; B. 36, 3731 C. 1904 [1] 35; B. 37, 3085 C. 1904 [2] 1056). — III, 441; \*III, 316.  
5) 3-Nitro-9,10-Phenanthrenchinon. Sm. 275° (279—280° u. Zers.) (A. 321, 337 C. 1902 [2] 61; B. 35, 3119 C. 1902 [2] 1211; B. 37, 3084 C. 1904 [2] 1056; B. 41, 3685 C. 1908 [2] 1869; B. 41, 4225 C. 1909 [1] 182). — \*III, 316.  
6) 4-Nitro-9,10-Phenanthrenchinon. Sm. 179—180° (B. 36, 3734 C. 1904 [1] 36).  
7) isom.  $\beta$ -Nitro-9,10-Phenanthrenchinon. Sm. 161—162° (C. 1900 [2] 117; B. 36, 3734 C. 1904 [1] 36). — \*III, 316.  
8) isom.  $\beta$ -Nitro-9,10-Phenanthrenchinon. Sm. 215—220° (B. 12, 1156). — III, 441.  
9) isom.  $\beta$ -Nitro-9,10-Phenanthrenchinon. Sm. 260—266° (B. 12, 1157). — III, 441.  
10) isom.  $\beta$ -Nitro-9,10-Phenanthrenchinon. Sm. 263° u. Zers. (B. 12, 1158). — III, 441.  
11) isom.  $\beta$ -Nitro-9,10-Phenanthrenchinon. Sm. 281—282° (J. pr. [2] 28, 172). — III, 441.
- C<sub>14</sub>H<sub>7</sub>O<sub>4</sub>N<sub>3</sub>** C 59,8 — H 2,5 — O 22,8 — N 14,9 — M. G. 281.  
1) 3,4-Methylenäther d. 3,5-Dicyan-6-Oxy-2-Keto-4-[3,4-Dioxyphenyl]-2,5-Dihydropyridin (Piperonyldicyanglutakonimid). Sm. oberhalb 300°. NH<sub>4</sub>, Ca + 5H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Co, Cu, Ag (C. 1903 [2] 714).
- C<sub>14</sub>H<sub>7</sub>O<sub>4</sub>Cl** 1) 3-Chlor-1,2-Dioxy-9,10-Anthrachinon. Sm. 265—267° (D.R.P. 77179; D.R.P. 189937 C. 1907 [2] 2009). — \*III, 302.  
2) isom.  $\beta$ -Chlor-1,2-Dioxy-9,10-Anthrachinon (Chloralizarin). Sm. 244 bis 248° (B. 11, 187). — III, 422.  
3) isom.  $\beta$ -Chlor-1,2-Dioxy-9,10-Anthrachinon (D.R.P. 151018 C. 1904 [1] 1382).  
4) 2-Chlor-1,4-Dioxy-9,10-Anthrachinon (C. 1900 [2] 884).



- C<sub>14</sub>H<sub>7</sub>O<sub>4</sub>Cl** 5) 5-Chlor-1,4-Dioxy-9,10-Anthrachinon. Sm. 240° (D.R.P. 172105 C. 1906 [2] 478).
- 6) 4-Chlor-1,5-Dioxy-9,10-Anthrachinon (D.R.P. 167743 C. 1906 [1] 1071).
- 7) 2-Chlor-1,7-Dioxy-9,10-Anthrachinon (D.R.P. 163194 C. 1904 [2] 575).
- 8) 2-Chlor-2,6-Dioxy-9,10-Anthrachinon (D.R.P. 152175 C. 1904 [2] 168).
- C<sub>14</sub>H<sub>7</sub>O<sub>4</sub>Br** 1) 3-Brom-1,2-Dioxy-9,10-Anthrachinon. Sm. 245° (D.R.P. 77179, 81965). — \*III, 302.
- 2) 2-Brom-1,2-Dioxy-9,10-Anthrachinon. + Br<sub>2</sub>, K (J. 1874, 485; Soc. 75, 436; A. 130, 343; B. 33, 1664). — III, 422; \*III, 302.
- 3) isom. 2-Brom-1,2-Dioxy-9,10-Anthrachinon. Sm. oberhalb 280° (B. 11, 190). — III, 422.
- 4) 2-Brom-1,4-Dioxy-9,10-Anthrachinon. Subl. bei 300° (i. V.) (B. 33, 1658; C. 1900 [2] 884). — \*III, 304.
- 5) 2-Brom-1,4-Dioxy-9,10-Anthrachinon (D.R.P. 151018 C. 1904 [1] 1382).
- C<sub>14</sub>H<sub>7</sub>O<sub>4</sub>Br<sub>3</sub>** 1) 2-Tribrom-1,4-Dioxy-2-Dihydro-9,10-Anthrachinon. Zers. bei 210° (B. 33, 1663). — \*III, 304.
- C<sub>14</sub>H<sub>7</sub>O<sub>5</sub>N** C 62,4 — H 2,6 — O 29,7 — N 5,2 — M. G. 269.
- 1) 3-Nitro-1-Oxy-9,10-Anthrachinon. Sm. 247—248° (B. 37, 4435 C. 1905 [1] 179).
- 2) 4-Nitro-1-Oxy-9,10-Anthrachinon (D.R.P. 163042 C. 1905 [2] 1062).
- 3) 5-Nitro-2-Oxy-9,10-Anthrachinon (D.R.P. 167699 C. 1906 [1] 1070).
- 4) 8-Nitro-2-Oxy-9,10-Anthrachinon (D.R.P. 167699 C. 1906 [1] 1071).
- 5) 2-Nitro-3-Oxy-9,10-Phenanthrenchinon. Sm. 259—260° (A. 322, 155 C. 1902 [2] 282; B. 41, 3698 C. 1908 [2] 1870). — \*III, 318.
- 6) 5-Nitro-4-Oxy-9,10-Phenanthrenchinon. Sm. 240° u. Zers. (B. 38, 3736 C. 1904 [1] 40).
- 7) 2-Nitro-9-Ketofluoren-1-Carbonsäure. Sm. 245—246°. Ba + 4 H<sub>2</sub>O (A. 200, 8). — II, 1719.
- 8) α-Phenylenpyridinketondicarbonsäure. Sm. 264°. Ag<sub>2</sub> (B. 23, 1236). — IV, 385.
- 9) β-Phenylenpyridinketondicarbonsäure. Sm. 284°. Ag<sub>2</sub> (B. 23, 1241). — IV, 385.
- C<sub>14</sub>H<sub>7</sub>O<sub>5</sub>N<sub>3</sub>** C 56,6 — H 2,4 — O 26,9 — N 14,1 — M. G. 297.
- 1) 2,7-Dinitro-9-Imido-10-Ketophenanthren. Sm. 358—360° u. Zers. (B. 36, 3741 C. 1904 [1] 37).
- 2) α-Diazoanthrachinonnitrat (A. 166, 150). — III, 413.
- C<sub>14</sub>H<sub>7</sub>O<sub>5</sub>N<sub>5</sub>** C 51,7 — H 2,1 — O 24,6 — N 21,5 — M. G. 325.
- 1) Dinitrocarbonyl-β-o-Amidophenylbenzimidazol. Sm. 315° (B. 32, 1487). — \*IV, 849.
- C<sub>14</sub>H<sub>7</sub>O<sub>5</sub>Cl** 1) 4-Chlor-1,2,3-Trioxy-9,10-Anthrachinon. Sm. 220° (223°) (C. 1899 [2] 966; M. 22, 722). — \*III, 310.
- 2) 2-Chlor-1,2,4-Trioxy-9,10-Anthrachinon (D.R.P. 151018 C. 1904 [1] 1382).
- 3) 2-Chlor-1,2,6-Trioxy-9,10-Anthrachinon. Sm. 305° (D.R.P. 189937 C. 1907 [2] 2009).
- C<sub>14</sub>H<sub>7</sub>O<sub>5</sub>Br** 1) 4-Brom-1,2,3-Trioxy-9,10-Anthrachinon. Sm. 212° (217°) (C. 1899 [2] 966; 1901 [2] 1242). — \*III, 310.
- 2) 2-Brom-1,2,4-Trioxy-9,10-Anthrachinon. Sm. 276° (B. 10, 554, 615, 1619). — III, 434.
- 3) isom. 2-Brom-1,2,4-Trioxy-9,10-Anthrachinon (D.R.P. 151018 C. 1904 [1] 1382).
- C<sub>14</sub>H<sub>7</sub>O<sub>6</sub>N** C 58,9 — H 2,4 — O 33,7 — N 4,9 — M. G. 285.
- 1) 3-Nitro-1,2-Dioxy-9,10-Anthrachinon. Sm. 244° u. Zers. (J. 1878, 1190; Bl. 26, 63; D.R.P. 74562; B. 10, 1760; 12, 585; 15, 692). — III, 423; \*III, 303.
- 2) 4-Nitro-1,2-Dioxy-9,10-Anthrachinon. Sm. 289° u. Zers. Ca, Ba (J. 1877, 586; D.R.P. 66811, 74431, 74598; A. 201, 353; B. 12, 587; 24, 1612). — III, 423; \*III, 302.
- 3) 4-Nitro-1,3-Dioxy-9,10-Anthrachinon (D.R.P. 153770 C. 1904 [2] 752).
- 4) 5-Nitro-1,4-Dioxy-9,10-Anthrachinon. Sm. 244—245° (D.R.P. 90041). — \*III, 305.
- 5) 2-Nitro-1,8-Dioxy-9,10-Anthrachinon. Sm. 232—234° (D.R.P. 193104 C. 1908 [1] 429).
- 6) 1-Nitro-2,3-Dioxy-9,10-Anthrachinon (B. 36, 2939 C. 1903 [2] 886).

- C<sub>14</sub>H<sub>7</sub>O<sub>6</sub>N<sub>3</sub>** C 53,7 — H 2,2 — O 30,7 — N 13,4 — M. G. 313.
- 1) **2,4-Dinitro-1-Amido-9,10-Anthrachinon** (D.R.P. 171588 C. 1906 [2] 468).
  - 2) **1,3-Dinitro-2-Amido-9,10-Anthrachinon**. Sm. 279—280° (B. 37, 4438 C. 1905 [1] 186; D.R.P. 171588 C. 1906 [2] 468).
  - 3) **4-Nitro-1-Nitramido-9,10-Anthrachinon**. Zers. bei 117° (D.R.P. 156803 C. 1905 [1] 314).
  - 4) **3-Nitro-2-Nitramido-9,10-Anthrachinon**. Zers. bei 182°. Na (B. 37, 4431 C. 1905 [1] 179).
  - 5) **1,5-Dinitro-9-Oximido-10-Keto-9,10-Dihydroanthracen**. Sm. 253° u. Zers. (B. 26, 2457). — III, 411.
  - 6) **Monooxim d. 2,7-Dinitro-9,10-Phenanthrenchinon**. Sm. 246—248° u. Zers. (B. 36, 3740 C. 1904 [1] 37).
  - 7) **Monooxim d. 4,5-Dinitro-9,10-Phenanthrenchinon**. Sm. 190—191° u. Zers. (B. 36, 3748 C. 1904 [1] 38).
  - 8) **4,4'-Dinitro-2'-Cyanbiphenyl-2-Carbonsäure**. Sm. 217—218° (B. 37, 4314 C. 1905 [1] 178).
  - 9) **2-Nitrophenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 167° (C. 1901 [2] 1159).
  - 10) **2-Nitrophenylimid d. 4-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 233° (C. 1901 [2] 1160).
  - 11) **3-Nitrophenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 219° (C. 1901 [2] 1159; 1903 [2] 431).
  - 12) **3-Nitrophenylimid d. 4-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 243° (C. 1901 [2] 1160).
  - 13) **4-Nitrophenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 249° u. Zers. (C. 1901 [2] 1159; 1903 [2] 431).
  - 14) **4-Nitrophenylimid d. 4-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 251 bis 253° (C. 1901 [2] 1160).
- C<sub>14</sub>H<sub>7</sub>O<sub>6</sub>Br** 1) **2-Brom-1,2,3,6-Tetraoxy-9,10-Anthrachinon** (C. 1901 [2] 1242).
- C<sub>14</sub>H<sub>7</sub>O<sub>7</sub>N** C 55,8 — H 2,3 — O 37,2 — N 4,6 — M. G. 301.
- 1) **α-4-Nitro-1,2,3-Trioxy-9,10-Anthrachinon**. Sm. 224° u. Zers. (M. 18, 290; 22, 718). — \*III, 310.
  - 2) **β-4-Nitro-1,2,3-Trioxy-9,10-Anthrachinon** (M. 18, 291; 22, 721). — \*III, 310.
  - 3) **4-Pseudonitro-1,2,3-Trioxy-9,10-Anthrachinon**. Pyridinsalz (M. 18, 285; 22, 724). — \*III, 311.
  - 4) **2-Nitro-1,2,4-Trioxy-9,10-Anthrachinon** (Nitropurpurin) (B. 24, 1617). — III, 434.
  - 5) **4[oder 8]-Nitro-1,5,8[oder 1,4,5]-Trioxy-9,10-Anthrachinon** (C. 1901 [2] 1189).
  - 6) **Pseudonitropurpurin** (B. 24, 1615). — III, 434.
  - 7) **2-Nitro-1,2,2'-Trioxy-9,10-Anthrachinon**. K<sub>2</sub> (Z. 1868, 264). — III, 423.
- C<sub>14</sub>H<sub>7</sub>O<sub>7</sub>N<sub>3</sub>** C 51,1 — H 2,1 — O 34,0 — N 12,8 — M. G. 329.
- 1) **3-Nitro-2-Nitramido-1-Oxy-9,10-Anthrachinon**. Zers. bei 234° (B. 37, 4440 C. 1905 [1] 180).
- C<sub>14</sub>H<sub>7</sub>O<sub>8</sub>N** C 53,0 — H 2,2 — O 40,4 — N 4,4 — M. G. 317.
- 1) **3-Nitro-1,2,5,8-Tetraoxy-9,10-Anthrachinon** (J. pr. [2] 43, 249). — III, 438.
- C<sub>14</sub>H<sub>7</sub>O<sub>8</sub>N<sub>5</sub>** C 45,0 — H 1,9 — O 34,3 — N 18,8 — M. G. 373.
- 1) **2,4-Diketo-1-[2,4,6-Trinitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzodiazin** (J. pr. [2] 49, 319).
  - 2) **Tetranitro-3-Methyl-β-Naphtochinolin**. Sm. 277° (B. 22, 256). — IV, 412.
- C<sub>14</sub>H<sub>7</sub>O<sub>8</sub>Br** 1) **4-Brom-1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon** (D.R.P. 114263 C. 1900 [2] 931). — \*III, 315.
- C<sub>14</sub>H<sub>7</sub>O<sub>10</sub>N<sub>5</sub>** C 41,5 — H 1,7 — O 39,5 — N 17,3 — M. G. 405.
- 1) **Verbindung** (aus Azoarcin). Zers. bei 160° (B. 7, 441). — II, 965.
- C<sub>14</sub>H<sub>7</sub>O<sub>11</sub>N<sub>3</sub>** C 42,7 — H 1,8 — O 44,8 — N 10,7 — M. G. 393.
- 1) **Monomethyläther d. 2-Trinitro-1,3,7-Trioxyxanthon** (Trinitrogentisin) (A. 62, 126). — III, 210.

- $C_{14}H_7O_{13}N_7$  C 34,9 — H 1,5 — O 43,2 — N 20,4 — M. G. 481.  
 1) N-Acetyldi[2,4,6-Trinitrophenyl]amin. Sm. 240° u. Zers. (B. 41, 1747 C. 1908 [2] 48).
- $C_{14}H_7NBr_5$  1) 2-Tetrabrom-2-Phenylindoldibromid. Sm. 259–260° (A. 272, 206). — IV, 413.
- $C_{14}H_7N_3Br_2$  1) Dibromindophenazin. Sm. 275° (B. 29, 202). — IV, 1189.
- $C_{14}H_7N_4Br_5$  1) Azimid d. 2-Tribrom-2-[2-Amido-4-Methylphenyl]benzimidazoldibromid. Sm. 120–130° u. Zers. (B. 31, 321). — IV, 1293.
- $C_{14}H_7Cl_4Br$  1) Dichlorbromanthracen. Sm. 168° (B. 10, 376, 377). — II, 264.
- $C_{14}H_7Br_3S_2$  1) 2-Tribromphenylbithienyl. Sm. 320° (Bl. [3] 5, 278). — III, 769.
- $C_{14}H_8ON_2$  C 76,4 — H 3,6 — O 7,3 — N 12,7 — M. G. 220.  
 1) Anhydro-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 181° (186 bis 187°) (B. 22, 1993; B. 40, 2459 C. 1907 [2] 245). — III, 446.  
 2) Benzoylenbenzimidazol. Sm. 211–212° (A. 347, 126 C. 1906 [2] 777).  
 3) Cumarophenazin. Sm. 168° (173,5°) (B. 34, 1110, 2294). — \*IV, 685.  
 4) Laktim d. peri-Naphtimidazol-2-Akrylsäure (Maleinoperinon). Sm. 161° (A. 365, 133 C. 1909 [1] 1415).
- $C_{14}H_8ON_4$  C 67,7 — H 3,2 — O 6,4 — N 22,6 — M. G. 248.  
 1) Nitril d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 194–195° (B. 28, 157; B. 42, 3711 C. 1909 [2] 1805). — IV, 1343.
- $C_{14}H_8OCl_2$  1) 9,9-Dichlor-10-Keto-9,10-Dihydroanthracen. Sm. 132–133° (B. 10, 1479; 21, 1176; Bl. [3] 17, 877). — III, 408; \*III, 294.  
 2) 9,9-Dichlor-10-Keto-9,10-Dihydrophenanthren (Dichlorphenanthron). Sm. 165° (168–169°) (J. pr. [2] 28, 169; B. 16, 331; B. 41, 4219 C. 1909 [1] 181). — III, 442.  
 3) Chlorid d. 9-Chlorfluoren-9-Carbonsäure. Sm. 111,5–112,5° (B. 39, 3062 C. 1906 [2] 1500).
- $C_{14}H_8OBr_2$  1) 9,9-Dibrom-10-Keto-9,10-Dihydroanthracen. Sm. 157° (B. 20, 2436; 21, 1177). — III, 408.
- $C_{14}H_8O_2N_2$  C 71,2 — H 3,4 — O 13,6 — N 11,8 — M. G. 236.  
 1) 4,4'-Biphenylendiisocyanat. Sm. 122° (Soc. 49, 255). — IV, 964.  
 2) Lakton d. 3-Oxy-2-Phenylindazol-2'-Carbonsäure. Sm. 295° (B. 39, 4268 C. 1907 [1] 558).  
 3) Verbindung (aus d. 4,4'-Diamidobiphenyl-2-Tetracarbonsäurebianhydrid). Sm. 283° (B. 16, 1762). — II, 2085.
- $C_{14}H_8O_2N_4$  C 63,6 — H 3,0 — O 12,1 — N 21,2 — M. G. 264.  
 1) Nitroindophenazin. Sm. noch nicht bei 305° (B. 29, 202). — IV, 1189.  
 2) Naphtalloxazin. Zers. oberhalb 300° (B. 24, 2366). — IV, 1020.
- $C_{14}H_8O_2Cl_2$  1)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3-Chlorphenyl]äthan (m-Dichlorbenzil). Sm. 121 bis 122°. — III, 281.  
 2)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Chlorphenyl]äthan. Sm. 200° (R. 21, 19 C. 1902 [1] 1013; B. 40, 1520 C. 1907 [1] 1697). — \*III, 222.  
 3) Dichlorid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 93–94° (A. 247, 268). — II, 1884.
- $C_{14}H_8O_2Cl_4$  1)  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 239° (J. pr. [2] 59, 236; A. 325, 46 C. 1903 [1] 462). — \*II, 605.  
 2) 3,4,5,6-Tetrachlordiphenylmethan-2-Carbonsäure. Sm. 156–157°. Na + 4H<sub>2</sub>O, Ag (A. 238, 343). — II, 1466.
- $C_{14}H_8O_2Cl_3$  1)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 240° u. Zers. + 2Molec. Essigsäure (J. pr. [2] 59, 235; A. 325, 51 C. 1903 [1] 462). — \*II, 606.
- $C_{14}H_8O_2Br_2$  1)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Bromphenyl]äthan. Sm. 228–229° (B. 41, 1761 C. 1908 [2] 422).  
 2) Anhydrid d. 2-Dibrom- $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Subl. bei 235° (B. 24, 3177). — II, 1118.  
 3) Anhydrid d. isom. 2-Dibrom- $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Subl. bei 245° (B. 24, 3177). — II, 1118.  
 4) Dibromoxytoliden. Sm. 121° (A. 153, 125). — III, 296.  
 5) 9,10-Phenanthrenchinondibromid (B. 37, 3556 C. 1904 [2] 1400).  
 6) 2-Dibromacetyl- $\beta$ -Naphtofuran. Sm. 177° (B. 36, 2867 C. 1903 [2] 832).
- $C_{14}H_8O_2Br_4$  1)  $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthen. Sm. 269° (A. 325, 30 C. 1903 [1] 460).  
 2) Benzoat d. 2,4,5,6-Tetrabrom-3-Oxy-1-Methylbenzol. Sm. 153 bis 154° (B. 32, 3042). — \*II, 718.



- C<sub>14</sub>H<sub>8</sub>O<sub>2</sub>Br<sub>8</sub>** 1)  $\alpha\alpha$ -Di[2,3,5-Tribrom-4-Oxyphenyl]äthan. Sm. 169—170° (A. 363, 257 C. 1909 [1] 175).  
 2)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Zers. bei 265° (A. 325, 32 C. 1903 [1] 460).
- C<sub>14</sub>H<sub>8</sub>O<sub>2</sub>S** 1) 1-Merkapto-9,10-Anthrachinon. Sm. 187° (D.R.P. 206536 C. 1909 [1] 1060; D.R.P. 208640 C. 1909 [1] 1367; D.R.P. 212857 C. 1909 [2] 774).  
 2) 2-Merkapto-9,10-Anthrachinon (D.R.P. 206536 C. 1909 [1] 1060; D.R.P. 208640 C. 1909 [1] 1367).
- C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>S<sub>2</sub>** 1) 1,5-Dimerkapto-9,10-Anthrachinon (D.R.P. 212857 C. 1909 [2] 774).  
**C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>N<sub>2</sub>** 1) C 66,7 — H 3,2 — O 19,0 — N 11,1 — M. G. 252.  
 1) 3-Nitro-9-Imido-10-Keto-9,10-Dihydrophenanthren. Zers. bei 203° (B. 41, 3685 C. 1908 [2] 1869).  
 2) 1-Diazo-9,10-Anthrachinon. Sulfat (B. 37, 4185 C. 1904 [2] 1742).  
 3) 2-Diazo-9,10-Anthrachinon. Nitrat (B. 37, 64 C. 1904 [1] 520).  
 4) Pyrazol (aus 4-Hydrazido-1-Oxy-9,10-Anthrachinon) (D.R.P. 171293 C. 1906 [2] 387).  
 C 60,0 — H 2,9 — O 17,1 — N 20,0 — M. G. 280.
- C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>N<sub>4</sub>** 1)  $\beta$ -Nitro-3-Oxy-1,5-2,3-Diphenylen-2,3-Dihydro-1,2,4-Triazol. Sm. noch nicht bei 320° (B. 28, 155). — IV, 1292.
- C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>Cl<sub>2</sub>** 1) Dichlordiphenylketon-2-Carbonsäure. Sm. 150° (A. 238, 356). — II, 1704.  
 2) Dichlordisalicylaldehyd. Sm. 172° (Am. 14, 295; B. 37, 4023).
- C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>Cl<sub>4</sub>** 1)  $\alpha$ -Keto- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 249° (A. 338, 244 C. 1905 [1] 1150).
- C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>Br<sub>2</sub>** 1) 3,10 oder 4,10-Dibrom-1,2,9-Trioxanthracen (C. 1901 [1] 601). — \*II, 698.  
 2)  $\beta$ -Dibromdiphenylketon-2-Carbonsäure. Sm. 194° (B. 39, 195 C. 1906 [1] 675).  
 3) 2,7-Dibrom-9-Oxyfluoren-9-Carbonsäure. Sm. 280° u. Zers. (B. 38, 3753 C. 1906 [1] 42).  
 4)  $\beta$ -Dibrom-9-Oxyfluoren-9-Carbonsäure. Sm. 225° (B. 10, 537). — II, 1706.  
 5) Anhydrid d. 4-Brombenzol-1-Carbonsäure. Sm. 212—213° (218 bis 220°) (Am. 9, 85; A. 291, 89 Anm.). — II, 1223; \*II, 766.  
 6)  $\alpha$ ,2-Lakton d.  $\beta$ -Dibrom-2,4-Dioxydiphenylmethan- $\alpha$ -Carbonsäure (B. 31, 2828). — \*II, 1090.  
 7)  $\alpha$ ,2'-Lakton d.  $\beta$ -Dibrom- $\alpha$ ,4-Dioxydiphenylmethan-2'-Carbonsäure. Sm. 223—224° (B. 27, 2636). — II, 1881.  
 8) Dibromdisalicylaldehyd. Sm. 165—166° (B. 22, 1153). — III, 78.
- C<sub>14</sub>H<sub>8</sub>O<sub>3</sub>Br<sub>6</sub>** 1)  $\alpha$ -Methyläther d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan. Sm. 179° u. Zers. (A. 330, 77 C. 1904 [1] 1148).  
 C 62,7 — H 3,0 — O 23,9 — N 10,4 — M. G. 268.
- C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>N<sub>2</sub>** 1)  $\alpha\beta$ -Di[4-Nitrophenyl]äthin (Dinitrotolan). Sm. 288° (J. pr. [2] 34, 346). — II, 272.  
 2) 9,10-Dinitroanthracen (Nitrosonitroanthron). Sm. 263° (288—290°; 294°) (B. 14, 470; Soc. 59, 637; A. 330, 162, 167 C. 1904 [1] 890). — II, 261.  
 3) Dinitrophenanthren. Sm. 150—160° (A. 167, 156). — II, 269.  
 4) 1-Nitramido-9,10-Anthrachinon. Sm. 193° u. Zers. Na (D.R.P. 156803 C. 1905 [1] 314).  
 5) 2-Nitro-1-Amido-9,10-Anthrachinon (D.R.P. 167410 C. 1906 [1] 1066).  
 6) 4-Nitro-1-Amido-9,10-Anthrachinon. Sm. 290—295° (296°) (C. 1901 [2] 1219; B. 39, 643 C. 1906 [1] 1025). — \*III, 298.  
 7) 5-Nitro-1-Amido-9,10-Anthrachinon. Sm. 200° (D.R.P. 78772; D.R.P. 147851 C. 1904 [1] 132). — \*III, 298.  
 8) 8-Nitro-1-Amido-9,10-Anthrachinon (D.R.P. 147851 C. 1904 [1] 132).  
 9) 1-Nitro-2-Amido-9,10-Anthrachinon (D.R.P. 167410 C. 1906 [1] 1066).  
 10) 3-Nitro-2-Amido-9,10-Anthrachinon. Sm. 305—306° (D.R.P. 148109 C. 1904 [1] 230; B. 37, 4434 C. 1905 [1] 179; D.R.P. 167410 C. 1906 [1] 1066).  
 11) 5-Nitro-4-Amido-9,10-Phenanthrenchinon (B. 38, 3734 C. 1906 [1] 40).  
 12) Diimidodioxy-9,10-Anthrachinon (A. 160, 157; B. 4, 231). — III, 410.

- $C_{14}H_5O_4N_2$  13) Monooxim d. 2-Nitro-9,10-Phenanthrenchinon. Sm. 213° u. Zers. (B. 36, 3732 C. 1904 [1] 35).  
 14) Monooxim d. 3-Nitro-9,10-Phenanthrenchinon. Sm. 240° (B. 35, 3120 C. 1902 [2] 1212).  
 15) Monooxim d. 4-Nitro-9,10-Phenanthrenchinon. Sm. 169—170° (B. 36, 3736 C. 1904 [1] 36).  
 16) 4-Oxy-1-Diazo-9,10-Naphtochinon (D.R.P. 161954 C. 1905 [2] 184).  
 17) Nitroisopyrophtalon. Sm. 199° (B. 36, 1661 C. 1903 [2] 40). — \*IV, 244.  
 18) 1-Keto-3-[2-Nitrophenyl]-2,4-Benzoxazin. Sm. 197° (A. 367, 132 C. 1909 [2] 700).  
 19) 4[oder 4']-Nitro-2'-Cyanbiphenyl-2-Carbonsäure. Sm. 194—195° (B. 37, 4313 C. 1905 [1] 177).  
 20) 1-Keto-4-Phenyl-2,3,8-Benzoxdiazin-4'-Carbonsäure. Sm. 300° u. Zers. (M. 21, 987). — \*IV, 129.  
 21) 1,4-[ββ]-Naphtdiazin-2,3-Dicarbonsäure. Sm. 192° (B. 27, 765). — IV, 1021.  
 22) 4,7-Naphtisodiazin-1,3-Dicarbonsäure. Sm. 248°. Ag (B. 33, 2923). — \*IV, 682.  
 23) Phenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 134° (136 bis 137°) (B. 32, 1992; C. 1901 [2] 1159; 1903 [2] 431; B. 37, 2610 C. 1904 [2] 522). — \*II, 1061.  
 24) Phenylimid d. 4-Nitrobenzol-1,2-Dicarbonsäure. Sm. 192° (194°) (B. 32, 1993; C. 1901 [2] 1159). — \*II, 1062.  
 25) 2-Nitrophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 200—203° (B. 28, 1120). — II, 1804.  
 26) 3-Nitrophenylimid d. Benzol-1,2-Dicarbonsäure. Sd. 242—243° (236—236,5°) (B. 11, 2261; 27, 3430; 28, 941, 1119). — II, 1804.  
 27) 4-Nitrophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 262—264° (B. 27, 3430; 28, 1119; D.R.P. 141893 C. 1903 [1] 1325). — II, 1804.  
 28) 4-Nitrophenylisomid d. Benzol-1,2-Dicarbonsäure? Sm. 190—190,5° (B. 28, 940). — II, 1804.  
 29) Verbindung (aus ? - Dinitro-9,10-Anthrachinon) (J. pr. [2] 9, 265). — III, 411.  
 $C_{14}H_5O_4N_4$  C 56,7 — H 2,7 — O 21,6 — N 18,9 — M. G. 296.  
 1) αβ-Di[2,4-Dinitrophenyl]äthen. Sm. 266—267° (B. 37, 3599 C. 1904 [2] 1500).  
 2) 1,5-Bisdiazo-9,10-Anthrachinon. Sulfat (B. 37, 4186 C. 1904 [2] 1742).  
 3) Verbindung (aus ? - Diamido-9,10-Anthrachinon) (A. 160, 152). — III, 414.  
 $C_{14}H_5O_4N_6$  C 51,8 — H 2,5 — O 19,7 — N 25,9 — M. G. 324.  
 1) 3,6-Di[4-Nitrophenyl]-1,2,4,5-Tetrazin. Sm. 218° (A. 298, 53). — \*IV, 960.  
 2) 4,4'-Bidiazoimidobiphenyl-3,3'-Dicarbonsäure. Zers. bei 165° (B. 31, 2578). — IV, 1557.  
 $C_{14}H_5O_4Cl_2$  1) 4,4'-Dichlorbiphenyl-3,3'-Dicarbonsäure. Sm. 267—268° (323 bis 324°) (B. 21, 1098; A. 352, 126 C. 1907 [1] 1797). — II, 1887.  
 2) 3,3'-Dichlorbiphenyl-4,4'-Dicarbonsäure. Sm. 287—288° (Soc. 85, 9 C. 1904 [1] 376, 729).  
 $C_{14}H_5O_4Cl_4$  1) Diacetat d. 1,3,6,8-Tetrachlor-2,7-Dioxynaphtalin. Sm. 196° (B. 23, 526). — II, 985.  
 $C_{14}H_5O_4Cl_6$  1) 2-Dichlor-2,6-Dioxy-2-Hexahydro-9,10-Anthrachinon (D.R.P. 179916 C. 1907 [1] 1366).  
 $C_{14}H_5O_4Br_2$  1) 2-Brombenzoylperoxyd. Zers. bei 114° (B. 33, 1046). — \*II, 766.  
 2) 3-Brombenzoylperoxyd. Sm. 132° u. Zers. (B. 33, 1047). — \*II, 766.  
 3) 4-Brombenzoylperoxyd. Zers. bei 152° (B. 33, 1047). — \*II, 767.  
 4) 2-Dibrom-1,2,6,9-Tetraoxyanthracen (Dibromdesoxyflavopurpurin) (C. 1901 [1] 601).  
 5) 2-Dibrom-1,2,7,9-Tetraoxyanthracen (Dibromdesoxyanthrapurpurin) (C. 1901 [1] 601).  
 6) 7-Methyläther d. 2-Dibrom-1,7-Dioxyxanthon. Sm. 196° (B. 27, 1995).  
 7) 4,4'-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 277—278° (B. 37, 3569 C. 1904 [2] 1402).

- C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>Br<sub>2</sub>** 8) *p*-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 245°. Ca + 3H<sub>2</sub>O, Pb, Ag<sub>2</sub> (B. 19, 3153; M. 16, 819). — II, 1885.  
 9) isom. *p*-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 295—296°. Ca, Ba (B. 7, 1091). — II, 1885.  
 10) *p*-Dibrom-4'-Oxydiphenylketon-2-Carbonsäure. Sm. 246—248° u. Zers. (B. 26, 2261). — II, 1887.  
 11)  $\alpha$ ,2'-Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[*p*-Dibrom-2,4[*p*]-Dioxyphenyl]-methan-2'-Dicarbonsäure. Sm. 197,5—199,5° u. Zers. (B. 27, 2638). — II, 1971.
- C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>Br<sub>4</sub>** 1) Diacetat d. 1,4,6,7-Tetrabrom-2,3-Dioxynaphtalin. Sm. 237° (A. 334, 363 C. 1904 [2] 1055).
- C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>Br<sub>6</sub>** 1) *p*-Hexabrom-1,4-Dioxy-*p*-Hexahydro-9,10-Anthrachinon. Sm. 210 bis 220° u. Zers. (B. 33, 1661). — \*III, 304.  
 2) isom. *p*-Hexabrom-1,4-Dioxy-*p*-Hexahydro-9,10-Anthrachinon. 2 + CS<sub>2</sub> (B. 33, 1662). — \*III, 304.
- C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>J<sub>2</sub>** 1) *p*-Dijodbiphenyl-2,2'-Dicarbonsäure. Sm. 262°. Ag<sub>2</sub> (A. 196, 21). — II, 1885.
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>N<sub>2</sub>** C 59,2 — H 2,8 — O 28,2 — N 9,8 — M. G. 284.  
 1) 10,10-Dinitro-9-Keto-9,10-Dihydroanthracen (Dinitroanthron). Sm. 116° u. Zers. (B. 14, 472). — II, 262.  
 2) 5-Nitro-1-Hydroxylamido-9,10-Anthrachinon (B. 29, 2941). — \*III, 299.  
 3) 8-Nitro-1-Hydroxylamido-9,10-Anthrachinon (B. 29, 2942). — \*III, 299.  
 4) 3-Diazo-1,2-Dioxy-9,10-Anthrachinon. Zers. bei 135° (J. pr. [2] 74, 288 C. 1907 [1] 110).  
 5) 4-Diazo-1,2-Dioxy-9,10-Anthrachinon. Sulfat (J. pr. [2] 74, 286 C. 1907 [1] 110).  
 6) 1-Keto-2-[3-Nitrobenzoyl]-1,2-Dihydrobenzoxazol. Sm. 199,5—201,5° (Am. 23, 24). — \*II, 773.
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>N<sub>4</sub>** C 53,8 — H 2,6 — O 25,6 — N 17,9 — M. G. 312.  
 1) 3,5-Di[3-Nitrophenyl]-1,2,4-Oxdiazol. Sm. 168° (138°; 147,5—149,5°; 184°) (B. 22, 3158; 28, 2231; 34, 2029; C. 1906 [1] 234; 1906 [2] 233; J. pr. [2] 73, 255 C. 1906 [1] 1243). — II, 1208; \*II, 756.  
 2) 3,4-Di[*p*-Nitrophenyl]-1,2,5-Oxdiazol (Dinitrodiphenylfurazan). Sm. 218—220° (A. 264, 182). — III, 292.  
 3) 2,5-Di[2-Nitrophenyl]-1,3,4-Oxdiazol. Sm. 195° (J. pr. [2] 74, 11 C. 1906 [2] 791).  
 4) 2,5-Di[4-Nitrophenyl]-1,3,4-Oxdiazol. Sm. 302° (J. pr. [2] 74, 22 C. 1906 [2] 792).
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>Cl<sub>6</sub>** 1) Verbindung (aus d. Verb. C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>Cl<sub>6</sub>). Sm. 173° (B. 42, 1866 C. 1909 [2] 194).
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>Br<sub>2</sub>** 1) 3',5'-Dibrom-2',4'-Dioxydiphenylketon-2-Carbonsäure. Sm. 224° (A. 183, 56; B. 28, 315; 29, 2624). — II, 1972; \*II, 1143.
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>Br<sub>4</sub>** 1) Anhydrid d.  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha$ -Di[2-Furanyl]butan- $\beta\gamma$ -Dicarbonsäure. Sm. 196° (Soc. 85, 190 C. 1904 [1] 645, 925).
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>J<sub>2</sub>** 1) Anhydrid d. 2-Jodosobenzol-1-Carbonsäure. Sm. 219—220° (B. 26, 1730). — II, 1228; \*II, 769.
- C<sub>14</sub>H<sub>8</sub>O<sub>5</sub>S** 1) 9,10-Anthrachinon-1-Sulfonsäure. K (B. 36, 4197 C. 1904 [1] 290; B. 37, 67 C. 1904 [1] 667; B. 37, 331 C. 1904 [1] 667; B. 37, 646 C. 1904 [1] 893; D.R.P. 149801 C. 1904 [1] 1043; D.R.P. 164292 C. 1905 [2] 1474).  
 2) 9,10-Anthrachinon-2-Sulfonsäure. Na + H<sub>2</sub>O, Ca + 2H<sub>2</sub>O, Ba + H<sub>2</sub>O, Pb, Ce + 3H<sub>2</sub>O (A. 160, 130; 212, 44; B. 7, 805; 12, 1293, 1597; 16, 907; 18, 1723; J. pr. [2] 19, 218; A. 361, 186 C. 1908 [2] 383). — III, 414.  
 3) 9,10-Phenanthrenchinon-3-Sulfonsäure. K, Ba + 2½H<sub>2</sub>O (A. 321, 341 C. 1902 [2] 61). — \*III, 319.
- C<sub>14</sub>H<sub>8</sub>O<sub>6</sub>N<sub>2</sub>** C 56,0 — H 2,7 — O 32,0 — N 9,3 — M. G. 300.  
 1) 2,7-Dinitro-9,10-Dioxyphenanthren. Sm. 274° u. Zers. (B. 35, 3126 C. 1902 [2] 1213).  
 2) 4,5-Dinitro-9,10-Dioxyphenanthren. Sm. 201° (B. 35, 3128 C. 1902 [2] 1213).



- $C_{14}H_5O_6S$  3)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[2-Nitrophenyl]äthan (Dinitrobenzil). Sm. 147° (151°) (*J. r.* 4, 278; D.R.P. 44269, 45789; *B.* 29, 2124; *B.* 40, 2563 *C.* 1907 [2] 339). — III, 282; \*III, 222.
- 4)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Nitrophenyl]äthan. Sm. 209° (*A.* 368, 262 Anm. *C.* 1909 [2] 1568).
- 5)  $\beta$ -Dinitro- $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan (Dinitrobenzil). Sm. 131° (*J. r.* 4, 278; D.R.P. 44269, 45789; *B.* 29, 2124). — III, 282; \*III, 222.
- $C_{14}H_5O_6N_4$  6) Isodinitrobenzil. Sm. 205° u. ger. Zers. (*J. r.* 13, 29). — III, 282.  
C 51,2 — H 2,4 — O 29,3 — N 17,1 — M. G. 328.
- 1) 2,6-Dinitro-1,5-Diamido-9,10-Anthrachinon (D.R.P. 167410 *C.* 1906 [1] 1066).
- 2) 4,8-Dinitro-1,5-Diamido-9,10-Anthrachinon. Sm. oberhalb 300° (D.R.P. 127780 *C.* 1902 [1] 337; D.R.P. 158076 *C.* 1905 [1] 635; *B.* 39, 644 *C.* 1906 [1] 1025).
- 3) 4,5-Dinitro-1,8-Diamido-9,10-Anthrachinon. Sm. oberhalb 300° (D.R.P. 127780 *C.* 1902 [1] 338).
- 4) Dinitrodiamido-9,10-Anthrachinon (D.R.P. 126676 *C.* 1902 [1] 86).
- 5) 1,5-Di[Nitramido]-9,10-Anthrachinon. Zers. bei 203°.  $Na_2$  (D.R.P. 156803 *C.* 1905 [1] 314).
- 6) 4,5-Di[3-Nitrophenyl]-1,2,3,6-Dioxdiazin. Sm. 183—185° (*B.* 27, 2848; 32, 1662). — III, 295; \*III, 224.
- 7) 4,5-Di[4-Nitrophenyl]-1,2,3,6-Dioxdiazin. Sm. 197—198° (*B.* 27, 2848; 32, 1664). — III, 295; \*III, 224.
- 8) Dinitrophenylamidoimid d. Benzol-1,2-Dicarbonsäure. Sm. 182° u. Zers. (*J. pr.* [2] 35, 279). — IV, 710.
- $C_{14}H_5O_6N_6$  C 47,2 — H 2,2 — O 27,0 — N 23,6 — M. G. 356.
- 1) Disanhydroalloxan-p-Phenylendiamin. Sm. oberhalb 300° (*J. pr.* [2] 73, 482 *C.* 1906 [2] 505).
- 2) Diureid d. Dinitroacenaphtenchinon. Sm. noch nicht bei 300° (*C.* 1899 [2] 339). — \*III, 290.
- $C_{14}H_5O_6Cl_2$  1) 3,6-Dichlor-1,4-Dimethyl-p- $\beta$ -Benzdifuran-2,5-Dicarbonsäure (*J. pr.* [2] 45, 72). — III, 735.
- $C_{14}H_5O_6Cl_6$  1) Dimethyläther d. Verb.  $C_{14}H_5O_6Cl_6$ . Sm. 218° (*Am.* 38, 152 *C.* 1907 [2] 1162).
- $C_{14}H_5O_6Br_2$  1) 5,5'-Dibrom-4,4'-Dioxybiphenyl-3,3'-Dicarbonsäure. Sm. oberhalb 300° (*Soc.* 91, 1311 *C.* 1907 [2] 1071).
- $C_{14}H_5O_6Br_6$  1) Hexabrom-o-Chinobrenzkatechinäther + Methylalkohol. Sm. 220 bis 221° u. Zers. *Na* (*Am.* 34, 463 *C.* 1906 [1] 31).
- $C_{14}H_5O_6S$  1) 1-Oxy-9,10-Anthrachinon-5-Sulfonsäure. *Na* (D.R.P. 158413 *C.* 1905 [1] 704; D.R.P. 197607 *C.* 1908 [1] 1814).
- 2) 1-Oxy-9,10-Anthrachinon-6-Sulfonsäure. *Na*, *Ag* (*B.* 17, 900; (D.R.P. 145188 *C.* 1903 [2] 1037; *B.* 40, 1050 *C.* 1907 [1] 1203). — III, 420.
- 3) 1-Oxy-9,10-Anthrachinon-8-Sulfonsäure. *Na* (D.R.P. 197607 *C.* 1908 [1] 1814).
- 4) 1-Oxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure. *Na* (*C.* 1905 [1] 1516).
- 5) 2-Oxy-9,10-Anthrachinon-6-Sulfonsäure. *Na* (*C.* 1900 [1] 741). — \*III, 301.
- 6) 2-Oxy-9,10-Anthrachinon-7-Sulfonsäure. *Na* (*C.* 1900 [1] 741). — \*III, 301.
- 7) 2-Oxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure. *Na*, *Ba* (*J. pr.* [2] 18, 178; [2] 43, 237). — III, 420.
- 8) 2-Oxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (*C.* 1905 [1] 1516).  
C 53,2 — H 2,5 — O 35,4 — N 8,9 — M. G. 316.
- $C_{14}H_5O_7N_2$  1)  $\beta$ -Dinitrodiphenylketon-4-Carbonsäure. Sm. 240°.  $Ca + 2H_2O$ ,  $Ba + 4H_2O$  (*B.* 7, 988). — II, 1706.
- 2) isom.  $\beta$ -Dinitrodiphenylketon-4-Carbonsäure. Sm. 211—212° (*B.* 7, 984). — II, 1706.
- 3) 2,7-Dinitro-9-Oxyfluoren-9-Carbonsäure. Sm. 280° u. Zers. (*B.* 38, 3744 *C.* 1906 [1] 41).
- 4) 4,5-Dinitro-9-Oxyfluoren-9-Carbonsäure. Sm. 140° u. Zers. (*B.* 38, 3747 *C.* 1906 [1] 42).
- 5) Anhydrid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 135° (*B.* 17, 2789). — II, 1231.

- C<sub>14</sub>H<sub>8</sub>O<sub>7</sub>N<sub>2</sub>** 6) Anhydrid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 47° (A. 87, 158; B. 34, 184). — II, 1233; \*II, 772.
- 7) Anhydrid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 189—190° (186°) (A. 314, 305 Anm.; R. 15, 362). — \*II, 774.
- 8)  $\alpha$ ,2'-Lakton d. 3,5-Dinitro- $\alpha$ ,4'-Dioxydiphenylmethan-2'-Carbon-säure. Sm. 187° (B. 31, 2801). — \*II, 1089.
- 9) 4,4'-Dinitrodisalicylaldehyd. Sm. 221° (Am. 14, 297). — III, 78.
- 10) Verbindung (aus Aloëinsäure) (A. 134, 240). — III, 617.
- C<sub>14</sub>H<sub>8</sub>O<sub>7</sub>N<sub>4</sub>** C 48,8 — H 2,3 — O 32,6 — N 16,3 — M. G. 344.
- 1) 2,7,9-Trinitro-5-Keto-3-Methyl-5,10-Dihydroakridin. Sm. 253° (G. 35 [2] 381 C. 1905 [2] 1671).
- 2) 4,7,9-Trinitro-5-Keto-3-Methyl-5,10-Dihydroakridin. Sm. 320°. Na + 2½H<sub>2</sub>O (G. 36 [1] 330 C. 1906 [2] 348).
- C<sub>14</sub>H<sub>8</sub>O<sub>7</sub>N<sub>6</sub>** C 45,2 — H 2,1 — O 30,1 — N 22,6 — M. G. 372.
- 1) 9-Semicarbazon-2,3,7-Trinitrofluoren. Sm. 299° u. Zers. (B. 38, 3762 C. 1906 [1] 43).
- C<sub>14</sub>H<sub>8</sub>O<sub>7</sub>S** 1) 1,2-Dioxy-9,10-Anthrachinon-3-Sulfonsäure. K + H<sub>2</sub>O (J. pr. [2] 74, 295 C. 1907 [1] 111).
- 2) 1,2-Dioxy-9,10-Anthrachinon-4-Sulfonsäure (J. pr. [2] 18, 174; D. R. P. 167169 C. 1906 [1] 880). — III, 424.
- 3) 1,2-Dioxy-9,10-Anthrachinon-5-Sulfonsäure (D. R. P. 172688 C. 1906 [2] 647).
- 4) isom. 1,2-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure. Na + H<sub>2</sub>O (A. 160, 144; B. 12, 571; J. pr. [2] 18, 173). — III, 424; \*III, 304.
- 5) isom. 1,2-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (B. 36, 4199 C. 1904 [1] 291).
- 6) isom. 1,2-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (D. R. P. 205965 C. 1909 [1] 1058).
- 7) 1,3-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (Xanthopurpurinsulfon-säure) (C. 1900 [1] 1178).
- 8) 1,3-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure. Na + ¾H<sub>2</sub>O (C. 1905 [1] 1516).
- 9) 1,4-Dioxy-9,10-Anthrachinon-2-Sulfonsäure (D. R. P. 153129 C. 1904 [2] 751).
- 10) isom. 1,4-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (D. R. P. 84505). — \*III, 305.
- 11) 1,4-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure. Na (A. 212, 12). — II, 426.
- 12) 1,4-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure. Na + 2½H<sub>2</sub>O (C. 1905 [1] 1516).
- 13) 1,4-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (D. R. P. 172688 C. 1906 [2] 647).
- 14) 1,5-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (Anthrarufinsulfonsäure) (C. 1900 [1] 1178). — \*III, 306.
- 15) 1,6-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (Chrysazinsulfonsäure) (C. 1900 [1] 1178).
- 16) 2,6-Dioxy-9,10-Anthrachinon-1-Sulfonsäure. Na (A. 280, 12).
- 17) isom. 2,6-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (D. R. P. 205965 C. 1909 [1] 1058).
- 18)  $\beta$ -Dioxy-9,10-Anthrachinon-1-Sulfonsäure. Ba + 2H<sub>2</sub>O (D. R. P. 170329 C. 1906 [1] 1719).
- C<sub>14</sub>H<sub>8</sub>O<sub>8</sub>N<sub>2</sub>** C 50,6 — H 2,4 — O 38,6 — N 8,4 — M. G. 332.
- 1) 3-Nitrobenzoylperoxyd. Sm. 140—141° (139°) (J. 1863, 317; B. 30, 2004; 33, 1045; A. 298, 287). — II, 1233; \*II, 772.
- 2) 4-Nitrobenzoylperoxyd. Sm. 151° (B. 33, 1046). — \*II, 775.
- 3) 4,4'-Dinitrobiphenyl-2,2'-Dicarbonsäure + H<sub>2</sub>O. Sm. 253° (248 bis 249° wasserfrei). Ba + 6H<sub>2</sub>O (B. 10, 75; 34, 2183; A. 193, 131; 196, 26; B. 36, 3740 C. 1904 [1] 37). — II, 1885.
- 4) 6,6'-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 297° (303° u. Zers.). Ba + 4H<sub>2</sub>O (A. 193, 131; 203, 105; J. 1881, 842; B. 36, 3746 C. 1904 [1] 37). — II, 1885.
- 5) 2,2'-Dinitrobiphenyl-4,4'-Dicarbonsäure. Sm. 335—337°. Ba + 3H<sub>2</sub>O (B. 42, 649 C. 1909 [1] 1012).

- $C_{14}H_8O_8N_2$  6) 4,4'-Bipyridyl-2,6,2',6'-Tetracarbonsäure.  $Ca_2, Ba_2, Cu_2$  (B. 31, 2282; 32, 2211). — \*IV, 661.  
 7) Di[3-Nitrophenylester] d. Oxalsäure. Sm. 213° (B. 35, 3451 C. 1902 [2] 1303).  
 8) Di[4-Nitrophenylester] d. Oxalsäure. Sm. 258° u. Zers. (B. 35, 3438 C. 1902 [2] 1303; B. 35, 3451 C. 1902 [2] 1304).  
 9) Acetat d. p-Dinitro-3-Oxy-9,10-Phenanthrenchinon. Sm. 263—265° (A. 322, 158 C. 1902 [2] 282).  
 $C_{14}H_8O_8N_4$  C 46,7 — H 2,2 — O 35,5 — N 15,5 — M. G. 360.  
 1)  $\alpha\beta$ -Di[2,4-Dinitrophenyl]äthen. Sm. 264—266° u. Zers. (J. r. 27, 339, 341; M. 23, 547 C. 1902 [2] 741; Soc. 93, 1725 C. 1908 [2] 1927). — \*II, 118.  
 2) 2,4,6,4'-Tetranitro- $\alpha\beta$ -Diphenyläthen. Sm. 196° (B. 41, 2297 C. 1908 [2] 599).  
 3) p-Dinitroazobenzol-3,3'-Dicarbonsäure.  $Na_2, K_2 + 3H_2O, Ba$  (J. r. 6, 197). — IV, 1459.  
 4) p-Dinitroazobenzol-4,4'-Dicarbonsäure. Zers. bei 257°.  $Na_2 + 4H_2O, K_2 + 4H_2O, Ca + 5H_2O, Ba + 5H_2O, Ag_2$  (J. r. 20, 25). — IV, 1460.  
 $C_{14}H_8O_8N_6$  C 43,3 — H 2,1 — O 33,0 — N 21,6 — M. G. 388.  
 1) Di[2,4-Dinitrobenzyliden]hydrazin. Sm. 246° (B. 35, 1233 C. 1902 [1] 1000). — \*III, 30.  
 $C_{14}H_8O_8Br_2$  1) Tetraacetat d. isom. Inositdibromhydrin. Sm. 235° (Soc. 91, 1786 C. 1908 [1] 269).  
 $C_{14}H_8O_8S$  1) 1,2,3-Trioxo-9,10-Anthrachinon-4-Sulfonsäure. Na (C. 1901 [2] 1139). — \*III, 311.  
 2) 1,2,4-Trioxo-9,10-Anthrachinon-3-Sulfonsäure. K (D.R.P. 153129 C. 1904 [2] 751; B. 39, 293 C. 1907 [1] 111).  
 3) 1,2,4-Trioxo-9,10-Anthrachinon-5[oder 8]-Sulfonsäure (B. 37, 71 C. 1904 [1] 666).  
 4) 1,2,4-Trioxo-9,10-Anthrachinon-8-Sulfonsäure (D.R.P. 155045 C. 1904 [2] 1270).  
 5) 1,2,4-Trioxo-9,10-Anthrachinon-p-Sulfonsäure (D.R.P. 84774, 97688). — \*III, 312.  
 6) 1,2,4-Trioxo-9,10-Anthrachinon-p-Sulfonsäure (D.R.P. 154337 C. 1904 [2] 1080).  
 7) 1,2,5-Trioxo-9,10-Anthrachinon-3-Sulfonsäure. Na (D.R.P. 178631 C. 1907 [1] 775).  
 8) 1,2,5-Trioxo-9,10-Anthrachinon-6-Sulfonsäure (C. 1899 [2] 640).  
 9) 1,2,5-Trioxo-9,10-Anthrachinon-p-Sulfonsäure (A. 349, 206 C. 1906 [2] 1337).  
 10) 1,2,8-Trioxo-9,10-Anthrachinon-7-Sulfonsäure (C. 1899 [2] 640).  
 11) 1,4,5-Trioxo-9,10-Anthrachinon-6-Sulfonsäure (D.R.P. 165860 C. 1906 [1] 520).  
 12) 1,4,p-Trioxo-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 153129 C. 1904 [2] 751).  
 $C_{14}H_8O_8S_2$  1) 9,10-Anthrachinon-1,5-Disulfonsäure.  $Na_2 + 5H_2O, K_2$  (B. 12, 1289; B. 36, 4197 C. 1904 [1] 290; B. 37, 68 C. 1904 [1] 666; D.R.P. 164292 C. 1905 [2] 1474; D.R.P. 157123 C. 1905 [1] 57; D.R.P. 167169 C. 1906 [1] 880; B. 42, 1413 C. 1909 [1] 1711). — III, 416.  
 2) 9,10-Anthrachinon-1,6-Disulfonsäure (A. 280, 35; B. 36, 4197 C. 1904 [1] 290; B. 37, 69 C. 1904 [1] 666; D.R.P. 167169 C. 1906 [1] 880; D.R.P. 170329 C. 1906 [1] 1719; D.R.P. 202398 C. 1908 [2] 1476). — III, 416.  
 3) 9,10-Anthrachinon-1,7-Disulfonsäure (B. 36, 4197 C. 1904 [1] 290; B. 37, 69 C. 1904 [1] 666; D.R.P. 167169 C. 1906 [1] 880; D.R.P. 170329 C. 1906 [1] 1719; D.R.P. 202398 C. 1908 [2] 1476).  
 4) 9,10-Anthrachinon-1,8-Disulfonsäure.  $K_2$  (B. 36, 4197 C. 1904 [1] 290; B. 37, 68 C. 1904 [1] 666; D.R.P. 164292 C. 1905 [2] 1474; D.R.P. 157123 C. 1905 [1] 57; D.R.P. 167169 C. 1906 [1] 880; B. 42, 1414 C. 1909 [1] 1711).  
 5) 9,10-Anthrachinon-2,6-Disulfonsäure. Ba, Pb (B. 9, 682; A. 280, 17). — III, 416.  
 6) 9,10-Anthrachinon-2,7-Disulfonsäure (Bl. 33, 264; D.R.P. 73961; B. 9, 682; A. 280, 24). — III, 416; \*III, 299.



- $C_{14}H_8O_8S_2$  7) isom. 9,10-Anthrachinon- $\beta$ -Disulfonsäure.  $Na_2 + 4H_2O$  (B. 12, 1288). — III, 416.  
 8) isom. 9,10-Anthrachinon- $\beta$ -Disulfonsäure (B. 12, 1419). — III, 416.  
 9) isom. 9,10-Anthrachinon- $\beta$ -Disulfonsäure (A. 158, 323; 160, 134; J. 1878, 1189; B. 3, 63; 7, 1106). — III, 416.
- $C_{14}H_8O_9N_2$  10) 9,10-Phenanthrenchinon- $\beta$ -Disulfonsäure (A. 167, 143). — III, 442.  
 C 48,3 — H 2,3 — O 41,4 — N 8,0 — M. G. 348.  
 1) Monomethyläther d.  $\beta$ -Dinitro-1,3,7-Trioxyanthron +  $H_2O$  (Dinitro-gentisin) (A. 62, 123). — III, 210.
- $C_{14}H_8O_9N_4$  C 44,7 — H 2,1 — O 38,3 — N 14,9 — M. G. 376.  
 1) 5,5'-Dinitroazoxybenzol-3,3'-Dicarbonsäure. Sm. oberhalb  $200^\circ$  u. Zers. (B. 28, 1801). — IV, 1344.
- $C_{14}H_8O_9S$  1) 1,2,5,8-Tetraoxy-9,10-Anthrachinon-3-Sulfonsäure (D. R. P. 165860 C. 1906 [1] 520).  
 C 40,0 — H 1,9 — O 38,1 — N 20,0 — M. G. 420.
- $C_{14}H_8O_{10}N_6$  1)  $\alpha\beta$ -Di[3,5-Dinitrobenzoyl]hydrazin. Sm.  $276^\circ$ .  $Na_2$  (J. pr. [2] 76, 251 C. 1907 [2] 1499).  
 2) s-Di[2,4-Dinitrophenylamid] d. Oxalsäure. Sm.  $182^\circ$  (oberhalb  $270^\circ$ ) (Am. 9, 356; Soc. 61, 460; D. R. P. 74058). — II, 410; \*II, 208.
- $C_{14}H_8O_{10}S_2$  1) 1,2-Dioxy-9,10-Anthrachinon-3,5-Disulfonsäure (D. R. P. 172688 C. 1906 [2] 647; D. R. P. 210863 C. 1909 [2] 243).  
 2) 1,2-Dioxy-9,10-Anthrachinon-3,8-Disulfonsäure (D. R. P. 210863 C. 1909 [2] 243).  
 3) 1,2-Dioxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure (D. R. P. 56952). — \*III, 304.  
 4) 1,4-Dioxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure (D. R. P. 172688 C. 1906 [2] 647).  
 5) 1,5-Dioxy-9,10-Anthrachinon-2,6-Disulfonsäure (D. R. P. 163447 C. 1905 [2] 1303).  
 6) 1,5-Dioxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure.  $Na_2 + 1\frac{1}{2}H_2O$  (D. R. P. 96364 C. 1898 [1] 1255; C. 1905 [1] 1516). — \*III, 306.  
 7) 1,6-Dioxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure.  $K_2$  (B. 36, 2941 C. 1903 [2] 886).  
 8) 2,6-Dioxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure.  $K_2$  (C. 1899 [1] 464). — \*III, 309.  
 9) 2,6-Dioxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure.  $Na_2 + 2\frac{1}{2}H_2O$  (C. 1905 [1] 1516).  
 10) 2,7-Dioxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure.  $K_2$  (D. R. P. 99612 C. 1899 [1] 399). — \*III, 309.
- $C_{14}H_8O_{11}S_2$  1) 1,2,4-Trioxo-9,10-Anthrachinon-3,8-Disulfonsäure (D. R. P. 172688 C. 1906 [2] 647).
- $C_{14}H_8O_{12}Br_2$  1) Verbindung (aus Galsäure) +  $4H_2O$  (A. 260, 343). — II, 2108.
- $C_{14}H_8O_{12}S_2$  1) 1,3,5,7-Tetraoxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure.  $Na_2$  (D. R. P. 70803). — \*III, 313.  
 2) 1,4,5,8-Tetraoxy-9,10-Anthrachinon- $\beta$ -Disulfonsäure (C. 1901 [2] 1189). — \*III, 314.
- $C_{14}H_8O_{13}Br_4$  1) Tetrabromgalsäure (A. 260, 344). — II, 2108.
- $C_{14}H_8O_{14}N_{10}$  C 31,1 — H 1,5 — O 41,5 — N 25,9 — M. G. 540.  
 1) Di[2,4,6-Trinitrophenylhydrazid] d. Oxalsäure. Sm.  $175^\circ$  (G. 24 [1] 573). — IV, 701.
- $C_{14}H_8O_{14}S_2$  1) 1,2,4,5,6,8-Hexaoxy-9,10-Anthrachinon-3,7-Disulfonsäure (D. R. P. 75490, 94397, 104244, 104367, 104750, 107238; C. 1903 [2] 1130). — \*III, 315.
- $C_{14}H_8N_2Cl_4$  1) Di[ $\alpha$ ,4-Dichlorbenzyliden]hydrazin. Sm.  $125^\circ$  (J. pr. [2] 74, 10 C. 1906 [2] 791).
- $C_{14}H_8N_2Br_2$  1) Nitril d.  $\alpha$ -[2,4-Dibromphenyl]imido- $\alpha$ -Phenylelessigsäure. Sm.  $141^\circ$  (B. 35, 3335 C. 1902 [2] 1193).
- $C_{14}H_8N_2S$  1) Chinoxalinderivat (aus 1,2-Diketo-1,2-Dihydrobenzthiofuran u. 1,2-Diamidobenzol). Sm.  $166$ — $167^\circ$  (B. 41, 237 C. 1908 [1] 1063).
- $C_{14}H_8N_2S_2$  1) Dibenzthiazol. Sm.  $304^\circ$  (B. 13, 1227; 20, 2256; 25, 1902; Bl. [3] 15, 82). — II, 798.  
 2) Biphenyl-2,4'-Disenöl (2,4'-Diisorhodanbiphenyl). Sm.  $94^\circ$  (B. 36, 4092 C. 1904 [1] 269).

- $C_{14}H_8N_2S_2$  3) Biphenyl-4,4'-Disenöl. Sm. 203° (B. 27, 1557; J. pr. [2] 59, 593). — IV, 965; \*IV, 642.
- $C_{14}H_8N_2S_4$  1) Dibenzthiazoldisulfid. Sm. 186° (180°) (B. 24, 1404). — II, 798.
- $C_{14}H_8N_3Cl$  1) m-Chlorisatohydrophenazin. Sm. noch nicht bei 300° (B. 28, 2530). — IV, 1189.
- 2)  $\alpha$ -Chlorindophenazin. Sm. oberhalb 300° (B. 35, 4331 C. 1903 [1] 292). — \*IV, 848.
- 3)  $\beta$ -Chlorindophenazin. Sm. 310° (B. 35, 4332 C. 1903 [1] 292). — \*IV, 848.
- $C_{14}H_8N_3Br$  1) Bromindophenazin. Sm. 279—280° (B. 35, 4333 C. 1903 [1] 292). — \*IV, 848.
- $C_{14}H_8N_4Br_2$  1) 3,6-Di[4-Bromphenyl]-1,2,4,5-Tetrazin. Sm. noch nicht bei 280° (J. pr. [2] 74, 4 C. 1906 [2] 790).
- 2) Azimid d.  $\beta$ -Dibrom-2-[2-Amido-4-Methylphenyl]benzimidazol. Sm. 257° (B. 31, 321). — IV, 1293.
- $C_{14}H_8Cl_2Br_2$  1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[ $\beta$ -Bromphenyl]äthen. Sm. 119—120° (B. 7, 1180).
- $C_{14}H_8Cl_3Br_4$  1) Dichloranthracentetrabromid. Sm. 178° (166°) (B. 10, 376; 19, 1106). — II, 264.
- $C_{14}H_9ON$  C 81,2 — H 4,3 — O 7,7 — N 6,8 — M. G. 207.
- 1) Phenanthrenchinonimid. Sm. 158—159° (A. 196, 51; B. 12, 1642). — III, 444.
- 2) Aldehyd d. Akridin-5-Carbonsäure. Sm. 139—140°. HCl (B. 20, 1547). — IV, 422.
- 3) 4-Benzoylphenylisonitril. Sm. 118—119° (A. 210, 271; B. 14, 1838). — III, 184.
- 4) Nitril d. Diphenylketon-4-Carbonsäure. Sm. 107—108° (B. 20, 2957). — II, 1705.
- $C_{14}H_9ON_3$  C 71,5 — H 3,8 — O 6,8 — N 17,9 — M. G. 235.
- 1) 3-Oxy-1,5-2,3-Diphenyl-2,3-Dihydro-1,2,4-Triazol. Sm. noch nicht bei 320°. Ag (B. 28, 154). — IV, 1292.
- 2) Carbonyl- $\beta$ -o-Amidophenylbenzimidazol. Sm. 334°. +  $C_2H_4O_3$ , HCl, 2HCl +  $H_2O$  (B. 32, 1486). — \*IV, 849.
- 3) 3-Benzoyl-1,2,4-Benztriazin. Sm. 114° (B. 26, 2788; J. pr. [2] 65, 146 C. 1902 [1] 1002). — IV, 1165; \*IV, 818.
- 4) Verbindung (aus 1,2-Diamidobenzol u. Pyrrolylbrenztraubensäureanhydrid). Zers. bei 250° (B. 23, 2155). — IV, 1189.
- $C_{14}H_9ON_5$  C 63,9 — H 3,4 — O 6,1 — N 26,6 — M. G. 263.
- 1) 6-Cyanamido-3-Keto-2-Phenyl-2,3-Dihydro-1,2,4-Benztriazin (Carbonylcyanchrysoidin). Sm. 258° (C. 1908 [2] 1588).
- $C_{14}H_9OCl$  1) 1-Chlor-2-Phenylbenzfuran. Sd. 191°<sub>18</sub> (B. 36, 3983 C. 1904 [1] 171).
- 2) 9-Chlor-10-Oxyphenanthren (Chlorphenanthron). Sm. 122—123° (121°). Pikrat (J. pr. [2] 28, 171; B. 41, 4220 C. 1909 [1] 181). — III, 442.
- $C_{14}H_9OCl_3$  1) 4-Trichlormethyldiphenylketon. Sm. 111—111,5° (A. 189, 92). — III, 213.
- $C_{14}H_9OBr$  1) 9-Brom-10-Oxyanthracen. Sm. 148—149° (150° u. Zers.) (B. 20, 2437; B. 38, 1797 C. 1905 [1] 1648). — II, 902.
- 2) 4-Brom-1-Phenylbenzfuran. Sm. 148° (B. 36, 3982 C. 1904 [1] 171).
- 3) 1-Brom-2-Phenylbenzfuran. Sd. 189—191°<sub>20</sub> (B. 36, 4007 C. 1904 [1] 175).
- $C_{14}H_9OBr_3$  1) 3,5-Dibrom-4-Keto-1-[ $\beta$ -Brom- $\beta$ -Phenyläthyliden]-1,4-Dihydrobenzol. Sm. 190° u. Zers. (A. 349, 114 C. 1906 [2] 1257).
- $C_{14}H_9O_2N$  C 75,3 — H 4,0 — O 14,3 — N 6,3 — M. G. 223.
- 1) 9-Nitroanthracen (Nitrosoanthron). Sm. 146° (143—144°) (B. 13, 1586; 20, 974; 33, 3548; 34, 221; Soc. 59, 639; D.R.P. 127399 C. 1902 [1] 235; A. 330, 165 C. 1904 [1] 890). — II, 261; \*II, 121.
- 2) 3-Nitrophenanthren. Sm. 170—171° (B. 12, 1157; 34, 3532). — II, 269.
- 3) 9-Nitrophenanthren. Sm. 116—117°. Pikrat (B. 33, 3258; 34, 1461; B. 36, 2511 C. 1903 [2] 505; A. 355, 307 C. 1907 [2] 1626). — \*II, 122.
- 4)  $\alpha$ -Nitrophenanthren. Sm. 73—75° (A. 167, 155; B. 12, 1155). — II, 269.
- 5)  $\beta$ -Nitrophenanthren. Sm. 126—127° (B. 12, 1156). — II, 269.
- 6) 1-Amido-9,10-Anthrachinon. Sm. 241° (242—243°). HCl (A. 166, 149; C. 1901 [2] 307; B. 14, 979; 15, 1518, 1790; 30, 1116; B. 35, 3922 C. 1903 [1] 88; D.R.P. 148110 C. 1904 [1] 329; D.R.P. 149801 C. 1904 [1] 1043; D.R.P. 175024 C. 1906 [2] 1465). — III, 413; \*III, 296.

- C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>N** 7) **2-Amido-9,10-Anthrachinon**. Sm. 302° (293—295°). HCl (*B.* 33, 264; *A.* 212, 61; *B.* 12, 1418, 1566; 15, 229, 1792; D.R.P. 148110 *C.* 1904 [1] 329; *M.* 29, 436 *C.* 1908 [2] 1028). — III, 413; \*III, 296.
- 8) **9-Amido-9,10-Anthrachinon**. Sm. 255,5° (*B.* 14, 979; *B.* 39, 3019 *C.* 1906 [2] 1432).
- 9) **2-Amido-9,10-Phenanthrenchinon**. Sm. bei 200° u. Zers. (oberhalb 320°) (*B.* 18, 1943; *A.* 321, 338 *C.* 1902 [2] 61; *C.* 1904 [1] 461). — III, 442; \*III, 316.
- 10) **3-Amido-9,10-Phenanthrenchinon**. Sm. 254° (*A.* 321, 338 *C.* 1902 [2] 61; *B.* 41, 3698 *C.* 1908 [2] 1870). — \*III, 316.
- 11) **1-Oximido-2-Keto-1,2-Dihydroanthracen**. Zers. bei 188°. K, Na (*A.* 342, 69 *C.* 1905 [2] 1593).
- 12) **2-Oximido-1-Keto-1,2-Dihydroanthracen**. Zers. bei 200°. Na, K, Zn (*B.* 39, 927 *C.* 1906 [1] 1256).
- 13) **4-Oximido-1-Keto-1,4-Dihydroanthracen**. Sm. 233° u. Zers. (*B.* 39, 928 *C.* 1906 [1] 1256).
- 14) **9-Oximido-10-Keto-9,10-Dihydroanthracen** (Anthrachinonoxim). Sm. 224°; subl. bei 200° (*B.* 16, 2179; 27, 2125; *Soc.* 59, 644; *A.* 323, 232 *C.* 1902 [2] 802). — III, 409.
- 15) **9-Oximido-10-Keto-9,10-Dihydrophenanthren**. Sm. 158° (*B.* 16, 2178; 22, 1989). — III, 445.
- 16) **Benzoylanthranil**. Sm. 122—123° (*B.* 16, 2229; *J. pr.* [2] 30, 486; [2] 33, 19; *G.* 30 [2] 278; *A.* 324, 126 *C.* 1902 [2] 1253; *B.* 35, 3483 *C.* 1902 [2] 1318; *B.* 36, 2766 *C.* 1903 [2] 835; *B.* 42, 1649 *C.* 1909 [2] 204). — II, 1254; \*II, 786.
- 17) **4-Benzoylphenylisocyanat**. Sm. 201° (*A.* 311, 149). — \*III, 148.
- 18)  **$\alpha$ -Pyrophtalon**. Sm. 287° (283°). K, Na (*B.* 16, 2604; *Bl.* 36, 1654, 1657 *C.* 1903 [2] 39; *B.* 36, 3916 *C.* 1904 [1] 97; *B.* 37, 3025 *C.* 1904 [2] 1411; *B.* 39, 2448 *C.* 1906 [2] 787). — IV, 126; \*IV, 101.
- 19)  **$\gamma$ -Pyrophtalon**. Sm. oberhalb 300°. Na, HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*B.* 38, 162 *C.* 1905 [1] 453).
- 20) **3-Keto-2-Phenyl-1,1-Dihydroindol-1-Oxyd**. Sm. 186° (*C.* 1904 [1] 1356; 1907 [1] 732).
- 21) **2,3-Diketo-2,3-Dihydro-1-Phenylindol** (Phenylpseudoisatin). Sm. 134° (*A.* 239, 222). — IV, 236.
- 22) **1,3-Diketo-2-Phenyl-2,3-Dihydro-5-Isobenzazol + H<sub>2</sub>O**. HCl + H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Ag (*B.* 37, 2142 *C.* 1904 [2] 234).
- 23) **2'-Cyanbiphenyl-2-Carbonsäure**. Sm. 170—172° (*B.* 37, 4311 *C.* 1905 [1] 177).
- 24) **Akridin-5-Carbonsäure**. Zers. oberhalb 300° (*B.* 20, 1549). — IV, 421.
- 25)  **$\beta$ -Naphtochinolin-3-Carbonsäure**. Sm. 187° u. Zers. Na + 2½H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Cu + 1½H<sub>2</sub>O, HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*B.* 22, 261). — IV, 422.
- 26) **Lakton d. 4-[ $\alpha$ -Oxy- $\beta$ -Phenyläthenyl]pyridin-3-Carbonsäure** (Benzalmerid). Sm. 178—180° (*B.* 37, 2140 *C.* 1904 [2] 234).
- 27) **Oximanhydrid d.  $\alpha$ -Oximido- $\alpha\alpha$ -Diphenylmethan-2-Carbonsäure** (Oximanhydrid d. 2-Benzoylbenzol-1-Carbonsäure). Sm. 162°. K<sub>2</sub> + 3H<sub>2</sub>O, Ba, (Ag, NH<sub>4</sub>) (*B.* 26, 1262, 1795). — II, 1704; \*II, 1000.
- 28) **Nitril d. 2-Benzoxylbenzol-1-Carbonsäure**. Sm. 106° (148—149°?) (*A.* 99, 250; *B.* 2, 491; 26, 2623; 31, 3041; *Soc.* 87, 1225 *C.* 1905 [2] 1335). — II, 1501; \*II, 893.
- 29) **Amid d. 9-Ketofluoren-1-Carbonsäure**. Sm. 229—230° (*M.* 23, 891 *C.* 1902 [2] 1472).
- 30) **Amid d. 9-Ketofluoren-4-Carbonsäure**. Sm. 230° (225°) (*B.* 21, 2357; *A.* 252, 26; 284, 311; *M.* 23, 891 Anm.). — II, 1719.
- 31) **Imid d. Biphenyl-2,2'-Dicarbonsäure**. Sm. 219—220° (217,5°). Na (*A.* 247, 270; 252, 16; *Am. Soc.* 20, 659). — II, 1884; \*II, 1092.
- 32) **Phenylimid d. Benzol-1,2-Dicarbonsäure**. Sm. 205° (203°; 207°) (*J.* 1847/48, 605; *A.* 210, 267; *J. pr.* [2] 55, 265; *B.* 16, 1323; 29, 1795, 2804; 30, 1443; 31, 2884; *Am.* 9, 202; 18, 338; 26, 455; *C.* 1903 [2] 432; *R.* 15, 287; *B.* 36, 1000 *C.* 1903 [1] 1131; *Am.* 37, 598 *C.* 1907 [2] 393). — II, 1804; \*II, 1053.
- 33)  **$\alpha$ -Phenylisomid d. Benzol-1,2-Dicarbonsäure**. Sm. 115—117° (120 bis 122°) (*R.* 15, 286; 21, 341 Anm.; *R.* 21, 339 *C.* 1903 [1] 156). — \*II, 1054.



- C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>N** 34)  $\beta$ -Phenylisoimid d. Benzol-1,2-Dicarbonsäure. Sm. 83—84° (C. 1909 [2] 983).  
 35) Verbindung (aus d. Aldehyd d. 2-Nitrobenzol-1-Carbonsäure). Sm. 186 bis 187° (G. 36 [2] 267 C. 1906 [2] 1499).  
 36) Verbindung (aus Phenylphthalamidsäure). Sm. 125—126° (C. 1909 [2] 983).
- C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>N<sub>3</sub>** C 66,9 — H 3,6 — O 12,7 — N 16,7 — M. G. 251.  
 1) 3,4-Methylenäther d. 3-[3,4-Dioxyphenyl]-1,2,4-Benzotriazin. Sm. 154° (C. 1903 [2] 427).  
 2) Nitril d.  $\alpha$ -Phenylimido- $\alpha$ -[4-Nitrophenyl]essigsäure. Sm. 130° (B. 34, 500). — \*II, 942.  
 3) Nitril d.  $\alpha$ -[3-Nitrophenyl]imido- $\alpha$ -Phenylessigsäure. Sm. 120° (B. 35, 3338 C. 1902 [2] 1193).  
 4) Nitril d.  $\alpha$ -[4-Nitrophenyl]imido- $\alpha$ -Phenylessigsäure. Sm. 140° (B. 35, 3339 C. 1902 [2] 1193).  
 5) Nitril d. 2,6-Diketo-4-[3-Methylphenyl]-1,2,3,6-Tetrahydropyridin-3,5-Dicarbonsäure. NH<sub>4</sub>, Cu + 6H<sub>2</sub>O, Ag (C. 1902 [2] 699; A. 325, 209 C. 1903 [2] 439).
- C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>Cl** 1) Chloroxytoliden. Sm. 57—58° (A. 153, 127). — III, 296.  
 2) Chlorid d. Diphenylketon-2-Carbonsäure. Sm. 70° (A. 291, 10; Bl. [3] 25, 4; M. 22, 788; M. 25, 1181 C. 1905 [1] 364). — \*II, 999.  
 3) isom. Chlorid d. Diphenylketon-2-Carbonsäure. Fl. (M. 25, 1181 C. 1905 [1] 364).
- C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>Cl<sub>3</sub>** 1) Benzoat d. 2,3,5-Trichlor-4-Oxy-1-Methylbenzol. Sm. 89° (A. 328, 281 C. 1903 [2] 1245).
- C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>Br** 1) Bromoxytoliden. Fl. (A. 153, 125). — III, 296.  
 2) 10-Brom-1,9-Dioxyanthracen. Zers. bei 120° (B. 38, 1798 C. 1905 [1] 1648).  
 3) 2-Bromacetyl- $\beta$ -Naphthofuran. Sm. 113° (B. 36, 2867 C. 1903 [2] 832).  
 4) Lakton d.  $\alpha$ -Brom-2-Oxydiphenylessigsäure. Sm. 70° (B. 30, 127). — \*II, 995.
- C<sub>14</sub>H<sub>9</sub>O<sub>2</sub>Br<sub>3</sub>** 1) Benzoat d. 3,5-Dibrom-2-Oxy-1-Brommethylbenzol. Sm. 119—120° (A. 332, 199 C. 1904 [2] 211).
- C<sub>14</sub>H<sub>9</sub>O<sub>3</sub>N** C 70,4 — H 3,7 — O 20,1 — N 5,8 — M. G. 239.  
 1) 10-Nitro-9-Oxyanthracen. Sm. 148° u. Zers. (Soc. 61, 869; B. 42, 1216 C. 1909 [1] 1710). — II, 261.  
 2) 10-Nitro-9-Keto-9,10-Dihydroanthracen (Nitroanthron). Sm. 140° u. Zers. (135°; 148°) (Soc. 61, 868; A. 330, 171 C. 1904 [1] 891; A. 330, 177 C. 1904 [1] 891). — II, 261.  
 3) 10-Nitroso-10-Oxy-9-Keto-9,10-Dihydroanthracen (Nitrosooxanthranol) (B. 14, 471). — II, 262.  
 4) 2-Amido-1-Oxy-9,10-Anthrachinon ( $\beta$ -Alizarinamid). Subl. bei 150° (J. pr. [2] 18, 139; A. 183, 209; B. 15, 1805; B. 39, 1206 C. 1906 [1] 1748). — III, 419.  
 5) 3-Amido-1-Oxy-9,10-Anthrachinon. Sm. noch nicht bei 310° (B. 37, 4436 C. 1905 [1] 179).  
 6) 3[oder 1]-Amido-1[oder 3]-Oxy-9,10-Anthrachinon (Purpuroxanthinamid) (A. 183, 217). — III, 426.  
 7) 4-Amido-1-Oxy-9,10-Anthrachinon. Sm. 207—208° (B. 29, 2943; C. 1898 [1] 543; B. 35, 3923 C. 1903 [1] 88; D.R.P. 154353 C. 1904 [2] 1013). — \*III, 300.  
 8) 5-Amido-1-Oxy-9,10-Anthrachinon. Sm. 215—216° (210°). Na (B. 35, 3925 C. 1903 [1] 88; D.R.P. 148875 C. 1904 [1] 556; D.R.P. 149780 C. 1904 [1] 909).  
 9) 6-Amido-1-Oxy-9,10-Anthrachinon (B. 36, 2936 C. 1903 [2] 885).  
 10) 8-Amido-1-Oxy-9,10-Anthrachinon. Sm. 214—215° (230°) (B. 35, 3927 C. 1903 [1] 89; D.R.P. 148875 C. 1904 [1] 556; D.R.P. 149780 C. 1904 [1] 909).  
 11) 1-Amido-2-Oxy-9,10-Anthrachinon ( $\alpha$ -Alizarinamid). Sm. 251°. Ba (A. 183, 205; B. 15, 1799; 28, 1423; A. 342, 85 C. 1905 [2] 1593). — III, 419.  
 12) 5-Amido-2-Oxy-9,10-Anthrachinon (D.R.P. 167699 C. 1906 [1] 1070).  
 13) 8-Amido-2-Oxy-9,10-Anthrachinon (D.R.P. 167699 C. 1906 [1] 1071).  
 14) 1-Hydroxylamido-9,10-Anthrachinon (B. 29, 2943). — \*III, 298.

- C<sub>11</sub>H<sub>9</sub>O<sub>3</sub>N**
- 15) 5-Amido-4-Oxy-9,10-Phenanthrenchinon (*B.* 38, 3737 *C.* 1906 [1] 40).
  - 16) 10-Hydroxyloximido-9-Keto-9,10-Dihydroanthracen (Isonitrosoanthron). NH<sub>4</sub>, Na, Benzylaminsalz (*A.* 330, 178 *C.* 1904 [1] 891; *B.* 42, 1218 *C.* 1909 [1] 1710).
  - 17) 5-Keto-4-[2-Fural]-2-Phenyl-4,5-Dihydrooxazol. Sm. 171° (*A.* 337, 283 *C.* 1905 [1] 378).
  - 18) 5-Keto-4-Fural-3-Phenyl-4,5-Dihydroisoxazol. Sm. 132—133° u. Zers. (*C. r.* 146, 638 *C.* 1908 [1] 1702).
  - 19) 1-Keto-2-Benzoyl-1,2-Dihydrobenzoxazol. Sm. 173—174° (*B.* 31, 1065, 1268; *Am.* 23, 20). — \*II, 739.
  - 20) 2-Keto-1-Benzoyl-1,2-Dihydrobenzopseudoxazol. Sm. 153—154° (*B.* 42, 2322 *C.* 1909 [2] 603).
  - 21) 3-Oxybenzol-2-Indolindigo. Sm. 245° u. Zers. (*M.* 29, 392 *C.* 1908 [2] 518).
  - 22) 4-Oxybenzol-2-Indolindigo (*M.* 19, 387 *C.* 1908 [2] 517).
  - 23) 9-Oximidofluoren-1-Carbonsäure. Sm. 230° u. Zers. (*M.* 23, 892 *C.* 1902 [2] 1472).
  - 24) 9-Oximidofluoren-4-Carbonsäure. Sm. 263°. Ag (*A.* 247, 280). — II, 1719.
  - 25) 2-[2-Furanyl]chinolin-4-Carbonsäure. Sm. 210—215° u. Zers. (2HCl, PtCl<sub>4</sub>), 2 + AuCl<sub>3</sub> (*A.* 242, 285). — IV, 422.
  - 26) 5-Keto-5,10-Dihydroakridin-1-Carbonsäure. Sm. 325° u. Zers. (*A.* 355, 354 *C.* 1907 [2] 1509).
  - 27) 5-Keto-5,10-Dihydroakridin-3-Carbonsäure. Sm. oberhalb 350° (*A.* 355, 357 *C.* 1907 [2] 1509).
  - 28) Acetat d. 7-Oximido-8-Ketoacenaphten. Sm. 247° (*G.* 33 [1] 43 *C.* 1903 [1] 881).
  - 29) Acetat d. 2-Naphtisatin. Sm. 195° (*B.* 36, 1738 *C.* 1903 [2] 119).
  - 30) Benzoat d. 1-Oxybenzoxazol. Sm. 173° (*C. r.* 143, 1165 *C.* 1907 [1] 633).
  - 31) Amid d. Naphtaronylessigsäure. Sm. 265° u. Zers. (*Soc.* 81, 425 *C.* 1902 [1] 999). — \*III, 572.
  - 32) Phenylimid d. 3-Oxybenzol-1,2-Dicarbonsäure. Sm. 174—175° (*Soc.* 91, 112 *C.* 1907 [1] 1121).
  - 33) Phenylimid d. 4-Oxybenzol-1,2-Dicarbonsäure. Sm. 251° (263°) (*B.* 32, 1993; *Soc.* 91, 101 *C.* 1907 [1] 1120). — \*II, 1117.
  - 34) 2-Oxyphenylimid d. Benzol-1,2-Dicarbonsäure (o-Oxyphthalanil). Sm. 220° (*B.* 9, 1528). — II, 1809.
  - 35) 4-Oxyphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 287—288° (292°) (*G.* 16, 252; *C.* 1897 [1] 48; *M.* 20, 350; *B.* 36, 1000 *C.* 1903 [1] 1131). — II, 1809; \*II, 1055.
- C<sub>14</sub>H<sub>9</sub>O<sub>3</sub>N<sub>3</sub>**
- C 62,9 — H 3,4 — O 18,0 — N 15,7 — M. G. 267.
- 1) 5-Phenyl-3-[3-Nitrophenyl]-1,2,4-Oxdiazol. Sm. 160° (*B.* 18, 1067). — II, 1235.
  - 2) 5-Phenyl-3-[4-Nitrophenyl]-1,2,4-Oxdiazol. Sm. 198° (*B.* 22, 2421). — II, 1238.
  - 3) 4-Nitro-2-Benzoylindazol. Sm. 162—163° (*B.* 37, 2584 *C.* 1904 [2] 659).
  - 4) 6-Nitro-2-Benzoylindazol. Sm. 165—165,5° (*B.* 37, 2578 *C.* 1904 [2] 658).
  - 5) 8-Nitro-4-Keto-2-Phenyl-3,4-Dihydro-1,3-Benzdiazin (*J. pr.* [2] 43, 444). — II, 1282.
  - 6) 2-[3-Nitrophenyl]-4-Keto-1,4-Dihydro-1,3-Benzdiazin. Sm. 206 bis 207° (*A.* 251, 168). — II, 1267.
  - 7) 3-Oxy-2-[2-Nitrophenyl]-1,4-Benzdiazin. Sm. 295° (*B.* 34, 4008 *C.* 1902 [1] 204). — \*IV, 684.
  - 8) 4-Keto-2-Phenyl-3,4-Dihydro-1,2,3-Benztriazin-3<sup>2</sup>-Carbonsäure. Sm. 192° u. Zers. (*A.* 351, 278 *C.* 1907 [1] 1494).
  - 9) Nitril d. Benzoyl-2-Nitrophenylamidoameisensäure. Sm. 105° (*Bl.* [3] 33, 71 *C.* 1905 [1] 441).
  - 10) Nitril d. Benzoyl-3-Nitrophenylamidoameisensäure. Sm. 109° (*Bl.* [3] 33, 72 *C.* 1905 [1] 441).
  - 11) Nitril d. Benzoyl-4-Nitrophenylamidoameisensäure. Sm. 131° (*Bl.* [3] 33, 74 *C.* 1905 [1] 441).

- C<sub>14</sub>H<sub>9</sub>O<sub>3</sub>N<sub>3</sub>** 12) Nitril d. 3-[3-Nitrobenzoyl]amidobenzol-1-Carbonsäure. Sm. 196,5 bis 197° (C. 1904 [2] 102).  
 13) Nitril d. 3-[4-Nitrobenzoyl]amidobenzol-1-Carbonsäure. Sm. 250 bis 251° (C. 1904 [2] 102).  
 14) Nitril d. 6-Oxy-2-Keto-4-[4-Methoxyphenyl]-2,5-Dihydropyridin-3,5-Dicarbonsäure + 2 H<sub>2</sub>O. NH<sub>4</sub> + H<sub>2</sub>O, (Cu + 4 NH<sub>3</sub> + H<sub>2</sub>O), Ag (C. 1899 [2] 119). — \*IV, 231.  
 15) Imid d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. noch nicht bei 320° (B. 28, 157). — IV, 1343.  
 16) Phenylnitrosamidoimid d. Benzol-1,2-Dicarbonsäure. Sm. 153 bis 154° u. Zers. (J. pr. [2] 35, 274). — IV, 710.
- C<sub>14</sub>H<sub>9</sub>O<sub>3</sub>Cl** 1) p-Chlor-1,2,9-Trioxyanthracen (Chlordesoxyzalizin) (C. 1901 [1] 601).  
 2) 4[oder 5]-Chlordiphenylketon-2-Carbonsäure. Sm. 170° (A. 233, 239). — II, 1704.  
 3) 4'-Chlordiphenylketon-2-Carbonsäure. Sm. 147—148° (151—153°) (D.R.P. 75288; D.R.P. 148110 C. 1904 [1] 329). — \*II, 1000.
- C<sub>14</sub>H<sub>9</sub>O<sub>3</sub>Cl<sub>3</sub>** 1) Benzot d. 3,4,5-Trichlor-1,2-Dioxybenzolmonomethyläther. Sm. 128—129° (G. 28 [1] 231). — \*II, 719.
- C<sub>14</sub>H<sub>9</sub>O<sub>3</sub>Br** 1) 4'-Bromdiphenylketon-2-Carbonsäure. Sm. 169° (D.R.P. 148110 C. 1904 [1] 329).  
 2) p-Bromdiphenylketon-2-Carbonsäure. Sm. 156° (B. 39, 194 C. 1906 [1] 675).  
 3) p-Bromdiphenylketon-2-Carbonsäure. Sm. 219—221° (B. 12, 2126). — II, 1704.  
 4) 2-Brom-9-Oxyfluoren-9-Carbonsäure. Sm. 213° u. Zers. (B. 38, 3750 C. 1906 [1] 42).  
 5) α,2-Lakton d. p-Brom-2,4-Dioxydiphenylessigsäure. Sm. 145° (B. 31, 2828). — \*II, 1090.  
 6) α,2-Lakton d. p-Brom-2,6-Dioxydiphenylessigsäure. Sm. 142° (B. 31, 2828). — \*II, 1090.
- C<sub>14</sub>H<sub>9</sub>O<sub>3</sub>Br<sub>3</sub>** 1) 5,3',5'-Tribrom-6,2'-Dioxy-3-Methyldiphenylketon. Sm. 190° (B. 40, 3520 C. 1907 [2] 1410).  
 2) p-Tribrom-6,4'-Dioxy-3-Methyldiphenylketon. Sm. 211,5—212,5° (B. 40, 3520 C. 1907 [2] 1410).
- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>N** C 65,9 — H 3,5 — O 25,1 — N 5,5 — M. G. 255.  
 1) 2-Nitro-9,10-Dioxyphenanthren. Sm. 220° (B. 36, 3732 C. 1904 [1] 35).  
 2) 3-Nitro-9,10-Dioxyphenanthren. Sm. 222—223° (B. 35, 3125 C. 1902 [2] 1212).  
 3) 3-Amido-1,2-Dioxy-9,10-Anthrachinon. Sm. oberhalb 300° (B. 12, 588; 18, 445; D.R.P. 126016, 126603). — III, 423; \*III, 303.  
 4) 4-Amido-1,2-Dioxy-9,10-Anthrachinon (J. 1877, 586; B. 24, 1613; 35, 906). — III, 423; \*III, 303.  
 5) 2-Amido-1,3-Dioxy-9,10-Anthrachinon. Ba (M. 6, 755; 22, 732; M. 26, 572 C. 1905 [2] 333). — III, 433; \*III, 311.  
 6) 4-Amido-1,3-Dioxy-9,10-Anthrachinon (Purpurinamid) (A. 130, 337; 183, 211). — III, 434.  
 7) 4-Amido-1,8-Dioxy-9,10-Anthrachinon (B. 35, 3927 C. 1903 [1] 89).  
 8) 1[p]-Amido-2,7-Dioxy-9,10-Anthrachinon (Anthrappurpurinamid) (J. 1878, 669). — III, 436.  
 9) αβ-Diketo-β-[2-Nitrophenyl]-α-Phenyläthan (o-Nitrobenzil). Sm. 98° (B. 26, 2453). — III, 281.  
 10) αβ-Diketo-β-[4-Nitrophenyl]-α-Phenyläthan (p-Nitrobenzil). Sm. 141 bis 142° (130°; 138—139°) (A. Spl. 3, 153; G. 31 [1] 263; B. 23, 532; 31, 2426; 34, 3904; J. pr. [2] 62, 544). — III, 282.  
 11) 3,4-Dioxybenzol-2-Indolindigo (M. 29, 393 C. 1908 [2] 518).  
 12) Anhydrid d. 3-Acetylamidonaphtalin-1,8-Dicarbonsäure. Sm. oberhalb 300° (B. 32, 3286). — \*II, 1087.  
 13) α,2'-Lakton d. α-Oxy-p-Nitroso-4-Oxydiphenylmethan-2'-Carbon-säure. Sm. 153°. Ba (A. 300, 236). — \*II, 1089.  
 14) Methylester d. 3-Oxy-4-Keto-1,4-Dihydronaphtalin-1-Cyanmethy-lencarbonsäure. Sm. 164° (C. 1907 [1] 1130).  
 15) Acetat d. Resorufin. Sm. 223° (M. 5, 611; B. 22, 3029). — II, 933.  
 16) Acetat d. B-I-Oxybenzolazoxindon. Sm. 225—226° (B. 35, 2820 C. 1902 [2] 999). — \*IV, 234.



- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>N** 17) Amid d. 4-Oxy-1,2- $\alpha$ -Naphtopyron-3-Carbonsäure. Sm. 182° (A. 368, 46 C. 1909 [2] 1443).  
 18) Amid d. 4-Oxy-1,2- $\beta$ -Naphtopyron-3-Carbonsäure. Sm. 256° (A. 367, 260 C. 1909 [2] 1240).  
 19) Phenylamid d. 3,4-Carbonyldioxybenzol-1-Carbonsäure. Sm. 166 bis 167° (Soe. 93, 570 C. 1908 [1] 1690).  
 20) Imid d. *p*-Acetoxylnaphtalin-1,8-Dicarbonsäure. Sm. 278° (B. 32, 3291). — \*II, 1140.
- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>N<sub>8</sub>** C 59,4 — H 3,2 — O 22,6 — N 14,8 — M. G. 283.  
 1) 3-Nitro-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 200° u. Zers. (B. 41, 3686 C. 1908 [2] 1869).  
 2) 3,*p*-Dinitro-2-Phenylindol. Sm. oberhalb 280° (G. 30 [2] 279). — \*IV, 251.  
 3) 6-Nitro-3-Oxy-2-Keto-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. noch nicht bei 300° (B. 38, 97 C. 1905 [1] 540).  
 4)  $\alpha$ -Dinitro-3-Methyl- $\beta$ -Naphtochinolin. Sm. 226—227° (B. 22, 256). — IV, 412.  
 5)  $\beta$ -Dinitro-3-Methyl- $\beta$ -Naphtochinolin. Sm. 230° (B. 22, 257). — IV, 412.  
 6)  $\gamma$ -Dinitro-3-Methyl- $\beta$ -Naphtochinolin. Sm. 205—212° (B. 22, 257). — IV, 412.  
 7) 6-Nitro-1-Phenylisindazol-3-Carbonsäure. Sm. 272° (B. 22, 320; A. 264, 149). — IV, 1465.  
 8) 5-Nitro-1-Phenylbenzimidazol-2-Carbonsäure. Sm. noch nicht bei 300° (B. 38, 101 C. 1905 [1] 540).  
 9) Nitril d. 6-Oxy-2-Keto-4-[4-Oxy-3-Methoxyphenyl]-2,5-Dihydropyridin-3,5-Dicarbonsäure. NH<sub>4</sub> + 2½ H<sub>2</sub>O, Ag (C. 1904 [2] 902).  
 10) Phenylnitramidoimid d. Benzol-1,2-Dicarbonsäure. Sm. 147—148° u. Zers. (J. pr. [2] 35, 277). — IV, 710.  
 11) Phtalyl-4-Nitrophenylhydrazid. Sm. 247° (B. 39, 2281 C. 1906 [2] 512).  
 12) Ureid d. 4-Keto-3-Oxy-1,4-Dihydronaphtalin-1-Cyanmethylen-carbonsäure. Sm. 298° (303°) (C. 1907 [1] 1129).
- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>N<sub>5</sub>** C 54,0 — H 2,9 — O 20,6 — N 22,5 — M. G. 311.  
 1) 2,5-Di[4-Nitrophenyl]-1,3,4-Triazol. Sm. 257° (A. 298, 52; J. pr. [2] 74, 23 C. 1906 [2] 792). — IV, 1187.  
 2) Nitril d. 4-Nitrophenylamido-4-Nitrophenylimidoessigsäure. Sm. 217°. Na (J. pr. [2] 74, 85 C. 1906 [2] 1250).
- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>Cl** 1) 4-Chlorbiphenyl-2,2'-Dicarbonsäure. Sm. 237° (B. 39, 3895 C. 1907 [1] 166).  
 2) Phenylester d. 2-Chlorformoxybenzol-1-Carbonsäure. Sm. 90—91° (C. 1901 [1] 653). — \*II, 889.
- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>Br** 1) 4-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 238—239° (B. 37, 3566 C. 1904 [2] 1402).  
 2) 5-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 257° u. Zers. (B. 37, 3572 C. 1904 [2] 1403).  
 3) *p*-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 235—236°. Na<sub>2</sub>, Ba + 3 H<sub>2</sub>O, Cu, Ag<sub>2</sub> (B. 19, 3149; M. 16, 818). — II, 1884; \*II, 1092.  
 4) 4-Brombiphenyl-2,4'-Dicarbonsäure. Sm. 208° (B. 22, 3018). — II, 1883.  
 5) Verbindung (aus Resorcin u. Brompiperonal) (B. 42, 4171 C. 1909 [2] 1930).
- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>Br<sub>3</sub>** 1) Bromverbindung d. *p*-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 256° u. Zers. Na<sub>2</sub> (B. 19, 3152). — II, 1885.
- C<sub>14</sub>H<sub>9</sub>O<sub>4</sub>Br<sub>7</sub>** 1) Pentabromoureumindibromid. Sm. bei 120° (Am. 4, 364). — III, 660.
- C<sub>14</sub>H<sub>9</sub>O<sub>5</sub>N** C 62,0 — H 3,3 — O 29,5 — N 5,2 — M. G. 271.  
 1) 4-Amido-1,2,3-Trioxo-9,10-Anthrachinon (M. 18, 291). — \*III, 311.  
 2) 4-Nitrodiphenylketon-2-Carbonsäure. Sm. 212°. + CH<sub>4</sub>O. Ag (M. 29, 432 C. 1908 [2] 1028).  
 3) 5-Nitrodiphenylketon-2-Carbonsäure. Sm. 164—165° (B. 38, 294 C. 1905 [1] 617; M. 29, 178 C. 1908 [2] 326).  
 4) 3'-Nitrodiphenylketon-2-Carbonsäure. Sm. 186—187° (D. R. P. 148110 C. 1904 [1] 329; M. 26, 972 C. 1905 [2] 1491; M. 29, 177 C. 1908 [2] 326).  
 5) 2'-Nitrodiphenylketon-4-Carbonsäure. Sm. 235,5—236° (B. 41, 1849 C. 1908 [2] 158).

- C<sub>14</sub>H<sub>9</sub>O<sub>6</sub>N** 6) 3'-Nitrodiphenylketon-4-Carbonsäure. Sm. 242°. K, Ba + H<sub>2</sub>O (A. 286, 316). — II, 1705.  
 7) 4'-Nitrodiphenylketon-4-Carbonsäure. Sm. 255°. Na (A. 286, 330). — II, 1706.  
 8) 3'-Nitroso-4'-Oxydiphenylketon-2-Carbonsäure. Sm. 178° (A. 300, 234). — \*II, 1094.  
 9) 2-Nitro-9-Oxyfluoren-9-Carbonsäure. Sm. 160—161° u. Zers. (B. 38, 3740 C. 1906 [1] 41).  
 10) 3-Nitro-9-Oxyfluoren-9-Carbonsäure. Sm. 239—240° (B. 41, 3691 C. 1908 [2] 1870).  
 11) 4-Nitro-9-Oxyfluoren-9-Carbonsäure. Sm. 156—158° (B. 38, 3741 C. 1906 [1] 41).  
 12) 3-Benzoylpyridin-2,3'-Dicarbonsäure + H<sub>2</sub>O. Cd (M. 21, 984). — \*IV, 128.  
 13) Gem. Anhydrid d. Benzolcarbonsäure u. 3-Nitrobenzol-1-Carbonsäure (A. 87, 158). — II, 1233.  
 14) Gem. Anhydrid d. Benzolcarbonsäure u. 4-Nitrobenzol-1-Carbonsäure. Sm. 130° (B. 36, 2537 Anm. C. 1903 [2] 720).  
 15) α,2'-Lakton d. p-Nitro-4-Oxydiphenylmethan-2'-Carbonsäure. Sm. 152—153° (B. 27, 2636). — II, 1881.
- C<sub>14</sub>H<sub>9</sub>O<sub>5</sub>N<sub>2</sub>** 16) Monacetat d. Resazurin. Sm. 222° (B. 22, 3024). — II, 932.  
 C 56,2 — H 3,0 — O 26,7 — N 14,0 — M. G. 299.  
 1) p-Dinitro-2-[4-Methylphenyl]benzoxazol. Sm. 187—188° (B. 27, 1453). — IV, 417.  
 2) Aldehyd d. p-Nitroazoxybenzol-4,4'-Dicarbonsäure. Sm. 171—172° (Am. 28, 43 C. 1902 [2] 701). — \*IV, 1004.  
 C 51,4 — H 2,7 — O 24,5 — N 21,4 — M. G. 327.
- C<sub>14</sub>H<sub>9</sub>O<sub>5</sub>N<sub>2</sub>** 1) 9-Semicarbazon d. 2,7-Dinitrofluoren. Sm. noch nicht bei 350° (B. 38, 3747 C. 1906 [1] 42).  
 2) 9-Semicarbazon-4,5-Dinitrofluoren. Sm. 288° u. Zers. (B. 38, 3750 C. 1906 [1] 42).  
 C 58,5 — H 3,1 — O 33,4 — N 4,9 — M. G. 287.
- C<sub>14</sub>H<sub>9</sub>O<sub>6</sub>N** 1) 4-Nitrobiphenyl-2,2'-Dicarbonsäure. Sm. 217° (214—216°) (B. 16, 2347; B. 36, 3732 C. 1904 [1] 35). — II, 1885.  
 2) 5-Nitrobiphenyl-2,2'-Dicarbonsäure. Sm. 268° (B. 36, 3734 C. 1904 [1] 35).  
 3) 6-Nitrobiphenyl-2,2'-Dicarbonsäure. Sm. 248—250° u. Zers. (B. 36, 3737 C. 1904 [1] 36).  
 4) 3'-Nitro-4-Oxydiphenylketon-3-Carbonsäure. Sm. 244° (A. 290, 170). — \*II, 1094.  
 C 53,3 — H 2,9 — O 30,5 — N 13,3 — M. G. 315.
- C<sub>14</sub>H<sub>9</sub>O<sub>6</sub>N<sub>3</sub>** 1) 2,4,6-Trinitro-αβ-Diphenyläthen. Sm. 158° (156°) (B. 39, 1306 C. 1906 [1] 1785; B. 41, 2296 C. 1908 [2] 599).  
 2) 2,4,2'-Trinitro-αβ-Diphenyläthen. Sm. 194—195° (B. 34, 2848).  
 3) 2,4,3'-Trinitro-αβ-Diphenyläthen. Sm. 183—184° (C. 1901 [2] 1030; B. 34, 2847).  
 4) 2,4,4'-Trinitro-αβ-Diphenyläthen. Sm. 240° (C. 1901 [2] 1030; B. 34, 2846).  
 5) 9,9,10-Trinitro-9,10-Dihydroanthracen. Sm. 139—140° u. Zers. (A. 330, 162 C. 1904 [1] 890).  
 6) 4,6-Dinitro-5-Oxy-3-Methyl-1-Phenylbenzoxazol. Zers. bei 188 bis 189° (M. 19, 499). — \*II, 742.  
 7) 3,9-Dinitro-6-Acetylphenoxazin. Sm. 192° (B. 36, 477 C. 1903 [1] 651).  
 8) p-Nitrozobenzol-4,4'-Dicarbonsäure. Zers. bei 270°. Na + 4H<sub>2</sub>O, K + 3H<sub>2</sub>O, K<sub>2</sub> + 3H<sub>2</sub>O, Ca + 5H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag<sub>2</sub> (J. r. 20, 20). — IV, 1459.  
 9) Benzoat d. 2,4-Dinitrobenzaldoxim. Sm. 165—166° (B. 35, 1267 C. 1902 [1] 1102; M. 23, 559 C. 1902 [2] 742).  
 10) Imid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 199° (195°) (J. pr. [2] 51, 402; A. 251, 172, 173). — II, 1234; \*II, 772.  
 11) p-Dinitro-1-Naphtylimid d. Bernsteinsäure. Zers. bei 250° (B. 10, 1713; A. 209, 382). — II, 611.
- C<sub>14</sub>H<sub>9</sub>O<sub>6</sub>Cl** 1) Diacetat d. 2-Chlor-5,6-Dioxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 192° (A. 286, 43). — III, 386.

- $C_{14}H_9O_7N_3$  C 50,8 — H 2,7 — O 33,8 — N 12,7 — M. G. 331.  
 1) 3',p,p-Trinitro-4-Methyldiphenylketon. Sm. 165° (A. 286, 311). — III, 214.  
 2) 4',p,p-Trinitro-4-Methyldiphenylketon. Sm. 159° (165°) (A. 286, 323; B. 7, 983). — III, 214.  
 3) N-3-Nitrobenzoat d. 3-Nitrobenzhydroxamsäure. Sm. 153—156° (B. 32, 1662). — \*II, 773.  
 4) N-4-Nitrobenzoat d. 4-Nitrobenzhydroxamsäure. Zers. bei 174° (173—176°) (R. 16, 186; B. 32, 1665). — \*II, 776.
- $C_{14}H_9O_7N_3$  C 46,8 — H 2,5 — O 31,2 — N 19,5 — M. G. 359.  
 1) 4,7-Dinitro-6-Oxy-2-Methyl-1-[3-Nitrophenyl]benzimidazol. Sm. 242—243°. Ag (Soc. 89, 1942 C. 1907 [1] 716).  
 2) 4,7-Dinitro-6-Oxy-2-Methyl-1-[4-Nitrophenyl]benzimidazol. Sm. 249—250° u. Zers.  $NH_4$ , K, Na (Soc. 93, 1676 C. 1908 [2] 1922).  
 C 48,4 — H 2,6 — O 36,9 — N 12,1 — M. G. 347.
- $C_{14}H_9O_8N_3$   
 1) p-Dinitro-5-Amidobiphenyl-2,2'-Dicarbonsäure. Sm. 200—201° u. Zers. (B. 41, 3695 C. 1908 [2] 1870).  
 2) 4,6-Dinitrodiphenylamin-2,2'-Dicarbonsäure. Sm. 251—252°. Na (G. 33 [2] 330 C. 1904 [1] 278).  
 3) isom. 4,6-Dinitrodiphenylamin-2,2'-Dicarbonsäure? Sm. 153—159°. Ba (M. 22, 396).  
 4) 4,6-Dinitrodiphenylamin-2,3'-Dicarbonsäure. Sm. 273° (G. 33 [2] 332 C. 1904 [1] 278).  
 5) 4,6-Dinitrodiphenylamin-2,4'-Dicarbonsäure. Sm. 264—265° (G. 33, [2] 332 C. 1904 [1] 278).
- $C_{14}H_9O_8N_5$  C 44,8 — H 2,4 — O 34,1 — N 18,7 — M. G. 375.  
 1) Methylenäther d.  $\alpha$ -[2,4,6-Trinitrophenyl]- $\beta$ -[3,4-Dioxybenzyliden]-hydrazin. Sm. 169° (C. 1906 [2] 1249).  
 2) 4,7,p-Trinitro-6-Oxy-1-[2-Oxyphenyl]-2-Methylbenzimidazol. Zers. bei 265—270° (Soc. 95, 1045 C. 1909 [2] 519).  
 3) 4,7,p-Trinitro-6-Oxy-1-[3-Oxyphenyl]-2-Methylbenzimidazol. Sm. 260° u. Zers. (Soc. 95, 1046 C. 1909 [2] 519).  
 4) 4,7,p-Trinitro-6-Oxy-1-[4-Oxyphenyl]-2-Methylbenzimidazol. Sm. 252,5° (Soc. 95, 1046 C. 1909 [2] 519).
- $C_{14}H_9O_9N_3$  C 46,3 — H 2,5 — O 39,6 — N 11,6 — M. G. 363.  
 1) Aldehyd d. 2',4',6'-Trinitro-2-Oxydiphenyläther-2-Methyläther-4-Carbonsäure (Pikrylvanillin). Sm. 114—116° (B. 27, 2459). — III, 102.  
 2) Methylester d. 2',4',6'-Trinitrodiphenyläther-2-Carbonsäure. Sm. 139° (G. 26 [2] 556). — \*II, 889.
- $C_{14}H_9O_9N_5$  C 43,0 — H 2,3 — O 36,8 — N 17,9 — M. G. 391.  
 1) N-Acetyl-2,4,2',4'-Tetranitrodiphenylamin. Sm. 178° (C. 1903 [2] 1109).
- $C_{14}H_9O_{10}N_3$  C 44,3 — H 2,4 — O 42,2 — N 11,1 — M. G. 379.  
 1) 2',4',6'-Trinitro-2-Oxydiphenyläther-2-Methyläther-4-Carbonsäure (Pikrylvanillinsäure). Sm. 184—186° (B. 27, 2460). — II, 1742.
- $C_{14}H_9O_{10}N_5$  C 41,3 — H 2,2 — O 39,3 — N 17,2 — M. G. 407.  
 1) 3,5,2',4'-Tetranitro-4-Acetylamidodiphenyläther. Sm. 238° u. Zers. (B. 38, 1595 C. 1905 [1] 1601).  
 2) Acetat d. 3,5,2',4'-Tetranitro-4-Oxydiphenylamin. Sm. 210° (B. 38, 1599 C. 1905 [1] 1602).  
 3) Acetat d. 2',4',p,p-Tetranitro-4-Oxydiphenylamin. Sm. 161° (B. 37, 1731 C. 1904 [1] 1521).
- $C_{14}H_9O_{12}N_7$  C 36,0 — H 1,9 — O 41,1 — N 21,0 — M. G. 467.  
 1) Äthyl-2,4,6,2',4',6'-Hexanitrodiphenylamin. Sm. 198—200° (201 bis 202°) (R. 25, 122 C. 1906 [2] 34; B. 41, 1747 C. 1908 [2] 48).  
 2) p-Hexanitro-4,4'-Dimethyldiphenylamin. Sm. 258° (B. 13, 1545). — II, 486.
- $C_{14}H_6N_2Cl$  1) 2-Chlor-4-Phenyl-1,3-Benzdiazin. Sm. 113° (B. 29, 1310). — IV, 1023.  
 2) 4-Chlor-1-Phenyl-2,3-Benzdiazin. Sm. 160—161° (B. 38, 3922 C. 1906 [1] 247).
- $C_{14}H_6N_2Cl_7$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2,4-Dichlorphenylamido]äthan. Sm. 144° (A. 302, 369). — \*II, 235.
- $C_{14}H_6N_2Br$  1) Bromdihydroacenaphtendiazin (C. 1899 [2] 339). — \*IV, 686.



- C<sub>14</sub>H<sub>9</sub>N<sub>2</sub>Br** 2) Nitril d.  $\alpha$ -[4-Bromphenyl]imido- $\alpha$ -Phenyllessigsäure. Sm. 118° (B. 35, 3335 C. 1902 [2] 1193).
- C<sub>14</sub>H<sub>9</sub>N<sub>2</sub>J** 1) 4-Jod-1-Phenyl-2,3-Benzdiazin. Sm. 188—189° u. Zers. (B. 38, 3922 C. 1906 [1] 247).
- C<sub>14</sub>H<sub>9</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) 2,5-Di[3-Chlorphenyl]-1,3,4-Triazol. Sm. 220° (J. pr. [2] 69, 384 C. 1904 [2] 536).
- C<sub>14</sub>H<sub>9</sub>N<sub>3</sub>Br<sub>2</sub>** 1) 2,5-Di[4-Bromphenyl]-1,3,4-Triazol. Sm. 284° (J. pr. [2] 74, 2 C. 1906 [2] 790).
- C<sub>14</sub>H<sub>9</sub>N<sub>3</sub>Br<sub>6</sub>** 1) 2,4,6,2',4',6'-Hexabrom-3,3'-Dimethyldiazoamidobenzol (B. 30, 2355). — IV, 1568.
- C<sub>14</sub>H<sub>9</sub>N<sub>3</sub>S** 1) Thiocarbonyl- $\beta$ -o-Amidophenylbenzimidazol. Sm. 291° (B. 32, 1489). — \*IV, 849.
- C<sub>14</sub>H<sub>9</sub>N<sub>3</sub>S<sub>2</sub>** 1) Diphnylamin - 4,4' - Dithiocarbonimid. Sm. 170° (A. 303, 366). — \*IV, 821.
- C<sub>14</sub>H<sub>9</sub>N<sub>4</sub>Cl** 1) Chlorfluoravin. Sm. oberhalb 360° (B. 29, 786; A. 319, 270 C. 1902 [1] 359). — IV, 1293.
- C<sub>14</sub>H<sub>9</sub>N<sub>4</sub>Br<sub>3</sub>** 1) p-Tribrom-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Zers. bei 224° (Soc. 55, 246). — IV, 1233.
- C<sub>14</sub>H<sub>9</sub>N<sub>5</sub>S<sub>3</sub>** 1) 5-[2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazolyl-5]-äther d. 5-Merkapto-1,2,3-Benztriazol. Sm. 186—187° (J. pr. [2] 60, 193). — \*IV, 445.
- C<sub>14</sub>H<sub>9</sub>ClS<sub>2</sub>** 1) 9-Anthracendithiochlorid. Sm. 212° (B. 34, 2767).
- C<sub>14</sub>H<sub>9</sub>Cl<sub>3</sub>Br<sub>2</sub>** 1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[p-Bromphenyl]äthan. Sm. 139—141° (B. 7, 1180). — II, 231.
- C<sub>14</sub>H<sub>10</sub>ON<sub>2</sub>** C 75,7 — H 4,5 — O 7,2 — N 12,6 — M. G. 222.
- 1) 4,4'-Azoxy- $\alpha\beta$ -Diphenyläthen (p-Azoxystilben) (C. 1903 [1] 1414).
  - 2) Benzoylphenyl-R-Azomethylen (Ketazodiphenylketon). Sm. 63° u. Zers. (B. 22, 2162; J. pr. [2] 44, 182). — III, 287.
  - 3) 3,5-Diphenyl-1,2,4-Oxdiazol. Sm. 108° (110°; 102,5—104°); Sd. 290° (B. 17, 1694; 18, 1081; 28, 2231; 31, 2111; 33, 1786; A. 252, 48; 296, 287; C. 1906 [1] 234; 1906 [2] 233; J. pr. [2] 73, 254 C. 1906 [1] 1243; B. 39, 1487 C. 1906 [1] 1742; B. 39, 2526 C. 1906 [2] 869; B. 42, 814 C. 1909 [1] 1152). — II, 1207; \*II, 755.
  - 4) 3,4-Diphenyl-1,2,5-Oxdiazol (Diphenylfurazan). Sm. 94° (B. 21, 810; 22, 715; 27, 214; A. 252, 52; 264, 180). — III, 292.
  - 5) 2,5-Diphenyl-1,3,4-Oxdiazol + H<sub>2</sub>O. Sm. 80° u. Zers. (140° wasserfrei); Sd. oberhalb 360°. + AgNO<sub>3</sub> (B. 27, 1006; 32, 798; A. 297, 263; Soc. 77, 1189; C. 1899 [1] 1240; J. pr. [2] 69, 157 C. 1904 [1] 1274; J. pr. [2] 70, 414 C. 1905 [1] 83). — II, 1215; IV, 1023; \*II, 762.
  - 6) 3 [oder 5]-Phenyl-5 [oder 3]-[4-Pyridyl]isoxazol. Sm. 165° (M. 22, 625). — \*IV, 137.
  - 7) 3-Nitroso-2-Phenylindol. Sm. 259° (C. 1907 [1] 732).
  - 8) 1-Nitroso-3-Phenylindol. Sm. 60—61° u. Zers. (A. 253, 37). — IV, 414.
  - 9) 3-Phenylimido-2-Keto-2,3-Dihydroindol (Phenylimesatin). Sm. 200° (J. 1855, 541; A. 144, 51; B. 40, 4979 C. 1908 [1] 457). — II, 1608.
  - 10) 2-Phenylamido-3-Ketopseudoindol ( $\alpha$ -Isatinanilid). Sm. 126° (C. 1900 [2] 929). — \*II, 943.
  - 11) 3-Keto-1-Benzyliden-2,3-Dihydro-2,5-Isobenzazol (Benzalmerimidin). Sm. 234—236° (B. 37, 2145 C. 1904 [2] 235).
  - 12) 3-Oximido-2-Phenylpseudoindol. Sm. 258° u. Zers. (250°). HCl, HNO<sub>3</sub>, Na (B. 15, 2487; 18, 167; 21, 1073; G. 29 [2] 51; 30 [2] 268; C. 1908 [2] 605). — IV, 413; \*IV, 250.
  - 13) 1-Benzoylbenzimidazol. Sm. 91—92° (A. 273, 360; B. 37, 3116 C. 1904 [2] 1316). — IV, 869.
  - 14) 4-Oxy-2-Phenyl-1,3-Benzdiazin. Sm. 235—236° (B. 28, 289; B. 36, 2385 C. 1903 [2] 569). — IV, 1023; \*IV, 684.
  - 15) 3-Oxy-2-Phenyl-1,4-Benzdiazin. Sm. 247° (B. 34, 4009 C. 1902 [1] 205). — \*IV, 684.
  - 16) 2-Keto-4-Phenyl-1,2-Dihydro-1,3-Benzdiazin. Sm. 250—251° (B. 29, 1310). — IV, 1023.
  - 17) 4-Keto-2-Phenyl-1,4-Dihydro-1,3-Benzdiazin. Sm. 233—234° (241°). (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 36, 157; J. pr. [2] 67, 457 C. 1903 [1] 1421; J. pr. [2] 74, 154 C. 1906 [2] 1124). — II, 1254.

- C<sub>14</sub>H<sub>10</sub>ON<sub>2</sub>** 18) 4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 139°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 22, 2690; 24, 3055; C. 1899 [1] 847). — IV, 874; \*IV, 584.
- 19) 2-Keto-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 167° (B. 39, 1320 C. 1906 [1] 1738; J. pr. [2] 76, 97 C. 1907 [2] 1089).
- 20) 1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 106—107° (B. 21, 1611; A. 239, 86; A. 347, 124 C. 1906 [2] 776). — IV, 696.
- 21) 1-Keto-4-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 236° (J. pr. [2] 51, 151). — IV, 1023.
- 22) α-Pyrophtalin. Sm. 185°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, TiCl<sub>3</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 36, 1663 C. 1903 [2] 40). — \*IV, 244.
- 23) β-Pyrophtalin. Sm. 255°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, TiCl<sub>3</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 36, 1664 C. 1903 [2] 41). — \*IV, 244.
- 24) Laktim d. peri-Naphtimidazol-2-Propionsäure (Succinoperinon). Sm. 158° (A. 365, 132 C. 1909 [1] 1415).
- 25) Aldehyd d. 2-Phenylindazol-2<sup>3</sup>-Carbonsäure. Sm. 94,5—95° (C. r. 137, 983 C. 1904 [1] 176; Bl. [3] 31, 872 C. 1904 [2] 661).
- 26) Nitril d. α-[4-Oxyphenyl]imido-α-Phenylelessigsäure. Sm. 146° (D.R.P. 121974; B. 35, 3348 C. 1902 [2] 1194).
- 27) Nitril d. Phenylbenzoylamidoameisensäure. Sm. 118° (124°) (B. 28, 1306; G. 28 [2] 69). — \*II, 737.
- 28) Nitril d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 216° (B. 29, 631). — \*II, 786.
- 29) Nitril d. 3-Benzoylamidobenzol-1-Carbonsäure. Sm. 141,5—142° (C. 1904 [2] 101).
- 30) Nitril d. α-Oximido-αα-Diphenylmethan-4-Carbonsäure. Sm. 176° (B. 20, 2957). — II, 1705.
- 31) Amid d. 9-Imidofluoren-4-Carbonsäure. Sm. 220—221° (A. 252, 30). — II, 1719.
- 32) Phenylamid d. 4-Cyanbenzol-1-Carbonsäure. Sm. 178—179° (J. pr. [2] 80, 106 C. 1909 [2] 1328).
- 33) Verbindung (aus d. Verb. C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>Cl<sub>2</sub> aus Benzildioxim). Sm. 135 bis 136°. + AgNO<sub>3</sub> (A. 252, 61). — III, 292.
- C<sub>14</sub>H<sub>10</sub>ON<sub>4</sub>** C 67,2 — H 4,0 — O 6,4 — N 22,4 — M. G. 250.
- 1) 4-Benzoylamidodiazobenzolcyanid (Soc. 95, 1324 C. 1909 [2] 977).
- 2) Pyrazol (aus 1,5-Dihydrazido-9,10-Anthrachinon) (D.R.P. 171293 C. 1906 [2] 387).
- 3) Aldazin d. Azoxybenzol-3,3'-Dicarbonsäurealdehyd (B. 36, 3472 C. 1903 [2] 1269).
- 4) Nitril d. Phenylimidophenylnitrosamidoessigsäure. Sm. 117° bis 118° u. Zers. (J. pr. [2] 74, 90 C. 1906 [2] 1251).
- C<sub>14</sub>H<sub>10</sub>OCl<sub>2</sub>** 1) 4-Dichlormethyldiphenylketon. Sm. 94—95° (A. 189, 91). — III, 213.
- 2) ββ-Dichlor-α-Keto-αβ-Diphenyläthan. Sm. 61°; Sd. 229—232°<sub>45</sub> (A. 119, 178; 149, 374; J. 1880, 614; B. 17, 1162; J. r. 21, 428). — III, 218.
- 3) α-Keto-αβ-Di[3-Chlorphenyl]äthan. Sm. 134°. — III, 218.
- 4) Aldehyd d. Di[4-Chlorphenyl]essigsäure. Sm. 149° (R. 21, 36 C. 1902 [1] 1014; C. 1903 [2] 1052). — \*III, 48.
- 5) Chlorid d. Diphenylchloroessigsäure. Sm. 50°; Sd. 179—180°<sub>14</sub> (B. 22, 1539; B. 38, 1735 C. 1905 [1] 1646; A. 356, 72 C. 1907 [2] 1700). — II, 1464.
- C<sub>14</sub>H<sub>10</sub>OBr<sub>2</sub>** 1) α-Phenyl-β-[3,5-Dibrom-4-Oxyphenyl]äthen. Sm. 150° (A. 349, 117 C. 1906 [2] 1257).
- 2) 4-Dibrommethyldiphenylketon. Sm. 86,8° (Bl. [3] 15, 949). — \*III, 161.
- 3) ββ-Dibrom-α-Keto-αβ-Diphenyläthan. Sm. 112° (A. 126, 221; 155, 70; J. pr. [2] 44, 547). — III, 218.
- 4) Bromid d. Diphenylbromessigsäure. Sm. 65—66° (A. 356, 121 C. 1907 [2] 1702).
- C<sub>14</sub>H<sub>10</sub>OBr<sub>4</sub>** 1) Di[β-Dibrom-3-Methylphenyl]äther. Sd. 260—270°<sub>35</sub> (Am. 36, 550 C. 1907 [1] 545).
- 2) 3,5-Dibrom-4-Keto-1-[αβ-Dibrom-β-Phenyläthyl]-1,4-Dihydrobenzol. Sm. 201° u. Zers. (A. 349, 113 C. 1906 [2] 1257).

- $C_{14}H_{10}OJ_2$  1) 9-Oxyanthracendijodid (B. 37, 3343 C. 1904 [2] 1057).  
 $C_{14}H_{10}O_2N_2$  C 70,6 — H 4,2 — O 13,4 — N 11,8 — M. G. 238.
- 1)  $\alpha\beta$ -Di[4-Nitrosophenyl]äthen (p-Dinitrosostilben). Sm. 263° (B. 26, 2232). — II, 248.
  - 2) 2-Amido-9[oder 10]-Imido-1-Oxy-10[oder 9]-Keto-9,10-Dihydroanthracen. Sm. 280°. K + CH<sub>3</sub>O (J. pr. [2] 18, 133; A. 183, 209; B. 39, 1203, 1205 C. 1906 [1] 1747). — III, 414.
  - 3) 1,4-Diamido-9,10-Anthrachinon. Sm. 268° (C. 1901 [2] 1219; D.R.P. 135561 C. 1902 [2] 1232; D.R.P. 156803 C. 1905 [1] 314; B. 39, 643 C. 1906 [1] 1025). — \*III, 297.
  - 4) 1,5-Diamido-9,10-Anthrachinon. Sm. 319° (B. 16, 366; C. 1901 [2] 640; D.R.P. 147851 C. 1904 [1] 132; C. 1904 [1] 461; B. 37, 4180 C. 1904 [2] 1741; D.R.P. 165728 C. 1906 [1] 516; B. 39, 637 C. 1906 [1] 1024; D.R.P. 181722 C. 1907 [1] 1652). — III, 414; \*III, 297.
  - 5) 1,8-Diamido-9,10-Anthrachinon. Sm. 262°. 2HCl, H<sub>2</sub>SO<sub>4</sub> (B. 39, 639 C. 1906 [1] 1024; D.R.P. 181722 C. 1907 [1] 1652).
  - 6) 2,3-Diamido-9,10-Anthrachinon. Sm. noch nicht bei 320°. 2H<sub>2</sub>SO<sub>4</sub> (B. 37, 4531 C. 1905 [1] 368).
  - 7) 2,6-Diamido-9,10-Anthrachinon. Sm. 310–320° (D.R.P. 135561 C. 1902 [2] 1232; D.R.P. 135634).
  - 8) 2,7-Diamido-9,10-Anthrachinon. Sm. oberhalb 330°. HCl, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 9, 266; B. 39, 640 C. 1906 [1] 1025). — III, 414.
  - 9) 2,9-Diamido-9,10-Anthrachinon (D.R.P. 148109 C. 1904 [1] 230).
  - 10) 2,7-Diamido-9,10-Phenanthrenchinon. Sm. noch nicht bei 310° (B. 18, 1944; C. 1904 [1] 462). — III, 442.
  - 11) 4,6-Diamido-9,10-Phenanthrenchinon. Sm. 235° (B. 36, 3750 C. 1904 [1] 38).
  - 12) Monoxim d. 3-Amido-9,10-Phenanthrenchinon. Sm. 247° (B. 41, 3694 C. 1908 [2] 1870).
  - 13) 9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 202° u. Zers. Na, Na<sub>2</sub> (B. 22, 1991; B. 40, 2455 C. 1907 [2] 244). — III, 445.
  - 14) Oxalyl-4,4'-Diamidobiphenyl (J. 1860, 356). — IV, 965.
  - 15) Diphenyldiisocyanat. Sm. 175° (A. Spl. 1, 57; B. 4, 246; Soc. 49, 254). — II, 375.
  - 16) Azodibenzoyl. Sm. 118° u. Zers. (B. 33, 1770; J. pr. [2] 70, 272 C. 1904 [2] 1543; J. pr. [2] 70, 289 C. 1904 [2] 1566). — \*II, 808.
  - 17) 3-Amidobenzoid. Sm. bei 225° (B. 16, 1321). — II, 1257.
  - 18) polym. 3-Amidobenzoid = (C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>)<sub>x</sub> (B. 16, 1321, 1322). — II, 1257.
  - 19) 5-Keto-3-Furanyl-4-Benzyliden-4,5-Dihydropyrazol. Sm. noch nicht bei 300° (C. 1908 [2] 1363).
  - 20) 5-Keto-4-[2-Fural]-2-Phenyl-4,5-Dihydropyrazol. Zers. bei 241° (A. 337, 285 C. 1905 [1] 378).
  - 21) 5-Phenyl-3-[2-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 128° (B. 22, 2780, 3147). — II, 1503.
  - 22) 5-Phenyl-3-[3-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 163° (B. 18, 2475; 24, 830). — II, 1519.
  - 23) 5-Phenyl-3-[4-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 183° (B. 24, 836). — II, 1531.
  - 24) 3,5-Diphenyl-4,5-Dihydro-1,2,4-Oxdiazol-4,5-Oxyd. Sm. 130–131° u. Zers. (134°) (B. 39, 1486 C. 1906 [1] 1742; B. 40, 1673 C. 1907 [1] 1678).
  - 25) 3,4-Diphenyl-2,3-Dihydro-1,2,5-Oxdiazol-2,3-Oxyd. Sm. 94° (A. 358, 54 C. 1908 [1] 650).
  - 26) 5-Keto-3,4-Diphenyl-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 166–167° (B. 19, 1670; 22, 2402). — II, 1204.
  - 27) 2-Keto-3,5-Diphenyl-2,3-Dihydro-1,3,4-Oxdiazol (Benzoylphenylcarbin). Sm. 113–114°; Sd. oberhalb 300° (B. 21, 2461; 33, 243). — IV, 672.
  - 28) 6-Oxy-2-Furanyl-4-Phenyl-1,3-Diazin. Sm. 256° (B. 25, 1419). — IV, 1023.
  - 29) 4,5-Diphenyl-1,2,3,6-Dioxdiazin (Benzildioximsuperoxyd). Sm. 114 bis 115° (B. 19, 184, 1146; 21, 804; 22, 1593; 27, 2195; 32, 1658; C. 1906 [1] 234, 1701; B. 39, 1487 C. 1906 [1] 1742; C. 1906 [2] 1003; J. pr. [2] 73, 495 C. 1906 [2] 328; G. 39 [1] 325 C. 1909 [1] 1474). — III, 294; \*III, 223.



- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>** 30) 3-Nitro-2-Phenylindol. Sm. 238—239° (*G.* 30 [2] 275). — \*IV, 251.
- 31) 3-Nitroso-1-Oxy-2-Phenylindol. Sm. 240° (*C.* 1904 [1] 1356).
- 32) 3-[4-Oxyphenyl]imido-2-Keto-2,3-Dihydroindol (4-Oxyphenylimesatin). Sm. oberhalb 300° (*J. pr.* [2] 73, 469 *C.* 1906 [2] 504).
- 33) 3-Oximido-2-Phenyl-1,1-Dihydroindol-1-Oxyd. Sm. 240°. Na (*C.* 1907 [1] 732).
- 34) 3-Oxy-2-[2-Oxyphenyl]-1,4-Benzdiazin. Sm. 296° (*B.* 34, 1110, 2296). — \*IV, 685.
- 35) 2,4-Diketo-1-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Zers. oberhalb 360° (*J. pr.* [2] 49, 319).
- 36) 2,4-Diketo-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 272° (275—277°) (*B.* 27, 44, 977, 1868; 30, 1687; *J. pr.* [2] 51, 266; *Am.* 21, 145; *B.* 38, 131 *C.* 1905 [1] 459; *B.* 38, 1213 *C.* 1905 [1] 1262; *J. pr.* [2] 79, 539 *C.* 1909 [2] 428). — IV, 874, 897; \*IV, 599.
- 37) 1,4-Diketo-2-Phenyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin. Sm. 210°. Ag (*J. pr.* [2] 35, 281; *G.* 16, 204; 17, 284; *C.* 1905 [2] 1249). — IV, 710.
- 38) 1-Keto-3-[2-Amidophenyl]-2,4-Benzoxazin. Sm. 162°. HCl (*A.* 367, 129 *C.* 1909 [2] 700).
- 39) Oxim d. Isopyrophtalon. Sm. 240° (*B.* 36, 1662 *C.* 1903 [2] 40). — \*IV, 244.
- 40) 2-Phenylindazol-2<sup>2</sup>-Carbonsäure? Sm. 203—204° (204—205°). Ag (*C. r.* 136, 372 *C.* 1903 [1] 635; *C. r.* 137, 983 *C.* 1904 [1] 176; *C. r.* 138, 1277 *C.* 1904 [2] 121; *Bl.* [3] 31, 873 *C.* 1904 [2] 661). — \*IV, 581.
- 41) 2-Phenylindazol-2<sup>3</sup>-Carbonsäure. Sm. 211°. Na (*B.* 25, 3595). — IV, 867.
- 42) 2-Phenylbenzimidazol-2<sup>2</sup>-Carbonsäure. Sm. 278° u. Zers. (277°) (*B.* 23, 1044; *G.* 24 [1] 145; *A.* 327, 41 *C.* 1903 [1] 1336; *A.* 347, 128 *C.* 1906 [2] 777). — IV, 562.
- 43) 2-Phenylbenzimidazol-2<sup>4</sup>-Carbonsäure + 1½ H<sub>2</sub>O. Sm. oberhalb 300°. K + 7 H<sub>2</sub>O, Ca + 5 H<sub>2</sub>O, Ba + 6 H<sub>2</sub>O, Ag (*B.* 11, 293; *A.* 205, 118; 210, 337). — IV, 1020.
- 44) peri-Naphtimidazol-2-Akrylsäure. Zers. bei 210° (*A.* 365, 132 *C.* 1909 [1] 1415).
- 45) 2-Methyl-1,4-Naphtisodiazin-4-Carbonsäure. Sm. 309—310° (*B.* 33, 2934). — \*IV, 682.
- 46) 3-Methyl-4,7-Naphtisodiazin-1-Carbonsäure. Sm. 205°. Na, Cu, 2 HCl, (2 HCl, PtCl<sub>4</sub>), 2 H<sub>2</sub>SO<sub>4</sub> (*B.* 33, 2926). — \*IV, 682.
- 47) Inn. Anhydrid d. 2-[2-Amidobenzoyl]amidobenzol-1-Carbonsäure. Sm. 162°. HCl (*B.* 40, 1619 *C.* 1907 [1] 1630).
- 48) Anhydro-3-[α-Oximido-4-Methylbenzyl]pyridin-2-Carbonsäure. Sm. 217° (*M.* 18, 456). — \*IV, 119.
- 49) Methylphenazoncarbonsäure. Sm. noch nicht bei 290° (*B.* 26, 2242). — IV, 1466.
- 50) Bilaktam d. 2-Amidobenzol-1-Carbonsäure (Dianthranilid). Na<sub>2</sub>, Na<sub>2</sub> + 2 C<sub>2</sub>H<sub>6</sub>O (*A.* 367, 153 *C.* 1909 [2] 702).
- 51) Inn. Anhydrid d. α-Phenylimido-β-[2-Pyrroyl]propionsäure. Sm. 218° (*B.* 23, 2157). — IV, 89.
- 52) Aldehyd d. Azobenzol-3,3'-Dicarbonsäure. Sm. 150° (*C. r.* 138, 289 *C.* 1904 [1] 722).
- 53) Aldehyd d. Azobenzol-4,4'-Dicarbonsäure. Sm. 237—238° (239°) (*C. r.* 134, 1360 *C.* 1902 [2] 195; *B.* 36, 2306 *C.* 1903 [2] 428; *Bl.* [3] 31, 453 *C.* 1904 [1] 1498; *C.* 1905 [2] 1091). — \*IV, 1068.
- 54) Nitril d. β-Nitrodiphenylmethan-2-Carbonsäure. Sm. 110° (*B.* 25, 3022). — II, 1466.
- 55) Amid d. 9-Oximidofluoren-4-Carbonsäure. Sm. 272° (*A.* 252, 29; *M.* 23, 891 Anm.). — II, 1719.
- 56) Phenylimid d. 3-Amidobenzol-1,2-Dicarbonsäure. Sm. 185—187° (186—188°) (*B.* 37, 2611 *C.* 1904 [2] 522; *C.* 1909 [1] 1758).
- 57) Phenylimid d. 4-Amidobenzol-1,2-Dicarbonsäure. Sm. 205,5° (204°) (*C.* 1906 [2] 118; 1908 [2] 1026).
- 58) 2-Amidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 184—186° (*A.* 327, 49 *C.* 1903 [1] 1336). — \*IV, 367.

- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>** 59) **3-Amidophenylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 190° (178°) (*B.* 10, 1165; *A.* 327, 42 *C.* 1903 [1] 1336). — *IV*, 578; \**IV*, 376.
- 60) **4-Amidophenylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 250° (182°?) (*B.* 10, 1164; *A.* 327, 43 *C.* 1903 [1] 1336; *A.* 347, 54 *C.* 1906 [2] 508). — *IV*, 595; \**IV*, 389.
- 61) **Phenylamidoimid d. Benzol-1,2-Dicarbonsäure.** Sm. 181—182° (178 bis 179°) (*G.* 16, 203; *B.* 19, 1204; *B.* 19, 1617; *A.* 232, 233; *J. pr.* [2] 35, 268; *B.* 35, 2300 *C.* 1902 [2] 375; *C.* 1905 [2] 1250). — *IV*, 710.
- 62) **Verbindung (aus p-Hydroxylaminbenzaldehyd).** Sm. 205—206° (*C.* 1903 [1] 147).
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>N<sub>4</sub>** C 63,2 — H 3,8 — O 12,0 — N 21,0 — M. G. 266.
- 1) **Diureid d. Acenaphtenchinon (*C.* 1899 [2] 339).** — \**III*, 290.
- 2)  **$\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[p-Nitrobenzyliden]hydrazin.** Sm. 163° (*G.* 37 [1] 625 *C.* 1907 [2] 803).
- 3) **2-Phenylhydrazon-5-Keto-4-Phenyl-4,5-Dihydro-1,3,4-Oxdiazol.** Sm. 198—200° (*B.* 23, 2832). — *IV*, 676.
- 4) **3-[4-Nitrobenzyliden]amidoindazol.** Sm. 232—234° (*A.* 305, 350). — \**IV*, 796.
- 5) **6-[4-Nitrobenzyliden]amidoindazol.** Sm. 215—216° (*B.* 37, 2580 *C.* 1904 [2] 659).
- 6) **7-[4-Nitrobenzyliden]amidoindazol.** Sm. 227—229° (*B.* 37, 2577 *C.* 1904 [2] 658).
- 7) **2,3-Di[Formylamido]-5,10-Naphtdiazin (*B.* 23, 842).** — *IV*, 1281.
- 8) **2,4-Lakton d. 2-Oxy-1,2-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure.** Sm. 161° (*B.* 27, 2926). — *IV*, 1240.
- 9) **Benzoat d. 1-Oxy-5-Phenyl-1,2,3,4-Tetrazol.** Sm. 127° u. Zers. (*Soc* 95, 188 *C.* 1909 [1] 1316).
- 10) **Verbindung (aus d. Nitril d. 4-Nitrophenylessigsäure).** Sm. 201—202° (*B.* 16, 341). — *II*, 1319.
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>Cl<sub>2</sub>** 1)  **$\beta$ -Oxy- $\alpha$ -Keto- $\alpha$  $\beta$ -Di[3-Chlorphenyl]äthan (m-Dichlorbenzoin).** Sm. 65—67° — *III*, 223.
- 2)  **$\beta$ -Oxy- $\alpha$ -Keto- $\alpha$  $\beta$ -Di[4-Chlorphenyl]äthan (p-Dichlorbenzoin).** Sm. 88° (*B.* 40, 1519 *C.* 1907 [1] 1697).
- 3) **2,6-Dichlor-4-Methylphenylester d. Benzolcarbonsäure.** Sm. 89° (91°) (*G.* 29 [2] 39; *A.* 328, 278 *C.* 1903 [2] 1245). — \**II*, 718.
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>Cl<sub>4</sub>** 1)  **$\alpha$  $\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan.** Sm. 160° (*A.* 325, 50 *C.* 1903 [1] 462).
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>Br<sub>2</sub>** 1)  **$\beta$ -Oxy- $\alpha$ -Keto- $\alpha$  $\beta$ -Di[3-Bromphenyl]äthan.** Sm. 123—124° (*C.* 1908 [2] 1690).
- 2)  **$\alpha$ -Keto- $\alpha$ -[p-Dibrom-4-Oxyphenyl]- $\beta$ -Phenyläthan + H<sub>2</sub>O.** Sm. 138 bis 142° (wasserfrei). NH<sub>4</sub> (*M.* 28, 292 *C.* 1907 [1] 1749).
- 3) **p-Dibrom-2-Oxy-4-Methyldiphenylketon.** Sm. 132,5° (*B.* 35, 2813 *C.* 1902 [2] 1117).
- 4) **Methyläther d. 2,2'-Dibrom-4-Oxydiphenylketon.** Sm. 121° (*B.* 38, 1497 *C.* 1905 [1] 1406).
- 5) **p-Dibrom-4-Methylphenylester d. Benzolcarbonsäure.** Sm. 91 bis 91,5° (*B.* 17, 2532). — *II*, 1147.
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>Br<sub>4</sub>** 1)  **$\alpha$  $\alpha$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan.** Sm. 140—141° (*A.* 363, 256 *C.* 1909 [1] 174).
- 2) **Dibromid d. 5,5'-Dibrom-4,4'-Dioxy-3,3'-Dimethylbiphenyl.** Sm. 96° u. Zers. (*Soc.* 91, 1311 *C.* 1907 [2] 1071).
- 3) **Di[p-Dibromphenyläther] d.  $\alpha$  $\beta$ -Dioxyäthan.** Sm. unter 100° (*Z.* 1869, 447). — *II*, 655.
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>J<sub>2</sub>** 1) **Aldehyd d. Diphenyljodoniumjodid-4,4'-Dicarbonsäure.** Sm. 138° + J<sub>2</sub> (*B.* 38, 3447 *C.* 1905 [2] 1585).
- 2) **p-Dijod-4-Methylphenylester d. Benzolcarbonsäure.** Sm. 129,5 bis 130° (*B.* 17, 2534). — *II*, 1147.
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>S** 1) **Dibenzoylsulfid (Anhydrid d. Benzolthiolcarbonsäure).** Sm. 48° (*Z.* 1868, 357; *B.* 40, 2862 *C.* 1907 [2] 593). — *II*, 1291.
- 2) **Anthracen-2-Sulfinsäure.** Na, Ag (*B.* 28, 2262). — \**II*, 121.
- C<sub>14</sub>H<sub>10</sub>O<sub>2</sub>S<sub>2</sub>** 1) **Dibenzoyldisulfid.** Sm. 128° (129—130°; 133°) (*Z.* 1868, 358; *A.* 115, 27; 118, 305; *J. pr.* [2] 4, 59; *B.* 29, 2150; *B.* 36, 1010 *C.* 1903 [1] 1077; *B.* 36, 2272 *C.* 1903 [2] 563; *B.* 40, 2862 *C.* 1907 [2] 593; *B.* 40, 3857 *C.* 1907 [2] 1681). — *II*, 1291; \**II*, 796.

- $C_{14}H_{10}O_2S_2$  2) Diphenylester d. Dithioloxalsäure. Sm. 119—120° (*C.* 1909 [2] 590).
- $C_{14}H_{10}O_2S_4$  1) Disulfid d. 2-Oxybenzol-1-Dithiocarbonsäure. Sm. 122,5° (D. R. P. 214888 *C.* 1909 [2] 1780).
- $C_{14}H_{10}O_3N_2$  C 66,1 — H 3,9 — O 18,9 — N 11,0 — M. G. 254.
- 1) 3-Nitro-9[oder 10]-Amido-10[oder 9]-Oxyphenanthren. HCl (*B.* 35, 3131 *C.* 1902 [2] 1213).
- 2) 2,4-Diamido-1-Oxy-9,10-Anthrachinon. Sm. 266° (D. R. P. 183332 *C.* 1907 [2] 766).
- 3) 4,8-Diamido-1-Oxy-9,10-Anthrachinon (*C.* 1899 [2] 924).
- 4) 1-Amido-5-Hydroxylamido-9,10-Anthrachinon (D. R. P. 147851 *C.* 1904 [1] 132).
- 5) 4-Hydrazido-1-Oxy-9,10-Anthrachinon (D. R. P. 163447 *C.* 1905 [2] 1304).
- 6) cis- $\gamma$ -Keto- $\alpha$ -[2-Nitrophenyl]- $\gamma$ -[2-Pyridyl]propen. Sm. 153° (*B.* 35, 4064 *C.* 1903 [1] 91). — \*IV, 136.
- 7) trans- $\gamma$ -Keto- $\alpha$ -[2-Nitrophenyl]- $\gamma$ -[2-Pyridyl]propen. Sm. 141° (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 35, 4065 *C.* 1903 [1] 91). — \*IV, 136.
- 8) 3-Nitro-9-Acetylcarbazol. Sm. 237—238° (*G.* 22 [2] 443). — IV, 392.
- 9) 2-Acetylamido-3-Oxyphenoxazin. Sm. 275° (*B.* 39, 135 *C.* 1906 [1] 757).
- 10) isom. 2-Acetylamido-3-Oxyphenoxazin. Sm. 285° (*B.* 39, 135 *C.* 1906 [1] 757).
- 11) 4-Acetylamido-3-Keto-1,6-Phenoxazin? Sm. 287° (285°) (*B.* 28, 297; *A.* 226, 64). — IV, 1005.
- 12) 4,5,7-Trioxo-2-Phenyl-1,3-Benzdiazin (PINNER, Imidoäther 297). — IV, 1024.
- 13) 3-Oxy-2-Phenylindazol-2'-Carbonsäure. Sm. 228° (*C. r.* 143, 54 *C.* 1906 [2] 611).
- 14) Säure (aus s-Diphenylhydrazin-3,3'-Dicarbonsäure). Ba + 7H<sub>2</sub>O, HCl (*B.* 23, 917). — IV, 1508.
- 15) Monoaldehyd d. Azobenzol-2,2'-Dicarbonsäure (*C. r.* 140, 664 *C.* 1905 [1] 1099).
- 16) Monoaldehyd d. Azobenzol-3,3'-Dicarbonsäure. Sm. 163°. Na (*B.* 36, 3473 *C.* 1903 [2] 1269; *C.* 1905 [2] 1091).
- 17) Monoaldehyd d. Azobenzol-4,4'-Dicarbonsäure. Sm. noch nicht bei 300° (*B.* 36, 3474 *C.* 1903 [2] 1270; *B.* 38, 2520 *C.* 1905 [2] 619; *C.* 1905 [2] 1091).
- 18) Aldehyd d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 118,5—119° (*B.* 39, 4265 *C.* 1907 [1] 558; *B.* 42, 1706 *C.* 1909 [2] 209).
- 19) Aldehyd d. Azoxybenzol-3,3'-Dicarbonsäure. Sm. 129° (*Am.* 28, 479 *C.* 1903 [1] 328; *B.* 36, 3470 *C.* 1903 [2] 1269; *B.* 36, 3801 *C.* 1904 [1] 25). — \*IV, 1004.
- 20) Aldehyd d. Azoxybenzol-4,4'-Dicarbonsäure. Sm. 194° (180°; 194 bis 195,5°) (*B.* 29, 30, 37; 30, 1598; *C.* 1900 [2] 612; *B.* 35, 2438 *C.* 1902 [2] 446; *Am.* 28, 34 *C.* 1902 [2] 701; *C.* 1903 [1] 147; *Am.* 28, 475 *C.* 1903 [1] 327; *B.* 36, 3474 *C.* 1903 [2] 1270). — IV, 1345; \*IV, 1003.
- 21) Aldehyd d. ?-Oxyazobenzol-3,3'-Dicarbonsäure. Sm. 165° (*B.* 38, 2519 *C.* 1905 [2] 619; *C.* 1905 [2] 1090).
- 22) Aldehyd d. 4-Oxyazobenzol-3,4'-Dicarbonsäure. Sm. 180° (*J. pr.* [2] 56, 123). — IV, 1476.
- 23) Methylester d. 5-Keto-5,10-Dihydro- $\alpha$ -Chinochinolin-3-Carbonsäure. Sm. 176° (*B.* 28, 123). — IV, 1020.
- 24) Verbindung (aus d. Äthylester d.  $\alpha$ -Nitro- $\beta$ -[4-Nitrophenyl]akrylsäure). Sm. 188° (*B.* 16, 850). — II, 1415.
- $C_{14}H_{10}O_3N_4$  C 59,6 — H 3,5 — O 17,0 — N 19,9 — M. G. 282.
- 1) 9-Semicarbazol-4-Nitrofluoren. Sm. noch nicht bei 350° (*B.* 38, 3743 *C.* 1904 [1] 41).
- 2) 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]-1,2,4-Triazol. Sm. 235°. Ag + H<sub>2</sub>O (*Soc.* 73, 372). — IV, 1157.
- 3) 3-Oxy-5-[3-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 275—278° u. Zers. Ag +  $\frac{1}{2}$ H<sub>2</sub>O (*Soc.* 71, 209). — IV, 1157.
- 4) 3-Oxy-5-[4-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 256—260° u. Zers. Ag +  $\frac{1}{2}$ H<sub>2</sub>O (*Soc.* 71, 205). — IV, 1158.



- C<sub>14</sub>H<sub>10</sub>O<sub>3</sub>N<sub>4</sub>** 5) *p*-Nitro-2-Phenylhydrazon-2-Oxypseudoindol (Phenylhydrazon d. Nitroisatin). Sm. 284° (B. 28, 546). — IV, 695.
- 6) Nitril d.  $\alpha$ -[3-Nitrophenyl]nitrosamido- $\alpha$ -Phenylelessigsäure. Sm. 90–91° (B. 35, 3338 C. 1902 [2] 1193).
- 7) Verbindung (aus 1,8-Diamidonaphtalin u. Alloxan) (A. 365, 155 C. 1909 [1] 1822).
- C<sub>14</sub>H<sub>10</sub>O<sub>3</sub>Cl<sub>2</sub>** 1)  $\alpha$ -Oxy- $\alpha$ -Di[3-Chlorphenyl]essigsäure. Sm. 114–115°. — II, 1696.
- 2)  $\alpha$ -Oxy- $\alpha$ -Di[4-Chlorphenyl]essigsäure. Sm. 101,75°. Ag + C<sub>6</sub>H<sub>6</sub> (R. 21, 21 C. 1902 [1] 1013).
- 3) Benzoat d. 4,5-Dichlor-1,2-Dioxybenzolmonomethyläther. Sm. 72 bis 74° (G. 28 [1] 230). — \*II, 719.
- C<sub>14</sub>H<sub>10</sub>O<sub>3</sub>Cl<sub>4</sub>** 1)  $\alpha$ -Methyläther d.  $\alpha$ -Oxydi[3,5-Dichlor-4-Oxyphenyl]methan. Sm. 142° u. Zers. (A. 362, 236 C. 1908 [2] 944).
- C<sub>14</sub>H<sub>10</sub>O<sub>3</sub>Br<sub>2</sub>** 1) Monomethyläther d. 5,5'-Dibrom-2,2'-Dioxydiphenylketon. Sm. 159° (B. 39, 2363 C. 1906 [2] 526).
- 2) *p*-Dibrom-4-Oxydiphenylelessigsäure (B. 41, 1666 C. 1908 [2] 170).
- 3) Acetat d. Brommethyl-*p*-Brom-1-Oxy-2-Naphtylketon. Sm. 124° (B. 30, 1468). — \*III, 142.
- 4) Benzoat d. 3,5-Dibrom-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 204° (B. 35, 463 C. 1902 [1] 646). — \*III, 251.
- C<sub>14</sub>H<sub>10</sub>O<sub>3</sub>Br<sub>4</sub>** 1)  $\alpha$ -Methyläther d.  $\alpha$ -Oxydi[3,5-Dibrom-4-Oxyphenyl]methan. Sm. 143–144° (A. 362, 241 C. 1908 [2] 945).
- C<sub>14</sub>H<sub>10</sub>O<sub>3</sub>S** 1) 3-Methyldiphenylketon-2,2'-Sulfon. Sm. 172° (B. 38, 740 C. 1905 [1] 877).
- 2) 5-Methyldiphenylketon-2,2'-Sulfon. Sm. 199° (B. 38, 741 C. 1905 [1] 877).
- 3) Anthracen-1-Sulfonsäure. Na, Zn + 2NH<sub>3</sub> + H<sub>2</sub>O (B. 37, 70 C. 1904 [1] 666; B. 37, 648 C. 1904 [1] 892; B. 38, 2863 C. 1905 [2] 1094).
- 4) Anthracen-2-Sulfonsäure. Na + 4N<sub>2</sub>O, Ba, Pb + 2H<sub>2</sub>O (B. 12, 589, 1288; 13, 47; 15, 852; 28, 2262; A. 212, 48). — II, 264; \*II, 122.
- 5) isom. Anthracensulfonsäure. Pb (B. 1, 187). — II, 265.
- 6) isom. Anthracensulfonsäure. Na, Ba + 6H<sub>2</sub>O, Pb + 4H<sub>2</sub>O (J. pr. [2] 11, 222). — II, 265.
- 7) isom. Anthracensulfonsäure. Na, Ba + 7H<sub>2</sub>O, Pb + 7H<sub>2</sub>O (J. pr. [2] 11, 223; B. 12, 592). — II, 265.
- 8) Phenanthren-2-Sulfonsäure. NH<sub>4</sub>, K, Pb + 2H<sub>2</sub>O (B. 34, 4004 C. 1902 [1] 202; A. 321, 273 C. 1902 [2] 57).
- 9) Phenanthren-3-Sulfonsäure + 1(u. 2)H<sub>2</sub>O. Sm. 175–177° wasserfrei. Salze meist bekannt (A. 167, 152; B. 11, 213; Soc. 37, 83; B. 34, 4004 C. 1902 [1] 202; A. 321, 266 C. 1902 [2] 56; A. 369, 104 C. 1909 [2] 1808). — II, 269.
- 10) Phenanthren-9-Sulfonsäure. K, Ba + 2½H<sub>2</sub>O (Soc. 73, 83; A. 321, 270 C. 1902 [2] 57). — II, 269.
- 11) isom. Phenanthrensulfonsäure. K, Ba + 3H<sub>2</sub>O, Pb + 3H<sub>2</sub>O (Am. Soc. 2, 203). — II, 269.
- 12)  $\alpha\beta$ -Diphenyläthin-*p*-Sulfonsäure (Tolansulfonsäure). Ca, Ba (B. 4, 380). — II, 272.
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>N<sub>2</sub>** C 62,2 — H 3,7 — O 23,7 — N 10,4 — M. G. 270.
- 1)  $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthen. Sm. 104–105° (105–107°) (Soc. 71, 223; B. 34, 623; C. 1901 [1] 1051; D. R. P. 126798 C. 1902 [1] 82).
- 2) isom.  $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthen. Sm. 186–187° (B. 34, 621; C. 1901 [1] 1051; D. R. P. 126798 C. 1902 [1] 82).
- 3) *cis*- $\alpha\beta$ -Di[2-Nitrophenyl]äthen. Sm. 126° (B. 21, 2072; 28, 1412). — II, 248.
- 4) *trans*- $\alpha\beta$ -Di[2-Nitrophenyl]äthen (Dinitrostilben). Sm. 196° (191 bis 192°) (B. 21, 2072; 28, 1412). — II, 248; \*II, 118.
- 5)  $\alpha\beta$ -Di[4-Nitrophenyl]äthen. Sm. 280–285° (292–294°) (B. 6, 328; 23, 1959; 26, 2232; 33, 1981; J. pr. [2] 34, 344; G. 32 [2] 356 C. 1903 [1] 629; Soc. 91, 2079 C. 1908 [1] 643). — II, 248.
- 6) isom.  $\alpha\beta$ -Di[4-Nitrophenyl]äthen. Sm. 210–216° (B. 6, 328; 23, 1959; 26, 2232; J. pr. [2] 34, 344). — II, 248.
- 7) 2,4-Dinitro- $\alpha\beta$ -Diphenyläthen. Sm. 139–140° (C. 1901 [2] 1030; B. 34, 2843).
- 8) 2,6-Dinitro- $\alpha\beta$ -Diphenyläthen. Sm. 86° (B. 39, 1305 C. 1906 [1] 1785).

- $C_{14}H_{10}O_4N_2$  9)  $\alpha\alpha$ -Diphenylvinylndinitrit. Sm. 148—149° (A. 233, 340). — II, 232.
- 10) Methylenäther d. 3-Nitrophenyl-3,4-Dioxybenzylidenamin. Sm. 119° (C. 1908 [1] 1541).
- 11) 9,10-Dinitro-9,10-Dihydroanthracen (Untersalpetersäureanthracen). Sm. 194° (B. 13, 1585; 14, 484; 33, 3547; A. 330, 170 C. 1904 [1] 891). — II, 261.
- 12) 4,8-Diamido-1,5-Dioxy-9,10-Anthrachinon (B. 29, 2937, 2941; D. R. P. 106034 C. 1900 [1] 739). — \*III, 306.
- 13) 4,5-Diamido-1,8-Dioxy-9,10-Anthrachinon (D. R. P. 100138 C. 1899 [1] 655). — \*III, 308.
- 14) isom. Diamidodioxy-9,10-Anthrachinon (B. 29, 2937). — \*III, 306.
- 15) 1,5 - Di[Hydroxylamido]-9,10-Anthrachinon (B. 29, 2935; D. R. P. 81694). — \*III, 298.
- 16) 1,8 - Di[Hydroxylamido]-9,10 - Anthrachinon (B. 29, 2942). — \*III, 299.
- 17) 5-Nitro-4-Amido-9,10-Dioxyphenanthren. HCl (B. 38, 3735 C. 1906 [1] 40).
- 18)  $\beta$ -Oximido- $\alpha$ -Keto- $\beta$ -[2-Nitrophenyl]- $\alpha$ -Phenyläthan. Sm. 185° u. Zers. (B. 26, 2454). — III, 281.
- 19)  $\alpha$ -Oximido- $\beta$ -Keto- $\beta$ -[2-Nitrophenyl]- $\alpha$ -Phenyläthan. Sm. 265° u. Zers. (B. 26, 2456). — III, 281.
- 20) Diacetylpyrokoll. Sm. 225° (G. 19, 354). — IV, 88.
- 21) N-3-Formylphenyläther d. 3-Nitrobenzaldoxim. Sm. 191° (B. 29, 3039; B. 36, 2309 C. 1903 [2] 429). — \*III, 38.
- 22) N-4-Formylphenyläther d. 4-Nitrobenzaldoxim. Sm. 224° (B. 29, 3038; B. 36, 2306 C. 1903 [2] 428). — \*III, 38.
- 23) 2-[2-Nitrobenzyliden]amidobenzol-1-Carbonsäure. Sm. 167—168° (B. 37, 595 C. 1904 [1] 881; B. 38, 1685 C. 1905 [1] 1541).
- 24) 2-[3-Nitrobenzyliden]amidobenzol-1-Carbonsäure. Sm. 198—200° (B. 37, 595 C. 1904 [1] 881; B. 38, 1685 C. 1905 [1] 1541).
- 25) 2-[4-Nitrobenzyliden]amidobenzol-1-Carbonsäure. Sm. 165—167° (B. 38, 1685 C. 1905 [1] 1541).
- 26) Azobenzol-2,2'-Dicarbonsäure. Sm. 237° u. Zers. (245—245,5°). Ba + 7(9)H<sub>2</sub>O, Ag<sub>2</sub> (B. 10, 1868; 11, 760; 15, 55; C. r. 136, 372; B. 34, 4133 C. 1902 [1] 193; B. 39, 4269 C. 1907 [1] 558). — IV, 1458; \*IV, 1054.
- 27) Azobenzol-2,3'-Dicarbonsäure. Sm. 237° u. Zers. (B. 25, 3597). — IV, 1458.
- 28) Azobenzol-3,3'-Dicarbonsäure. Sm. 340° u. Zers. Ca, Ba + 5H<sub>2</sub>O, Ag<sub>2</sub> (A. 129, 133; 320, 137; B. 8, 41; J. r. 6, 196; 16, 414; 21, 485; B. 34, 4134 C. 1902 [1] 193; C. r. 141, 595 C. 1905 [2] 1534). — IV, 1458; \*IV, 1054.
- 29) Azobenzol-4,4'-Dicarbonsäure. Sm. noch nicht bei 280° (Zers. bei 330°). (NH<sub>4</sub>)<sub>2</sub> + H<sub>2</sub>O, Na, Ca + 3H<sub>2</sub>O, Ba, Ag<sub>2</sub> (A. 132, 144; 135, 154; 139, 13; 303, 385; 320, 135; A. Spl. 3, 160; Z. 1868, 563; B. 15, 2331; J. r. 20, 28; 21, 484; B. 34, 4134 C. 1902 [1] 193; C. r. 141, 595 C. 1905 [2] 1534; B. 39, 746 C. 1906 [1] 1008). — IV, 1459; \*IV, 1054.
- 30) Säure (aus 3-Amidobenzol-1-Carbonsäure). Ba, Ag (A. 123, 291). — IV, 1459.
- 31) Monaldehyd d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 179—180° (B. 39, 4273 C. 1907 [1] 558).
- 32) Nitrit d. 10-Nitro-9-Oxy-9,10-Dihydroanthracen. Sm. 125° u. Zers. (A. 330, 159 C. 1904 [1] 890).
- 33) Benzoat d. anti-3-Nitrobenzaldoxim. Sm. 161° (G. 22 [2] 171; 26 [1] 458). — III, 48; \*III, 37.
- 34) Amid d. 3'-Nitrodiphenylketon-4-Carbonsäure. Sm. 204° (A. 286, 318). — II, 1705.
- 35) Phenylnitrosomonamid d. Benzol-1,2-Dicarbonsäure (Am. 26, 458). — \*II, 1050.
- $C_{14}H_{10}O_4N_4$  C 56,4 — H 3,3 — O 21,5 — N 18,8 — M. G. 298.
- 1) 2,3-Anhydroderivat d.  $\alpha$ -[4-Nitrophenyl]imido- $\alpha$ -[5-Nitro-2-Amido-3-Oxymethylphenyl]methan. Sm. 243—246° u. Zers. (B. 35, 744 C. 1902 [1] 754). — \*III, 66.
- 2) Di[2-Nitrobenzyliden]hydrazin. Sm. 204,5° (182°) (J. pr. [2] 39, 49; B. 33, 2643; J. pr. [2] 66, 17 C. 1902 [2] 584). — III, 38; \*III, 29.

- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>N<sub>4</sub>** 3) Di[3-Nitrobenzyliden]hydrazin. Sm. 194—195,5° (*G.* 29 [2] 476; *B.* 33, 2462). — \*III, 29.
- 4) Di[4-Nitrobenzyliden]hydrazin. Sm. 296° (304,5°) (*B.* 33, 2465; *G.* 29 [2] 476; *J. pr.* [2] 66, 17 *C.* 1902 [2] 583; *B.* 39, 808 *C.* 1906 [1] 1246). — \*III, 29.
- 5) 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Malonylharnstoff. Zers. bei 250° (*A.* 255, 236). — IV, 548.
- 6) 6-[2,4-Dioxyphenyl]azo-1,4-Diketo-1,2,3,4-Tetrahydro-2,3-Benz-diazin (*J. pr.* [2] 76, 326 *C.* 1908 [1] 38).
- 7) Biphenyl-4,4'-Di[Diazocarbonsäure]. Na<sub>2</sub> + 2H<sub>2</sub>O (*C.* 1907 [1] 1573).
- 8) p-Nitro-1-[4-Methylphenyl]-1,2,3-Benzotriazol-5-Carbonsäure. Sm. 253° (*B.* 23, 3455). — IV, 1154.
- 9) 2,4-Lakton d. 2-Oxy-1,2-Di[4-Oxyphenyl]-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure + 3½ H<sub>2</sub>O (Di-p-Oxyphenyltetrazoliumbetain). Sm. 178—179° u. Zers. (*B.* 28, 1692). — IV, 1241.
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>N<sub>6</sub>** C 51,5 — H 3,1 — O 19,6 — N 25,8 — M. G. 326.
- 1) Di[2-Nitrobenzyliden]tetrazon (*B.* 33, 2464).
- 2) Di[3-Nitrobenzyliden]tetrazon (*B.* 33, 2462).
- 3) Di[4-Nitrobenzyliden]tetrazon (*B.* 33, 2465).
- 4) 3,6-Di[4-Nitrophenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 215° (*A.* 298, 53). — IV, 1289.
- 5) 6-Nitro-3-[5-Nitro-2-Methylphenylazo]indazol (*B.* 37, 2579 *C.* 1904 [2] 659).
- 6) 7-Nitro-3-[6-Nitro-2-Methylphenylazo]indazol. Sm. 250—251° (*B.* 37, 2576 *C.* 1904 [2] 658).
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>N<sub>8</sub>** C 47,5 — H 2,8 — O 18,1 — N 31,6 — M. G. 354.
- 1) Verbindung (aus 4-Nitro-anti-Diazobenzolcyanid u. 2-Oxynaphtalin). Sm. 210° u. Zers. (*B.* 28, 2079). — IV, 1453.
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Diacetat d. 2,4-Dichlor-1,3-Dioxynaphtalin. Sm. 136° (*A.* 300, 193). — \*II, 594.
- 2) Diacetat d. p-Dichlor-1,4-Dioxynaphtalin. Sm. 236° (*A.* 149, 7). — II, 983.
- 3) Diacetat d. 1,4-Dichlor-2,3-Dioxynaphtalin. Sm. 140,5° (*A.* 334, 354 *C.* 1904 [2] 1054).
- 4) Diacetat d. 1,5-Dichlor-2,6-Dioxynaphtalin. Sm. 179° (*B.* 40, 3975 *C.* 1907 [2] 2057).
- 5) Diacetat d. 1,8-Dichlor-2,7-Dioxynaphtalin. Sm. 195° (*B.* 23, 525). — II, 985.
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>Br<sub>2</sub>** 1) 4-Methyläther d. p-Dibrom-2,4,6-Trioxydiphenylketon (Dibrom-cotoïn). Sm. 116° (114°) (*A.* 199, 26; *B.* 27, 415). — III, 203.
- 2) Dioxyessigdi[p-Bromphenyläther]säure. Sm. 151°. Ag (*B.* 27, 2797). — \*II, 373.
- 3) Diacetat d. 2,3-Dibrom-1,4-Dioxynaphtalin. Sm. 238° (*Soc.* 67, 909). — \*II, 595.
- 4) Diacetat d. 1,4-Dibrom-2,3-Dioxynaphtalin. Sm. 175° (*A.* 334, 362 *C.* 1904 [2] 1055).
- 5) Diacetat d. 6,7-Dibrom-2,3-Dioxynaphtalin. Sm. 155° (*A.* 334, 365 *C.* 1904 [2] 1055).
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>Br<sub>4</sub>** 1) αβ-Dioxy-αβ-Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 280° u. Zers. (*A.* 325, 41 *C.* 1903 [1] 461).
- 2) isom.-αβ-Dioxy-αβ-Di[3,5-Dibrom-4-Oxyphenyl]äthan? Sm. 270° u. Zers. (*A.* 325, 43 *C.* 1903 [1] 461).
- 3) Tetrabromcureumin (*Ann.* 4, 364). — III, 660.
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>S** 1) 2-Oxyanthracen-p-Sulfonsäure. Na, Ba (*B.* 12, 185; 15, 1808). — II, 901.
- 2) Dialdehyd d. Diphenylsulfon-4,4'[p]-Dicarbonsäure + 1½ H<sub>2</sub>O (Dibenzalsulfon). Sm. 179°. + 2NaHSO<sub>3</sub> + 1½ H<sub>2</sub>O (*Bl.* [3] 11, 505). — III, 19.
- C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>S<sub>2</sub>** 1) Diphenyldisulfid-2,2'-Dicarbonsäure. Sm. 289°. (NH<sub>4</sub>)<sub>2</sub> + 2H<sub>2</sub>O (*B.* 22, 2206; 31, 1669; 32, 1151; D.R.P. 69073; *Ann.* 16, 366; 21, 209). — \*II, 900.
- 2) Diphenyldisulfid-3,3'-Dicarbonsäure. Sm. 242—244°. (NH<sub>4</sub>)<sub>2</sub> + 2H<sub>2</sub>O, Ca + 3H<sub>2</sub>O, Ba + 3H<sub>2</sub>O, Pb + H<sub>2</sub>O, (CuOH)<sub>2</sub> + 5H<sub>2</sub>O, Ag<sub>2</sub> + 1½ H<sub>2</sub>O (*Z.* 1870, 294; *J. pr.* [2] 1, 103; *B.* 4, 622; 6, 1150; 7, 794; 32, 1151). — II, 1522; \*II, 905.



- $C_{14}H_{10}O_4S_2$  3) Verbindung (aus Benzolcarbonsäure) (*Soc.* 95, 1237 *C.* 1909 [2] 1047).
- $C_{14}H_{10}O_4Hg$  1) Quecksilberdiphenyl-2,2'-Dicarbonsäure (o-Merkurodibenzoësäure). Sm. 165°.  $Na_2$ ,  $K_2$ ,  $Ca$  (*C.* 1901 [1] 454; 1901 [2] 108; *G.* 32 [2] 293 *C.* 1902 [2] 1454). — \*IV, 1216.
- $C_{14}H_{10}O_5N_2$  C 58,7 — H 3,5 — O 28,0 — N 9,8 — M. G. 286.
- 1) *p*-Dinitro- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan. 3 Modifikationen.  $\alpha$ -Modif. Sm. 112—114°;  $\beta$ -Modif. Sm. 124—125°;  $\gamma$ -Modif. Sm. 154—155° (*J. r.* 13, 23; *B.* 13, 2403). — III, 219.
  - 2)  $\alpha$ -Keto- $\beta$ -[2,4-Dinitrophenyl]- $\alpha$ -Phenyläthan. Sm. 136—137° (*B.* 42, 611 *C.* 1909 [1] 999; *B.* 42, 1315 *C.* 1909 [1] 1560).
  - 3) *p*-Dinitro-3-Methyldiphenylketon. Sm. 145° (*A.* 220, 236). — III, 212.
  - 4) 3',*p*-Dinitro-4-Methyldiphenylketon. Sm. 125° (*A.* 286, 311). — III, 214.
  - 5) 4',*p*-Dinitro-4-Methyldiphenylketon. Sm. 127° (*A.* 286, 322; *B.* 7, 983). — III, 214.
  - 6) *N*-Benzoat d. 3-Nitrobenzhydroxamsäure. Sm. 153—154° (*B.* 32, 1664). — \*II, 773.
  - 7) *N*-Benzoat d. 4-Nitrobenzhydroxamsäure. Sm. 187° u. Zers. (185°; 178°) (*R.* 15, 363; 16, 187; *B.* 32, 1666). — \*II, 776.
  - 8) *N*-2-Nitrobenzoat d. Benzhydroxamsäure. Sm. 131—132° (*B.* 32, 1661). — \*II, 771.
  - 9) *N*-3-Nitrobenzoat d. Benzhydroxamsäure. Sm. 151° (*B.* 32, 1660, 1663). — \*II, 773.
  - 10) *N*-4-Nitrobenzoat d. Benzhydroxamsäure. Sm. 168° u. Zers. (172°) (*R.* 15, 361; 16, 185; *B.* 32, 1661). — \*II, 776.
  - 11) 1-Naphtyläther d. 5,5-Dioxy-2,4,6-Triketohexahydro-1,3-Diazin (Alloxan- $\alpha$ -Naphtol) (*C.* 1900 [1] 1113). — \*II, 503.
  - 12) 2-[2-Nitrobenzoyl]amidobenzol-1-Carbonsäure. Sm. 239° (*A.* 351, 273 *C.* 1907 [1] 1494).
  - 13) 3-[3-Nitrobenzoyl]amidobenzol-1-Carbonsäure (*A.* 251, 169). — II, 1267.
  - 14) 5-[2-Nitrobenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 221° u. Zers. (223°) (*B.* 31, 2260; *C.* 1907 [1] 108; *G.* 39 [2] 28 *C.* 1909 [2] 1053). — \*III, 25.
  - 15) 5-[3-Nitrobenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 252° u. Zers. (245°) (*B.* 31, 2260; *C.* 1907 [1] 108; *G.* 38 [1] 13 *C.* 1908 [1] 828). — \*III, 25.
  - 16) 5-[4-Nitrobenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 217 bis 218° u. Zers. (245—247°) (*B.* 31, 2260; *C.* 1907 [1] 108; *Soc.* 93, 534 *C.* 1908 [1] 1690). — \*III, 25.
  - 17) 6-[2-Nitrobenzyliden]amido-3-Oxybenzol-1-Carbonsäure. Zers. bei 220° (*G.* 39 [2] 23 *C.* 1909 [2] 1052).
  - 18) 6-[3-Nitrobenzyliden]amido-3-Oxybenzol-1-Carbonsäure. Zers. oberhalb 240° (*G.* 39 [2] 24 *C.* 1909 [2] 1053).
  - 19) 6-[4-Nitrobenzyliden]amido-3-Oxybenzol-1-Carbonsäure. Zers. oberhalb 240° (*G.* 39 [2] 24 *C.* 1909 [2] 1053).
  - 20) Azoxybenzol-2,2'-Dicarbonsäure. Sm. 237—240° u. Zers. (248°; 250°).  $Ba + 4H_2O$  (*B.* 7, 1611; 17, 1903; 29, 656; 35, 2000; *H.* 2, 57; *C.* 1902 [1] 1190; *J. r.* 23, 89; *B.* 36, 374 *C.* 1903 [1] 578; *B.* 36, 2049 *C.* 1903 [2] 383; *C.* 1904 [1] 878; *J. pr.* [2] 77, 164 *C.* 1908 [1] 1269; *B.* 41, 879 *C.* 1908 [1] 1546; *B.* 41, 2691 *C.* 1908 [2] 1257). — IV, 1343; \*IV, 1003.
  - 21) Azoxybenzol-3,3'-Dicarbonsäure. Sm. 345°.  $K_2$ ,  $Ba$ ,  $Ag_2$  (*J.* 1864, 352; *J. r.* 23, 91; *J. pr.* [2] 50, 565, 566; *Soc.* 73, 146; *A.* 196, 18; *B.* 36, 3472 *C.* 1903 [2] 1269; *C. r.* 141, 595 *C.* 1905 [2] 1534). — IV, 1343.
  - 22) Azoxybenzol-4,4'-Dicarbonsäure. Zers. bei 240°.  $(NH_4)_2$ ,  $Ba$ ,  $Ag_2$  (*B.* 30, 1599; *Soc.* 73, 147; *A.* 326, 337; *J. pr.* [2] 50, 565). — IV, 1344; \*IV, 1003.
  - 23) 4'-Oxyazobenzol-2,6-Dicarbonsäure (*B.* 39, 75 *C.* 1906 [1] 670).
  - 24) 4'-Oxyazobenzol-2,3'-Dicarbonsäure. Sm. 219° (*C.* 1908 [2] 310).
  - 25) 4-Oxyazobenzol-3,3'-Dicarbonsäure. Sm. 280° u. Zers. (*C.* 1908 [2] 310).
  - 26) *p*-Oxyazobenzol-3,3'-Dicarbonsäure?  $Ag_2$  (*J. pr.* [2] 1, 106; *B.* 9, 630). — IV, 1470.

- $C_{14}H_{10}O_6N_2$  27) 4,3',4'-Trioxazobenzol-3',4'-Methylenäther-3-Carbonsäure. Sm. 218—222° (*G.* 39 [2] 320 *C.* 1909 [2] 1804).
- 28) Säure (aus 1-Naphtylaminallloxan) +  $H_2O$  (*G.* 17, 411). — II, 612.
- 29) Nitrat d. 10-Nitro-9-Oxy-9,10-Dihydroanthracen. Sm. 78—79° u. Zers. (*A.* 330, 160 *C.* 1904 [1] 890).
- 30) 2-Phenylamid d. 3-Nitrobenzol-1,2-Dicarbonsäure. Sm. 180° (*C.* 1901 [2] 1159).
- 31) Phenylmonamid d. 4-Nitrobenzol-1,2-Dicarbonsäure. Sm. 181° (*C.* 1901 [2] 1159).
- 32) 2-Nitrophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 145 bis 146° (*A.* 327, 55 *C.* 1903 [1] 1336).
- 33) 3-Nitrophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 202° (240°). Benzylaminsalz, Chinolinsalz (*A.* 327, 55 *C.* 1903 [1] 1336).
- 34) 4-Nitrophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 186° (190 bis 192°). Pyridinsalz, Chinolinsalz (*A.* 327, 55 *C.* 1909 [1] 1336).
- $C_{14}H_{10}O_6N_4$  C 53,5 — H 3,2 — O 25,5 — N 17,8 — M. G. 314.
- 1) 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol. Sm. 188—189° (*Soc.* 89, 1938 *C.* 1907 [1] 715; *Soc.* 93, 1671 *C.* 1908 [2] 1922).
- 2) Benzylidenhydrazid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. 262° (*J. pr.* [2] 76, 245 *C.* 1907 [2] 1498).
- $C_{14}H_{10}O_6N_2$  C 55,6 — H 3,3 — O 31,8 — N 9,3 — M. G. 302.
- 6) 1)  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha\beta$ -Di[2-Nitrophenyl]äthan. Sm. 155,5° (161—162°) (*B.* 40, 2563 *C.* 1907 [2] 339; *B.* 41, 1851 *C.* 1908 [2] 158).
- 2) Methyläther d. 3,5-Dinitro-2-Oxydiphenylketon. Sm. 83° (*B.* 39, 359 *C.* 1906 [1] 843).
- 3) p-Diamido-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 81741, 81742, 106034, 119756). — \*III, 313.
- 4) 1,5-Naphtylendiooxaminsäure. Sm. 235°.  $Na_2$  (*B.* 30, 774). — IV, 923.
- 5) 2,2'-Dinitro-4-Methylbiphenyl-4'-Carbonsäure. Sm. 235,5—236°.  $Ba + 4H_2O$  (*B.* 42, 648 *C.* 1909 [1] 1011).
- 6) Methylester d. 3,4'-Dinitrobiphenyl-4-Carbonsäure. Sm. 156° (*A.* 210, 192). — II, 1463.
- 7) 2-Nitrobenzylester d. 2-Nitrobenzol-1-Carbonsäure. Sm. 104—106° (*C.* 1906 [2] 1554).
- 8) 3-Nitrobenzylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 143—144° (*C.* 1906 [2] 1554).
- 9) 4-Nitrobenzylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 171—172° (*C.* 1906 [2] 1554).
- 10) 2-Nitro-4-Methylphenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 143—144° (*B.* 28, 1129). — \*II, 772.
- 11) 2-Nitro-4-Methylphenylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 132—133° (*B.* 28, 1128). — \*II, 774.
- 12) Nitril d. 3,4,6-Triacetoxybenzol-1,2-Dicarbonsäure. Sm. 160° (*A.* 349, 51 *C.* 1906 [2] 1259).
- 13) Diacetat d. 2,3-Dioximido-1,4-Diketo-1,2,3,4-Tetrahydronaphtalin. Sm. 160° u. Zers. (*A.* 307, 23). — \*III, 279.
- $C_{14}H_{10}O_6N_4$  C 50,9 — H 3,0 — O 29,1 — N 17,0 — M. G. 330.
- 1) 1,3,5-Trinitrobenzol + Indol. Sm. 187° (*B.* 14, 66). — IV, 217.
- 2) s-2-Nitrophenyl-2-Nitrobenzoylharnstoff. Sm. 220° (*Am.* 19, 303, 327). — \*II, 771.
- 3) s-3-Nitrophenyl-3-Nitrobenzoylharnstoff. Sm. 230° (*Am.* 19, 24, 339). — \*II, 773.
- 4) s-4-Nitrophenyl-4-Nitrobenzoylharnstoff. Sm. 256° (*Am.* 19, 301). — \*II, 775.
- 5) Peroxyd d. 3-Nitrobenzaldoxim. Sm. 105° u. Zers. (124°; 131°) (*C.* 1906 [1] 234; *J. pr.* [2] 73, 255 *C.* 1906 [1] 1243; *C.* 1906 [2] 233).
- 6) s-Di[2-Nitrobenzoyl]hydrazin. Sm. oberhalb 250° (*J. pr.* [2] 51, 177). — \*II, 811.
- 7) s-Di[3-Nitrobenzoyl]hydrazin. Sm. 242° (*J. pr.* [2] 51, 177). — \*II, 811.
- 8) s-Di[4-Nitrobenzoyl]hydrazin. Sm. 245° (*J. pr.* [2] 51, 178). — \*II, 811.
- 9) 4,7-Dinitro-6-Oxy-1-[2-Oxyphenyl]-2-Methylbenzimidazol. Sm. 243 bis 244° (*Soc.* 95, 1044 *C.* 1909 [2] 519).
- 10) 4,7-Dinitro-6-Oxy-1-[3-Oxyphenyl]-2-Methylbenzimidazol. Sm. 279° u. Zers. (*Soc.* 95, 1045 *C.* 1909 [2] 519).

- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>N<sub>4</sub>** 11) 4,7-Dinitro-6-Oxy-1-[4-Oxyphenyl]-2-Methylbenzimidazol. Sm. 245,5° (Soc. 95, 1046 C. 1909 [2] 519).
- 12) 4,4'-Bisdiazobiphenyl-3,3'-Dicarbonsäure + 2H<sub>2</sub>O (B. 31, 2576). — IV, 1557.
- 13) Acetat d. 3,2'-Dinitro-4-Oxyazobenzol. Sm. 119° (Soc. 87, 228 C. 1905 [1] 929, 1316).
- 14) Acetat d. 3,3'-Dinitro-4-Oxyazobenzol. Sm. 138° (Soc. 87, 229 C. 1905 [1] 930, 1316).
- 15) Acetat d. 3,4'-Dinitro-4-Oxyazobenzol. Sm. 138° (Soc. 87, 230 C. 1905 [1] 930, 1316).
- 16) s-Di[2-Nitrophenylamid] d. Oxalsäure. Sm. oberhalb 300° (A. 209, 369). — II, 410.
- 17) s-Di[3-Nitrophenylamid] d. Oxalsäure. Sm. noch nicht bei 270°. — II, 410.
- 18) s-Di[4-Nitrophenylamid] d. Oxalsäure. Sm. 260° (A. 209, 366; B. 8, 473). — II, 410.
- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>Cl<sub>2</sub>** 1) Dimethyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinonhemiacetal. Na<sub>2</sub> (Am. 17, 600). — III, 350.
- 2) 1,4-Diacetat d. 3,6-Dichlor-1,2,4,5-Tetraoxybenzol-2,5-Diäthyläther. Sm. 172° (J. pr. [2] 42, 169). — II, 1032.
- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>S** 1) Diphenylsulfon-4,4'-Dicarbonsäure. Sm. oberhalb 300°. Ba, Ag<sub>2</sub> (B. 11, 121). — II, 1308.
- 2) Diphenylsulfon-2-Dicarbonsäure. Ag<sub>2</sub> (Bl. [3] 9, 709). — II, 1291.
- 3) Gem. Anhydrid d. Benzolcarbonsäure u. d. Benzol-1-Carbonsäure-3-Sulfonsäure (A. 131, 162). — II, 1299.
- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>S<sub>2</sub>** 1) Anthracen-1,5-Disulfonsäure (β-Anthracendisulfonsäure). Na<sub>2</sub> + 3H<sub>2</sub>O, Ca + 3H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Pb (B. 11, 1613; 12, 183). — II, 265; \*II, 122.
- 2) Anthracen-1,8-Disulfonsäure (α-Anthracendisulfonsäure). Na<sub>2</sub> + 4H<sub>2</sub>O, K<sub>2</sub> + H<sub>2</sub>O, Ca + 5H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Pb (B. 11, 1613; 12, 183). — II, 265; \*II, 122.
- 3) Anthracen-2,7-Disulfonsäure. Ba + 4H<sub>2</sub>O (D.R.P. 73961, 76280). — \*II, 122.
- 4) Flavanthracendisulfonsäure. Na<sub>2</sub>, Ba (B. 15, 1807). — II, 265.
- 5) Phenanthrendisulfonsäure. K<sub>2</sub> + 3H<sub>2</sub>O, Ba (B. 13, 314). — II, 269.
- C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>S<sub>4</sub>** 1) 2-Phenylbithienyl-2-Sulfonsäure. Ba (Bl. [3] 5, 279). — III, 769.
- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>N<sub>2</sub>** C 52,8 — H 3,1 — O 35,2 — N 8,8 — M. G. 318.
- 1) Monomethyläther d. 2-Dinitro-3,4-[2]-Dioxydiphenylketon. Sm. 188 bis 189° (G. 27 [1] 285). — \*III, 155.
- 2) 3,5-Dinitro-2-Oxyphenyläther d. Oxymethylphenylketon. Sm. 168° (Bl. [4] 5, 506 C. 1909 [2] 21).
- 3) Aldehyd d. 2,4'-Dinitro-2-Oxydiphenyläther-2-Methyläther-4-Carbonsäure. Sm. 131° (B. 27, 2457). — III, 101.
- 4) Methylester d. 2-Dinitrodiphenyläther-2-Carbonsäure. Sm. 126° (A. 257, 83). — II, 1495.
- 5) Verbindung (aus Tetraphenylthiophen) (A. 144, 199). — III, 750.
- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>N<sub>4</sub>** C 48,6 — H 2,9 — O 32,2 — N 16,2 — M. G. 346.
- 1) Methyl-2-[2,4,6-Trinitrophenyl]amidophenylketon. Sm. 232° (B. 33, 432). — \*III, 94.
- 2) Methyl-4-[2,4,6-Trinitrophenyl]amidophenylketon. Sm. 162—163° (B. 33, 432). — \*III, 96.
- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>N<sub>6</sub>** C 44,9 — H 2,7 — O 30,0 — N 22,4 — M. G. 374.
- 1) 2,4,6-Trinitrophenyläther d. α-Oximido-α-Phenylazoäthan (Pikrylphenyläthylidenoxy-R-Triazan). Zers. bei 140° (B. 33, 2798; B. 35, 3271 C. 1902 [2] 1251). — \*IV, 1067.
- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>S** 1) 1,4,9,10-Tetraoxyanthracen-5-Sulfonsäure (D.R.P. 148767 C. 1904 [1] 558).
- 2) 1,4,9,10-Tetraoxyanthracen-6-Sulfonsäure (Chinizarinhydrärsulfonsäure) (D.R.P. 148767 C. 1904 [1] 558; C. 1904 [2] 340).
- C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>S<sub>3</sub>** 1) Methyläthylester d. ββ'-Dioxythio-γ-Pyrondithiophen-αα'-Dicarbonsäure. Sm. 245° (B. 41, 4050 C. 1909 [1] 85).
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>N<sub>2</sub>** C 50,3 — H 3,0 — O 38,3 — N 8,4 — M. G. 334.
- 1) Dioxyessigdi[4-Nitrophenyläther]säure. Sm. 188—189° (B. 40, 3172 C. 1907 [2] 981).
- 2) polym. Pyridindicarbonsäure. Sm. 96°. Pb<sub>3</sub>, Ag<sub>4</sub> (B. 14, 1912). — IV, 166.



- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>N<sub>2</sub>** 3) Dimethylester d. *p*-Dinitronaphtalin-1,5-Dicarbonsäure. Sm. 210 bis 215° u. Zers. (*G.* 26 [1] 108). — \*II, 1088.
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>N<sub>4</sub>** 1) *p*-Tetranitro-4-Methyldiphenylmethan. Sm. 160—161° (*B.* 5, 685). — II, 237.
- 2) Methyläther d. 2,3,5[oder 2,3,6]-Trinitro-4-Benzoylamido-1-Oxybenzol. Sm. 220—230° (*B.* 42, 1528 *C.* 1909 [1] 1810).
- 3) Methyläther d. 2,3-Dinitro-4-[*p*-Nitrobenzoyl]amido-1-Oxybenzol. Sm. 194—195° (*B.* 42, 1527 *C.* 1909 [1] 1810).
- 4) Acetylderivat d. 3,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 167 bis 168° (*B.* 38, 1594 *C.* 1905 [1] 1601).
- 5) 5,2',4'-Trinitro-4-Methyldiphenylamin-2-Carbonsäure. Sm. 298° (*G.* 35 [2] 380 *C.* 1905 [2] 1671).
- 6) 3,4',6'-Trinitro-4-Methyldiphenylamin-2'-Carbonsäure + 2½ H<sub>2</sub>O. Sm. 232°. NH<sub>4</sub>, Na + 2½ H<sub>2</sub>O, Pyridinsalz (*G.* 36 [1] 325 *C.* 1906 [2] 347; *C.* 1906 [2] 669).
- 7) Acetat d. 2,4,6-Trinitro-2'-Oxydiphenylamin. Sm. 161° (*Soc.* 59, 720). — II, 704.
- 8) Acetat d. 2,4,6-Trinitro-4'-Oxydiphenylamin. Sm. 165° (*Soc.* 59, 718). — II, 718.
- 9) 3-Nitrobenzoat d. 2,3[oder 2,6]-Dinitro-4-Methylamido-1-Oxybenzol. Sm. 203—204° (*B.* 42, 1529 *C.* 1909 [1] 1811).
- 10) 2,6-Dinitro-4-Methoxyphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 174—175° (*Soc.* 91, 1479 *C.* 1907 [2] 1502).
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>N<sub>6</sub>** C 43,1 — H 2,6 — O 32,8 — N 21,5 — M. G. 390.
- 1) 4,6,4',6'-Tetranitro-2,2'-Dimethylazobenzol. Sm. 218° u. Zers. (*A.* 339, 222 *C.* 1905 [1] 1382).
- 2) *p*-Tetranitro-4,4'-Dimethylazobenzol. Sm. 198—200° (*M.* 9, 839). — IV, 1379.
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>Cl<sub>2</sub>** 1) 3,6-Dichlor-1,4-Benzochinondi[Methylfurancarbonsäure]. Zers. bei 220° (*J. pr.* [2] 45, 76). — II, 2078.
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>S** 1) Säure (aus 1-Diazobenzol-3-Carbonsäure) (*J.* 1864, 351). — II, 1523.
- C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>S<sub>2</sub>** 1) αβ-Diketo-αβ-Diphenyläthan-3,3'-Disulfonsäure (m-Benzildisulfonsäure). Ba (*B.* 24, 794). — III, 295.
- C<sub>14</sub>H<sub>10</sub>O<sub>9</sub>N<sub>6</sub>** C 41,4 — H 2,4 — O 35,5 — N 20,7 — M. G. 406.
- 1) Säure (aus 6-Nitro-2-Amido-1-Diazobenzol-4-Carbonsäure-1,4-Anhydrid) (*A.* 128, 177; 163, 61). — IV, 1555.
- C<sub>14</sub>H<sub>10</sub>O<sub>10</sub>N<sub>4</sub>** C 42,6 — H 2,5 — O 40,6 — N 14,2 — M. G. 394.
- 1) Dimethyläther d. *p*-Tetranitro-4,4'-Dioxybiphenyl. Sm. 244,6° (*Am.* 31, 138 *C.* 1904 [1] 809).
- 2) Resorcinodialloxan + H<sub>2</sub>O. Zers. oberhalb 200° (*C.* 1900 [2] 1092). — \*II, 565.
- C<sub>14</sub>H<sub>10</sub>O<sub>10</sub>N<sub>8</sub>** C 37,3 — H 2,2 — O 35,5 — N 24,9 — M. G. 450.
- 1) Di[2,4-Dinitrophenylhydrazid] d. Oxalsäure. Sm. 292° (*G.* 24 [1] 562). — IV, 701.
- C<sub>14</sub>H<sub>10</sub>O<sub>11</sub>N<sub>2</sub>** C 44,0 — H 2,6 — O 46,1 — N 7,3 — M. G. 382.
- 1) *p*-Hexaoxyazoxybenzol-3,3'-Dicarbonsäure (Azoxygallussäure?). Sm. unter 200°. Ag<sub>2</sub> (*B.* 28, 1802) — IV, 1344.
- C<sub>14</sub>H<sub>10</sub>O<sub>12</sub>N<sub>8</sub>** C 34,9 — H 2,1 — O 39,8 — N 23,2 — M. G. 482.
- 1) αβ-Di[2,4,6-Trinitrophenylamido]äthan. Sm. 230° (*J. pr.* [2] 48, 204). — II, 343.
- 2) *p*-Hexanitro-4,4'-Di[Methylamido]biphenyl. Zers. oberhalb 220° (*B.* 19, 2126). — IV, 962.
- C<sub>14</sub>H<sub>10</sub>NCI** 1) 4[oder 6]-Chlor-2-Phenylindol. Sm. 181—182°. Pikrat (*B.* 25, 2876). — IV, 413.
- 2) 5-Chlor-2-Phenylindol. Sm. 196° (*D.R.P.* 127245 *C.* 1902 [1] 154, 155). — \*IV, 250.
- 3) 2-[4-Chlorphenyl]indol. Sm. 201—202° (*Bl.* [3] 21, 66). — \*IV, 250.
- 4) Nitri ld. α-Chlordiphenylmethan-2-Carbonsäure. Fl. (*B.* 29, 1315).
- C<sub>14</sub>H<sub>10</sub>NBr** 1) 2-[4-Bromphenyl]indol. Sm. 208—209° (*Bl.* [3] 21, 67). — \*IV, 250.
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) αβ-Dichlor-αβ-Di[Phenylimido]äthan. Sm. 115° (*B.* 40, 2653 *C.* 1907 [2] 223).
- 2) Di[α-Chlorbenzyliden]hydrazin. Sm. 123° (*J. pr.* [2] 73, 288 *C.* 1906 [1] 1783).

- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>Cl<sub>2</sub>** 3) Di[2-Chlorbenzyliden]hydrazin. Sm. 143,5° (B. 34, 849). — \*III, 29.  
4) Nitril d. 3-Chlorphenylamido-4-Chlorphenylessigsäure. Sm. 88° (J. pr. [2] 65, 268 C. 1902 [1] 1214).
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>Br<sub>2</sub>** 5) Verbindung (aus α-Benzildioxim). Sm. 122° (A. 252, 60). — III, 292.  
1) Dibromtetrahydroacenaphthendiazin (C. 1899 [2] 339).  
2) Nitril d. α-[2,4-Dibromphenyl]amido-α-Phenylessigsäure. Sm. 92° (B. 15, 2032; B. 35, 3335 C. 1902 [2] 1193). — II, 1324.  
3) Verbindung (aus Benzonitril) (A. 133, 145). — II, 1212.
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>J<sub>2</sub>** 1) Di[2-Jodbenzyliden]hydrazin. Sm. 184,5° (B. 38, 1479 C. 1905 [1] 1385).  
2) Di[3-Jodbenzyliden]hydrazin. Sm. 146,5° (B. 38, 1479 C. 1905 [1] 1385).  
3) Di[4-Jodbenzyliden]hydrazin. Zers. bei 231° (B. 38, 1479 C. 1905 [1] 1385).  
4) Azin (aus d. Aldehyd d. Diphenyljodoniumjodid-4,4'-Dicarbonsäure). Zers. bei 200° (B. 38, 3450 C. 1905 [2] 1586).
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>S** 1) 3,5-Diphenyl-1,2,4-Thiodiazol. Sm. 90° (91°). (2HCl, PtCl<sub>4</sub>) (B. 2, 646; 25, 1589; J. pr. [2] 69, 45 C. 1904 [1] 521). — IV, 1023.  
2) 2,5-Diphenyl-1,3,4-Thiodiazol. Sm. 141—142°; Sd. 259°<sub>17</sub>. + AgNO<sub>3</sub> (B. 32, 798; J. pr. [2] 69, 158 C. 1904 [1] 1274; J. pr. [2] 70, 424 C. 1905 [1] 84; J. pr. [2] 73, 289 C. 1906 [1] 1783). — \*IV, 686.  
3) 2,3'-Anhydrid d. 2-Thiocarbonyl-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 160—161°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 55, 372). — IV, 634.
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2-Thiocarbonyl-4,5-Diphenyl-2,4-Dihydro-1,3,4-Thiodiazol (Endothiodiphenylthiobiazolin). Sm. 223—224° (B. 28, 2645; J. pr. [2] 60, 217; J. pr. [2] 67, 216 C. 1903 [1] 1260). — IV, 750; \*IV, 483.  
2) Thiocarbonyl-s-Diphenylthioharnstoff. Sm. 78—79° (B. 25, 1459). — II, 398.  
3) Phenylamid d. Benzthiazol-1-Thiocarbonsäure. Sm. 155° (B. 37, 3727 C. 1904 [2] 1450).
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>S<sub>3</sub>** 1) 5-Phenylimido-3-Thiocarbonyl-4-Phenyl-3,5-Dihydro-1,2,4-Dithiazol (Phenylsenfölsulfid). Sm. 154—156° (B. 9, 1265; 22, 2200; 24, 3023; 25, 1463, 3526; A. 285, 199; J. pr. [2] 59, 575). — II, 389; \*II, 195.  
2) Phenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol (B. 29, 2141). — IV, 683.
- C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>Se** 1) 3,5-Diphenyl-1,2,4-Selendiazol. Sm. 85°. (2HCl, PtCl<sub>4</sub>) (B. 37, 2551 C. 1904 [2] 520).  
2) 2,5-Diphenyl-1,3,4-Selendiazol. Sm. 156° (B. 7, 1274; J. pr. [2] 69, 511 C. 1904 [2] 601). — II, 1308.
- C<sub>14</sub>H<sub>10</sub>N<sub>3</sub>Cl** 1) 5-Chlor-1,4-Diphenyl-1,2,3-Triazol. Sm. 137° (A. 335, 106 C. 1904 [2] 1232; A. 364, 219 C. 1909 [1] 1008).  
2) 3-Chlor-1,5-Diphenyl-1,2,4-Triazol. Sm. 96°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (B. 29, 2672). — IV, 1156.
- C<sub>14</sub>H<sub>10</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) 3,6-Di[4-Chlorphenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 215° (J. pr. [2] 74, 10 C. 1906 [2] 791).
- C<sub>14</sub>H<sub>10</sub>N<sub>4</sub>Br<sub>2</sub>** 1) 3,6-Di[4-Bromphenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 235° u. Zers. (J. pr. [2] 74, 3 C. 1906 [2] 790).  
2) 2,5-Di[4-Bromphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. noch nicht bei 300°. HCl (J. pr. [2] 74, 5 C. 1906 [2] 790).  
3) ?-Dibrom-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin (Soc. 55, 246). — IV, 1233.  
4) isom. ?-Dibrom-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 131° (Soc. 55, 246). — IV, 1233.
- C<sub>14</sub>H<sub>10</sub>N<sub>4</sub>S<sub>2</sub>** 1) 5-Phenylazo-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 160—165° u. Zers. (B. 23, 2829). — IV, 687.
- C<sub>14</sub>H<sub>10</sub>N<sub>5</sub>Cl** 1) 2-Chlorphenylat d. 4-Cyan-1-Phenyl-1,2,3,5-Tetrazol. Sm. 265 bis 267° (B. 30, 2995). — IV, 1240.
- C<sub>14</sub>H<sub>10</sub>N<sub>6</sub>S<sub>2</sub>** 1) Disulfid d. 5-Merkapto-1-Phenyl-1,2,3,4-Tetrazol. Sm. 145—148° (B. 28, 81). — IV, 1233.
- C<sub>14</sub>H<sub>10</sub>ClBr** 1) α-Chlor-β-Brom-α-β-Diphenyläthen. Sm. 173—174° (Soc. 71, 222). — \*II, 118.  
2) cis-β-Chlor-α-Phenyl-α-[4-Bromphenyl]äthen. Fl. (A. 342, 7 C. 1905 [2] 1592).

- $C_{14}H_{10}ClBr$  3) *trans*- $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[4-Bromphenyl]äthen. Sm. 123° (A. 342, 6 C. 1905 [2] 1592).
- $C_{14}H_{10}Cl_2Br_2$  1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Dibrom- $\alpha\alpha$ -Diphenyläthan. Sm. 120–120,5° (B. 26, 1956; A. 296, 265). — II, 231; \*II, 112.
- $C_{14}H_{11}ON$  C 80,4 — H 5,2 — O 7,6 — N 6,7 — M. G. 209.
- 2) 2-Amido-1-Oxyanthracen. HCl (B. 39, 930 C. 1908 [1] 1256).
  - 2) 1-Amido-2-Oxyanthracen. Zers. bei 140–150° (B. 28, 1422; A. 342, 76 C. 1905 [2] 1593). — \*II, 540.
  - 3) 2-Amido-3-Oxyphenanthren. Sm. 159–161° u. Zers. HCl (A. 321, 295 C. 1902 [2] 53).
  - 4) 9-Amido-10-Oxyphenanthren (Morphigenin). Sm. 417°. HCl (C. 1902 [1] 1302; B. 35, 2733 C. 1902 [2] 643; B. 35, 3044 C. 1902 [2] 1259; C. 1902 [1] 1302; B. 35, 1310 C. 1902 [2] 1213; D.R.P. 141422 C. 1903 [1] 1197).
  - 5) Methyläther d. 9-Oximidofluoren. Sm. 145–146° (B. 40, 4259 C. 1907 [2] 1847).
  - 6) N-Benzylanthranil. Sm. 153,5–154° (C. 1906 [1] 1823).
  - 7) 4-Methylphenylanthranil. Sm. 95,5°. +  $HgCl_2$  (B. 41, 1848 C. 1908 [2] 158; B. 42, 1711 C. 1909 [2] 209).
  - 8)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[2-Pyridyl]propan. Sm. 75°. HCl, (2HCl,  $PtCl_4$ ) (B. 35, 4061 C. 1903 [1] 91). — \*IV, 135.
  - 9) 1-Keto-2-[2-Pyridyl]-2,3-Dihydroindolen. Sm. 207,5° (B. 36, 3917 C. 1904 [1] 97).
  - 10) 1-Oxy-2-Phenylindol. Sm. 175° (B. 28, 587; 29, 2062; 32, 3055; C. 1907 [1] 732). — IV, 414.
  - 11) 3-Oxy-2-Phenylindol. Sm. 225° (C. 1907 [1] 733).
  - 12) isom. 3-Oxy-2-Phenylindol? Sm. 160–165° (A. 243, 246). — IV, 772.
  - 13) 2-Keto-3-Phenyl-2,3-Dihydroindol. Sm. 183° (M. 18, 546). — \*IV, 251.
  - 14) 1-Keto-2-Phenyl-1,3-Dihydroisindol (Phenylphtalimidin). Sm. 160° (162–163°) (B. 10, 1450; 11, 239; A. 239, 87; 247, 306; A. 369, 297 C. 1909 [2] 2168; J. pr. [2] 80, 105 C. 1909 [2] 1328). — II, 1558.
  - 15) 4-Methyl-1-Phenylbenzoxazol. Sm. 104° (B. 31, 2695). — \*II, 741.
  - 16) 2-[4-Methylphenyl]benzisoxazol. Sm. 81–82°; Sd. 344–346° u. ger. Zers. (B. 27, 1453). — IV, 417.
  - 17) 3-Phenyl-1,4-Benzoxazin. Sm. 102–103°. (2HCl,  $PtCl_4$ ) (B. 23, 172). — IV, 417.
  - 18) 3-Acetylcarbazol. Sm. 227° (B. 40, 381 C. 1907 [1] 823).
  - 19) 9-Acetylcarbazol. Sm. 69°; Sd. oberhalb 360° (A. 163, 350). — IV, 392.
  - 20) 4-Oxy-2-Methyl- $\alpha$ -Naphtochinolin. Sm. 292°. (2HCl,  $PtCl_4$ ) (B. 17, 545; 21, 531; D.R.P. 42276). — IV, 411; \*IV, 250.
  - 21) 1-Oxy-3-Methyl- $\beta$ -Naphtochinolin. Sm. 286°. (2HCl,  $PtCl_4$ ) (B. 17, 543; 21, 532; D.R.P. 42276). — IV, 412; \*IV, 250.
  - 22) 2-Keto-1-Methyl-1,2-Dihydro- $\alpha$ -Naphtochinolin. Sm. 175°. (2HCl,  $PtCl_4$ ) (J. pr. [2] 57, 77). — \*IV, 248.
  - 23) 3-Keto-4-Methyl-3,4-Dihydro- $\beta$ -Naphtochinolin. Sm. 183° u. Zers. (J. pr. [2] 57, 57). — \*IV, 249.
  - 24) 2-Oxy-5-Methylakridin. Sm. oberhalb 250°. HCl +  $H_2O$  (B. 24, 2045). — IV, 416.
  - 25) 5-Keto-1-Methyl-5,10-Dihydroakridin. Sm. 345–346° (A. 279, 278; B. 29, 1191). — IV, 415.
  - 26) 5-Keto-2-Methyl-5,10-Dihydroakridin. Sm. 312° (344–344,5°) (B. 42, 593 C. 1909 [1] 1012; Soc. 95, 444 C. 1909 [1] 1654; B. 42, 1719 C. 1909 [2] 211).
  - 27) 5-Keto-3-Methyl-5,10-Dihydroakridin. Sm. 338° (A. 279, 272; B. 29, 1191). — IV, 415.
  - 28) 5-Keto-10-Methyl-5,10-Dihydroakridin (N-Methylakridin). Sm. 203,5° (201°) (J. pr. [2] 45, 193; A. 276, 47; B. 35, 2536 C. 1902 [2] 458; B. 37, 1567 C. 1904 [1] 1447; B. 39, 2721 C. 1906 [2] 1205). — IV, 406; \*IV, 246.
  - 29) 9-Keto-10-Methyl-9,10-Dihydrophenanthridin. Sm. 108,5° (108°) (B. 26, 1966; A. 276, 252; C. 1897 [1] 414; B. 35, 2535 C. 1902 [2] 457). — IV, 408; \*IV, 247.
  - 30) Nitril d.  $\alpha$ -Oxydiphenylmethan-2-Carbonsäure. Fl. (B. 29, 1316).



- C<sub>14</sub>H<sub>11</sub>ON** 31) Nitril d. 2-Oxybenzölbenzyläther-1-Carbonsäure. Sm. 71—72° (B. 31, 3040). — \*II, 893.
- 32) Nitril d. 4-Oxybenzölbenzyläther-1-Carbonsäure. Sm. 94—94,5° (B. 31, 3041). — \*II, 909.
- 33) Nitril d. 1-Oxymethylbenzolphenyläther-2-Carbonsäure. Sm. 63 bis 65° (B. 25, 3019). — II, 1559.
- C<sub>14</sub>H<sub>11</sub>ON<sub>3</sub>** C 70,9 — H 4,6 — O 6,8 — N 17,7 — M. G. 237.
- 1)  $\alpha$ -Phenyl- $\beta$ -[2-Cyanphenyl]harnstoff. Sm. 194° (B. 29, 632). — \*II, 784.
- 2)  $\alpha$ -Phenyl- $\beta$ -[3-Cyanphenyl]harnstoff. Sm. 170,5—171° (C. 1904 [2] 102).
- 3)  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 132° (G. 37 [1] 625 C. 1907 [2] 803).
- 4) 5-Keto-1-Phenyl-3-[2-Pyridyl]-4,5-Dihydropyrazol. Sm. 179° (B. 34, 4239 C. 1902 [1] 208). — \*IV, 809.
- 5) 5-Keto-1-Phenyl-3-[4-Pyridyl]-4,5-Dihydropyrazol. Sm. 215° (B. 34, 4250 C. 1902 [1] 209). — \*IV, 809.
- 6) 5-Phenyl-3-[3-Amidophenyl]-1,2,4-Oxiazol. Sm. 143°. HCl, (2 HCl, PtCl<sub>4</sub>) (B. 18, 2473). — II, 1257.
- 7) 2-Phenylimido-3-Phenyl-2,3-Dihydro-1,3,4-Oxiazol. Sm. 99°. HCl (B. 26, 2870). — IV, 674.
- 8) 5-Oxy-1,4-Diphenyl-1,2,3-Triazol. Sm. 150—151°. Na (A. 335, 102 C. 1904 [2] 1232).
- 9) 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 288° (290°). HCl + 2 H<sub>2</sub>O, Ag + H<sub>2</sub>O (Soc. 67, 1064; B. 29, 1951, 2311; Am. 27, 263 C. 1902 [1] 1298). — IV, 1157; \*IV, 806.
- 10) 1-Oxy-2,5-Diphenyl-1,3,4-Triazol. Sm. 185—186° (J. pr. [2] 73, 293 C. 1906 [1] 1784).
- 11) 1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Oxyd. Sm. 249° (256°) (B. 25, 3112; 34, 334; J. pr. [2] 67, 263 C. 1903 [1] 1266). — IV, 676; \*IV, 434.
- 12) 5-Keto-1,3-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 229—230° (Am. 34, 127 C. 1905 [2] 1031).
- 13) 2-[2-Naphtyl]amido-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 270° (Am. 40, 144 C. 1908 [2] 1107).
- 14) 3-[4-Amidophenyl]imido-2-Keto-2,3-Dihydroindol. Sm. oberhalb 300° (J. pr. [2] 73, 471 C. 1906 [2] 504).
- 15) 2-Phenylhydrazon-3-Keto-2,3-Dihydroindol. Sm. 236° (242,5°) (B. 16, 2190; 28, 226; 38, 1625; B. 40, 1298 C. 1907 [1] 1427; B. 41, 375 C. 1908 [1] 827). — IV, 1484; \*IV, 1076.
- 16) 3-Phenylhydrazon-2-Oxypseudoindol. Sm. 210—211° (B. 17, 577; 23, 3619; 28, 543; M. 23, 916). — IV, 695; \*IV, 455.
- 17) 2-[2-Oximidomethylphenyl]indazol. Sm. 223° (Bl. [3] 31, 872 C. 1904 [2] 661).
- 18) 2-Benzoylimido-2,3-Dihydrobenzimidazol (Benzoylphenylguanidin). Sm. 237° (Am. 26, 415; C. 1908 [2] 1586). — \*IV, 368.
- 19) 1-Benzoyl-6-Methylbenzisotriazol. Sm. 125° (Am. 17, 452). — IV, 1147.
- 20) 3-Nitroso-4-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 131° u. Zers. (B. 29, 1312). — IV, 1016.
- 21) 2-Amido-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 237 bis 238° (C. 1903 [2] 831).
- 22) 2-Phenylamido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 256° (C. 1903 [2] 831).
- 23) 3-Phenylamido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 140° (J. pr. [2] 69, 101 C. 1904 [1] 730).
- 24) 3-Oxy-2-[2-Amidophenyl]-1,4-Benzdiazin (o-Amidophenimesatin). Sm. 260—261° (B. 29, 198; 34, 1108, 4008; J. pr. [2] 60, 408). — IV, 1187; \*IV, 845.
- 25) 4-Keto-3-[2-Methylphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 166° (J. pr. [2] 63, 280). — \*IV, 804.
- 26) 4-Keto-3-[3-Methylphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 150° (J. pr. [2] 63, 281). — \*IV, 805.
- 27) 4-Keto-3-[4-Methylphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 143° (J. pr. [2] 63, 281). — \*IV, 805.

- $C_{14}H_{11}ON_3$  28) 5-Keto-8-Methyl-6-Phenyl-5,6-Dihydro-1,6,7-Benztriazin. Sm. 121° (B. 26, 1512). — IV, 516.
- 29) 8-Keto-7-Methyl-5-Phenyl-7,8-Dihydro-1,6,7-Benztriazin. Sm. 173 bis 175° (M. 22, 845).
- 30) 3-Benzöyl-3,4-Dihydro-1,2,3-Benztriazin. Sm. 114—115° u. Zers. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 51, 280). — IV, 631.
- 31) Nitril d.  $\alpha$ -Phenylnitrosamido- $\alpha$ -Phenylelessigsäure. Sm. 55° (B. 35, 3330 C. 1902 [2] 1192).
- 32) Nitril d. 1-Phenylnitrosamidomethylbenzol-3-Carbonsäure. Sm. 63° (J. pr. [2] 80, 107 C. 1909 [2] 1328).
- 33) Nitril d. 1-Phenylnitrosamidomethylbenzol-4-Carbonsäure. Sm. 90° (J. pr. [2] 80, 106 C. 1909 [2] 1328).
- 34) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin- $\alpha^2$ -Carbonsäure. Sm. 163° (A. 365, 336 C. 1909 [1] 1867).
- 35) Nitril d. 3-Oxyazobenzol-3-Methyläther-4-Carbonsäure (J. pr. [2] 79, 452 C. 1909 [2] 125).
- $C_{14}H_{11}ON_5$  C 63,4 — H 4,1 — O 6,0 — N 26,4 — M. G. 265.
- 1) 6-Cyanamido-3-Keto-2-Phenyl-1,2,3,4-Tetrahydro-1,2,4-Benztriazin. Sm. 210° u. Zers. (C. 1908 [2] 1589).
- 2) Verbindung (aus 5-Oxy-1-Phenyl-1,2,3-Triazol). Sm. 131—132° (A. 335, 87 C. 1904 [2] 1231).
- 3) isom. Verbindung (aus 5-Oxy-1-Phenyl-1,2,3-Triazol). Sm. 162—163° (A. 335, 88 C. 1904 [2] 1231).
- $C_{14}H_{11}OCl$  4) 4-Chlormethyl-diphenylketon. Sm. 97—98° (A. 189, 89). — III, 213.
- 2)  $\beta$ -Chlor- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 65° (68,5°). Na (B. 17, 1163; J. pr. [2] 44, 548; B. 42, 2348 C. 1909 [2] 355). — III, 218.
- 3)  $\alpha$ -Keto- $\beta$ -[4-Chlorphenyl]- $\alpha$ -Phenyläthan. Sm. 133° (B. 25, 2240; J. pr. [2] 67, 379 C. 1903 [1] 1356). — III, 218.
- 4) 4-Chloracetyl-biphenyl. Sm. 122—123° (Bl. [3] 17, 510). — \*III, 165.
- 5) 9-Methylxantheniumchlorid. + HgCl<sub>2</sub>, + FeCl<sub>3</sub> (B. 38, 2507 C. 1905 [2] 635).
- 6) Chlorid d. Diphenylelessigsäure. Sm. 55° (56—57°); Sd. 170—171°<sub>16</sub> (B. 38, 1737 C. 1905 [1] 1646; A. 356, 79 C. 1907 [2] 1701; B. 41, 690 C. 1908 [1] 1394).
- $C_{14}H_{11}OBr$  1) cis- $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 63° (A. 342, 11 C. 1905 [2] 1592).
- 2) trans- $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 85° (A. 342, 9 C. 1905 [2] 1592).
- 3) Phenyläther d.  $\beta$ -Brom- $\beta$ -Oxy- $\alpha$ -Phenyläthen. Sm. 60°; Sd. 156°<sub>10</sub> (B. 38, 1965 C. 1905 [2] 133).
- 4)  $\beta$ -Brom- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 54—55° (50°) (A. 155, 68; B. 21, 1355). — III, 218.
- 5) 4-Brommethyl-diphenylketon. Sm. 96,6° (Bl. [3] 15, 946). — \*III, 161.
- 6) 2'-Brom-4-Methyldiphenylketon. Sm. 92—93° (B. 27, 1452). — III, 214.
- 7) 4'-Brom-4-Methyldiphenylketon. Sm. 139° (A. 286, 328).
- 8) 4-Keto-1-[ $\beta$ -Brom- $\beta$ -Phenyläthyliden]-1,4-Dihydrobenzol (A. 349, 122 C. 1906 [2] 1258).
- $C_{14}H_{11}OJ_3$  1) Benzyläther d. 2,4,6-Trijod-3-Oxy-1-Methylbenzol. Sm. 131° (A. 357, 93 C. 1907 [2] 1974).
- 2) 9-Methylxantheniumtrijodid (B. 38, 2506 C. 1905 [2] 635).
- $C_{14}H_{11}O_2N$  C 74,7 — H 4,9 — O 14,2 — N 6,2 — M. G. 225.
- 1)  $\alpha$ -Nitro- $\alpha\beta$ -Diphenyläthen. Sm. 75° (B. 37, 4509 C. 1905 [1] 252; A. 355, 270 C. 1907 [2] 1622).
- 2)  $\beta$ -Nitro- $\alpha\alpha$ -Diphenyläthen. Sm. 86° (B. 18, 664). — II, 250.
- 3) 2-Nitro- $\alpha\beta$ -Diphenyläthen. Sm. 76° (B. 39, 902 C. 1906 [1] 1167; B. 39, 1305 C. 1906 [1] 1785).
- 4) Nitrodihydrophenanthren. Zers. bei 100° (D. R. P. 129990).
- 5) 10-Nitroso-9-Oxy-9,10-Dihydroanthracen. Na (B. 13, 1587). — II, 261.
- 6) 2-Amido-9,10-Dioxyphenanthren (B. 18, 1943). — II, 1001.
- 7) 3,4-Methylenäther d. 3,4-Dioxy-1-Phenylimidomethylbenzol (Piperonanilid). Sm. 65°. HCl (B. 14, 793; C. 1908 [1] 1540). — III, 103.

- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N** 8)  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ - $\beta$ -Diphenyläthan ( $\alpha$ -Benziloxim). Sm. 137—138° (Co. B. 22, 540, 557; 29, 2906; 35, 262; A. 274, 6; 296, 279; B. 40, 743 C. 1907 [1] 962; J. pr. [2] 76, 91 C. 1907 [2] 1062; Soc. 95, 431 C. 1909 [1] 1755). — III, 288; \*III, 222.
- 9) isom.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ - $\beta$ -Diphenyläthan ( $\gamma$ -Benziloxim). Sm. 113 bis 114°. +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (Sm. 70°) (B. 22, 543; 29, 2906; A. 296, 284; Soc. 95, 431 C. 1909 [1] 1755). — III, 289; \*III, 223.
- 10) 3-[ $\alpha$ -Oximidoäthyl]biphenylenoxyd (Oxim d. Acetylbiiphenylenoxyd). Sm. 145—146° (A. 264, 189). — III, 217.
- 11) Hydrat d. Benzamid + 2H<sub>2</sub>O? Sm. 99° (A. 169, 111). — II, 1171.
- 12) 4-[ $\alpha$ - $\gamma$ -Diketo- $\gamma$ -Phenylpropyl]pyridin. Sm. 80°; Sd. 233°<sub>18</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (M. 22, 622). — \*IV, 137.
- 13) Methylenäther d.  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[2-Pyridyl]äthen (Piperonal- $\alpha$ -Pikolin). Sm. 109°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (B. 30, 1579). — IV, 395.
- 14) Methylenäther d.  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[4-Pyridyl]äthen ( $\gamma$ -Piperonalpikolin). Sm. 98°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (HCl, AuCl<sub>3</sub>) (B. 42, 1193 C. 1909 [1] 1576).
- 15) 5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 239—239,5° (241—242°) (B. 30, 1105; M. 19, 496). — \*II, 742.
- 16) 3-Oxy-5-Methyl-1-Phenylbenzoxazol. Sm. 124—126° (B. 37, 3110 C. 1904 [2] 994).
- 17) Methyläther d. 3-Oxy-1-Phenylbenzoxazol. Sm. 65—66° (B. 35, 1481 C. 1902 [1] 1209).
- 18) Methyläther d. 2-[4-Oxyphenyl]benzisoxazol. Sm. 100—101° (B. 27, 1455). — IV, 410.
- 19) Phenyläther d. 1-Oxymethylbenzoxazol. Sm. 146—147° (J. pr. [2] 64, 294).
- 20) 4-Keto-2-Phenyl-3,4-Dihydro-1,3-Benzoxazin. Sm. 169° (Soc. 91, 266 C. 1907 [1] 1262; Soc. 91, 1425 C. 1907 [2] 1341; Soc. 95, 915 C. 1909 [2] 370).
- 21) 2-[ $\alpha$ -Oximidoäthyl]- $\beta$ -Naphtofuran. Sm. 207° (B. 36, 2867 C. 1903 [2] 832).
- 22) 6-Acetylphenoxazin. Sm. 142° (B. 36, 477 C. 1903 [1] 650).
- 23) Methyläther d. 1-Oxy-5-Keto-5,10-Dihydroakridin. Sm. 293° (A. 355, 344 C. 1907 [2] 1508).
- 24) Methyläther d. 2-Oxy-5-Keto-5,10-Dihydroakridin. Sm. 290° (A. 355, 371 C. 1907 [2] 1511).
- 25) Methyläther d. 3-Oxy-5-Keto-5,10-Dihydroakridin. Sm. 282—284° (B. 38, 2125 C. 1905 [2] 247).
- 26)  $\alpha$ -Phenylimidophenyllessigsäure (Anilphenylglyoxylsäure). Sm. 151°. Ag (C. 1895 [2] 90). — \*II, 941.
- 27) 1-Phenylimidomethylbenzol-2-Carbonsäure? (Phtalaldehydsäure-Anilid). Sm. 174° (A. 239, 89; C. 1898 [2] 524). — II, 1626; \*II, 949.
- 28) 2-Benzylidenamidobenzol-1-Carbonsäure (D. R. P. 157617 C. 1905 [1] 316).
- 29) 3-Benzylidenamidobenzol-1-Carbonsäure. Sm. 119° (B. 24, 3522). — III, 32.
- 30)  $\beta$ -[6-Phenyl-2-Pyridyl]akrylsäure. (2HCl, PtCl<sub>4</sub>) (B. 35, 2785 C. 1902 [2] 994). — \*IV, 243.
- 31) 3-Methylcarbazol-6-Carbonsäure. Sm. 265° (B. 40, 386 C. 1907 [1] 824).
- 32) Laktone d.  $\beta$ -Oxy- $\alpha$ -[2-Chinolyl]- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 108° (A. 315, 356). — \*IV, 230.
- 33) Aldehyd d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 73—74° (B. 28, 287). — III, 17.
- 34) Nitrit d.  $\beta$ -Oxy- $\alpha$ - $\alpha$ -Diphenyläthen. Sm. 87—88° (A. 233, 336; C. 1905 [2] 825). — II, 232.
- 35) Benzoat d. anti-Benzaldoxim. Sm. 101—102° (G. 22 [2] 167). — III, 43.
- 36) Amid d. 9-Oxyfluoren-4-Carbonsäure. Sm. 206—210° (A. 252, 29). — II, 1706.
- 37) Amid d. Diphenylketon-2-Carbonsäure. Sm. 165° (A. 291, 11). — \*II, 999.



- $C_{14}H_{11}O_2N$  38) Phenylamid d. Benzolketocarbonsäure. Sm. 63° (A. 274, 9). — II, 1598.
- 39) anti-Benzylidenamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 170—190° (Soc. 91, 1426 C. 1907 [2] 1342).
- 40) syn-Benzylidenamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 182° (Soc. 91, 1429 C. 1907 [2] 1342).
- 41) 2-Oxybenzylidenamid d. Benzolcarbonsäure. Zers. bei 190° (B. 31, 1603; Soc. 93, 1939 C. 1909 [1] 282). — \*III, 54.
- 42) isom. 2-Oxybenzylidenamid d. Benzolcarbonsäure. Zers. bei 200° (Soc. 93, 1940 C. 1909 [1] 282).
- 43) Phenylformylamid d. Benzolcarbonsäure. Sm. 112° (Am. 18, 385, 543; 19, 135). — \*II, 734.
- 44) Imid d. Benzolcarbonsäure (Benzamid). Sm. 148° (149°). Na, Ag, + J<sub>2</sub> (A. 111, 6; 252, 65; 297, 252; B. 9, 975; 11, 764; 13, 708; 22, 1606; 23, 2389, 3039; 25, 3120; 27, 999; 28, 435, 2355; J. pr. [2] 30, 87; Soc. 81, 1530 C. 1903 [1] 157; Soc. 93, 1942 C. 1909 [1] 283). — II, 1170; \*II, 735.
- 45) Äthylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 148° (G. 25 [1] 250; B. 28, 362). — II, 1880.
- 46) 1-Naphtylimid d. Bernsteinsäure. Sm. 152° (u. 151,5—153°) (B. 10, 1713; A. 209, 382; 248, 158; Ch. Z. 1895, 2081; A. 347, 29 C. 1906 [2] 506). — II, 611.
- 47) 2-Naphtylimid d. Bernsteinsäure. Sm. 180° (183°) (A. 248, 159; 292, 190; C. 1896 [1] 996; B. 37, 1599 C. 1904 [1] 1418). — II, 620; \*II, 339.
- $C_{14}H_{11}O_2N_3$  C 66,4 — H 4,3 — O 12,6 — N 16,6 — M. G. 253.
- 1) 1,2,3-Triamido-9,10-Anthrachinon. Sm. noch nicht bei 300° (B. 37, 4439 C. 1905 [1] 180).
- 2) Benzyliden-2-Nitrobenzylidenhydrazin. Sm. 105° (B. 33, 2464). — \*III, 29.
- 3) Benzyliden-3-Nitrobenzylidenhydrazin. Sm. 125° (B. 33, 2462). — \*III, 29.
- 4) Benzyliden-4-Nitrobenzylidenhydrazin. Sm. 256° (B. 33, 2465). — \*III, 29.
- 5) 2-Phenylhydrazon-1-Oximido-1,2-Dihydrobenzofuran. Sm. 155—156° (B. 35, 1645 C. 1902 [1] 1361). — \*IV, 517.
- 6) 4-[1-Naphtyl]hydrazon-5-Keto-3-Methyl-4,5-Dihydroisoxazol. Sm. 168—170° (B. 30, 1165). — IV, 928.
- 7) 4-[2-Naphtyl]hydrazon-5-Keto-3-Methyl-4,5-Dihydroisoxazol. Sm. 200° (B. 30, 1166). — IV, 930.
- 8) 2-Phenylamido-5-Keto-4-Phenyl-4,5-Dihydro-1,3,4-Oxiazol (Diphenyldihydrobiuret; Phenylcarbizincarbonanilid). Sm. 173° (B. 21, 2465). — IV, 676.
- 9) 5-Keto-3-Oxy-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 163°. Na, Ca (B. 34, 2336; 35, 974; B. 36, 1367 C. 1903 [1] 1342). — \*IV, 747.
- 10) ?-Phenylazo-5-Oxy-1-Methylbenzoxazol. Sm. 91° (B. 35, 4206 C. 1903 [1] 147). — \*IV, 1076.
- 11) 6-Phenylazo-5-Oxy-3-Methylbenzoxazol. Sm. 186° (M. 19, 517). — IV, 1448.
- 12) 3-Phenylhydrazon-2-Keto-1-Oxy-2,3-Dihydroindol. Sm. 220° (221°). (B. 39, 2346 C. 1906 [2] 515; B. 41, 3930 C. 1909 [1] 295).
- 13) 6-Nitro-2-Benzylindazol. Sm. 111—112° (B. 37, 2578 C. 1904 [2] 658).
- 14) 5-Nitro-2-Methyl-1-Phenylbenzimidazol. Sm. 170°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat, + HgCl<sub>2</sub> (J. pr. [2] 69, 41 C. 1904 [1] 521; J. pr. [2] 74, 193 C. 1906 [2] 1435).
- 15) 5-Nitro-1-Methyl-2-Phenylbenzimidazol. Sm. 140° u. Zers. (Bl. [3] 17, 869). — IV, 562.
- 16) ?-Nitro-5-Methyl-2-Phenylbenzimidazol + ½ H<sub>2</sub>O. Sm. 222—223° (B. 25, 1995). — IV, 1013.
- 17) 9-Nitroso-3-Acetylamidocarbazol. Sm. 162—164° u. Zers. (G. 21 [2] 386). — IV, 992.
- 18) 6-Amido-2-Keto-3-Oxy-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. noch nicht bei 300°. H<sub>2</sub>SO<sub>4</sub> (B. 38, 98 C. 1905 [1] 540).

- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>** 19) 2-Acetylamido-3-Oxy-5,10-Naphtdiazin. Sm. noch nicht bei 340° (B. 35, 4305 C. 1903 [1] 344). — \*IV, 835.
- 20) 1-Phenyl-5-Pyrrylpyrazol-3-Carbonsäure. Sm. 215° (B. 23, 2159). — IV, 798.
- 21) 1-[2-Methylphenyl]-1,2,3-Benztriazol-5-Carbonsäure. Sm. 204,5° (A. 332, 86 C. 1904 [1] 1569).
- 22) 1-[4-Methylphenyl]-1,2,3-Benztriazol-5-Carbonsäure. Sm. 271° (267°) (B. 23, 3454; A. 332, 88 C. 1904 [1] 1569). — IV, 1154.
- 23) Aldehyd d. Diazoamidobenzol-4,4'-Dicarbonsäure. Sm. 135° (J. pr. [2] 56, 118). — IV, 1579.
- 24) Acetat d. 2-[4-Oxyphenyl]-2,1,3-Benztriazol. Sm. 141° (B. 39, 3932 C. 1907 [1] 158).
- 25) Nitril d.  $\alpha$ -[3-Nitrophenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 109° (B. 35, 3337 C. 1902 [2] 1193).
- 26) Nitril d.  $\alpha$ -[4-Nitrophenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 129° (128°) (B. 25, 2054; B. 35, 3338 C. 1902 [2] 1193). — II, 1324.
- 27) Nitril d. 4-Nitro-1-Phenylamidomethylbenzol-3-Carbonsäure. Sm. 135° (B. 34, 3374 Anm.).
- 28) Nitril d. 2,6-Diketo-4-Methyl-4-Phenylhexahydropyridin-3,5-Dicarbonsäure. Sm. 270—280° (C. 1901 [1] 581). — \*II, 1217.
- 29) Phenylamidoimid d. 3-Amidobenzol-1,2-Dicarbonsäure. Sm. 284 bis 285° (C. 1909 [1] 1759).
- 30) Verbindung (aus d.  $\alpha$ -Phenylhydrazid d. 2-Amidobenzol-1-Carbonsäure). Sm. 218—219° (A. 301, 94). — \*IV, 809.
- 31) Verbindung (aus Stilben). Sm. 220° u. Zers. (B. 7, 1097; 8, 1050). — II, 249.
- 32) Verbindung (aus d. Verb. C<sub>15</sub>H<sub>13</sub>ON<sub>3</sub>S). Sm. 161—162° (B. 34, 341).
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>5</sub>** C 59,8 — H 3,9 — O 11,4 — N 24,9 — M. G. 281.
- 1) ?-Nitro-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. oberhalb 300° (Soc. 53, 852; 57, 51). — IV, 1234.
- 2) isom. ?-Nitro-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 145 bis 146° (Soc. 53, 852; 57, 51). — IV, 1234.
- 3) 6-[4-Amidophenyl]azo-1,4-Diketo-1,2,3,4-Tetrahydro-2,3-Benzdiazin. HCl +  $\frac{1}{2}$ H<sub>2</sub>O (J. pr. [2] 76, 328 C. 1908 [1] 38).
- 4) 6-Phenylamidoazo-1,4-Diketo-1,2,3,4-Tetrahydro-2,3-Benzdiazin +  $\frac{1}{2}$ H<sub>2</sub>O. Zers. bei 185—187° (J. pr. [2] 76, 327 C. 1908 [1] 38).
- 5) 6-Ureido-3-Keto-2-Phenyl-2,3-Dihydro-1,2,4-Benztriazin (Carbonylchrysoidylharustoff). Sm. noch nicht bei 300° (C. 1908 [2] 1589).
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>Cl** 1) Benzylidenäther d. Chlordioxyethylbenzol? (A. 154, 347; J. 1850, 489). — III, 13.
- 2) Diphenylchloroessigsäure. Sm. 118—119° u. Zers. (B. 36, 145 C. 1903 [1] 466).
- 3) Benzoat d. 5-Chlor-2-Oxy-1-Methylbenzol. Sm. 71—72° (G. 28 [1] 211). — \*II, 718.
- 4) Benzoat d. ?-Chlor-3-Oxy-1-Methylbenzol. Sm. 86—87° (D. R. P. 93694). — \*II, 718.
- 5) 2-Naphtylester d.  $\beta$ -Chlorpropen- $\alpha$ -Carbonsäure (2-N. d.  $\beta$ -Chlorcrotonsäure). Sm. 99—100° (B. 29, 1669). — \*II, 521.
- 6) 2-Naphtylester d. isom.  $\beta$ -Chlorpropen- $\alpha$ -Carbonsäure (2-N. d.  $\beta$ -Chlorisocrotonsäure). Sm. 67° (B. 29, 1669). — \*II, 521.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>Cl<sub>3</sub>** 1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 202° u. Zers. (B. 7, 1201; J. pr. [2] 47, 59). — II, 995.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>Br** 1) Benzylidenäther d. Bromdioxyethylbenzol. Sm. 69—70° (A. 3, 266; B. 14, 2475). — III, 13.
- 2)  $\beta$ -Brom- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 108° (M. 26, 998 C. 1905 [2] 1181).
- 3) Bromoxymethyldiphenylketon. (CH<sub>3</sub>:OH:Br = 1:2:?). Sm. 130 bis 131° (G. 32 [2] 273 C. 1902 [2] 1382).
- 4) Methyläther d. 2-Brom-4'-Oxydiphenylketon. Sm. 95—95,5° (B. 27, 1455). — III, 195.
- 5) Diphenylbromessigsäure (A. 171, 131). — II, 1464.
- 6) Methylester d. ?-Brombiphenyl-3-Carbonsäure. Sm. 67° (B. 27, 3389). — II, 1462.

- $C_{14}H_{11}O_2Br$  7) **3-Brom-2-Methylphenylester d. Benzolcarbonsäure.** Sm. 76° (*B.* 37, 1022 *C.* 1904 [1] 1203).  
 8) **p-Brom-2-Methylphenylester d. Benzolcarbonsäure.** Sm. 59° (*J. pr.* [2] 51, 213). — \*II, 718.  
 9) **p-Brom-3-Methylphenylester d. Benzolcarbonsäure.** Sm. 82° (*J. pr.* [2] 51, 213). — \*II, 718.  
 10) **p-Brom-4-Methylphenylester d. Benzolcarbonsäure.** Fl. (*J. pr.* [2] 51, 213). — \*II, 718.
- $C_{14}H_{11}O_2Br_3$  1)  **$\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -[3,5-Dibrom-4-Oxyphenyl]- $\beta$ -Phenyläthan.** Sm. 170° (*A.* 349, 115 *C.* 1906 [2] 1257).  
 2)  **$\alpha$ -Oxy- $\alpha$ -[4-Bromphenyl]- $\alpha$ -[3,5-Dibrom-4-Oxyphenyl]äthan.** Sm. 194° (*A.* 363, 278 *C.* 1909 [1] 176).  
 3) **5,3',5'-Tribrom-4,4'-Dioxy-3-Methyldiphenylmethan.** Sm. 185—190° (*A.* 356, 167 *C.* 1907 [2] 1700).
- $C_{14}H_{11}O_2J$  1)  **$\beta$ -Jod- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan.** Sm. 195° (*M.* 26, 999 *C.* 1905 [2] 1181).  
 2) **Acetat d. Diphenylenjodoniumhydroxyd.** Sm. 195,5° u. Zers. (*C.* 1908 [1] 134).
- $C_{14}H_{11}O_3N$  C 69,7 — H 4,6 — O 19,9 — N 5,8 — M. G. 241.  
 1) **3,4-Methylenäther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol.** Sm. 208—209° (*B.* 31, 175). — \*III, 75.  
 2) **9-Nitro-10-Oxy-9,10-Dihydroanthracen (Salpetersäureanthracen).** Sm. 125° u. Zers. (*B.* 13, 1585; 33, 3547). — II, 260.  
 3) **Orcinufin ( $\alpha$ -Brcindichroin).** Na (*B.* 7, 1100; 17, 1879; 21, 251; 23, 718). — II, 965.  
 4) **Äthyläther d. Resorufin.** Sm. 228° (*M.* 1, 894; *B.* 22, 3028; 23, 719). — II, 933.  
 5) **2-Nitro-4<sup>[p]</sup>-Methyldiphenylketon.** Sm. 126—127° (*B.* 5, 685; 7, 983). — III, 214.  
 6) **2'-Nitro-4-Methyldiphenylketon.** Sm. 155° (*B.* 41, 1847 *C.* 1908 [2] 158).  
 7) **3'-Nitro-4-Methyldiphenylketon.** Sm. 111°. +  $AlCl_3$  (*R.* 19, 24; *A.* 286, 307; *B.* 29, 3036). — III, 214; \*III, 161.  
 8) **4'-Nitro-4-Methyldiphenylketon.** Sm. 122—124°. +  $AlCl_3$  (*R.* 19, 25; *A.* 286, 321). — III, 214; \*III, 161.  
 9)  **$\alpha$ -Keto- $\beta$ -[2-Nitrophenyl]- $\alpha$ -Phenyläthan.** Sm. 73—74° (*B.* 21, 2448; 26, 2452). — III, 219.  
 10)  **$\alpha$ -Keto- $\beta$ -[4-Nitrophenyl]- $\alpha$ -Phenyläthan.** Sm. 145° (140—142°) (*J. r.* 11, 99; *B.* 25, 2242). — III, 219.  
 11) **4-Nitro-4'-Acetylbiphenyl.** Sm. 90—94° (*B.* 28, 525). — III, 217.  
 12) **3,4-Methylenäther d. N-Phenyl-3,4-Dioxybenzaloxim.** Sm. 135° (*C.* 1905 [2] 764).  
 13) **Azoorein** (*B.* 7, 440; 17, 1882). — II, 965.  
 14) **3-Keto-2-Oxy-1-[4-Oxyphenyl]-1,3-Dihydroisindol (Oxyphenylphtalidoxim).** Sm. 215—216°. +  $CH_4O$  (*B.* 42, 2835 *C.* 1909 [2] 622).  
 15) **6-Äthylphenoxazin-3,4-Chinon.** Sm. 226° (*B.* 31, 496). — \*IV, 234.  
 16) **2-Oxy-4,9-Diketo-1-Äthyl-4,9-Dihydro- $\beta\beta$ -Naphtindol** (*B.* 33, 569). — \*II, 1089.  
 17)  **$\alpha$ -Methylderivat d. 2,4-Dioxy-5-Keto-5,10-Dihydroakridin.** Sm. 203° (*B.* 38, 3013 *C.* 1905 [2] 1264).  
 18)  **$\beta$ -Methylderivat d. 2,4-Dioxy-5-Keto-5,10-Dihydroakridin.** Sm. 252° u. Zers. (*B.* 38, 3013 *C.* 1905 [2] 1264).  
 19) **Diphenyloxaminsäure +  $H_2O$ .** Sm. 141,5° (wasserfrei) u. Zers. — II, 408.  
 20) **3-[2-Oxybenzyliden]amidobenzol-1-Carbonsäure.** Sm. 190° (202 bis 204°) (*A.* 210, 116; *B.* 37, 595 *C.* 1904 [1] 881). — III, 74.  
 21) **3-Benzylidenamido-2-Oxybenzol-1-Carbonsäure.** Sm. noch nicht bei 300° (*J. pr.* [2] 61, 543). — \*III, 25.  
 22) **5-Benzylidenamido-2-Oxybenzol-1-Carbonsäure.** Sm. 256° (*C.* 1907 [1] 107).  
 23) **4-Amidodiphenylketon-2-Carbonsäure.** Sm. 193—194° u. Zers. (*M.* 29, 437 *C.* 1908 [2] 1028).  
 24) **5-Amidodiphenylketon-2-Carbonsäure.** Sm. 195° u. Zers. +  $C_2H_5O$  (*B.* 38, 296 *C.* 1905 [1] 617).



- $C_{14}H_{11}O_3N$  25) 3'-Amidodiphenylketon-2-Carbonsäure. Sm. 165° u. Zers. (174 bis 175°) (D.R.P. 148110 C. 1904 [1] 329; M. 29, 180 C. 1903 [2] 326).
- 26) 3'-Amidodiphenylketon-4-Carbonsäure +  $H_2O$ . Sm. 145°. Ba, HCl,  $H_2SO_4$  +  $2H_2O$  (A. 286, 318). — II, 1706.
- 27) 4'-Amidodiphenylketon-4-Carbonsäure. Sm. 211°.  $H_2SO_4$  (A. 286, 331). — II, 1706.
- 28) 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 177° (181°; 183°). Na +  $4H_2O$ , Mg +  $4H_2O$ , Ca +  $3H_2O$ , Ba +  $3H_2O$ , Ag (A. 205, 130; B. 16, 2229; 19, 1196; 25, 1263; 26, 1304; 27, 1480; 29, 2063; 32, 3403; G. 30 [2] 277; B. 35, 3484 C. 1902 [2] 1318; J. pr. [2] 69, 25 C. 1904 [1] 641; B. 38, 1609 C. 1905 [1] 1563). — II, 1254; \*II, 786.
- 29) 3-Benzoylamidobenzol-1-Carbonsäure (A. 103, 90; 117, 172). — II, 1267.
- 30) 4-Benzoylamidobenzol-1-Carbonsäure. Sm. 278°. Ca, Ba, Ag (A. 205, 127). — II, 1273.
- 31) Diphenylamin-4-Ketocarbonsäure (C. 1901 [1] 238).
- 32) Benzoylbenzhydroxamsäure. Sm. 95° (B. 19, 1670; 27, 2198; 32, 1654; C. r. 140, 1398 C. 1905 [2] 130). — II, 1208; \*II, 756.
- 33) 1-N-Phenylbenzaldoxim-2-Carbonsäure +  $H_2O$ . Zers. bei 125° (B. 34, 1019).
- 34) N-Phenylbenzaldoxim-N 3-Carbonsäure. Sm. 198° u. Zers. (200°) (C. 1898 [2] 80; B. 29, 3042). — \*III, 35.
- 35) 3-[4-Methylbenzoyl]pyridin-2-Carbonsäure. Sm. 166°. Ag, AgH, HCl (M. 18, 453; 21, 981). — \*IV, 119.
- 36) 4-Phenylacetylpyridin-3-Carbonsäure. Sm. 187–188° u. Zers. Ag (B. 37, 2143 C. 1904 [2] 234).
- 37)  $\alpha$ ,2'-Lakton d. 2-Amido- $\alpha$ ,4-Dioxydiphenylmethan-2'-Carbonsäure. Sm. 229–230° (B. 31, 2801). — \*II, 1089.
- 38) Methylester d. 3-Benzoylpyridin-2-Carbonsäure. Sm. 91° (M. 22, 846). — \*IV, 119.
- 39) Äthylester d. 1-Ketoiden-3-Cyanessigsäure. Sm. 124° (B. 33, 2431). — \*II, 1141.
- 40) N-Benzoat d. Benzhydroxamsäure. Sm. 161°. Na, K, Pb, Ag (A. 161, 357; 175, 257, 305; 178, 226; 252, 228; 281, 221; B. 16, 874; 25, 43; 27, 2198; Am. 20, 7; R. 15, 359; J. r. 14, 41; G. 23 [2] 242; J. pr. [2] 71, 136 C. 1905 [1] 819; B. 40, 228 C. 1907 [1] 813). — II, 1206; \*II, 755.
- 41) 1-Benzoat d. 2-Oxybenzaldoxim. Sm. 117° (114,5–115°) (B. 26, 2624; G. 26 [1] 463). — III, 77; \*III, 57.
- 42) 2-Benzoat d. 2-Oxybenzaldoxim. Sm. 130° (B. 26, 2625). — III, 77.
- 43) Benzoat d. 4-Oximido-1-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 193° (u. 144°) (Am. 20, 770; 22, 402). — \*III, 266.
- 44) Benzoat d. 4-Oximido-1-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 177° u. Zers. (Am. 20, 775). — \*III, 265.
- 45) Monamid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 193° (190–191°) (A. 247, 269; 252, 24). — II, 1884.
- 46) Amid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 144° (Soc. 87, 1220 C. 1905 [2] 1335; B. 38, 3257 C. 1905 [2] 1588; Soc. 89, 1331 C. 1906 [2] 1415; B. 40, 3509 C. 1907 [2] 1409).
- 47) Amid d. 4-Benzoxylbenzol-1-Carbonsäure. Sm. 218–220° (B. 40, 3508 C. 1907 [2] 1409).
- 48) Phenylmonamid d. Benzol-1,2-Dicarbonsäure (Phenylphtalamidsäure). Sm. 158° u. Zers. (169–169,5°). Ba, Methylaminsalz, Anilinsalz, Benzylaminsalz, 2-Naphtylaminsalz (J. 1847/48, 605; J. pr. [2] 55, 264; A. 255, 375; B. 32, 2123; Am. 18, 337; 26, 457; B. 36, 997 C. 1903 [1] 1131; Am. 37, 599 C. 1907 [2] 393; C. 1909 [2] 984). — II, 1797; \*II, 1049.
- 49) 2-Naphtylmonamid d. Maleinsäure. Sm. 200° u. Zers. (Am. 19, 495). — \*II, 341.
- 50) Benzoylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 208° (200–202°). Na, Ag, Piperidinsalz (A. 99, 249; J. 1856, 502; Soc. 81, 1533 C. 1903 [1] 157; B. 38, 2795 C. 1905 [2] 1248; Soc. 87, 1219 C. 1905 [2] 1335; B. 38, 3257 C. 1905 [2] 1588; Soc. 89, 1331 C. 1906 [2] 1415). — II, 1500.

- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>N** 51) **Methylimid d. ?-Oxynaphtalinmethylläther-1, 8-Dicarbonensäure** (B. 32, 3291). — \*II, 1140.
- 52) **Äthoxylimid d. Naphthalin-1,8-Dicarbonensäure**. Sm. 160° (G. 25 [1] 253; B. 28, 363). — II, 1880.
- 53) **Phenylimid d. α-[2-Furanyl]äthan-αβ-Dicarbonensäure**. Sm. 152,5° (B. 31, 1121). — \*III, 514.
- 54) **2-Naphtylimid d. Äpfelsäure**. Sm. 193° (B. 23, 2046; Ph. Ch. 17, 250). — II, 620; \*II, 341.
- 55) **Verbindung** (aus α-Pikolin u. Phtalsäureanhydrid). Sm. 180° (B. 36, 1659 C. 1903 [2] 40). — \*IV, 101.
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>N<sub>3</sub>** C 62,4 — H 4,1 — O 17,8 — N 15,6 — M. G. 269.
- 1) **β-[2-Nitrophenyl]hydrazon-α-Keto-α-Phenyläthan**. Sm. 140—141° (141,5—142,5°) (B. 18, 2565; 34, 2013). — IV, 1478; \*IV, 1072.
- 2) **isom. β-[2-Nitrophenyl]hydrazon-α-Keto-α-Phenyläthan**. Sm. 113 bis 117° (B. 34, 2013). — \*IV, 1072.
- 3) **β-[3-Nitrophenyl]hydrazon-α-Keto-α-Phenyläthan**. Sm. 139—140° (B. 34, 2015). — \*IV, 1072.
- 4) **isom. β-[3-Nitrophenyl]hydrazon-α-Keto-α-Phenyläthan**. Sm. 149 bis 152° (B. 34, 2015). — \*IV, 1072.
- 5) **β-[4-Nitrophenyl]hydrazon-α-Keto-α-Phenyläthan**. Sm. 199—200° (B. 34, 2017). — \*IV, 1072.
- 6) **3-Nitrobenzyliden-2-Oxybenzylidenhydrazin**. Sm. 162° (B. 33, 2463). — \*III, 56.
- 7) **5-Nitro-2-β-Phenyläthenyl]diazobenzol**. Chlorid, Sulfat (B. 39, 904 C. 1906 [1] 1168).
- 8) **3-Nitro-4-β-Phenyläthenyl]diazobenzol**. Salze, siehe (B. 39, 902 C. 1906 [1] 1167).
- 9) **5-Nitro-1-Nitroso-2-Phenyl-2,3-Dihydroindol**. Sm. 160° (B. 31, 2541). — \*IV, 237.
- 10) **5-Nitro-2-Methyl-1-[4-Oxyphenyl]benzimidazol**. Sm. 187—188° (D.R.P. 175 829 C. 1906 [2] 1798).
- 11) **7-Nitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol**. Sm. 200—203,5° (Soc. 91, 1482 C. 1907 [2] 1502).
- 12) **6-Nitro-2-Keto-1-Phenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin**. Sm. 230,5° (B. 38, 94 C. 1905 [1] 539).
- 13) **6-Nitro-3-[4-Methylphenyl]-1,2,4-Benzoxdiazin**. Sm. 185° (B. 32, 2692). — \*IV, 678.
- 14) **2-Oximidomethylazobenzol-2'-Carbonsäure**. Sm. 232° (C. r. 140, 664 C. 1905 [1] 1099).
- 15) **3-Oximidomethylazobenzol-3'-Carbonsäure**. Sm. 185° (B. 36, 3473 C. 1903 [2] 1270).
- 16) **5-Methyl-2-[4-Oxyphenyl]-2,1,3-Benztriazol-2<sup>3</sup>-Carbonsäure**. Sm. 276° u. Zers. (B. 40, 4207 C. 1907 [2] 2047).
- 17) **Acetat d. 2-[4-Oxyphenyl]-1,2-Dihydro-1,2,3-Benztriazol-1-Oxyd**. Sm. 176° (B. 39, 3931 C. 1907 [1] 158).
- 18) **Amid d. 4-Benzoxylphenylazoameisensäure**. Sm. 191° u. Zers. (A. 334, 188 C. 1904 [2] 835).
- 19) **Phenylamid d. 5-Keto-3-Furanyl-4,5-Dihydropyrazol-1-Carbon-säure**. Sm. 192° (C. 1908 [2] 1363).
- 20) **s-Diphenylnitrosamid d. Oxalsäure**. Sm. 86° (B. 10, 960). — II, 410.
- 21) **Benzylidenhydrazid d. 2-Nitrobenzol-1-Carbonensäure**. Sm. 152° (J. pr. [2] 51, 172). — III, 39.
- 22) **Benzylidenhydrazid d. 3-Nitrobenzol-1-Carbonensäure**. Sm. 203° (J. pr. [2] 51, 172). — III, 39.
- 23) **Benzylidenhydrazid d. 4-Nitrobenzol-1-Carbonensäure**. Sm. 247° (J. pr. [2] 51, 173). — III, 39.
- 24) **3-Nitrobenzylidenhydrazid d. Benzolcarbonsäure**. Sm. 192° (J. pr. [2] 50, 303). — III, 39.
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>N<sub>5</sub>** C 56,5 — H 3,7 — O 16,2 — N 23,6 — M. G. 297.
- 1) **4-Phenylnitrosamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol**. Sm. 123° (C. 1901 [1] 935). — \*IV, 435.
- 2) **5-Nitro-1-[4-Acetylamidophenyl]-1,2,3-Benztriazol**. Sm. noch nicht bei 250° (D.R.P. 87 337). — \*IV, 788.

- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>N<sub>5</sub>** 3) Verbindung (aus 2,4-Dinitro-1-[2,4-Dimethylphenyl]aznitrosobenzol). Sm. 116° (*J. pr.* [2] 60, 107). — \*IV, 790.
- 4) Verbindung (aus p-Xylylaznitrosodinitrobenzol). Sm. 128° (*J. pr.* [2] 71, 402 *C.* 1905 [2] 40).
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>Cl** 1) 1-Methyläther d. 6-Chlor-1,3,6-Trioxypentanthren. Sm. 162° (*B.* 34, 1555).
- 2) Benzoat d. 4-Chlor-1,2-Dioxybenzolmonomethyläther. Sm. 76—77° (*G.* 28 [1] 229). — \*II, 719.
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>Br** 1) 1-Methyläther d. 5-Brom-1,3,6-Trioxypentanthren. Sm. 158° +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (*B.* 33, 576; 34, 1545). — \*II, 1144.
- 2) Phenylester d. Oxyessig-4-Bromphenyläthersäure. Sm. 73° (*C.* 1898 [1] 988). — \*II, 373.
- 3) 4-Bromphenylester d. Oxyessigphenyläthersäure. Sm. 98° (*C.* 1898 [1] 988). — \*II, 373.
- 4) Acetat d. Methyl- $\beta$ -Dibrom-1-Oxy-2-Naphtylketon. Sm. 107° (*B.* 39, 3097 *C.* 1906 [2] 1410).
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>J** 1) Aldehyd d. Diphenyljodoniumhydroxyd-4,4'-Dicarbonsäure. Salze, siehe (*B.* 38, 3446 *C.* 1905 [2] 1585).
- 2) 1-Benzoat d. 4-Jod-1,2-Dioxybenzol-2-Methyläther. Sm. 80—81° (*C. r.* 144, 758 *C.* 1907 [2] 46; *C.* 1907 [2] 976).
- C<sub>14</sub>H<sub>11</sub>O<sub>4</sub>N** C 65,4 — H 4,3 — O 24,9 — N 5,4 — M. G. 257.
- 1) Monomethyläther d. 1,3-Dioxy- $\beta$ -[3-Nitrobenzyliden]benzol. Zers. bei 150° (*G.* 22 [2] 302). — II, 997.
- 2) 4'-Nitro-6-Oxy-3-Methyldiphenylketon. Sm. 142—143° (*Ph. Ch.* 32, 41; *B.* 36, 3892 *C.* 1904 [1] 93). — \*III, 161.
- 3) Methyläther d. 4'-Nitro-2-Oxydiphenylketon. Sm. 117—119° (*B.* 36, 3900 *C.* 1904 [1] 94).
- 4) Methyläther d. 3'-Nitro-4-Oxydiphenylketon. + AlCl<sub>3</sub> (*R.* 19, 25). — \*III, 153.
- 5) Methyläther d. 4'-Nitro-4-Oxydiphenylketon. Sm. 121°. + AlCl<sub>3</sub> (*R.* 19, 25; *B.* 36, 3899 *C.* 1904 [1] 94). — \*III, 153.
- 6) Äthyläther d. Resazurin. Sm. 212° (*M.* 1, 889; *B.* 22, 3023). — II, 931.
- 7) 2-Nitrophenyläther d. Oxymethylphenylketon. Sm. 118° (*B.* 23, 172). — III, 132.
- 8) 4-Nitrophenyläther d. Oxymethylphenylketon. Sm. 144° (*B.* 15, 2498). — III, 133.
- 9) N-Methyläther d.  $\beta$ -Oxynaphtalinmethyläther-1,8-Dicarbonsäureanhydridoxim. Sm. 191° (*B.* 32, 3294). — \*II, 1140.
- 10) 3-[2-Oxybenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 207°. NH<sub>4</sub> (*J. pr.* [2] 61, 543). — \*III, 53.
- 11) 5-[2-Oxybenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 245° u. Zers. (247°) (*A.* 210, 117; *G.* 38 [1] 14 *C.* 1908 [1] 828). — III, 75.
- 12) 5-[4-Oxybenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Zers. bei 260° (*G.* 39 [2] 28 *C.* 1909 [2] 1053).
- 13) 6-[2-Oxybenzyliden]amido-3-Oxybenzol-1-Carbonsäure. Zers. bei 248° (*G.* 39 [2] 25 *C.* 1909 [2] 1053).
- 14) 2-[2-Oxybenzoyl]amidobenzol-1-Carbonsäure. Sm. 212° (*A.* 351, 279 *C.* 1907 [1] 1495).
- 15) 3-Benzoylamido-2-Oxybenzol-1-Carbonsäure. Sm. 189° (*A.* 195, 37). — II, 1512.
- 16) 5-Benzoylamido-2-Oxybenzol-1-Carbonsäure. Sm. 252°. Ca, Ba + 6 H<sub>2</sub>O (*Am.* 5, 23). — II, 1513.
- 17) 4-Oxybiphenyl-4'-Oxaminsäure. Zers. oberhalb 270° (*B.* 39, 4181 *C.* 1907 [1] 473).
- 18) 4-Amidobiphenyl-2,2'-Dicarbonsäure. Sm. 277° u. Zers. HCl (*B.* 16, 2347; *B.* 36, 3733 *C.* 1904 [1] 35). — II, 1886.
- 19) 6-Amidobiphenyl-2,2'-Dicarbonsäure. Sm. noch nicht bei 300° (*B.* 36, 3738 *C.* 1904 [1] 36).
- 20) Diphenylamin-2,2'-Dicarbonsäure. Sm. 300° u. Zers. (295°). Cu (D.R.P. 145604, 145605 *C.* 1903 [2] 1099; D.R.P. 148179 *C.* 1904 [1] 412; *A.* 355, 352 *C.* 1907 [2] 1509).
- 21) Diphenylamin-2,3'-Dicarbonsäure. Sm. 281—282° (296° u. Zers.) (D.R.P. 148179 *C.* 1904 [1] 412; *A.* 355, 355 *C.* 1907 [2] 1509).



- C<sub>14</sub>H<sub>11</sub>O<sub>4</sub>N** 22) Diphenylamin - 2,4'-Dicarbonsäure. Sm. 282—283° (290° u. Zers.) (D.R.P. 148179 *C.* 1904 [1] 412; *A.* 355, 356 *C.* 1907 [2] 1509).
- 23)  $\alpha$ -Benzoylamido- $\beta$ -[2-Furanyl]akrylsäure. Sm. 210° (*A.* 337, 284 *C.* 1905 [1] 378).
- 24) 2-Methyl-4-Phenylpyridin-5,6-Dicarbonsäure. Sm. 100° u. Zers. Cu (*B.* 36, 2457 *C.* 1903 [2] 671).
- 25) 2-Methyl-5-Phenylpyridin-6,5<sup>2</sup>-Dicarbonsäure + H<sub>2</sub>O. Sm. 201°. Na<sub>2</sub> + 2H<sub>2</sub>O, Zn + 1½H<sub>2</sub>O, Cu + 1½H<sub>2</sub>O (*B.* 22, 259). — IV, 386.
- 26) Äthylester d.  $\beta$ -Benzoylamidofuran-2-Carbonsäure. Sm. 99—100° (*C. r.* 136, 1455 *C.* 1903 [2] 292).
- 27) Benzylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 83,5—84° (*B.* 30, 2288).
- 28) 2-Nitrobenzylester d. Benzolcarbonsäure. Sm. 94° (*B.* 25, 2962). — II, 1144.
- 29) 4-Nitro-2-Methylphenylester d. Benzolcarbonsäure. Sm. 126° (128°) (*B.* 26, 2352; *A.* 330, 95 *C.* 1904 [1] 1075). — II, 1147.
- 30) 4-Nitro-3-Methylphenylester d. Benzolcarbonsäure. Sm. 75° (*A.* 330, 99 *C.* 1904 [1] 1076).
- 31) 6-Nitro-3-Methylphenylester d. Benzolcarbonsäure. Sm. 76° (*A.* 330, 99 *C.* 1904 [1] 1076).
- 32) 2-Nitro-4-Methylphenylester d. Benzolcarbonsäure. Sm. 102° (*A.* 360, 13 *Ann. C.* 1908 [1] 2032).
- 33) 4-Benzoat d. 4-Oximido-2-Oxy-1-Keto-1,4-Dihydrobenzol-2-Methyläther. Sm. 188° (*Am.* 22, 487). — \*III, 262.
- 34) Amid d. 2-[2-Oxybenzoxyl]benzol-1-Carbonsäure. Sm. 157° (*Soc.* 91, 198 *C.* 1907 [1] 1200). — \*II, 893.
- 35) Phenylmonamid d. 3-Oxybenzol-1,2-Dicarbonsäure. Sm. 145° u. Zers. (*Soc.* 91, 112 *C.* 1907 [1] 1121).
- 36) Phenylmonamid d. 4-Oxybenzol-1,2-Dicarbonsäure. Sm. 260° (*Soc.* 91, 101 *C.* 1907 [1] 1120).
- 37) 2-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäure (Oxyphtalanilsäure). Sm. 223°. Na (*B.* 9, 1528). — II, 1809.
- 38) 3-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 227—229° (*B.* 32, 2119). — \*II, 1055.
- 39) 4-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 289° (220 bis 225°) (*G.* 16, 252; *B.* 36, 998 *C.* 1903 [1] 1131). — II, 1809.
- 40) Imid d. 2-Oxybenzol-1-Carbonsäure (Disalicylamid). Sm. 197—199° u. Zers. (200—203°). Ag, HCl (*J. pr.* [2] 22, 289; [2] 61, 552, D.R.P. 111656 *C.* 1900 [2] 612; *Soc.* 91, 199 *C.* 1907 [1] 1200). — II, 1499; \*II, 892.
- C<sub>14</sub>H<sub>11</sub>O<sub>4</sub>N<sub>8</sub>** 41) 2-Naphtylimid d. Weinsäure? (*Soc.* 71, 1062).  
C 59,0 — H 3,9 — O 22,4 — N 14,7 — M. G. 285.
- 1) 2-[2,4-Dinitrobenzyliden]amido-1-Methylbenzol. Sm. 153,5° (*B.* 35, 2708 *C.* 1902 [2] 637).
- 2) 4-[2,4-Dinitrobenzyliden]amido-1-Methylbenzol. Sm. 151° (*B.* 35, 1267 *C.* 1902 [1] 1102; *M.* 23, 557 *C.* 1902 [2] 742). — \*III, 23.
- 3) 3-Nitro-1-[3-Nitro-4-Methylbenzyliden]amidobenzol. Sm. 156° (*B.* 32, 1289). — \*III, 41.
- 4) s-Phenyl-3-Nitrobenzoylharnstoff. Sm. 224° (*C.* 1904 [1] 1559).
- 5) s-Benzoyl-3-Nitrophenylharnstoff. Sm. 231—232° (*Am.* 24, 221). — \*II, 736.
- 6) 4-Nitrobenzylidenderivat d. 2-Hydroxylamidobenzaldoxim. Sm. 178° (*B.* 34, 4027 *C.* 1902 [1] 117). — \*III, 39.
- 7) 1-Naphtylaminalloxan (*G.* 17, 410). — II, 612.
- 8) 4-Nitrophenylnitrosamidobenzoylmethan. Sm. 135—145° (*B.* 15, 2474). — III, 126.
- 9)  $\alpha\beta$ -Dioximido- $\beta$ -[2-Nitrophenyl]- $\alpha$ -Phenyläthan. Sm. 244° u. Zers. (*B.* 26, 2455). — III, 281.
- 10)  $\alpha\beta$ -Dioximido- $\beta$ -[4-Nitrophenyl]- $\alpha$ -Phenyläthan (2 isom. Form.).  $\alpha$ -Modif. Sm. 225° u. Zers.;  $\beta$ -Modif. Sm. 185° (*B.* 23, 533, 534; *J. pr.* [2] 62, 544). — III, 294.
- 11) Methylenäther d.  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Nitro-3,4-Dioxybenzyliden]hydrazin (*C.* 1908 [2] 945).

- C<sub>14</sub>H<sub>11</sub>O<sub>4</sub>N<sub>3</sub>** 12) Methylenäther d. Phenyl-6-Nitro-3,4-Dioxybenzylidenhydrazin. Sm. 212° (B. 24, 625). — IV, 764.
- 13) α-Phenylhydrazon-2-Nitrophenylessigsäure. Sm. 165—166° u. Zers. (B. 23, 1579, 3618). — IV, 695.
- 14) α-Phenylhydrazon-3-Nitrophenylessigsäure. Sm. 174—175° u. Zers. (B. 23, 1576). — IV, 695.
- 15) Diazoamidobenzol-2,2'-Dicarbonsäure. Sm. 123° (C. 1902 [2] 938). — \*IV, 1137.
- 16) Diazoamidobenzol-3,3'-Dicarbonsäure. Zers. bei 180°. (NH<sub>4</sub>)<sub>2</sub>, K<sub>2</sub>, Ba, Ag<sub>2</sub> (A. 117, 2; 135, 107; J. 1864, 353). — IV, 1577.
- 17) Diazoamidobenzol-3,4'-Dicarbonsäure (J. 1864, 353). — IV, 1577.
- 18) Diazoamidobenzol-4,3'-Dicarbonsäure (J. 1864, 353). — IV, 1577.
- 19) Diazoamidobenzol-4,4'-Dicarbonsäure (A. 128, 269). — IV, 1577.
- 20) Säure (aus d. Nitril d. 2-Amidophenylessigsäure). Sm. 254° u. Zers. Ag<sub>3</sub> (B. 17, 509). — II, 1320.
- 21) Acetat d. 3-Nitro-4-Oxyazobenzol. Sm. 120,5° (Soc. 77, 102). — \*IV, 1036.
- 22) Acetat d. 2'-Nitro-4-Oxyazobenzol. Sm. 109° (B. 24, 2314). — IV, 1410.
- 23) Acetat d. 4'-Nitro-4-Oxyazobenzol. Sm. 147° (C. 1899 [2] 1113). — \*IV, 1036.
- 24) Phenylamidoformiat d. anti-2-Nitrobenzaldoxim. Sm. 88° (B. 26, 2100). — III, 46.
- 25) Phenylamidoformiat d. syn-2-Nitrobenzaldoxim. Sm. 91° u. Zers. (B. 26, 2101). — III, 47.
- 26) Phenylamidoformiat d. anti-3-Nitrobenzaldoxim. Sm. 105° (B. 23, 2171; 26, 2097; A. 355, 50 C. 1907 [2] 1165). — III, 47.
- 27) isom. Phenylamidoformiat d. anti-3-Nitrobenzaldoxim. Sm. 139° (142°) (B. 23, 2171; 26, 2097; A. 355, 51 C. 1907 [2] 1165). — III, 47.
- 28) Phenylamidoformiat d. syn-3-Nitrobenzaldoxim. Sm. 75° (B. 23, 2171). — III, 48.
- 29) Phenylamidoformiat d. anti-4-Nitrobenzaldoxim. Sm. 157° (B. 24, 2548). — III, 49.
- 30) Phenylamidoformiat d. syn-4-Nitrobenzaldoxim. Sm. 94° u. Zers. (B. 24, 2551). — III, 50.
- 31) Amid d. 3-[3-Nitrobenzoyl]amidobenzol-1-Carbonsäure. Sm. 223 bis 224° (A. 251, 167). — II, 1267.
- 32) Phenylamid d. 3-Nitrophenyloxaminsäure. Sm. 204° (Soc. 81, 1569 C. 1903 [1] 157).
- 33) Ureid d. 3,4-Dioxy-1-Naphtylecyanessigsäure. Sm. 223° u. Zers. (C. 1907 [1] 1129).
- 34) Verbindung (aus α-Phenylhydrazon-2-Nitrophenylessigsäure). Sm. 189 bis 190° u. Zers. (B. 23, 1575). — IV, 695.
- 35) Verbindung (aus 6-Nitro-1-Phenylisindazol-3-Carbonsäure). Sm. 235° (A. 264, 151). — IV, 1465.
- C<sub>14</sub>H<sub>11</sub>O<sub>4</sub>N<sub>5</sub>** C 53,7 — H 3,5 — O 20,4 — N 22,4 — M. G. 313.
- 1) 4,6-Dinitro-2-[4-Äthylphenyl]-2,1,3-Benzotriazol. Sm. 140° (J. pr. [2] 71, 413 C. 1905 [2] 41).
- 2) 4,6-Dinitro-2-[2,4-Dimethylphenyl]-2,1,3-Benzotriazol. Sm. 125° (J. pr. [2] 60, 105). — \*IV, 789.
- 3) 4,6-Dinitro-2-[2,5-Dimethylphenyl]-2,1,3-Benzotriazol. Sm. 125° (J. pr. [2] 71, 401 C. 1905 [2] 40).
- C<sub>14</sub>H<sub>11</sub>O<sub>4</sub>Cl** 1) 4-Chlorphenyl-2-Methoxyphenylester d. Kohlensäure. Sm. 98° (Bl. [3] 21, 825). — \*II, 550.
- C<sub>14</sub>H<sub>11</sub>O<sub>4</sub>Br** 2) Diacetat d. p-Chlor-1,2-Dioxynaphtalin. Sm. 149° (B. 27, 2760).
- 3) Bromoessol. Sm. 140—141° (C. 1899 [1] 431). — \*III, 458.
- 2) Verbindung (aus 1,2-Dioxybenzol u. Bromvanillin) (B. 42, 4166 C. 1909 [2] 1929).
- 3) Verbindung (aus 1,3-Dioxybenzol u. Bromvanillin) (B. 42, 4167 C. 1909 [2] 1929).
- 4) Verbindung (aus 1,4-Dioxybenzol u. Bromvanillin) (B. 42, 4167 C. 1909 [2] 1929).
- C<sub>14</sub>H<sub>11</sub>O<sub>5</sub>N** C 61,5 — H 4,0 — O 29,3 — N 5,1 — M. G. 273.
- 1) 4-Methyläther d. 3-Nitroso-2,4,6-Trioxydiphenylketon (Nitrosocotoïn). Sm. 153—154° (M. 22, 999 C. 1902 [1] 200). — \*III, 156.

- C<sub>14</sub>H<sub>11</sub>O<sub>6</sub>N** 2) 2-Methyl-6-[2-Nitro-5-Oxy-3-Methylphenyl]-1,4-Benzochinon (B. 31, 1336). — \*II, 578.
- 3)  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ -[ $\beta$ -Trioxyphenyl]- $\beta$ -Phenyläthan. Sm. 144° (B. 39, 2058 C. 1906 [2] 246).
- 4) 5-[3,4-Dioxybenzyliden]amido-2-Oxybenzol-1-Carbonsäure (G. 39 [2] 29 C. 1909 [2] 1053).
- 5) 6-Amido-6'-Oxybiphenyl-2,2'-Dicarbonsäure. Sm. 312—313° u. Zers. (B. 38, 3774 C. 1906 [1] 38).
- 6) 2-Keto-6-Methyl-1-Phenyl-1,2-Dihydropyridin-3,5-Dicarbonsäure. Sm. 265—267° u. Zers. Ag<sub>2</sub> (Soc. 93, 1032 C. 1908 [2] 524).
- 7) Anhydrid d.  $\alpha$ -[2-Nitrophenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 155° u. Zers. +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (B. 39, 295 C. 1906 [1] 761).
- 8) Anhydrid d.  $\alpha$ -[3-Nitrophenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 120,5° (B. 39, 296 C. 1906 [1] 761).
- 9) Anhydrid d.  $\alpha$ -[4-Nitrophenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 175—177°. + C<sub>6</sub>H<sub>6</sub> (B. 39, 297 C. 1906 [1] 761).
- 10) Methylester d. 4'-Nitrodiphenyläther-4-Carbonsäure. Sm. 108 bis 109°. Ba (B. 29, 2084). — \*II, 907.
- 11) 2-Methoxyphenylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 101 bis 102° (D.R.P. 67923; H. 32, 607). — \*II, 774.
- 12) Acetat d. 5-Acetylamido-2-Oxy-1,4-Naphtochinon (B. 31, 2423; 33, 3282). — \*III, 278.
- 13) 2-Benzoat d. 3-Nitro-1,2-Dioxybenzol-1-Methyläther. Sm. 88—89° (C. 1896 [2] 350).
- 14) 1-Benzoat d. 4-Nitro-1,2-Dioxybenzol-2-Methyläther. Sm. 102 bis 103° (C. 1896 [2] 350).
- 15) 3-Benzoat d. 4-Nitro-1,3-Dioxybenzol-1-Methyläther. Sm. 95° (C. 1901 [2] 96).
- C<sub>14</sub>H<sub>11</sub>O<sub>5</sub>N<sub>3</sub>** C 55,8 — H 3,6 — O 26,6 — N 14,0 — M. G. 301.
- 1) 3,5-Dinitro-4-Acetylamidobiphenyl. Sm. 240—241° (B. 37, 883 C. 1904 [1] 1143).
- 2)  $\beta$ -Dinitrophenylamidobenzoylmethan. Sm. 171—172° (B. 15, 2479). — III, 126.
- 3) N-2-Nitrobenzyläther d. 2-Nitrobenzaldoxim. Sm. 150° (B. 30, 60, 517). — \*III, 37.
- 4) N-3-Nitrobenzyläther d. 3-Nitrobenzaldoxim. Sm. 185° (A. 298, 190). — \*III, 38.
- 5) N-4-Nitrobenzyläther d. syn-4-Nitrobenzaldoxim. Sm. 227—228° (A. 263, 191, 354). — III, 50.
- 6) 3-Nitro-4-Amidobiphenyl-4'-Oxaminsäure. Sm. 206° (J. pr. [2] 77, 362 C. 1808 [1] 1695).
- 7) 3-Nitro-4'-Amidobiphenyl-4-Oxaminsäure. Sm. oberhalb 250° (J. pr. [2] 77, 359 C. 1908 [1] 1694).
- 8) 4-Nitroazobenzol-4'-Oxyessigsäure. Sm. 205°. Na (B. 34, 3938 C. 1902 [1] 117). — \*IV, 1036.
- 9) 2-Nitro-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 213° (242°) (B. 40, 4206 C. 1907 [2] 2047; C. 1908 [2] 310).
- 10) 3-Nitro-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 210° (C. 1908 [2] 310).
- 11) Methylester d. 5-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 132 bis 134° (Soc. 79, 52). — \*IV, 1058.
- 12) Methylester d. 3'-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 167° (A. 251, 189). — IV, 1469.
- 13) Methylester d. 4'-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 166° (J. pr. [2] 78, 396 C. 1909 [1] 362).
- 14) Phenylamid d. 2,4-Dinitrophenylessigsäure. Sm. 181° (B. 42, 604 C. 1909 [1] 998).
- 15) Methylphenylamid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. 155 bis 156° (Am. 36, 300 C. 1906 [2] 1420).
- 16) 2-Methylphenylamid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. 241 bis 242° (Am. 36, 300 C. 1906 [2] 1420).
- 17) 4-Methylphenylamid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. noch nicht bei 280° (Am. 36, 300 C. 1906 [2] 1420).



- $C_{14}H_{11}O_5N_3$  18) 2-Nitro-4-Methylphenylamid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 198° (B. 32, 1467). — \*II, 771.
- 19) 2-Nitro-4-Methylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 171—172° (B. 26, 2760). — II, 1236.
- 20) 3-Nitro-4-Methylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 188,5° (A. 210, 336; B. 10, 1712). — II, 1234.
- 21) Methyl-*p*-Dinitrophenylamid d. Benzolcarbonsäure. Sm. 136° (B. 18, 687).
- 22) 2,6-Dinitro-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 186° (A. 208, 312; 222, 73; B. 8, 877). — II, 1165.
- 23) 3,*p*-Dinitro-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 203° (A. 172, 229). — II, 1165.
- 24) Di[4-Nitrophenyl]amid d. Essigsäure. Sm. 164° (C. 1899 [2] 961). — \*II, 175.
- 25) 3-Nitrophenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 140° (J. pr. [2] 48, 562). — II, 523.
- 26) 4-Nitrophenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 155—156° (J. pr. [2] 54, 273). — \*II, 294.
- 27) 3-Nitrophenyl-4-Nitrobenzylamid d. Ameisensäure (3-Nitro-1-[Formyl-4-Nitrobenzyl]amidobenzol). Sm. 104° (B. 32, 1256). — \*II, 295.
- 28) 4-Nitrophenyl-4-Nitrobenzylamid d. Ameisensäure (4-Nitro-1-[Formyl-4-Nitrobenzyl]amidobenzol). Sm. 135° (B. 32, 1257). — \*II, 295.
- $C_{14}H_{11}O_5N_5$  C 51,1 — H 3,3 — O 24,3 — N 21,3 — M. G. 329.
- 1) 5-Amido-3,5-Di[3-Nitrophenyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 150—151°. HBr, (HBr, Br<sub>2</sub>) (B. 22, 3157; 28, 2230). — II, 1206; \*II, 774.
- 2) 4,6-Dinitro-2-[4-Äthylphenyl]-2,1,3-Benztriazol-1-Oxyd. Sm. 200° (J. pr. [2] 71, 413 C. 1905 [2] 41).
- 3) 4,6-Dinitro-2-[2,4-Dimethylphenyl]-2,1,3-Benztriazol-1-Oxyd. Sm. 192° (J. pr. [2] 55, 394; [2] 60, 104). — \*IV, 790.
- 4) 4,6-Dinitro-2-[2,5-Dimethylphenyl]-2,1,3-Benztriazol-1-Oxyd. Sm. 235° (J. pr. [2] 71, 401 C. 1905 [2] 40).
- 5) Amid d. 4-Nitrophenylimido-4-Nitrophenylamidoessigsäure. Sm. 245° u. Zers. (J. pr. [2] 74, 84 C. 1906 [2] 1250).
- 6) 3-Nitrobenzylidenhydrazid d. 5-Nitro-3-Amidobenzol-1-Carbonsäure. Sm. 240° (J. pr. [2] 76, 258 C. 1907 [2] 1499).
- $C_{14}H_{11}O_5Br$  1) Dimethylphthalidbromtetronsäure. Sm. 178—179° u. Zers. (A. 315, 173; A. 322, 384 C. 1902 [2] 737).
- 2) Verbindung (aus 1,2,3-Trioxybenzol u. Bromvanillin) (B. 42, 4167 C. 1909 [2] 1929).
- 3) Verbindung (aus 1,3,5-Trioxybenzol u. Bromvanillin) (B. 42, 4167 C. 1909 [2] 1929).
- $C_{14}H_{11}O_5P$  1) Oxyphenanthrenchinonphosphinsäure. Sm. 125—128°. Ca. (M. 7, 36). — IV, 1681.
- $C_{14}H_{11}O_5As$  1) Diphenyloxyarsin-4,4'-Dicarbonsäure (Dibenzarsenigsäure). Ca + 2H<sub>2</sub>O (A. 208, 25). — IV, 1693.
- $C_{14}H_{11}O_6N$  C 58,1 — H 3,8 — O 33,2 — N 4,8 — M. G. 289.
- 1) Nitrooreoson (oder  $C_{14}H_{11}O_5N$ ). Sm. 171° (C. 1899 [1] 432). — \*III, 458.
- 2) Diacetat d. 3-Nitro-1,2-Dioxynaphtalin. Sm. 196—197° (A. 295, 13 Ann.). — \*II, 593.
- $C_{14}H_{11}O_6N_3$  C 53,0 — H 3,5 — O 30,3 — N 13,2 — M. G. 317.
- 1) 2,4-Dinitro-4'-Acetylamidodiphenyläther. Sm. 195° (B. 37, 1518 C. 1904 [1] 1596).
- 2) Methyläther d. 4,5-Dinitro-2-Benzoylamido-1-Oxybenzol. Sm. 185 bis 186° (C. 1901 [2] 98).
- 3) Methyläther d. 2,3-Dinitro-4-Benzoylamido-1-Oxybenzol. Sm. 185° (B. 42, 1527 C. 1909 [1] 1810).
- 4) 2,4-Dinitrophenyläther d. anti-Methylbenzhydroxamsäure. Sm. 121° (B. 29, 1156). — \*II, 751.
- 5) 2,4-Dinitrophenyläther d. syn-Methylbenzhydroxamsäure. Sm. 152° (B. 29, 1159). — \*II, 752.
- 6) 4',6'-Dinitro-2-Methyldiphenylamin-2'-Carbonsäure. Sm. 171—172°. Na, K + H<sub>2</sub>O (G. 33 [2] 325 C. 1904 [1] 278).
- 7) 4',6'-Dinitro-3-Methyldiphenylamin-2'-Carbonsäure. Sm. 203° (G. 33 [2] 327 C. 1904 [1] 278).

- C<sub>14</sub>H<sub>11</sub>O<sub>6</sub>N<sub>8</sub>** 8) *p*-Dinitro-3-Methyldiphenylamin-4-Carbonsäure. Sm. 174° (B. 41, 2649 C. 1908 [2] 867).  
 9) isom. *p*-Dinitro-3-Methyldiphenylamin-4-Carbonsäure. Sm. 216° (B. 41, 2649 C. 1908 [2] 867).  
 10) 4',6'-Dinitro-4-Methyldiphenylamin-2'-Carbonsäure. Sm. 220°. Na, K + H<sub>2</sub>O (G. 33 [2] 327 C. 1904 [1] 278).  
 11) Acetat d. 2,4-Dinitro-2'-Oxydiphenylamin. Sm. 150° (B. 22, 902). — II, 704.  
 12) Acetat d. 2,4-Dinitro-4'-Oxydiphenylamin. Sm. 129° (137°) (B. 28, 2974; B. 36, 3265 C. 1903 [2] 1126). — \*II, 399.  
 13) Benzoat d. 2,3-Dinitro-4-Methylamido-1-Oxybenzol. Sm. 178° (B. 42, 1528 C. 1909 [1] 1811).
- C<sub>14</sub>H<sub>11</sub>O<sub>6</sub>N<sub>5</sub>** C 48,7 — H 3,2 — O 27,8 — N 20,3 — M. G. 345.  
 1) 2',4',6'-Trinitro-4-Äthylazobenzol. Sm. 192° (J. pr. [2] 71, 414 C. 1905 [2] 41).  
 2) 2',4',6'-Trinitro-2,4-Dimethylazobenzol. Sm. 215–216° (J. pr. [2] 60, 108). — \*IV, 1025.  
 3) 2',4',6'-Trinitro-2,5-Dimethylazobenzol. Sm. 172° (J. pr. [2] 71, 403 C. 1905 [2] 40).  
 4) *p*-Trinitro-2,2'-Dimethylazobenzol. — IV, 1376.  
 5) *p*-Trinitro-4,4'-Dimethylazobenzol. Sm. 189° (M. 9, 836). — IV, 1379.  
 6) isom. *p*-Trinitro-4,4'-Dimethylazobenzol. Sm. 138° (M. 9, 836). — IV, 1379.  
 7) 2,5-Dinitro-6-Acetylamido-3-Oxyazobenzol. Zers. bei 188° (Soc. 89, 1943 C. 1907 [1] 716).  
 8) Dibarbiturylphenylamin (J. pr. [2] 73, 475 C. 1906 [2] 504).
- C<sub>14</sub>H<sub>11</sub>O<sub>6</sub>Cl** 1) Diacetat d. 3-Chlor-7,8-Dioxy-4-Methyl-1,2-Benzpyron. Sm. 197° (B. 34, 360). — \*II, 1125.
- C<sub>14</sub>H<sub>11</sub>O<sub>6</sub>Br<sub>5</sub>** 1) Triacetat d. 3,5,6-Tribrom-4-Oxy-2-Dibrommethyl-1-Dioxy-methylbenzol. Sm. 132–133° (B. 32, 3037). — \*III, 65.
- C<sub>14</sub>H<sub>11</sub>O<sub>6</sub>As** 1) Diphenylarsinsäure-4,4'-Dicarbonsäure. Ca, Ba, Ag (A. 208, 21). — IV, 1693.
- C<sub>14</sub>H<sub>11</sub>O<sub>7</sub>N<sub>3</sub>** C 50,4 — H 3,3 — O 33,6 — N 12,6 — M. G. 333.  
 1) 4-Nitrobenzyläther d. 3,5-Dinitro-2-Oxy-1-Methylbenzol. Sm. 145° (B. 14, 899; A. 217, 178, 181, 183). — II, 1060.  
 2) 4-Nitrobenzyläther d. 3,5-Dinitro-4-Oxy-1-Methylbenzol. Sm. 186,5° (A. 224, 145). — II, 1060.  
 3) 2,4'-Dinitro-4-Oxy-2-Methyldiphenylamin-5-Carbonsäure (D. R. P. 133940 C. 1902 [2] 775).  
 4) 2,4'-Dinitro-4-Oxy-3-Methyldiphenylamin-5-Carbonsäure (D. R. P. 133940 C. 1902 [2] 775).  
 5) Phenylamid d. Oxyessig-*p*-Dinitro-2-Oxyphenyläthersäure. Sm. 199° (J. pr. [2] 61, 366). — \*II, 559.
- C<sub>14</sub>H<sub>11</sub>O<sub>7</sub>N<sub>5</sub>** C 46,5 — H 3,0 — O 31,0 — N 19,4 — M. G. 361.  
 1) 2',4',6'-Trinitro-4-Acetylamidodiphenylamin. Sm. 240–242° (B. 33, 434). — \*IV, 385.  
 2)  $\alpha$ -Phenyl- $\beta$ -Acetyl- $\beta$ -[2,4,6-Trinitrophenyl]hydrazin. Sm. 236° (B. 27, 2460). — IV, 665.  
 3) *p*-Trinitro-4,4'-Dimethylazoxybenzol. Sm. 201° (Z. 1870, 264; B. 6, 557). — IV, 1340.
- C<sub>14</sub>H<sub>11</sub>O<sub>7</sub>B** 1) Bordi[2-Oxybenzol-1-Carbonsäure]. NH<sub>4</sub>, Na, K, Mg + 10H<sub>2</sub>O, Ca + 10H<sub>2</sub>O, Ba (J. 1878, 761). — II, 1496.
- C<sub>14</sub>H<sub>11</sub>O<sub>8</sub>N<sub>3</sub>** C 46,0 — H 3,0 — O 39,5 — N 11,5 — M. G. 365.  
 1) Äthylester d. Oxyessig-1,*p,p*-Trinitro-2-Naphtyläthersäure. Sm. 227 bis 228° u. Zers. (B. 34, 3198). — \*II, 524.
- C<sub>14</sub>H<sub>11</sub>O<sub>8</sub>N<sub>5</sub>** C 42,7 — H 2,8 — O 36,6 — N 17,8 — M. G. 393.  
 1) *p*-Tetranitro-2-Oxy-4-Methylphenylbenzylamin. Sm. 168° (A. 241, 348). — II, 742.
- C<sub>14</sub>H<sub>11</sub>O<sub>10</sub>N<sub>7</sub>** C 38,4 — H 2,5 — O 36,6 — N 22,4 — M. G. 437.  
 1) Diazoamidoderivat (aus *p*-Dinitro-*p*-Amido-3-Oxy-1-Methylbenzol). Zers. bei 160° (B. 9, 1095). — IV, 1576.
- C<sub>14</sub>H<sub>11</sub>O<sub>12</sub>As** 1) Di[2,6-Dioxyphenyl]arsensäure-4,4'-Dicarbonsäure (G. 39 [2] 277 C. 1909 [2] 1862).

- C<sub>14</sub>H<sub>11</sub>O<sub>12</sub>Sb** 1) Di[2,6-Dioxyphenyl]antimonsäure-4,4'-Dicarbonsäure (*G.* 39 [2] 287 *C.* 1909 [2] 1863).
- C<sub>14</sub>H<sub>11</sub>NCl<sub>2</sub>** 1) 5,10-Dichlor-5-Methyl-5,10-Dihydroakridin. Sm. 280° u. Zers. (*Soc.* 85, 1201 *C.* 1904 [2] 1059).  
2) Chlormethylat d. 5-Chlorakridin. Sm. 73°. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*B.* 32, 1309). — \*IV, 245.
- C<sub>14</sub>H<sub>11</sub>NBr<sub>2</sub>** 1) p-Dibrom-4-Benzylidenamido-1-Methylbenzol. Sm. 160—165° u. Zers. (*J.* 1880, 566). — III, 30.  
2) 5,10-Dibrom-5-Methyl-5,10-Dihydroakridin. Zers. 261° (*Soc.* 85, 1201 *C.* 1904 [2] 1060).
- C<sub>14</sub>H<sub>11</sub>NBr<sub>4</sub>** 1) Tetrabromdi[4-Methylphenyl]amin. Sm. 162° (*B.* 13, 1545). — II, 486.
- C<sub>14</sub>H<sub>11</sub>NJ<sub>2</sub>** 1) 5-Methylakridindijodid. Sm. 180—210° (*Soc.* 85, 1202 *C.* 1904 [2] 1060).
- C<sub>14</sub>H<sub>11</sub>NS** 1) Diphenylmethylenföhl. Sm. 61°; Sd. 222—225° (*Am.* 26, 353).  
2) 1-Benzylbenzthiazol. Fl. HCl, (2HCl, PtCl<sub>4</sub> + 5H<sub>2</sub>O) (*B.* 13, 1234). — II, 1310.  
3) 5-Methyl-1-Phenylbenzthiazol. Sm. 122—123° (125°). (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (*B.* 14, 493; 22, 424, 1065). — II, 1179.  
4) 3-Phenyl-1,4-Benzthiazin. Sm. 233° (*B.* 30, 609, 2396). — \*IV, 252.  
5) 3-Phenyl-2,4-Benzthiazin (Phenylphenpenthiazol). Sm. 55—58°. Pikrat (*B.* 27, 3524). — \*IV, 252.  
6) Methyläther d. 5-Merkaptoakridin. Sm. 113—114°. (2HCl, PtCl<sub>4</sub>), Pikrat (*J. pr.* [2] 64, 481 *C.* 1902 [1] 125). — \*IV, 246.
- C<sub>14</sub>H<sub>11</sub>NSe** 1) Methyläther d. 5-Selenoakridin. Sm. 108°. (2HCl, PtCl<sub>4</sub>), Pikrat (*J. pr.* [2] 68, 93 *C.* 1903 [2] 446).
- C<sub>14</sub>H<sub>11</sub>N<sub>2</sub>Cl** 1) α-Benzyliden-β-[3-Chlorbenzyliden]hydrazin (*B.* 35, 3239 *C.* 1902 [2] 1045).  
2) 3-Chlor-2-Benzylindazol. Sm. 47,5°; Sd. 132—134°<sub>0,25</sub> (*B.* 35, 2318 *C.* 1902 [2] 453). — \*IV, 580.  
3) 6-Chlor-2-Methyl-1-Phenylbenzimidazol. Sm. 96°. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 23, 3425). — IV, 877.  
4) 5-Methyl-2-[2-Chlorphenyl]benzimidazol. HCl (*B.* 13, 468). — IV, 1013.  
5) 3-[4-Chlorphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 143°. HCl, (HCl, ZnCl<sub>2</sub>), (HCl, SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Bioxalat, Pikrat (*J. pr.* [2] 48, 544). — IV, 872.  
6) Chlormethylat d. 5-Chlorakridin. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*B.* 32, 1310).  
7) Chlorphenylat d. 2,3-Benzdiazin. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*A.* 347, 123 *C.* 1906 [2] 776).  
8) Nitril d. Phenylamido-2-Chlorphenylelessigsäure. Sm. 77° (*D. R. P.* 157617 *C.* 1905 [1] 316).  
9) Nitril d. Phenylamido-4-Chlorphenylelessigsäure. Sm. 112° (*J. pr.* [2] 65, 269 *C.* 1902 [1] 1214).
- C<sub>14</sub>H<sub>11</sub>N<sub>2</sub>Cl<sub>5</sub>** 1) βββ-Trichlor-αα-Di[3-Chlorphenylamido]äthan. Sm. 89° (*A.* 302, 367). — \*II, 235.  
2) βββ-Trichlor-αα-Di[4-Chlorphenylamido]äthan. Sm. 143° (*A.* 302, 368). — \*II, 235.
- C<sub>14</sub>H<sub>11</sub>N<sub>2</sub>Br** 1) α-[4-Bromphenyl]azo-α-Phenyläthen. Sm. 48° (*Am.* 21, 37). — \*IV, 1027.  
2) 2-Brom-4-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 165°. HBr (*B.* 29, 1306). — IV, 1016.  
3) 3-[4-Bromphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 142. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Bioxalat, Pikrat (*J. pr.* [2] 48, 551). — IV, 872.  
4) Nitril d. α-[4-Bromphenyl]amido-α-Phenylelessigsäure. Sm. 99° (*B.* 35, 3335 *C.* 1902 [2] 1193).
- C<sub>14</sub>H<sub>11</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Azoimid (aus Dibromtolidin) (*C.* 1906 [1] 936).
- C<sub>14</sub>H<sub>11</sub>N<sub>2</sub>S** 1) α-Phenyl-β-[3-Cyanphenyl]thioharnstoff (*C.* 1904 [2] 102).  
2) 5-Merkapto-1,3-Diphenyl-1,2,4-Triazol. Sm. 248—249° (*Am.* 27, 268 *C.* 1902 [1] 1299). — \*IV, 807.  
3) 3-Merkapto-1,5-Diphenyl-1,2,4-Triazol. Sm. 187—187,5° (*Am.* 27, 263 *C.* 1902 [1] 1298). — \*IV, 807.



- C<sub>14</sub>H<sub>11</sub>N<sub>3</sub>S** 4) 5-Merkapto-1,2-Diphenyl-1,3,4-Triazol. Sm. 187° (281°) (B. 27, 622; 29, 2917). — IV, 1159.
- 5) 1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Disulfid. Sm. 214—215° (J. pr. [2] 67, 249 C. 1903 [1] 1264). — \*IV, 752.
- 6) 5-Phenylamido-2-Phenyl-1,2,4-Thiodiazol. Sm. 174° (B. 24, 394). — IV, 847.
- 7) 2-Phenylimido-5-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 200°. Ag, (2HCl, PtCl<sub>4</sub>) (B. 27, 622; 29, 2916; Soc. 79, 60). — IV, 1159; \*IV, 810.
- 8) 1-Phenylamidoimidomethylbenzthiazol. Sm. 118°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 20, 2254). — II, 799.
- 9) α-Phenyl-β-[2-Cyanphenyl]thioharnstoff. Sm. noch nicht bei 300° (B. 29, 632). — \*II, 784.
- C<sub>14</sub>H<sub>11</sub>N<sub>3</sub>S<sub>2</sub>** 1) 3-Merkapto-5-Thiocarbonyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 177—178° (B. 34, 308). — \*IV, 750.
- 2) 5-Merkapto-2-Phenylimido-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 171—172° (B. 34, 312, 334). — \*IV, 449.
- 3) 5-Phenylamido-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 188—189° (B. 34, 335). — \*IV, 449.
- 4) 4,4'-Biphenylenamid d. Imidodi[Thioameisensäure]. Sm. noch nicht bei 300° (B. 27, 1558). — IV, 965.
- C<sub>14</sub>H<sub>11</sub>N<sub>3</sub>S<sub>3</sub>** 1) 4-Amidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 163—164°. HCl (B. 29, 2140). — IV, 683.
- C<sub>14</sub>H<sub>11</sub>N<sub>4</sub>Br** 1) p-Brom-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 219—220° (Soc. 55, 246). — IV, 1233.
- C<sub>14</sub>H<sub>11</sub>N<sub>5</sub>S** 1) Verbindung (aus Dianildithiobiuret). Sm. 218° (A. 318, 330 C. 1908 [2] 882).
- C<sub>14</sub>H<sub>11</sub>ClBr<sub>2</sub>** 1) α-Chlor-αβ-Dibrom-αβ-Diphenyläthan. Sm. 127° u. Zers. (Soc. 71, 222). — \*II, 113.
- 2) αβ-Dibrom-α-Phenyl-β-[2-Chlorphenyl]äthan. Sm. 176° (B. 35, 3971 C. 1903 [1] 31).
- C<sub>14</sub>H<sub>11</sub>ClS** 1) 9-Methylthioxantheniumchlorid. + HgCl<sub>2</sub> (B. 38, 2510 C. 1905 [2] 635).
- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>** C 75,0 — H 5,4 — O 7,1 — N 12,5 — M. G. 224.
- 1) α-Imido-α-[2-Oxybenzyliden]amido-α-Phenylmethan. Sm. 185°. HCl. (2HCl, PtCl<sub>4</sub>), Ag (B. 34, 3031). — \*IV, 568.
- 2) 3,9 [oder 3,10]-Diamido-10 [oder 9]-Oxyphenanthren. Sm. 264 bis 265° (B. 35, 3132 C. 1902 [2] 1214).
- 3) o-Nitrosimidobibenzyl. Sm. 120° (A. 305, 102). — \*IV, 237.
- 4) αβ-Methylen-αβ-Diphenylharnstoff. Sm. 197,5—198,5° (Soc. 95, 504 C. 1909 [1] 1892).
- 5) 9-Ureidofluoren. Sm. 161° (255°) (B. 29, 231; B. 41, 1250 C. 1908 [1] 1896). — \*II, 351.
- 6) α-Imido-α-Benzoylamidophenylmethan (Benzoylbenzamidin). Sm. 98° (105—106°). HCl, (2HCl, PtCl<sub>4</sub>) (A. 296, 285; B. 11, 765; 22, 1606; 25, 464; J. pr. [2] 30, 89; Am. 20, 571). — IV, 848; \*IV, 568.
- 7) Benzaldoximanhydrid. Sm. 208° u. Zers. (209—210°) (B. 33, 3198; A. 323, 268 C. 1902 [2] 1102). — \*II, 304.
- 8) s-Benzoylbenzylidenhydrazin. Sm. 202° (204—205°). Na, Ag, HgCl (J. pr. [2] 50, 301; [2] 53, 520; A. 297, 265; B. 33, 2560, 3196; G. 29 [2] 380; A. 323, 274 C. 1902 [2] 1102; J. pr. [2] 70, 396 C. 1905 [1] 82). — III, 39; \*III, 31.
- 9) s-Phenylloxymethylen-Benzylidenhydrazin. Sm. 206° (B. 27, 1008; A. 297, 265). — II, 1215.
- 10) Benzoylphenylhydrazimethylen. Sm. 151° u. Zers. (J. pr. [2] 44, 176). — III, 287.
- 11) 4-Oxyhydrazobenzol? (A. 154, 212). — IV, 1407.
- 12) β-Phenylhydrazon-α-Keto-α-Phenyläthan (Benzolazoacetophenon). Sm. 128,5° (138°) (B. 18, 2563; 21, 2123; 34, 2009). — IV, 1472, 1478; \*IV, 1072.
- 13) isom. β-Phenylhydrazon-α-Keto-α-Phenyläthan. Sm. 114—117° (B. 34, 2010). — \*IV, 1072.
- 14) Azoxydihydrostilben (B. 32, 2920). — \*II, 55.

- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>** 15) Benzolazo-4-Methylbenzoyl. Sm. 41° (*G.* 39 [1] 600 *C.* 1909 [2] 805).  
 16) 1-Methylphenylamidobenzoxazol. Sd. oberhalb 360. (2HCl, PtCl<sub>4</sub>) (*B.* 16, 1827). — II, 709.  
 17) 1-Phenylamido-4-Methylbenzoxazol. Sm. 205—206°. Pikrat (*B.* 22, 3237). — II, 753.  
 18) 1-[3-Amidophenyl]-4-Methylbenzoxazol. Sm. 160,5—161,5° (*B.* 28, 1129). — \*II, 787.  
 19) 1-[4-Amidophenyl]-4-Methylbenzoxazol. Sm. 188° (*B.* 28, 1128). — \*II, 791.  
 20) 2-[2-Oxymethylphenyl]indazol. Sm. 56—57°; Sd. 250°<sub>20—25</sub>. (2HCl, PtCl<sub>4</sub>) (*C. r.* 138, 1277 *C.* 1904 [2] 121).  
 21) 3-Keto-2-Benzyl-1,3-Dihydroindazol. Sm. 180,5° (*B.* 35, 2317 *C.* 1902 [2] 453). — \*IV, 1094.  
 22) 3-Keto-2-Methyl-1-Phenyl-1,3-Dihydroindazol + H<sub>2</sub>O. Sm. 54—55° (*B.* 32, 789). — \*IV, 581.  
 23) 3-Keto-1-Benzyl-2,3-Dihydrobenzpyrazol. Sm. 167—168°. HCl, Pikrat (*M.* 29, 919 *C.* 1908 [2] 2008).  
 24) 1-Methyl-2-[2-Oxyphenyl]benzimidazol. Sm. 164—165° (*B.* 25, 2843). — IV, 564.  
 25) 5 oder 6-Methyl-2-[2-Oxyphenyl]benzimidazol. Sm. 241° (*B.* 31, 317). — IV, 1014.  
 26) Methyläther d. 6-Oxy-1-Phenylbenzimidazol. Sm. 77° (*B.* 29, 2683). — \*II, 414.  
 27) 7-Amido-2-Oxy-4-Methylchinolin. Sm. noch nicht bei 300° (*J. pr.* [2] 79, 447 *C.* 1909 [2] 133).  
 28) 3-Phenylamido-1,4-Benzoxazin. Sm. 126°. HJ (*Am.* 20, 566). — \*II, 392.  
 29) 3-Phenylimido-3,4-Dihydro-2,4-Benzoxazin (Phenylimidocumazon; Benzophenyldihydroacimiazin). Sm. 145—146° (143°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 22, 1670, 2938; 27, 44, 2421). — IV, 874.  
 30) 3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 235° (*J. pr.* [2] 54, 287). — IV, 873.  
 31) 1-Oxy-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 128—129° (*A.* 347, 122 *C.* 1906 [2] 776).  
 32) 2-Keto-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 186—188° (*B.* 25, 2856; 27, 43, 2425; *J. pr.* [2] 55, 243). — IV, 632.  
 33) 2-Keto-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 187° (u. 193°). Acetat (*B.* 29, 1307, 1309).  
 34) 3-Keto-2-Phenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 201—202° (*B.* 25, 952). — IV, 1016.  
 35) 9-Nitroso-3,6-Dimethylcarbazol. Sm. 106° (*B.* 24, 2598). — IV, 398.  
 36) 3-[ $\alpha$ -Oximidoäthyl]carbazol. Sm. 253° (*B.* 40, 381 *C.* 1907 [1] 823).  
 37) 3-Acetylamidocarbazol. Sm. 213—214° (217°) (*G.* 21 [2] 385; *A.* 337, 101 *C.* 1904 [1] 1570). — IV, 992.  
 38) 3,8-Dimethyldiphenazonoxyd. Sm. 209° (*B.* 37, 26 *C.* 1904 [1] 523).  
 39) 2-Acetonyl-peri-Naphtimidazol. Sm. 267°. HCl (*A.* 365, 156 *C.* 1909 [1] 1823).  
 40) 5-Acetyldihydro-5,10-Naphtdiazin. Sm. 255° (*C.* 1905 [1] 1263; *B.* 38, 2801 *C.* 1905 [2] 1265; *C.* 1906 [2] 1621).  
 41) 1-Naphtooxymethylechinizin. Sm. bei 190° (*B.* 17, 551). — IV, 927.  
 42) 2-Naphtooxymethylechinizin. Sm. 190° (*B.* 17, 550). — IV, 929.  
 43) Base (aus d. Äthyläther d. 3-Oxy-s-Diphenylhydrazin). Pikrat (*B.* 36, 4082 *C.* 1904 [1] 268).  
 44) Laktam d.  $\beta$ -Amido- $\alpha$ -[2-Chinolyl]- $\alpha$ -Buten- $\delta$ -Carbonsäure (Succinimidechinaldin). Sm. 128°; Zers. bei 220°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (*A.* 315, 355). — \*IV, 230.  
 45) Inn. Anhydrid d.  $\alpha$ -Oxyphenylessigsäurephenylhydrazid. Sm. 165 bis 166° (*B.* 23, 3703). — IV, 694.  
 46) Aldehyd d. Phenylhydrazonphenylessigsäure. Sm. 142—143° (*B.* 22, 2557). — IV, 761.  
 47) Aldehyd d. 4-Methylazobenzol-4'-Carbonsäure. Sm. 177,5° (*B.* 36, 2311 *C.* 1903 [2] 429).  
 48) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -[2-Oxyphenyl]essigsäure. Sm. 113—114° (*B.* 37, 4084 *C.* 1904 [2] 1723).

- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>** 49) Nitril d.  $\alpha$ -[4-Oxyphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 175—180° (113—114°) (B. 35, 3347 C. 1902 [2] 1194; B. 39, 998 C. 1906 [1] 1342).  
 50) Amid d.  $\alpha$ -Phenylimido- $\alpha$ -Phenylelessigsäure. Sm. 141° (B. 34, 499).  
 51) Verbindung (aus Harnstoff u. uns-Phenylbenzylhydrazin). Sm. 167 bis 168° (B. 41, 1868 C. 1908 [2] 505).  
 52) Verbindung (aus 2-Amidobenzol-1-Carbonsäurealdehyd). Sm. 188—189°; Sd. 250°<sub>17</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (B. 17, 457; C. r. 136, 371 C. 1903 [1] 635). — III, 17.
- C<sub>14</sub>H<sub>12</sub>ON<sub>4</sub>** 53) Verbindung (aus Blausäure u. Salhydranilid) (B. 6, 339). — III, 73.  
 C 66,7 — H 4,8 — O 6,3 — N 22,2 — M. G. 252.  
 1) 5-Keto-4-[1-Naphtyl]azo-3-Methyl-4,5-Dihydropyrazol. Sm. 247° (B. 41, 2364 C. 1908 [2] 519).  
 2) 5-Keto-4-[2-Naphtyl]azo-3-Methyl-4,5-Dihydropyrazol. Sm. 237 bis 238°. Na (B. 41, 2365 C. 1908 [2] 519).  
 3) 3-Oxy-5-[3-Amidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 278°. HCl + 3H<sub>2</sub>O, Ag + H<sub>2</sub>O (Soc. 71, 211). — IV, 1271.  
 4) 3-Oxy-5-[4-Amidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. noch nicht bei 290°. HCl + 3H<sub>2</sub>O, Ag + H<sub>2</sub>O (Soc. 71, 207). — IV, 1271.  
 5) 3-Phenylamido-5-Keto-4-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 212 bis 213° (B. 35, 1720 C. 1902 [2] 30; J. pr. [2] 74, 548 C. 1907 [1] 482). — \*IV, 898.  
 6) 1[oder 3]-Nitroso-2-Phenylimido-5-Methyl-2,3-Dihydrobenzimidazol (Phenyltoluylennitrosoguanidin). Sm. 125° u. Zers. (B. 24, 2516). — IV, 623.  
 7) 1-Nitroso-2-[4-Methylphenyl]imido-2,3-Dihydrobenzimidazol. Sm. 150—160° u. Zers. (B. 24, 2512). — IV, 566.  
 8) 1-[4-Acetylamidophenyl]-1,2,3-Benztriazol. Sm. 200° (B. 28, 2978). — IV, 1259.  
 9) 5-Acetylamido-1-Phenyl-1,2,3-Benztriazol. Sm. 266° (B. 28, 2972; A. 313, 265). — IV, 1259.  
 10) 6-Benzoylamido-1-Methyl-1,2,3-Benztriazol. Sm. 228,5° (B. 30, 2853). — IV, 1259.  
 11) 2-[4-Amidophenyl]amido-4-Keto-1,4-Dihydro-1,3-Benzdiazin (4-Amidophenylbenzglykocyamidin) (B. 18, 2421). — IV, 595.  
 12) Imidophenylbenzglykocyamidin. Ba (B. 18, 2414). — IV, 562.  
 13) Phenylamid d. 5-Methyl-1,2,3-Benztriazol-1-Carbonsäure (Phenylazimidotolylharnstoff). Sm. 159—160° (J. pr. [2] 41, 325). — IV, 614.  
 C 60,0 — H 4,3 — O 5,7 — N 30,0 — M. G. 280.
- C<sub>14</sub>H<sub>13</sub>ON<sub>6</sub>** 1) 3,3'-Azoindazolhydrat. Sm. 338,5° (B. 37, 4282 C. 1907 [1] 480).
- C<sub>14</sub>H<sub>12</sub>OCl<sub>2</sub>** 1) Di[4-Chlorbenzyl]äther. Sm. 54—55° (G. 18, 243). — II, 1056.  
 2) Methyläther d. 4-Oxydiphenyldichlormethan. Sm. 54° (B. 24, 3518; 26, 21; 30, 3007). — II, 897; \*II, 539.
- C<sub>14</sub>H<sub>12</sub>OBr<sub>2</sub>** 1) Di[4-Brombenzyl]äther. Sm. 85—86° (G. 18, 240). — II, 1058.  
 2) Di[p-Brom-3-Methylphenyl]äther. Sm. 48°; Sd. 340—350°<sub>780</sub> (Am. 36, 549 C. 1907 [1] 545).  
 3) Phenyläther d.  $\alpha\beta$ -Dibrom- $\beta$ -Oxy- $\alpha$ -Phenyläthen. Sm. 91° (B. 38, 1964 C. 1905 [2] 133).  
 4) 4-Keto-1-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]-1,4-Dihydrobenzol. Sm. 161° u. Zers. (A. 349, 120 C. 1906 [2] 1258).
- C<sub>14</sub>H<sub>12</sub>OS** 1) Phenyläther d. Merkaptomethylphenylketon. Sm. 52—53° (B. 22, 309). — III, 128.  
 2) Benzylester d. Benzolthiolcarbonsäure. Sm. 39,5° (B. 13, 1285). — II, 1291.  
 3) 4-Methylphenylester d. Benzolthiolcarbonsäure. Sm. 75° (B. 9, 1636; Bl. [3] 27, 690 C. 1902 [2] 447). — II, 1291.
- C<sub>14</sub>H<sub>12</sub>OS<sub>2</sub>** 1) 2,6-Dimethylthianthren-9-Oxyd. Sm. 94° (B. 42, 1174 C. 1909 [1] 1575).
- C<sub>14</sub>H<sub>12</sub>OSe** 1) Benzoat d. 4-Seleno-1-Methylbenzol. Sm. 71—72° (Bl. [3] 35, 672 C. 1906 [2] 1120).
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>** C 70,0 — H 5,0 — O 13,3 — N 11,7 — M. G. 240.  
 1) 2-Nitro-4-Amido- $\alpha\beta$ -Diphenyläthen. Sm. 110—111°. HCl (B. 34, 2846).  
 2) 4-Nitro-2-Amido- $\alpha\beta$ -Diphenyläthen. Sm. 142—143°. HCl (B. 34, 2845).



- $C_{14}H_{11}O_2N_2$  3) 2-Nitro-2'-Amido- $\alpha\beta$ -Diphenyläthen (Nitroamidostilben) (B. 21, 2077). — II, 638.
- 4) 4-Nitro-4'-Amido- $\alpha\beta$ -Diphenyläthen (Nitroamidostilben). Sm. 229 bis 230°. HCl (B. 6, 329). — II, 638.
- 5) 2-Nitro-3-Methylbenzylidenamidobenzol (2-Nitro-3-Phenylimido-methyl-1-Methylbenzol). Sm. 51,5° (C. 1900 [2] 751). — \*III, 40.
- 6) 6-Nitro-3-Methylbenzylidenamidobenzol (4-Nitro-3-Phenylimido-methyl-1-Methylbenzol). Sm. 79° (C. 1900 [2] 751). — \*III, 40.
- 7) 3-Nitro-1-[4-Methylbenzyliden]amidobenzol. Sm. 79° (B. 32, 1287). — \*III, 41.
- 8) 4-Nitro-1-[4-Methylbenzyliden]amidobenzol. Sm. 135° (B. 32, 1287). — \*III, 41.
- 9) 2-[2-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 96° (C. 1906 [2] 325).
- 10) 2-[3-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 78–79° (Soc. 85, 1179 C. 1904 [2] 1216).
- 11) 4-[3-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 96° (85–86°?). HCl, (2HCl, PtCl<sub>4</sub>) (B. 21, 3209; B. 36, 1024 C. 1903 [1] 1268). — IV, 1047; \*IV, 702.
- 12) 4-[4-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 124,5° (126–127°). HCl, (2HCl, PtCl<sub>4</sub>) (B. 20, 3304; B. 36, 1022 C. 1903 [1] 1268). — IV, 1048; \*IV, 702.
- 13) 2,7-Diamido-9,10-Dioxyphenanthren. 2HCl + 3H<sub>2</sub>O (B. 18, 2168). — II, 1001.
- 14) 4,5-Diamido-9,10-Dioxyphenanthren. 2HCl (B. 36, 3749 C. 1904 [1] 38).
- 15)  $\alpha$ -Phenyl- $\alpha$ -Benzoylharnstoff. Sm. 146° (Am. 26, 232).
- 16)  $\alpha$ -Phenyl- $\beta$ -Benzoylharnstoff. Sm. 204° (210°) (B. 17, 2881; 28, 435; Am. 19, 299; 24, 209; A. 274, 28; R. 19, 330; J. pr. [2] 59, 272; B. 36, 3220 C. 1903 [2] 1056; Am. 30, 418 C. 1904 [1] 241; J. pr. [2] 72, 304 C. 1905 [2] 1535). — II, 1172; \*II, 736.
- 17) Phenylnitrosamidobenzoylmethan. Sm. 73° (B. 15, 2472). — III, 125.
- 18) 4-Nitroso-4'-Acetylamidobiphenyl. Sm. 275° (Soc. 95, 717 C. 1909 [2] 18).
- 19) Glyoxim-N-Phenyläther. Sm. 182–183° u. Zers. (B. 30, 2463, 2875; 33, 949; B. 35, 1883 C. 1902 [2] 33). — \*II, 244.
- 20)  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan ( $\alpha$ -Diphenylglyoxim;  $\alpha$ -Benzildioxim). Sm. 237° u. Zers. K, Fe (B. 16, 1616; 21, 793, 3525; Soc. 83, 44 C. 1903 [1] 442; Z. a. Ch. 46, 148 C. 1905 [2] 961). — III, 291.
- 21)  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan ( $\beta$ -Benzildioxim). Sm. 206–207° u. Zers. + 1½ C<sub>2</sub>H<sub>6</sub>O, + ½ Glycerin, + Aceton, + Benzol, + 2 Anilin, + 2 Pyridin, + 1½ Essigsäure (B. 16, 2176; 21, 517; 22, 710; 28, 3167; 33, 855; C. 1906 [1] 1701). — III, 292; \*III, 223.
- 22) isom.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan ( $\gamma$ -Benzildioxim). Sm. 164 bis 166°. + C<sub>2</sub>H<sub>6</sub>O (Sm. 100°) (B. 22, 710; 25, 1960; A. 274, 19). — III, 293.
- 23) 4,4'-Di[Oximidomethyl]biphenyl. Sm. 204° (A. 332, 77 C. 1904 [2] 43).
- 24) Benzylidenderivat d. 2-Hydroxylamidobenzaldoxim. Sm. 172 bis 172,5° (B. 34, 4027 C. 1902 [1] 117). — \*III, 39.
- 25) 2,2'-Di[Formylamido]biphenyl. Sm. 137° (B. 34, 3330). — \*IV, 637.
- 26) 4,4'-Di[Formylamido]biphenyl. Sm. noch nicht bei 240°. Na<sub>2</sub> (B. 17, 379; Soc. 67, 831). — IV, 964.
- 27) Anhydro-o-Phenylendiimidoglykobrenzkatechin. Zers. bei 245° (B. 27, 1984). — IV, 565.
- 28) 4-Acetylphenylhydrazon-1-Keto-1,4-Dihydrobenzol. Sm. 118° (116°) (Am. 22, 371; A. 369, 239 C. 1909 [2] 1996). — \*IV, 524.
- 29) Di[2-Oxybenzyliden]hydrazin (2-Oxybenzalazin). Sm. 205° (208 bis 210°; 213°) (J. pr. [2] 39, 48; G. 29 [2] 474; A. 302, 303; B. 31, 2807 Anm.; B. 34, 4229 C. 1902 [1] 304). — III, 75; \*III, 55.
- 30) Di[4-Oxybenzyliden]hydrazin. Sm. 268° u. Zers. (B. 39, 807 C. 1906 [1] 1246).
- 31) s-Dibenzoylhydrazin. Sm. 233° (238°; 237–239°; 241°). Na, K, Pb, Ag, HgCl. Lit. bedeutend. — II, 1308; \*II, 808.
- 32) Isodibenzoylhydrazin. Sm. 70° (B. 26, 2130). — II, 1214; \*II, 762.

- $C_{14}H_{12}O_2N_2$  33) **s-Benzoyl-2-Oxybenzylidenhydrazin**. Sm. 182° (*J. pr.* [2] 50, 302). — III, 76.
- 34) **s-Benzoyl-4-Oxybenzylidenhydrazin**. Sm. 233° (*J. pr.* [2] 50, 303). — III, 86.
- 35) **Methylenäther d. Phenyl-3,4-Dioxybenzylidenhydrazin** (Piperonalphenylhydrazon). Sm. 102—103° (100°) (*A.* 248, 104; *M.* 23, 913; *G.* 29 [2] 425; *B.* 24, 3656). — IV, 764; \*IV, 497.
- 36) **5-Benzoylazo-2-Oxy-1-Methylbenzol**. Sm. 172—174° u. Zers. (*A.* 340, 103 *C.* 1905 [2] 322).
- 37) **Methyläther d. Benzolazo-4-Oxybenzoyl**. Sm. 40° (*G.* 39 [1] 799 *C.* 1909 [2] 804).
- 38) **5-Keto-1-[7-Oxy-2-Naphtyl]-3-Methyl-4,5-Dihydropyrazol**. Sm. 243° (*J. pr.* [2] 78, 153 *C.* 1908 [2] 950).
- 39) **3-Phenyl-5-[2-Oxyphenyl]-4,5-Dihydro-1,2,4-Oxdiazol** (Benzenylhydrazoximsalicyden). Sm. 155° (*B.* 22, 3146). — III, 77.
- 40) **4,5-Diphenyl-1,2,3,6-Dioxdiazol** (Azobenzenylsuperoxyd; Benzaldoximhyperoxyd). Sm. 105° (96°; 114—116° u. Zers.) (*B.* 22, 1589; *C.* 1906 [1] 234; 1906 [2] 233; *J. pr.* [2] 73, 254 *C.* 1906 [1] 1243; *C.* 1906 [2] 1003; *J. pr.* [2] 73, 495 *C.* 1906 [2] 329; *B.* 39, 2525 *C.* 1906 [2] 869). — III, 45.
- 41)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen. Sm. 55—57°. HCl, (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ), (HCl,  $SnCl_2$ ), (HCl,  $BaCl_2$ ), (HCl,  $ZnCl_2$ ), HBr, HJ,  $HNO_3$ ,  $H_2SO_4$ , Pikrat (*B.* 40, 3400 *C.* 1907 [2] 1342).
- 42)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[4-Methyl-2-Pyridyl]äthen. Sm. 134°. HCl, (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ) (*B.* 35, 2792 *C.* 1902 [2] 995). — \*IV, 237.
- 43) **2-[3-Nitrophenyl]-1,3-Dihydroisindol**. Sm. 177° (*B.* 31, 630). — \*IV, 139.
- 44) **2-[4-Nitrophenyl]-1,3-Dihydroisindol** (*B.* 31, 630). — \*IV, 139.
- 45) **3-Amido-1,9-Dimethyl-1,3-Phenoxazon**. HCl (*B.* 39, 136 *C.* 1906 [1] 757).
- 46) **4-Oxy-6-Keto-2-Phenyl-5,6,7,8-Tetrahydro-1,3-Benzdiazin**. Sm. 272° (*B.* 22, 2623). — IV, 1015.
- 47) **3,8-Diketo-4,7-Dimethyl-3,4,7,8-Tetrahydro-4,7-Naphtisodiazin** + 4H<sub>2</sub>O. Sm. oberhalb 320° (*B.* 42, 2621 *C.* 1909 [2] 542).
- 48) **3-Nitro-9-Äthylcarbazol**. Sm. 108° (*C.* 1904 [1] 1570).
- 49) **N-Äthylsafranöl**. Na (*B.* 31, 1183). — IV, 1002; \*IV, 670.
- 50) **2-Oxyäthylphenazon**. Sm. 230—240° (*A.* 290, 302). — IV, 1002.
- 51) **Dimethylamidochinnoxazon**. Subl. oberhalb 250° (*B.* 25, 1065). — IV, 1005.
- 52) **Tolazondioxyd**. Sm. 128° u. Zers. (*B.* 26, 2240). — IV, 1402.
- 53) **Diphenylenazondioxyd**. Sm. 240° u. Zers. (*B.* 24, 3083). — IV, 1403.
- 54) **Phenylimidophenylamidoessigsäure**. Sm. 100° u. Zers. (*Soc.* 85, 995 *C.* 1904 [2] 831).
- 55) **2-[4-Amidobenzyliden]amidobenzol-1-Carbonsäure**. Sm. 225—227° u. Zers. (*B.* 38, 1684 *C.* 1905 [1] 1541).
- 56) **1-Phenylhydrazonmethylbenzol-3-Carbonsäure**. Sm. 112—115° (*B.* 24, 2424). — II, 1627.
- 57) **1-Phenylhydrazonmethylbenzol-4-Carbonsäure**. Sm. 212—214° (*B.* 24, 2424). — II, 1627.
- 58)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylessigsäure. Sm. 163° (153°; 160°) (*A.* 227, 341; 280, 295; 300, 247; *J. pr.* [2] 52, 36; *B.* 29, 210; *G.* 22 [2] 524). — IV, 694; \*IV, 455.
- 59)  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazin- $\alpha^2$ -Carbonsäure (2-Benzylidenhydrazidobenzol-1-Carbonsäure). Sm. 227—228° (*B.* 35, 2315 *C.* 1902 [2] 452).
- 60)  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazin- $\alpha^3$ -Carbonsäure (Benzylidenphenylhydrazin-3-Carbonsäure). Sm. 171—172° (173°) (*A.* 236, 171; *B.* 33, 2754). — II, 1289; \*II, 795.
- 61) **2-Methylazobenzol-6-Carbonsäure**. Sm. 93°. + C<sub>6</sub>H<sub>6</sub> (*Bl.* [4] 1, 223 *C.* 1907 [1] 1574).
- 62) **2-Methylazobenzol-2'-Carbonsäure**. Sm. 148° (*D.R.P.* 145063 *C.* 1903 [2] 973).
- 63) **4-Methylazobenzol-2'-Carbonsäure**. Sm. 115° (*B.* 25, 3170). — IV, 1462.

- C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>** 64) **4-Methylazobenzol-3'-Carbonsäure**. Sm. 192° (B. 31, 2204; C. 1899 [1] 1077). — IV, 1462.
- 65) **p-Methylazobenzol-p'-Carbonsäure** (Tolylazophenylcarbonsäure). Sm. 237°. Ag (B. 16, 945). — II, 92.
- 66) **peri-Naphtimidazol-2-Propionsäure**. Sm. 253° (A. 365, 131 C. 1909 [1] 1415).
- 67) **Lakton d. β-[5-Oxy-3-Methyl-1-Phenyl-4-Pyrazolyl]crotonsäure**. Sm. 145°; Sd. 235°<sub>13</sub> (A. 238, 182; B. 38, 3027 C. 1905 [2] 1326). — IV, 513.
- 68) **Aldehyd d. 4-Oxy-2-Methylazobenzol-5-Carbonsäure**. Sm. 143 bis 144° (B. 34, 2104). — \*IV, 1070.
- 69) **Aldehyd d. 4-Oxy-3-Methylazobenzol-5-Carbonsäure**. Sm. 76° (B. 34, 2099). — \*IV, 1070.
- 70) **Methylester d. Azobenzol-3-Carbonsäure**. Sm. 58° (C. r. 143, 910 C. 1907 [1] 470; A. 367, 329 C. 1909 [2] 1225).
- 71) **Methylester d. Azobenzol-4-Carbonsäure**. Sm. 123–124° (A. 303, 387). — IV, 1460.
- 72) **Methylester d. peri-Naphtimidazol-2-Methylcarbonsäure**. Sm. 184° (A. 365, 116 C. 1909 [1] 1413).
- 73) **Äthylester d. peri-Naphtimidazol-2-Carbonsäure**. Oxalat, Pikrat (B. 7, 314; 30, 776; A. 327, 8; A. 365, 96 C. 1909 [1] 1412). — IV, 924; \*IV, 610.
- 74) **Acetat d. 2-Oxyazobenzol?** Fl. (R. 22, 11). — \*IV, 1034.
- 75) **Acetat d. 3-Oxyazobenzol**. Sm. 67,5° (B. 36, 4104 C. 1904 [1] 271).
- 76) **Acetat d. 4-Oxyazobenzol**. Sm. 84–85° (89,5°); Sd. oberhalb 360° u. Zers. (B. 14, 2617; A. 303, 341; Am. 22, 372; B. 39, 4161 C. 1907 [1] 227; B. 40, 1435 C. 1907 [1] 1499). — IV, 1408; \*IV, 1034.
- 77) **Benzoat d. Amidooximidophenylmethan** (Benzenylbenzoylamidoxim). Sm. 140° (B. 17, 1694). — II, 1207.
- 78) **Benzoat d. α-Oximido-α-Phenylamidomethan** (Benzoat d. Methenylphenylamidoxim). Sm. 144–145° (B. 22, 2411). — II, 1209.
- 79) **Phenylamidoformiat d. anti-Benzaldoxim**. Sm. 135–136° (B. 22, 3101; A. 355, 52 C. 1907 [2] 1165). — III, 42.
- 80) **Phenylamidoformiat d. syn-Benzaldoxim**. Sm. 74–75° u. Zers. (B. 23, 3321). — III, 44.
- 81) **isom. Phenylamidoformiat d. syn-Benzaldoxim**. Sm. 94° u. Zers. (B. 23, 3323). — III, 44.
- 82) **Nitril d. 6-Oxy-2-Keto-4-Methyl-5-Benzyl-2,5-Dihydropyridin-3-Carbonsäure + H<sub>2</sub>O**. Sm. 217–218°. NH<sub>4</sub>, Mg + 9H<sub>2</sub>O, Ca, Ba, Cu, (Cu + 4NH<sub>3</sub> + 2H<sub>2</sub>O), Ag (C. 1897 [1] 369; 1905 [2] 684). — IV, 333.
- 83) **Amid d. Biphenyl-2,2'-Dicarbonsäure**. Sm. 212° (219°) (A. 247, 272; 252, 19, 23; B. 37, 4312 C. 1905 [1] 177). — II, 1884.
- 84) **Amid d. Biphenyl-p-Dicarbonsäure** (A. 172, 117). — II, 1887.
- 85) **Amid d. 3-[2-Oxybenzyliden]amidobenzol-1-Carbonsäure**. Sm. 186° (A. 218, 188). — III, 74.
- 86) **Amid d. 2-Benzoylamidobenzol-1-Carbonsäure**. Sm. 218–219° (214 bis 215° u. Zers.) (J. pr. [2] 36, 155; B. 35, 3484 C. 1902 [2] 1318). — II, 1254.
- 87) **Amid d. 4-Phenylacetylpyridin-3-Carbonsäure**. Sm. 205–206° u. Zers. (B. 37, 2144 C. 1904 [2] 234).
- 88) **Phenylamid d. α-Oximido-α-Phenylessigsäure**. Sm. 205–206° (A. 274, 10). — II, 1599.
- 89) **Monophenyldiamid d. Benzol-1,2-Dicarbonsäure** (J. pr. [2] 55, 265). — \*II, 1054.
- 90) **Benzylnitrosamid d. Benzolcarbonsäure**. Sm. 46–47° (B. 31, 2644). — \*II, 731.
- 91) **2-Methylphenylnitrosamid d. Benzolcarbonsäure**. Sm. 62–63° u. Zers. (B. 41, 663 C. 1908 [1] 1282).
- 92) **4-Methylphenylnitrosamid d. Benzolcarbonsäure**. Zers. bei 74–75° (B. 27, 652; 30, 215). — II, 1165; \*II, 731.
- 93) **4-Nitrosodiphenylamid d. Essigsäure**. Sm. 96–97° (A. 243, 276). — II, 368.



- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>** 94) **s-Di[Phenylamid] d. Oxalsäure** (Oxanilid). Sm. 245°; Sd. 320° (oberhalb 360°?). Na (A. 60, 308; 73, 184; 252, 57; 279, 59; B. 12, 1065; 13, 527; 14, 740; 22, 3350; 29, 2640; 30, 2463, 2878; Soc. 61, 459; J. pr. [2] 55, 264; Am. 23, 464; A. 332, 266 C. 1904 [2] 700; B. 39, 3968 C. 1907 [1] 154). — II, 409; \*II, 208.
- 95) **uns-Di[Phenylamid] d. Oxalsäure**. Sm. 169—170°. — II, 409.
- 96) **Benzylidenhydrazid d. 2-Oxybenzol-1-Carbonsäure**. Sm. 230° (J. pr. [2] 52, 239). — III, 41.
- 97) **Benzylidenhydrazid d. 3-Oxybenzol-1-Carbonsäure**. Sm. 205° (J. pr. [2] 52, 235). — III, 41.
- 98) **Benzylidenhydrazid d. 4-Oxybenzol-1-Carbonsäure**. Sm. 218° (J. pr. [2] 52, 237). — III, 41.
- 99) **Benzylidenderivat d. Verb. C<sub>7</sub>H<sub>5</sub>O<sub>2</sub>N<sub>3</sub>**. Sm. 164° u. Zers. (B. 34, 3791 C. 1902 [1] 41).
- 100) **Verbindung** (aus d. Carbanilidoisatinsäureamid (J. pr. [2] 32, 288). — II, 1604.
- 101) **Verbindung** (aus Dehydracetsäurechlorid). Sm. 203° u. Zers. (A. 257, 285). — II, 1756.
- 102) **Verbindung** (aus Dehydracetsäurephenylhydrazon). Sm. 158° (B. 38, 3029 C. 1905 [2] 1326).
- 103) **Verbindung** (aus d. Natriumamid d. Benzolcarbonsäure). Sm. 180—185° (B. 28, 436).
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>N<sub>4</sub>** C 62,7 — H 4,5 — O 11,9 — N 20,9 — M. G. 268.
- 1) **1,4,5,8-Tetraamido-9,10-Anthrachinon**. Sm. 332°. + Pyridin (D. R. P. 127780 C. 1902 [1] 338; D. R. P. 143804 C. 1903 [2] 475; B. 39, 644 C. 1906 [1] 1025).
- 2) **9-Tetraamido-9,10-Anthrachinon** (D. R. P. 126676 C. 1902 [1] 86).
- 3) **1,5-Dihydrazido-9,10-Anthrachinon** (D. R. P. 163447 C. 1905 [2] 1304).
- 4) **α-[α-Nitrosamidobenzyliden]-β-[α-Oxybenzyliden]hydrazin** (Nitrosobenzoylbenzenylhydrazidin). HCl + H<sub>2</sub>O (B. 27, 1000; A. 297, 253). — II, 1214; \*II, 762.
- 5) **Carbonylphenylhydrazin**. Sm. 148—150° (G. 22 [2] 101). — IV, 671.
- 6) **Hexahydrobenzo-4-Benzyliden-3,4-Bipyrazolon**. Sm. noch nicht bei 280° (J. pr. [2] 51, 65).
- 7) **2-Phenylhydrazido-5-Keto-4-Phenyl-4,5-Dihydro-1,3,4-Oxdiazol**. Sm. 180—181° (B. 23, 2831). — IV, 676.
- 8) **4-Phenylamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol** (Diphenylurazin). Sm. 264°. Ag (B. 21, 1225; 32, 16; 34, 2317; A. 263, 282; J. pr. [2] 60, 237; C. 1901 [1] 935; B. 35, 561 C. 1902 [1] 635). — IV, 676; \*IV, 634.
- 9) **3,6-Diketo-1,4-Diphenylhexahydro-1,2,4,5-Tetrazin**. Sm. 235° (G. 38 [1] 344 C. 1908 [1] 2030).
- 10) **5-Nitro-2-[4-Äthylphenyl]-2,1,3-Benztriazol**. Sm. 125° (J. pr. [2] 71, 415 C. 1905 [2] 42).
- 11) **5-Nitro-2-[2,4-Dimethylphenyl]-2,1,3-Benztriazol**. Sm. 138° (J. pr. [2] 60, 110). — \*IV, 789.
- 12) **5-Nitro-2-[2,5-Dimethylphenyl]-2,1,3-Benztriazol**. Sm. 158° (J. pr. [2] 71, 404 C. 1905 [2] 40).
- 13) **6-Acetylamido-2-Phenyl-2,1,3-Benztriazol-1-Oxyd**. Sm. 233° (B. 39, 189 C. 1906 [1] 754).
- 14) **α-Phenylazo-α-Phenylhydrazonessigsäure** (Formazylcarbonsäure). Sm. 162—163° (158,5—164°). Na, K, Ag (B. 25, 3185, 3202; J. pr. [2] 65, 127 C. 1902 [1] 995; J. pr. [2] 67, 401 C. 1903 [1] 1346). — IV, 1227; \*IV, 893.
- 15) **Nitril d. 2-Nitro-1-Phenylhydrazidomethylbenzol-4-Carbonsäure**. Sm. 207° (B. 27, 2165). — IV, 741.
- 16) **Amid d. 4-Benzoylamidodiazobenzenol-1-Carbonsäure**. Sm. 218° u. Zers. (B. 40, 3809 C. 1907 [2] 1503).
- 17) **Di[Phenylamid] d. Azodicarbonsäure**. Sm. 182—183° (J. pr. [2] 58, 226). — \*II, 191.
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>N<sub>6</sub>** C 56,8 — H 4,0 — O 10,8 — N 28,4 — M. G. 296.
- 1) **7,8-Disemicarbazonacenaphten**. Sm. 271° (G. 33 [1] 47 C. 1903 [1] 882).

- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>Cl<sub>2</sub>** 1)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3-Chlorphenyl]äthan. Sm. 154—155°. — II, 1101.  
 2)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Chlorphenyl]äthan. Sm. 151° (B. 21, 17 C. 1902 [1] 1013).  
 3)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (A. 335, 170 C. 1904 [2] 1129).  
 4) Äthyläther d.  $\beta$ -Dichloracetyl-1-Oxynaphtalin. Sm. 110° (B. 31, 172). — \*III, 142.  
 5) Di[2-Chlorphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 103—104° (B. 36, 2874 C. 1903 [2] 834).
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>Cl<sub>4</sub>** 1) Verbindung (aus 1,2,2,6-Tetrachlor-3,4-Diketo-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol). Sm. 173° (A. 296, 213). — \*I, 541.
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>2</sub>** 1)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (A. 335, 167 C. 1904 [2] 1128).  
 2) 3',5'-Dibrom-6,4'-Dioxy-3-Methyldiphenylmethan. Sm. 105—106,5° (B. 38, 3306 C. 1905 [2] 1588).  
 3) 5,5'-Dibrom-4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 185° (Soc. 91, 1310 C. 1907 [2] 1071).  
 4)  $\alpha$ -Methyläther d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 126° (A. 334, 381 C. 1904 [2] 1052).  
 5) Diphenyläther d.  $\alpha\beta$ -Dibrom- $\alpha\alpha$ -Dioxyäthan. Sm. 125° (G. 21, 262). — II, 655.  
 6) Di[2-Bromphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 110—111° (B. 36, 2875 C. 1903 [2] 834).
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>6</sub>** 1) Hexabromurushinsäure (Soc. 43, 478). — II, 1435.
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>S** 1) Benzyläther d. 5-Merkapto-2-Methyl-1,4-Benzochinon. Sm. 136 bis 137° (A. 336, 163 C. 1904 [2] 1300).  
 2) 4-Methyldiphenylsulfid-2'-Carbonsäure. Sm. 215—216° (B. 37, 4527 C. 1905 [1] 167).  
 3) Biphenyl-4-Merkaptoessigsäure. Sm. 169—170° (B. 13, 389). — II, 895.  
 4) 2-Methylphenylester d. 2-Oxybenzol-1-Thiolcarbonsäure. Sm. 36° (D.R.P. 68111). — \*II, 888.  
 5) 4-Benzoat d. 4-Merkapto-1-Oxybenzol-1-Methyläther. Sm. 99 bis 100° (Bl. [3] 33, 838 C. 1905 [2] 618).
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>S<sub>2</sub>** 1) 2,6-Dimethylthianthren-9,10-Dioxyd. Sm. 194° (B. 42, 1174 C. 1909 [1] 1575).  
 2) Dimerkaptoessigdiphenyläthersäure. Sm. 104—106° (B. 25, 3427). — II, 786.  
 3) Diacetat d. 2,7-Dimerkaptonaphtalin. Sm. 110° (B. 23, 2371). — II, 985.
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>Se** 1) 4-Benzoat d. 4-Seleno-1-Oxybenzol-1-Methyläther. Sm. 97° (Bl. [3] 35, 673 C. 1906 [2] 1120).
- C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>** C 65,6 — H 4,7 — O 18,7 — N 10,9 — M. G. 256.  
 1)  $\alpha$ -Nitro- $\beta$ -Nitroso- $\alpha\beta$ -Diphenyläthan (Stilbennitrosit). Sm. 195—197° u. Zers. (B. 34, 624; D.R.P. 126798 C. 1902 [1] 82).  
 2) 2-[3-Nitrobenzyliden]amido-1-Oxymethylbenzol. Sm. 93° (B. 25, 2971). — III, 32.  
 3) Methyläther d. 2-[4-Nitrobenzyliden]amido-1-Oxybenzol. Sm. 111°. HCl (Soc. 93, 1917 C. 1909 [1] 280).  
 4) Methyläther d. 4-[4-Nitrobenzyliden]amido-1-Oxybenzol. Sm. 139° (Soc. 93, 1917 C. 1909 [1] 280).  
 5) 6,4'-Di[Formylamido]-3-Oxybiphenyl. Sm. 243° u. Zers. (A. 303, 346). — \*II, 537.  
 6) 3-Nitro-4-Acetylamidobiphenyl. Sm. 132° (B. 37, 881 C. 1904 [1] 1143).  
 7) 4-Nitro-4'-Acetylamidobiphenyl. Sm. 240° (B. 39, 3479 C. 1906 [2] 1646).  
 8) 4-Nitrophenylamidobenzoylmethan. Sm. 167° (B. 15, 2475). — III, 126.  
 9) 5-Acetylamido-2-Phenylamido-1,4-Benzochinon. Sm. 278—280° u. Zers. (B. 31, 2400). — \*III, 260.  
 10)  $\alpha$ -Oximido- $\beta$ -[2-Nitrophenyl]- $\alpha$ -Phenyläthan. Sm. 118° (B. 26, 2453). — III, 219.  
 11)  $\alpha$ -Oximido- $\beta$ -[4-Nitrophenyl]- $\alpha$ -Phenyläthan. Sm. 107° (105°) (B. 21, 2449; 26, 2453). — III, 219.

- $C_{14}H_{12}O_3N_2$ , 12)  $\alpha$ -Oximido- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -[4-Methylphenyl]methan. Sm. 145° (A. 286, 329). — III, 215.
- 13)  $\alpha\beta$ -Dioximido- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. 2HCl (M. 26, 994 C. 1905 [2] 1181).
- 14) N-Benzyl-2-Nitrobenzaldoxim. Sm. 125—126° (126—127°) (A. 298, 193; A. 367, 281 C. 1909 [2] 1231). — \*III, 37.
- 15) N-Benzyl-syn-3-Nitrobenzaldoxim. Sm. 148° (150°) (B. 23, 2174; A. 298, 188; 314, 232; C. 1907 [1] 548). — III, 48; \*III, 37.
- 16) N-Benzyl-syn-4-Nitrobenzaldoxim. Sm. 118° (B. 23, 2750; A. 263, 197; 265, 239). — III, 50.
- 17) N-[2-Nitrobenzyl]-syn-Benzaldoxim. Sm. 104—105° (B. 30, 517). — \*III, 35.
- 18) N-[3-Nitrobenzyl]-syn-Benzaldoxim. Sm. 114—115° (A. 265, 244; 298, 189; 314, 233). — III, 44; \*III, 35.
- 19) N-[4-Nitrobenzyl]-syn-Benzaldoxim. Sm. 113,5—114,5° (105—107°) (B. 23, 2751; A. 263, 199; 265, 239). — III, 44.
- 20) N-4-Methylphenyl-2-Nitrobenzaldoxim. Sm. 113—114° (A. 367, 277 C. 1909 [2] 1231).
- 21) N-4-Methylphenyl-3-Nitrobenzaldoxim. Sm. 161° (C. 1905 [2] 764).
- 22) Benzyläther d. anti-4-Nitrobenzaldoxim. Sm. 117,5—118,5° (A. 263, 353). — III, 49.
- 23) 4-Nitrobenzyläther d. Benzaldoxim. Sm. 60—61° (B. 33, 1982). — \*III, 34.
- 24) Anhydro-o-Phenylendiimidoglykopyrogallol. Zers. bei 290° (B. 27, 1985). — IV, 565.
- 25) 2',4'-Dioxy-4-Acetylazobenzol. Sm. 215—220° u. Zers. (C. 1909 [2] 524).
- 26) 3',4'-Methylenäther d. 4,3',4'-Trioxy-3-Methylazobenzol. Sm. 157° (G. 39 [2] 317 C. 1909 [2] 1803).
- 27) 3',4'-Methylenäther d. 6,3',4'-Trioxy-3-Methylazobenzol. Sm. 165° (G. 39 [2] 318 C. 1909 [2] 1803).
- 28) Phenoxazinderivat (d. 4-Amido-1,3-Dioxybenzol-1-Äthyläther). Sm. 280°. HCl (J. pr. [2] 70, 329 C. 1904 [2] 1541).
- 29) 2-[2-Amidobenzoyl]amidobenzol-1-Carbonsäure. Sm. 203°. K, Na + 2 $\frac{1}{2}$  H<sub>2</sub>O, Cu (B. 35, 3478 C. 1902 [2] 1317; B. 39, 1057 C. 1906 [1] 1488; B. 39, 1451 C. 1906 [1] 1883; A. 351, 274 C. 1907 [1] 1494; B. 40, 1619 C. 1907 [1] 1630; J. pr. [2] 79, 320 C. 1909 [1] 1993; A. 367, 127 C. 1909 [2] 700; J. pr. [2] 80, 27 C. 1909 [2] 1331).
- 30) s-Diphenharnstoff-2-Carbonsäure. Sm. 181°. Ag (B. 27, 977). — II, 1251.
- 31) s-Diphenylharnstoff-3-Carbonsäure. Sm. 270° (264°) u. Zers. (B. 17, 2882; 27, 979). — II, 1261.
- 32) s-Diphenylharnstoff-4-Carbonsäure. NH<sub>4</sub>, Mg, Ca, Ba, Ag. — II, 1272.
- 33)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]essigsäure. Sm. 148° (B. 26, 221; B. 35, 1646 Anm. C. 1902 [1] 1361). — IV, 709; \*IV, 463.
- 34) 3-[2-Oxybenzyliden]hydrazidobenzol-1-Carbonsäure. Sm. 195° (B. 23, 3017). — III, 76.
- 35) Azobenzol-4-Oxyessigsäure. Sm. 193°. Na (B. 34, 3936 C. 1902 [1] 117). — \*IV, 1034.
- 36) 5[oder 6]-Oxy-2[oder 3]-Methylazobenzol-2'-Carbonsäure (D.R.P. 151279 C. 1904 [1] 1430).
- 37) 4'-Oxy-2-Methylazobenzol-2'-Carbonsäure. Sm. 240° (Soc. 89, 311 C. 1906 [2] 1495).
- 38) 4'-Oxy-2-Methylazobenzol-3'-Carbonsäure. Sm. 191° (C. 1908 [2] 310).
- 39) 6'-Oxy-2-Methylazobenzol-3'-Carbonsäure. Sm. 223° (J. pr. [2] 78, 403 C. 1909 [1] 363).
- 40) 4-Oxy-3-Methylazobenzol-5-Carbonsäure. Sm. 198—199° (164—165°). Na (B. 26, 603; G. 37 [1] 74 C. 1907 [2] 404). — IV, 1471.
- 41) 5-Oxy-3-Methylazobenzol-6-Carbonsäure. Sm. 216°. Na (G. 37 [1] 78 C. 1907 [2] 404).
- 42) 4'-Oxy-3-Methylazobenzol-3'-Carbonsäure. Sm. 208° (C. 1908 [2] 310).
- 43) 4'-Oxy-4-Methylazobenzol-2'-Carbonsäure. Sm. 233° u. Zers. (Soc. 89, 312 C. 1906 [2] 1495).



- $C_{14}H_{12}O_3N_2$  44) 4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 212—213°. Na (B. 40, 4207 C. 1907 [2] 2047; C. 1908 [2] 310).
- 45) 6'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 236° (J. pr. [2] 78, 403 C. 1909 [1] 363).
- 46) 3[oder 5]-[2-Methylphenyl]azo-2-Oxybenzol-1-Carbonsäure. Sm. 191° (B. 40, 3452 C. 1907 [2] 1505).
- 47) 2-Oxymethylazobenzol-2'-Carbonsäure? Sm. 195° (C. r. 136, 372 C. 1903 [1] 635). — \*IV, 1055.
- 48) 3-Oxymethylazobenzol-3'-Carbonsäure (3-Azobenzoëssäurebenzylalkohol). Sm. 182—183° (B. 31, 2204; C. 1899 [1] 1077). — IV, 1464.
- 49)  $\alpha$ -Phenylimido- $\beta$ -[2-Pyrroyl]propionsäure. Sm. 179° u. Zers. (B. 23, 2157). — IV, 89.
- 50) 3-Keto-4-Methyl-1, 2, 3, 4-Tetrahydro-1,4-Naphtisodiazin-5-Carbonsäure (D.R.P. 196563 C. 1908 [1] 1590).
- 51) Anhydrid d. 3-Amidobenzol-1-Carbonsäure (A. 123, 289; A. 326, 241 C. 1903 [1] 868). — II, 1257.
- 52) Methylester d. 4-Oxyazobenzol-2-Carbonsäure. Sm. 78—79° (J. pr. [2] 78, 406 C. 1909 [1] 363).
- 53) Methylester d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 106° (108°; 162 bis 165°) (Soc. 69, 1265; A. 263, 228; C. 1908 [1] 127). — IV, 1468.
- 54) Methylester d. 6-Oxyazobenzol-3-Carbonsäure. Sm. 116—117° (B. 30, 993). — IV, 1471.
- 55) Äthylester d. Benzo- $\beta$ -Ketopentamethylenazinmethylsäure (Bl. [3] 25, 713). — \*IV, 660.
- 56) Phenylester d. 5-Nitroso-2-Methylamidobenzol-1-Carbonsäure. Sm. 135—136° (B. 42, 3194 C. 1909 [2] 1333).
- 57) Acetat d. 4-Nitrosodiphenylhydroxylamin. Sm. 146—157° (B. 31, 1515). — \*II, 245.
- 58) Acetat d. 2-Oxyazoxybenzol. Sm. 56—57° (B. 35, 1617 C. 1902 [1] 1326). — \*IV, 1002.
- 59) Acetat d. 4-Oxyazoxybenzol. Sm. 88,5—89,5° (B. 35, 1611 C. 1902 [1] 1325). — \*IV, 1002.
- 60) Monobenzoat d. 1,4-Dioximido-2-Methyl-1,4-Dihydrobenzol. Sm. 180° u. Zers. (G. 33 [1] 239 C. 1903 [1] 1409).
- 61) 1-Benzoat d. 2-Oxy-1-Amidooximidomethylbenzol (N-Benzoat d. 2-Oxybenzenylamidoxim). Sm. 173° (B. 22, 2779). — II, 1503.
- 62) 1-Benzoat d. 4-Oxy-1-Amidooximidomethylbenzol (N-Benzoat d. 4-Oxybenzenylamidoxim). Sm. 160° (B. 24, 835). — II, 1531.
- 63) N-Phenylamidoformiat d. Oximidooxymethylbenzol. Sm. 209—210° u. Zers. (C. r. 143, 1165 C. 1907 [1] 633).
- 64) Amid d.  $\alpha$ -Benzoylamido- $\beta$ -[2-Furanyl]akrylsäure. Sm. 184° (A. 337, 284 C. 1905 [1] 378).
- 65) Phenylamid d. 2-Nitrophenylessigsäure. Sm. 158—159° (B. 32, 792). — \*II, 817.
- 66) Methylphenylamid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 94,5° (C. 1897 [1] 413). — \*II, 771.
- 67) 2-Methylphenylamid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 168 bis 169° (Ph. Ch. 30, 539; M. DOHRN, Dissertat. Heidelberg 1899, S. 11). — \*II, 771.
- 68) 2-Methylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 148° (Ph. Ch. 30, 539; M. DOHRN, Dissertat. Heidelberg 1899, S. 11). — \*II, 772.
- 69) 4-Methylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 162° (A. 210, 335; B. 10, 1712). — II, 1234.
- 70) 4-Methylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 197° (203°) (B. 25, 1082; 26, 2760). — II, 1236.
- 71) 2-Nitrophenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 110° (A. 205, 118; 210, 328). — II, 1341.
- 72) Methyl-3-Nitrophenylamid d. Benzolcarbonsäure. Sm. 104—105° (Soc. 53, 778). — II, 1164.
- 73) Methyl-4-Nitrophenylamid d. Benzolcarbonsäure. Sm. 111—112° (Soc. 53, 778; B. 18, 687; 30, 2857 Anm.). — II, 1164; \*II, 731.
- 74) 3-Nitro-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 167—167,5° (145—146°) (A. 172, 224; B. 15, 3017; 17, 1959). — II, 1165.

- C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>** 75) 5-Nitro-3-Methylphenylamid d. Benzolcarbonsäure. Sm. 177° (A. 217, 200; B. 15, 1138). — II, 1165.
- 76) 2-Nitro-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 143° (A. 208, 311; B. 8, 875). — II, 1165.
- 77) 3-Nitro-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 172° (168°) (A. 172, 228; B. 7, 1504; 15, 3017). — II, 1165.
- 78) 2-Nitrobenzylamid d. Benzolcarbonsäure. Sm. 110° (B. 23, 2809). — II, 1166.
- 79) 4-Nitrobenzylamid d. Benzolcarbonsäure. Sm. 155—156° (B. 23, 339). — II, 1166.
- 80) Phenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 77° (B. 22, 2683; D.R.P. 51712). — II, 523; \*II, 294.
- 81) 4-Amidobiphenylmonamid d. Oxalsäure (Benzidinoxamidsäure). NH<sub>4</sub>, Na (C. 1898 [1] 541). — \*IV, 643.
- 82) Phenylmonohydrazid d. Benzol-1,2-Dicarbonsäure. Sm. 165—166° u. Zers. (163°) (G. 16, 204; J. pr. [2] 35, 267; C. 1905 [2] 1251). — IV, 709.
- 83) ββ-Diphenylmonohydrazid d. Oxalsäure. Sm. 171° u. Zers. (B. 25, 1553). — IV, 701.
- 84) Benzylidenhydrazid d. 2-Oxyphenylkohlenensäure. Sm. 175° (A. 300, 149). — \*III, 31.
- 85) Benzylidenhydrazid d. 3-Oxyphenylkohlenensäure. Sm. 175° (A. 317, 197). — \*III, 31.
- 86) Benzylidenhydrazid d. 4-Oxyphenylkohlenensäure. Sm. 215° (A. 317, 202). — \*III, 31.
- 87) Verbindung (aus 1,2-Diamidobenzol u. Phtalsäureanhydrid). Sm. 144 bis 145° u. Zers. (G. 24 [1] 145). — IV, 563.
- 88) Verbindung (aus 3,5-Dioxy-1-Methylbenzol) (B. 7, 247; 8, 1650). — II, 966.
- C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>N<sub>4</sub>** 89) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>) (J. pr. [2] 70, 370 C. 1904 [2] 1565). C 59,2 — H 4,2 — O 16,9 — N 19,7 — M. G. 284.
- 1) α-[2-Nitrobenzyliden]amido-α-Phenylharnstoff. Sm. 200° (G. 38 [1] 339 C. 1908 [1] 2029).
- 2) α-[3-Nitrobenzyliden]amido-α-Phenylharnstoff. Sm. 232° (G. 38 [1] 339 C. 1908 [1] 2029).
- 3) α-[4-Nitrobenzyliden]amido-α-Phenylharnstoff. Sm. 239° (G. 38 [1] 339 C. 1908 [1] 2029).
- 4) α-Phenyl-β-[α-Imido-3-Nitrobenzyl]harnstoff(3-Nitrobenzimidophenylureid). Sm. 157° (B. 28, 484). — IV, 846.
- 5) α-Benzyliden-β-[2-Nitro-4-Amidobenzoyl]hydrazin. Sm. 187—189° (J. pr. [2] 76, 293 C. 1908 [1] 36).
- 6) 2,2'-Di[Oximidomethyl]azoxybenzol. Sm. 210,5—211° (B. 34, 4021 C. 1902 [1] 117; B. 35, 3897; B. 39, 4267 C. 1907 [1] 558). — \*IV, 1004.
- 7) 3,3'-Di[Oximidomethyl]azoxybenzol. Sm. 191° (B. 36, 3471 C. 1903 [2] 1269).
- 8) p-Oxy-3,3'-Di[Oximidomethyl]azobenzol. Sm. 207—211° (B. 38, 2519 C. 1905 [2] 619; C. 1905 [2] 1090).
- 9) 3-Nitro-4'-Acetylamidoazobenzol. Sm. 166—167°. — IV, 1358.
- 10) 4-Nitro-4'-Acetylamidoazobenzol. Sm. 234—235° (D. R. P. 88013). — \*IV, 1012.
- 11) 5-Nitro-2-[2,4-Dimethylphenyl]-2,1,3-Benztriazol-1-Oxyd. Sm. 185° (J. pr. [2] 55, 394; [2] 60, 109). — \*IV, 790.
- 12) 6-Nitro-2-[2,5-Dimethylphenyl]-2,1,3-Benztriazol-1-Oxyd. Sm. 167° (J. pr. [2] 71, 404 C. 1905 [2] 40).
- 13) 2-Phenylhydroxyd d. 1-Phenyl-1,2,3,5-Tetrazol-4-Carbonsäure. Chlorid, Nitrat (B. 27, 2925). — IV, 1240.
- 14) Äthylester d. Azobenzol-3-Carbonsäure-3'-Carbonsäurealdehyd. Sm. 90° (B. 38, 2519 C. 1905 [2] 619).
- 15) Benzylidenhydrazid d. 5-Nitro-3-Amidobenzol-1-Carbonsäure. Sm. 247—248° (J. pr. [2] 76, 257 C. 1907 [2] 1499).
- 16) Verbindung (aus Diphenylcarbodiazin) (Bl. [3] 25, 378). C 53,8 — H 3,8 — O 15,4 — N 26,9 — M. G. 312.
- 1) Amid d. 4-[α-Cyan-4-Nitrobenzyliden]amido-3,5-Dimethylpyrazol-1-Carbonsäure. Sm. 227° (B. 40, 671 C. 1907 [1] 969).

- $C_{14}H_{12}O_3Br_2$  1) Amyrolindibromid. Sm. 157—159° (C. 1900 [2] 1275). — \*III, 416.
- $C_{14}H_{12}O_3S$  1) Benzoyl-4-Methylphenylsulfon. Fl. (Hydrat, Sm. 80°) (Am. 22, 225). — \*II, 796.
- 2) 4'-Oxy-4-Methyldiphenyldisulfid-3'-Carbonsäure? Sm. 162—164° (D. R. P. 147634 C. 1904 [1] 131).
- 3)  $\alpha$ -Merkapto- $\alpha$ -Oxyphenylessig-S-Phenyläthersäure. Sm. 68,5° (B. 18, 891). — II, 1592.
- 4) Dihydroanthracensulfonsäure. Na + H<sub>2</sub>O, Ba (B. 12, 196; 13, 693; A. 212, 46).
- $C_{14}H_{12}O_4N_2$  C 61,8 — H 4,4 — O 23,5 — N 10,3 — M. G. 272.
- 1)  $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan. Sm. 235—236° u. Zers. (B. 18, 2438; 34, 626, 3536). — II, 248.
- 2) isom.  $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan. Sm. 150—152° (B. 34, 3541).
- 3) isom.  $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan. Sm. 235—236° u. Zers. (D. R. P. 126798 C. 1902 [1] 82).
- 4)  $\alpha\beta$ -Di[2-Nitrophenyl]äthan. Sm. 122° (127°) (B. 30, 1039; 33, 2709; Soc. 79, 1275). — \*II, 113.
- 5)  $\alpha\beta$ -Di[4-Nitrophenyl]äthan. Sm. 179—180° (166—167°; 180—182°) (A. 137, 260; 238, 364; B. 9, 15; 26, 2232; 30, 1053; Soc. 91, 2079 C. 1908 [1] 643). — II, 234; \*II, 113.
- 6) isom.  $\alpha\beta$ -Di[*p*-Nitrophenyl]äthan. Sm. 74—75° (A. 137, 261; B. 9, 15). — II, 234.
- 7) 5,4'-Dinitro-2-Methyldiphenylmethan. Sm. 137—138° (B. 26, 2811). — \*II, 114.
- 8) *p*-Dinitro-2-Methyldiphenylmethan. Sm. 100° (B. 7, 986). — II, 237.
- 9) *p*-Dinitro-3-Methyldiphenylmethan. Sm. 141° (A. 220, 235). — II, 237.
- 10) 3,3'-Dinitro-4-Methyldiphenylmethan. Sm. 139—140° (B. 27, 2296). — \*II, 114.
- 11) 3,4'-Dinitro-4-Methyldiphenylmethan. Sm. 143° (B. 27, 2296). — \*II, 115.
- 12) *p*-Dinitro-4-Methyldiphenylmethan. Sm. 137° (B. 5, 684). — II, 237.
- 13) 4,4'-Dinitro-2,2'-Dimethylbiphenyl. Sm. 170° (B. 38, 729 C. 1905 [1] 874).
- 14) 5,5'-Dinitro-2,2'-Dimethylbiphenyl. Sm. 173° (B. 38, 728 C. 1905 [1] 873).
- 15) 6,6'-Dinitro-2,2'-Dimethylbiphenyl. Sm. 110° (B. 38, 727 C. 1905 [1] 873).
- 16) 4,4'-Dinitro-3,3'-Dimethylbiphenyl. Sm. 228° (B. 37, 1401 C. 1904 [1] 1443; A. 352, 120 C. 1907 [1] 1797).
- 17) 6,6'-Dinitro-3,3'-Dimethylbiphenyl. Sm. 161° (B. 24, 2597). — II, 236; \*II, 114.
- 18) 2,2'-Dinitro-4,4'-Dimethylbiphenyl. Sm. 140° (B. 34, 3332; B. 34, 3804 C. 1902 [1] 44; C. 1909 [2] 2005).
- 19) 3,3'-Dinitro-4,4'-Dimethylbiphenyl. Sm. 175,5° (B. 38, 727 C. 1905 [1] 873).
- 20) *p*-Nitro-4-Acetylamido-4'-Oxybiphenyl. Sm. 246° (A. 207, 351). — II, 895.
- 21) 2-[Methyl-3-Nitrobenzoyl]amido-1-Oxybenzol. Sm. 105° (Am. 23, 36). — \*II, 773.
- 22) Methyläther d. 4-Nitro-2-Benzoylamido-1-Oxybenzol. Sm. 160 bis 161° (C. 1901 [2] 98).
- 23) Methyläther d. 5-Nitro-2-Benzoylamido-1-Oxybenzol. Sm. 149 bis 150° (C. 1901 [2] 98).
- 24) Methyläther d. 3-Nitro-4-Benzoylamido-1-Oxybenzol. Sm. 140° (B. 42, 1527 C. 1909 [1] 1810).
- 25) Methyläther d. *p*-Nitro-*p*-Benzoylamido-1-Oxybenzol (A. 74, 305). — II, 1178.
- 26) 2'-Methyläther d. 5-Nitro-2-[4-Oxybenzyliden]amido-1-Oxybenzol. Sm. 160—161° (B. 36, 4124 C. 1904 [1] 273).
- 27) 1,3-Di[Succinylamido]benzol. Sm. oberhalb 360° (B. 9, 1668). — IV, 593; \*IV, 375.
- 28) 1,4-Di[Succinylamido]benzol (A. 327, 25 C. 1903 [1] 1336). — \*IV, 388.



- $C_{14}H_{13}O_4N_2$  29) 5-[2-Nitro-4-Methylphenyl]amido-2-Methyl-1;4-Benzochinon (B. 23, 2796). — III, 360.
- 30) 4,8-Di[Acetylamido]-1,2-Naphtochinon. Sm. 240—245° u. Zers. (B. 34, 1230). — \*III, 284.
- 31) 2,8-Di[Acetylamido]-1,4-Naphtochinon. Sm: 225° (B. 34, 1230). — \*III, 276.
- 32) N-Di[4-Oxyphenyl]glyoxim. Zers. bei 250° (A. 277, 87; B. 31, 298). — II, 678; \*II, 422.
- 33) 4-Nitrobenzyläther d. Benzhydroxamsäure. Sm. 161° (B. 25, 44). — II, 1197.
- 34)  $\alpha\beta$ -Dioximido- $\alpha$ -Phenyl- $\beta$ -[2,4-Dioxyphenyl]äthan. 2HCl (M. 26, 1130 C. 1905 [2] 1181).
- 35) Di[2,4-Dioxybenzyliden]hydrazin. Sm. 310° (M. 30, 35 C. 1909 [1] 916).
- 36) Di[3,4-Dioxybenzyliden]hydrazin. Sm. 245° (M. 30, 35 C. 1909 [1] 916).
- 37) s-Di[2-Oxybenzoyl]hydrazin. Sm. 301° (J. pr. [2] 78, 162 C. 1908 [3] 950).
- 38)  $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha$ -[2-Nitrophenyl]- $\gamma$ -[2-Pyridyl]propan. Sm. 106° (B. 35, 4063 C. 1903 [1] 91). — \*IV, 135.
- 39) 2-[2-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 205—206° (B. 37, 594 C. 1904 [1] 881).
- 40) 2-[4-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 208—210° (214°) (B. 37, 594 C. 1904 [1] 881; B. 39, 3237 C. 1906 [2] 1419).
- 41) 3-[2-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 170—171°. K (B. 25, 3592). — II, 1259.
- 42) 4'-Nitro-2-Methyldiphenylamin-2'-Carbonsäure. Sm. 253—254°. Na + 3H<sub>2</sub>O, K + 2H<sub>2</sub>O, Ag (A. 279, 275). — II, 1283.
- 43) 4'-Nitro-4-Methyldiphenylamin-2'-Carbonsäure. Sm. 262,5°. K + 2½H<sub>2</sub>O, Ba + 7H<sub>2</sub>O (A. 279, 270). — II, 1283.
- 44) 2'-Nitro-2-Methyldiphenylamin-4'-Carbonsäure. Sm. 210—211° (212°). Na + H<sub>2</sub>O (B. 23, 3451; A. 332, 84 C. 1904 [1] 1569). — II, 1286.
- 45) 2'-Nitro-4-Methyldiphenylamin-4'-Carbonsäure. Sm. 257°. Na (B. 23, 3288, 3453). — II, 1286.
- 46) 2-Nitro-1-Phenylamidomethylbenzol-4-Carbonsäure. Sm. 160° u. Zers. HCl (B. 27, 2164). — II, 1353.
- 47) 5-Benzoylamido-3-Amido-2-Oxybenzol-1-Carbonsäure. Sm. 221° (D.R.P. 164295 C. 1905 [2] 1701).
- 48) 4,4'-Diamidobiphenyl-2,2'-Dicarbonsäure. Zers. bei 170°. Ag<sub>2</sub> + H<sub>2</sub>O, 2HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (A. 196, 25; D.R.P. 69541; B. 7, 1610; 10, 76; B. 38, 3771 C. 1906 [1] 37). — II, 1886; \*II, 1093.
- 49) 6,6'-Diamidobiphenyl-2,2'-Dicarbonsäure. Zers. oberhalb 300°. 2HCl (B. 26, 219; B. 36, 3747 C. 1904 [1] 38; B. 38, 3771 C. 1906 [1] 37). — II, 1886.
- 50) 4,4'-Diamidobiphenyl-2,3'-Dicarbonsäure. 2HCl (B. 25, 3598). — II, 1883.
- 51) 4,2'-Diamidobiphenyl-2,4'-Dicarbonsäure (D.R.P. 69541). — \*II, 1092.
- 52) 4,4'-Diamidobiphenyl-3,3'-Dicarbonsäure. Zers. bei 250° (B. 7, 1612; 21, 983; 25, 2797; 31, 2574; D.R.P. 43524; C. 1903 [1] 34; B. 41, 2690 C. 1908 [2] 1257). — II, 1886; \*II, 1093.
- 53) 2,2'-Diamidobiphenyl-4,4'-Dicarbonsäure. Sm. 307—309°. HCl (B. 42, 650 C. 1909 [1] 1012).
- 54)  $\alpha\gamma$ -Dicyan- $\beta$ -Benzylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 173° (Soc. 95, 484 C. 1909 [1] 1756).
- 55) s-Diphenylhydrazin-2,2'-Dicarbonsäure. Sm. 205° (B. 7, 1612; 17, 1904; 25, 2797). — IV, 1507.
- 56) s-Diphenylhydrazin-2,3'-Dicarbonsäure. Sm. 206° u. Zers. (B. 25, 3597). — IV, 1508.
- 57) s-Diphenylhydrazin-3,3'-Dicarbonsäure. Ba (A. 129, 141). — IV, 1507.
- 58) s-Diphenylhydrazin-4,4'-Dicarbonsäure (A. 132, 148; 135, 159). — IV, 1508.
- 59) 2-Oxymethylazoxybenzol-2'-Carbonsäure. Sm. 160—161°. Pb, Cu, Ag (B. 39, 4269 C. 1907 [1] 558).

- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>** 60) **4,6-Dioxy-2-Methylazobenzol-3-Carbonsäure** (Benzolazoorsellinsäure). Zers. bei 191° (B. 37, 1423 C. 1904 [1] 1418).
- 61) **4,6-Dioxy-2-Methylazobenzol-5-Carbonsäure** (Benzolazoparaorsellinsäure). Zers. bei 190° (B. 37, 1424 C. 1904 [1] 1418).
- 62) **Säure** (aus s-Diphenylhydrazin-3,3'-Dicarbonsäure). Sm. oberhalb 200°. Na + 4H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, HCl, HBr, H<sub>2</sub>SO<sub>4</sub> (B. 23, 913). — IV, 1508.
- 63) **Aldehyd d. 4,4'-Dioxy-s-Diphenylhydrazin-3,3'-Dicarbonsäure?** (Hydrazosalicylaldehyd) (A. 135, 168). — III, 70.
- 64) **2-Nitrophenylester d. Methylphenylamidoameisensäure**. Sm. 110° (B. 24, 2108). — II, 680.
- 65) **3-Nitrophenylester d. Methylphenylamidoameisensäure**. Sm. 105° (B. 24, 2109). — II, 681.
- 66) **4-Nitrophenylester d. Methylphenylamidoameisensäure**. Sm. 69 bis 70° (B. 24, 2109). — II, 683.
- 67) **4-Nitrobenzylester d. Phenylamidoameisensäure**. Sm. 123° (A. 302, 262).
- 68) **Diacetat d. 1,4-Dioximido-1,4-Dihydronaphtalin**. Sm. 160° (B. 21, 433). — III, 371.
- 69) **Acetat d. 1-Naphtyloxaminsäurehydroxylamid**. Sm. 170° u. Zers. NH<sub>4</sub>, Na (Soc. 79, 845).
- 70) **Acetat d. 2-Naphtyloxaminsäurehydroxylamid**. Sm. 172°. NH<sub>4</sub>, Na (Soc. 79, 846).
- 71) **Diacetat d. 4,6-Dioxy-2-Phenyl-1,3-Diazin**. Sm. 93—94° (B. 41, 3518 C. 1908 [2] 1692).
- 72) **Phenylamidoformiat d. 3-Nitro-4-Oxy-1-Methylbenzol**. Sm. 102° (A. 364, 175 C. 1909 [1] 919).
- 73) **1-Phenylamidoformiat d. 2-Oxy-1-Oximidooxymethylbenzol**. Sm. 181° u. Zers. (C. r. 143, 1165 C. 1907 [1] 633).
- 74) **2-Phenylamidoformiat d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol-5-Methyläther**. Sm. 168° (J. pr. [2] 70, 338 C. 1904 [2] 1542).
- 75) **Phenylamid d. 5-Nitro-2-Oxy-1-Methylbenzol-3-Carbonsäure**. Sm. 208° (M. 22, 947 C. 1902 [1] 194).
- 76) **Phenylamid d. Oxyessig-4-Nitrophenyläthersäure**. Sm. 170—171° (J. pr. [2] 55, 115). — \*II, 379.
- 77) **Di[2-Oxyphenylamid] d. Oxalsäure**. Sm. 280—282° (B. 29, 2643). — \*II, 393.
- 78) **Di[3-Oxyphenylamid] d. Oxalsäure**. Sm. 269—270° (B. 32, 2118). — \*II, 396.
- 79) **Di[4-Oxyphenylamid] d. Oxalsäure**. Subl. oberhalb 280° (G. 25 [2] 532; C. 1897 [1] 48; B. 31, 333). — \*II, 409.
- 80) **5-Nitro-2-Oxybenzylamid d. Benzolcarbonsäure**. Sm. 217—218° (D. R. P. 156398 C. 1905 [1] 55; A. 343, 244 C. 1906 [1] 924).
- 81) **3-Nitro-4-Oxybenzylamid d. Benzolcarbonsäure**. Sm. 137° (A. 343, 238 C. 1906 [1] 924).
- 82) **2-Nitro-1-Naphtylimid d. Essigsäure**. Sm. 115° (B. 17, 111; 19, 807). — II, 606.
- 83) **4-Nitro-1-Naphtylimid d. Essigsäure**. Sm. 144° (B. 17, 110; 19, 806; J. 1886, 869). — II, 607.
- 84) **2-Oxybenzylidenhydrazid d. 2-Oxyphenylkohlenensäure**. Sm. 162° (A. 300, 150). — \*III, 55.
- 85) **2-Oxybenzylidenhydrazid d. 3-Oxyphenylkohlenensäure**. Sm. 185 bis 186° (A. 317, 198). — \*III, 56.
- 86) **2-Oxybenzylidenhydrazid d. 4-Oxyphenylkohlenensäure**. Sm. 229 bis 230° (A. 317, 202). — \*III, 56.
- 87) **4-Oxybenzylidenhydrazid d. 2-Oxyphenylkohlenensäure + H<sub>2</sub>O**. Sm. 175° (A. 300, 150). — \*III, 62.
- 88) **Acetylderivat d. Verb. C<sub>14</sub>H<sub>10</sub>O<sub>8</sub>N<sub>2</sub>**. Zers. bei 264° (R. 21, 154 C. 1904 [2] 194).
- 89) **Verbindung** (aus Bernsteinsäurediäthylester u. 1,3-Diamidobenzol). Sm. 205° (A. 347, 31 C. 1906 [2] 506).
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>N<sub>4</sub>**  
 1) **α-[p-Nitrophenylamido]-α-[p-Nitrophenylimido]äthan**. HNO<sub>3</sub> (B. 7, 541). — II, 347.
- 2) **2,3-Anhydrid d. α-[4-Nitrophenyl]amido-α-[5-Nitro-2-Amido-3-Oxy-methylphenyl]methan**. Sm. 219—222° (B. 35, 744 C. 1902 [1] 754).

- $C_{14}H_{12}O_4N_4$  3) Benzoyl-3-Nitrophenylamidoharnstoff. Sm. 188—189° (Soc. 73, 372). — \*IV, 433.
- 4) p-Tetraamido-1,8-Dioxy-9,10-Anthrachinon (Hydrochrysamid) (A. 65, 241; 142, 91; 183, 180). — III, 429.
- 5)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3,5-Dinitrophenyl]äthan. Sm. 212° (J. pr. [2] 65, 293 C. 1902 [1] 1217; J. pr. [2] 69, 469 C. 1904 [2] 596). — \*IV, 502.
- 6)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[3-Nitro-4-Methylbenzyliden]hydrazin. Sm. 223 bis 224° (B. 32, 1289). — \*IV, 488.
- 7)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[2,4-Dinitrobenzyliden]hydrazin. Sm. 194° (B. 39, 2759 C. 1906 [2] 1322).
- 8)  $\alpha$ -[2-Oxybenzyliden]- $\beta$ -[2-Nitro-4-Amidobenzoyl]hydrazin. Sm. 210° (J. pr. [2] 76, 293 C. 1908 [1] 36).
- 9)  $\alpha$ -Nitroso- $\beta$ -Nitro- $\beta$ -[4-Methylbenzoyl]- $\alpha$ -Phenylhydrazin. Sm. 97 bis 98° u. Zers. (G. 38 [1] 527 C. 1908 [2] 407).
- 10) 2-Methylphenyldiazoniumphenyldinitromethan. Sm. 58° u. Zers. (G. 39 [1] 627 C. 1909 [2] 905).
- 11) 4-Methylphenyldiazoniumphenyldinitromethan. Sm. 74° u. Zers. (72°) (G. 38 [1] 527 C. 1908 [2] 407; G. 39 [1] 629 C. 1909 [2] 906).
- 12)  $\alpha$ -Nitro- $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -Phenyläthan. Sm. 118,5—119° (B. 36, 708 C. 1903 [1] 818). — \*IV, 1026.
- 13) Phenylazo-4-Methylphenyldinitromethan. Sm. 130—135° u. Zers. (G. 38 [1] 530 C. 1908 [2] 407).
- 14) 2-Methylphenylazophenyldinitromethan. Sm. 137° u. Zers. (G. 39 [1] 627 C. 1909 [2] 905).
- 15) 4-Methylphenylazophenyldinitromethan. Sm. 153—154° u. Zers. (G. 39 [1] 631 C. 1909 [2] 906).
- 16) 2',4'-Dinitro-2,4-Dimethylazobenzol. Sm. 204° (J. pr. [2] 60, 112). — \*IV, 1025.
- 17) 2',4'-Dinitro-2,5-Dimethylazobenzol. Sm. 157° (J. pr. [2] 71, 406 C. 1905 [2] 41).
- 18) 3,3'-Dinitro-2,2'-Dimethylazobenzol. Sm. 198° (A. 350, 111 C. 1907 [1] 173).
- 19) 4,4'-Dinitro-2,2'-Dimethylazobenzol. Sm. 258° (B. 38, 729 C. 1905 [1] 874).
- 20) 5,5'-Dinitro-2,2'-Dimethylazobenzol. Sm. 273° (B. 38, 728 C. 1905 [1] 874).
- 21) p-Dinitro-2,2'-Dimethylazobenzol. Sm. 142°. — IV, 1376.
- 22) p-Dinitro-2,2'-Dimethylazobenzol. Sm. 248—253° (J. r. 20, 609). — IV, 1376.
- 23) p-Dinitro-3,3'-Dimethylazobenzol. Sm. 192—193° (B. 22, 836). — IV, 1377.
- 24) 2,2'-Dinitro-4,4'-Dimethylazobenzol. Sm. 114° (B. 6, 556; M. 9, 838). — IV, 1379.
- 25) 3,3'-Dinitro-4,4'-Dimethylazobenzol. Sm. 149° (B. 33, 2717). — \*IV, 1021.
- 26) p-Dinitro-4,4'-Dimethylazobenzol. Sm. 185—187° (B. 20, 363).
- 27) 4'-Nitro-5-Acetylamido-2-Oxyazobenzol. Sm. 227° (J. pr. [2] 78, 394 C. 1909 [1] 362).
- 28) 3'-Nitro-3-Acetylamido-4-Oxyazobenzol. Sm. 251—252° u. Zers. (Soc. 69, 1324). — IV, 1411.
- 29) 1,2-Diacetyl-3,6-Difuranyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 197° (B. 28, 471; A. 298, 31). — III, 699; \*III, 504.
- 30) 1,4-Diacetyl-3,6-Difuranyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 166° (B. 28, 472; A. 298, 33). — III, 700; \*III, 504.
- 31) 1,3-Dinitro-5-Äthyl-5,10-Dihydro-5,10-Naphtdiazin. Sm. 246° u. Zers. (B. 26, 2374). — IV, 993.
- 32) 4-Oxyphenylazo-4-Oxyphenylhydrazonessigsäure (Di[4-Oxyphenyl]-formazylameisensäure). Sm. 186° (B. 28, 1694). — IV, 1240.
- 33) Methylester d. 3'-Nitrodiazoamidobenzol-2-Carbonsäure. Sm. 167° (J. pr. [2] 63, 288). — \*IV, 1138.
- 34) Methylester d. 4'-Nitrodiazoamidobenzol-2-Carbonsäure. Sm. 184° (J. pr. [2] 63, 290). — \*IV, 1138.
- 35) Amid d.  $\alpha$ -[3-Nitrophenyl]nitrosamido- $\alpha$ -Phenylessigsäure. Sm. 156° (B. 35, 3338 C. 1902 [2] 1193).



- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>N<sub>4</sub>** 36) Diamid d. 1,4-Naphtylendioxaminsäure. Sm. noch nicht bei 300° (B. 30, 773). — IV, 922.  
 37) Diamid d. 1,5-Naphtylendioxaminsäure. Sm. noch nicht bei 300° (B. 30, 774). — IV, 924.  
 38) Phenylhydrazid d. 2-Nitrophenyloxaminsäure. Sm. 181° u. Zers. (Soc. 81, 1568 C. 1903 [1] 157). — \*IV, 459.  
 39) Phenylhydrazid d. 3-Nitrophenyloxaminsäure. Sm. 184° (Soc. 81, 1569 C. 1903 [1] 157). — \*IV, 459.  
 40) Phenylhydrazid d. 4-Nitrophenyloxaminsäure. Sm. 217° u. Zers. (Soc. 81, 1570 C. 1903 [1] 158). — \*IV, 459.  
 41) 3-Oxybenzylidenhydrazid d. 5-Nitro-3-Amidobenzol-1-Carbonsäure. Sm. 242° (J. pr. [2] 76, 257 C. 1907 [2] 1499).  
 42) β-Benzoylhydrazid d. 3-Nitrophenylamidoameisensäure. Sm. 226° (J. pr. [2] 53, 523). — \*II, 809.  
 43) β-[3-Nitrobenzoyl]hydrazid d. Phenylamidoameisensäure. Sm. 204° (J. pr. [2] 53, 521). — \*II, 811.
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>N<sub>6</sub>**  
 1) αβ-Diimido-αβ-Di[3-Nitrophenylamido]äthan (m-Dinitrocyananilin) (J. pr. [2] 35, 530). — II, 449.  
 2) αβ-Di[4-Nitrophenylhydrazon]äthan. Sm. 311° u. Zers. (B. 33, 3107). — \*IV, 490.  
 3) Di[4-Nitro-α-Amidobenzyliden]hydrazin. Sm. 257°. 2HCl, 2HNO<sub>3</sub> (A. 298, 51). — \*II, 775.  
 4) 4-Nitro-6-Nitro-5-Methylnitrosamido-2-Methylazobenzol. Sm. 174° u. Zers. (J. pr. [2] 67, 529 C. 1903 [2] 239). — \*IV, 1115.
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>Cl<sub>4</sub>** 1) Äthylester d. 2,2,3,3-Tetrachlor-1-Acetoxy-2,3-Dihydroinden-1-Carbonsäure. Sm. 119–120° (A. 267, 334). — II, 1662.
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Dilakton d. αβ-Dibrom-δδ-Dioxy-α-Phenylpentan-β-Carbonsäure-γ-Methylcarbonsäure. Sm. 163° u. Zers. (A. 314, 30). — \*II, 1137.
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>Br<sub>6</sub>** 1) Diacetat d. αα-Dibrom-β-Oxy-β-[2,3,5,6-Tetrabrom-4-Oxyphenyl]-butan. Sm. 90° (A. 362, 219 C. 1908 [2] 943).
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>S** 1) 2-Methyldiphenylsulfon-2'-Carbonsäure. Sm. 189° (B. 38, 740 C. 1905 [1] 877).  
 2) 4-Methyldiphenylsulfon-2'-Carbonsäure. Sm. 155° (B. 38, 741 C. 1905 [1] 877).  
 3) 4-Methyldiphenylketon-2'-Sulfonsäure. NH<sub>4</sub> + H<sub>2</sub>O, Na + 4H<sub>2</sub>O, K + H<sub>2</sub>O, Ba + H<sub>2</sub>O (B. 33, 3489). — \*III, 162.  
 4) Benzolsulfonat d. 4-Oxy-1-Methylbenzol-3-Carbonsäurealdehyd. Sm. 63° (D.R.P. 185547 C. 1907 [2] 863).  
 5) 2-Methylbenzolsulfonat d. 2-Oxybenzol-1-Carbonsäurealdehyd. Sm. 79–80° (D.R.P. 162322 C. 1905 [2] 727).  
 6) 2-Methylbenzolsulfonat d. 3-Oxybenzol-1-Carbonsäurealdehyd. Sm. 65–66° (D.R.P. 162322 C. 1905 [2] 727).  
 7) 2-Methylbenzolsulfonat d. 4-Oxybenzol-1-Carbonsäurealdehyd. Sm. 61–62° (D.R.P. 162322 C. 1905 [2] 727).  
 8) 4-Methylbenzolsulfonat d. 2-Oxybenzol-1-Carbonsäurealdehyd. Sm. 62° (D.R.P. 162322 C. 1905 [2] 727; D.R.P. 185547 C. 1907 [2] 863).  
 9) 4-Methylbenzolsulfonat d. 3-Oxybenzol-1-Carbonsäurealdehyd. Sm. 66–68° (D.R.P. 162322 C. 1905 [2] 727).  
 10) 4-Methylbenzolsulfonat d. 4-Oxybenzol-1-Carbonsäurealdehyd. Sm. 73–74° (D.R.P. 162322 C. 1905 [2] 727).  
 11) Methyl ester d. Diphenylsulfon-2-Carbonsäure. Sm. 63° (Am. 33, 413 C. 1905 [1] 1395).
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>S<sub>2</sub>** 1) 4,4'-Dimethyldiphenylendisulfon. Sm. 286° (Soc. 75, 890; Bl. [3] 15, 425; B. 42, 1174; C. 1909 [1] 1575). — \*II, 584.
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>S<sub>4</sub>** 1) 4-Methyl-1,3-Phenylenester d. 1-Methylbenzol-2,4-Di[Thiolsulfonsäure] (J. pr. [2] 68, 334 C. 1903 [2] 1172).
- C<sub>14</sub>H<sub>12</sub>O<sub>4</sub>Pb** 1) Diformiat d. Bleidiphenyldihydroxyd + H<sub>2</sub>O. Sm. oberhalb 200° u. Zers. (B. 20, 3334). — IV, 1715.
- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** 1) C 58,3 — H 4,2 — O 27,8 — N 9,7 — M. G. 288.  
 1) Di[3-Nitrobenzyl]äther. Sm. 114° (Bl. [4] 5, 286 C. 1909 [1] 1474).  
 2) Di[2-Nitro-3-Methylphenyl]äther. Sm. 112–113° (Am. 36, 550 C. 1907 [1] 545).

- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** 3) Benzyläther d. 2,6-Dinitro-4-Oxy-1-Methylbenzol. Sm. 109° (A. 224, 143). — II, 1049.  
 4) 4-Nitrobenzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 163° (A. 224, 145). — II, 1060.  
 5) 4-Nitro-1-Diacetylamido-2-Oxynaphtalin. Sm. 200° (B. 40, 3397 C. 1907 [2] 1528).  
 6)  $\alpha\beta$ -Dioximido- $\alpha$ -[p-Trioxypheyl]- $\beta$ -Phenyläthan. Sm. 168° (B. 39, 2059 C. 1906 [2] 246).  
 7) Agnotobenzaldehyd. Sm. 98,5—99° (B. 39, 4259 C. 1907 [1] 558).  
 8) Acetat d. 5-Nitro-8-Acetylamido-1-Oxynaphtalin. Sm. 224° (B. 39, 3335 C. 1906 [2] 1616).
- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>N<sub>4</sub>** C 53,2 — H 3,8 — O 25,3 — N 17,7 — M. G. 316.  
 1) Di[2-Nitrobenzyl]nitrosamin. Sm. 120° (126—127°) (B. 24, 3094; 33, 2706). — II, 520; \*II, 293.  
 2) 2,4-Dinitro-4'-Acetylamidodiphenylamin. Sm. 238° (B. 23, 1853). — IV, 584.  
 3)  $\alpha$ -[4-Nitrophenyl]imido- $\alpha$ -[5-Nitro-2-Amido-3-Oxymethylphenyl]-methan. Sm. 207—208° (B. 35, 743 C. 1902 [1] 754). — \*III, 65.  
 4) 4-[2,4-Dinitrophenyl]amido-2-Formylamido-1-Methylbenzol. Sm. 157° (B. 15, 1237). — IV, 602.  
 5) 2,4-Dinitrophenyläther d. 4-Amidooximidomethyl-1-Methylbenzol. Sm. 174° (B. 32, 2691). — \*II, 828.  
 6) Methyläther d. 4-Nitrophenyl-3-Nitro-4-Oxybenzylidenhydrazin. Sm. 244° (C. 1907 [1] 548).  
 7) Methyläther d.  $\alpha$ -Nitroso- $\beta$ -Nitro- $\beta$ -[4-Oxybenzoyl]- $\alpha$ -Phenylhydrazin. Sm. 123—124° u. Zers. (G. 38 [1] 530 C. 1908 [2] 407).  
 8) Phenyl diazoniumsals d. 4-Methoxyphenyldinitromethan. Sm. 85° u. Zers. (G. 38 [1] 530 C. 1908 [2] 407).  
 9) 3,3'-Dinitro-2,2'-Dimethylazoxybenzol. Sm. 187° (B. 40, 3328 C. 1907 [2] 799).  
 10) 3,3'-Dinitro-4,4'-Dimethylazoxybenzol. Sm. 164° (167°) (B. 40, 3329 C. 1907 [2] 799; B. 41, 3193 C. 1908 [2] 1507).  
 11) p-Dinitro-4,4'-Dimethylazoxybenzol. Sm. 145° (B. 6, 557). — IV, 1340.  
 12) 3,3'-Dinitro-4-Oxy-2,2'-Dimethylazobenzol. Sm. 222° (B. 40, 3328 C. 1907 [2] 799).  
 13) 5,6'-Dinitro-2'-Oxy-2,3'-Dimethylazobenzol. Zers. bei 250—260° (B. 26, 2353). — IV, 1423.  
 14) 2,2'-Dinitro-4'-Oxy-2,3'-Dimethylazobenzol. Sm. 147—150° (B. 37, 2582 C. 1904 [2] 659).  
 15) 5,6'-Dinitro-4'-Oxy-2,3'-Dimethylazobenzol. Zers. bei 260—270° (B. 26, 2353). — IV, 1423.  
 16) Methyläther d. Phenylazo-4-Oxyphenyldinitromethan. Sm. 141 bis 148° u. Zers. (G. 38 [1] 531 C. 1908 [2] 407).  
 17) 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Alloxan + 3H<sub>2</sub>O (A. 255, 231). — IV, 548.  
 18) Nitril d. 3,5-Dinitro-2-Oxy-1-Methylbenzol-4-Carbonsäure + Anilin. Sm. 156—158° (B. 35, 574 C. 1902 [1] 583).  
 19) 3-Nitrophenylamid d. 3-Nitrophenylamidoessigsäure. Sm. 201—202° (B. 40, 5016 C. 1908 [1] 472).  
 20) 4-Nitrophenylamid d. 4-Nitrophenylamidoessigsäure. Sm. 260° (B. 40, 5016 C. 1908 [1] 472).
- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>Cl<sub>2</sub>** 1) Äthylester d. 6,8-Dioxy-4-Äthoxyl-1,2-Benzpyron-3-Carbonsäure. Sm. 148° (A. 368, 27 C. 1909 [2] 1441).
- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>Br<sub>2</sub>** 1) Äthylester d. 6,8-Dibrom-4-Äthoxyl-1,2-Benzpyron-3-Carbonsäure. Sm. 155° (A. 368, 30 C. 1909 [2] 1442).
- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>J<sub>2</sub>** 1) Äthylester d. 6,8-Dijod-4-Äthoxyl-1,2-Benzpyron-3-Carbonsäure. Sm. 159° (A. 368, 36 C. 1909 [2] 1442).
- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>S** 1) Phenoxy-methylphenylketon- $\beta$ -Sulfonsäure. Na + 2H<sub>2</sub>O, Ba + 4H<sub>2</sub>O (B. 35, 3564 C. 1902 [2] 1313).  
 2) 4-Benzolsulfonat d. 3,4-Dioxybenzol-3-Methyläther-1-Carbonsäurealdehyd. Sm. 68—69° (69—70°) (C. 1900 [1] 543; D.R.P. 80498). — \*III, 76.

- C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>S** 3) Benzolsulfonat d. 2-Oxybenzol-1-Carbonsäuremethylester. Sm. 41 bis 42° (C. 1900 [1] 543). — \*II, 890.
- 4) 2-Methylbenzolsulfonat d. 2-Oxybenzol-1-Carbonsäure. Sm. 154 bis 155° (D.R.P. 162322 C. 1905 [2] 727).
- 5) 2-Methylbenzolsulfonat d. 3-Oxybenzol-1-Carbonsäure. Sm. 162° (D.R.P. 162322 C. 1905 [2] 727).
- 6) 2-Methylbenzolsulfonat d. 4-Oxybenzol-1-Carbonsäure. Sm. 168 bis 170° (D.R.P. 162322 C. 1905 [2] 727).
- 7) 4-Methylbenzolsulfonat d. 2-Oxybenzol-1-Carbonsäure. Sm. 118 bis 120° (D.R.P. 162322 C. 1905 [2] 727).
- 8) 4-Methylbenzolsulfonat d. 3-Oxybenzol-1-Carbonsäure. Sm. 144 bis 146° (D.R.P. 162322 C. 1905 [2] 727).
- 9) 4-Methylbenzolsulfonat d. 4-Oxybenzol-1-Carbonsäure. Sm. 168 bis 170° (D.R.P. 162322 C. 1905 [2] 727).
- 10) 4-[4-Methylbenzol]sulfonat d. 3,4-Dioxybenzol-1-Carbonsäurealdehyd. Sm. 118° (D.R.P. 76493). — \*III, 76.
- C<sub>14</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>** C 55,3 — H 3,9 — O 31,6 — N 9,2 — M. G. 304.
- 1) 2-Dinitro-4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 272–273° (B. 21, 750, 1068). — II, 994.
- 2) Dimethyläther d. 5,5'-Dinitro-2,2'-Dioxybiphenyl. Sm. 264° (Am. 39, 694 C. 1908 [2] 394).
- 3) Monoäthyläther d. 5,5'-Dinitro-2,2'-Dioxybiphenyl. Sm. 224° (Am. 39, 695 C. 1908 [2] 395).
- 4) Di[2-Nitrophenyläther] d. αβ-Dioxyäthan. Sm. 163° (J. pr. [2] 21, 127; [2] 27, 201). — II, 680.
- 5) Di[3-Nitrophenyläther] d. αβ-Dioxyäthan. Sm. 139° (J. pr. [2] 27, 201). — II, 681.
- 6) Di[4-Nitrophenyläther] d. αβ-Dioxyäthan. Sm. 142–143° (147°) (J. pr. [2] 21, 127; [2] 27, 201; C. 1898 [2] 423). — II, 682; \*II, 379.
- 7) Di[2-Oxyphenylester] d. Hydrazin-αβ-Dicarbonsäure. Sm. 207° (A. 300, 148). — \*II, 550.
- 8) Dinitrat d. αβ-Dioxy-αβ-Diphenyläthan. Sm. 132° (J. pr. [2] 61, 173). — \*II, 674.
- 9) Acetat d. 5-Oxy-2,4,6-Triketo-5-Benzoylmethylhexahydro-1,3-Diazin. Sm. 236–237° u. Zers. (B. 38, 3006 C. 1905 [2] 1241; B. 41, 1662 C. 1908 [2] 54).
- 10) Diacetat d. 3-Acetyl-5,6-Dioxy-4-Keto-3,4-Dihydro-2,3-Benzdiazin. Sm. 184–186° (B. 27, 1422). — II, 1939.
- C<sub>14</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>** C 50,6 — H 3,6 — O 28,9 — N 16,9 — M. G. 332.
- 1) Äthyl-2,4,6-Trinitrodiphenylamin. Sm. 105–107° (B. 33, 434). — \*II, 158.
- 2) 2,4,6-Trinitro-3,5-Dimethyldiphenylamin (2,4,6-Trinitro-5-Phenyl-amido-1,3-Dimethylbenzol). Sm. 175° (B. 28, 2047). — \*II, 314.
- 3) 2',4',6'-Trinitro-2,4-Dimethyldiphenylamin. Sm. 153° (J. pr. [2] 79, 550 C. 1909 [2] 429).
- 4) 2',4',6'-Trinitro-2,5-Dimethyldiphenylamin. Sm. 163° (J. pr. [2] 79, 550 C. 1909 [2] 429).
- 5) 2',4',6'-Trinitro-2,6-Dimethyldiphenylamin. Sm. 212° (J. pr. [2] 79, 551 C. 1909 [2] 429).
- 6) 2,4,6-Trinitro-3,4'-Dimethyldiphenylamin. Sm. 127° (B. 37, 2095 C. 1904 [2] 34).
- 7) 2-Trinitro-4,4'-Dimethyldiphenylamin. Sm. 268° (B. 28, 1650). — \*II, 266.
- 8) Bisnitrosyl-2-Nitrobenzyl. Sm. 141° u. Zers. (B. 30, 1900).
- 9) Bisnitrosyl-4-Nitrobenzyl. Sm. 135–140° (A. 263, 347; B. 30, 1897). — III, 50; \*III, 38.
- 10) 2,5-Dinitro-6-Acetylamido-3-Oxydiphenylamin. Sm. 179° (Soc. 89, 1940 C. 1907 [1] 715).
- 11) 4-Methyläther d. 2,6-Dinitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 185° (B. 35, 4394 C. 1903 [1] 340). — \*IV, 497.
- C<sub>14</sub>H<sub>12</sub>O<sub>6</sub>N<sub>6</sub>** C 66,7 — H 3,3 — O 26,7 — N 23,3 — M. G. 360.
- 1) 4,6-Dinitro-5-Methylnitrosamido-2-Methyldiphenylnitrosamin. Zers. bei 100° (J. pr. [2] 67, 562 C. 1903 [2] 241). — \*IV, 400.



- $C_{14}H_{12}O_6N_6$  2)  $\alpha\beta$ -Di[5-Nitro-3-Amidobenzoyl]hydrazin. Sm. 263—264° (*J. pr.* [2] 76, 262 *C.* 1907 [2] 1500).  
 3)  $\alpha\beta$ -Di[2-Nitro-4-Amidobenzoyl]hydrazin. Sm. 238° (*J. pr.* [2] 76, 295 *C.* 1908 [1] 36).  
 4) 1,4-Di[Barbiturylamido]benzol (*J. pr.* [2] 73, 484 *C.* 1906 [2] 505).  
 5) Di[2-Nitrophenylhydrazid] d. Oxalsäure (*B.* 22, 2805). — IV, 701.
- $C_{14}H_{12}O_6N_8$  C 43,3 — H 3,1 — O 24,7 — N 28,9 — M. G. 388.  
 1) 2,4,6-Trinitrodiphenylbiguanid. Sm. 205° (*B.* 41, 1643 *C.* 1908 [2] 51).
- $C_{14}H_{12}O_6S$  1) 2',4'-Dioxy-4-Methyldiphenylketon-2-Sulfonsäure + 4H<sub>2</sub>O. Ca + 6H<sub>2</sub>O, Ba + 5H<sub>2</sub>O, Zn + xH<sub>2</sub>O, Pb + 7H<sub>2</sub>O, Ag + 2H<sub>2</sub>O (*Am.* 17, 556). — III, 212.
- $C_{14}H_{12}O_6S_2$  1)  $\alpha\beta$ -Diphenyläthen- $\beta$ -Disulfonsäure (Stilbendisulfonsäure). Ba + 2H<sub>2</sub>O (*A.* 145, 335). — II, 249.
- $C_{14}H_{12}O_7N_2$  C 52,5 — H 3,7 — O 35,0 — N 8,7 — M. G. 320.  
 1) Dimethyläther d. 3,5-Dinitro-2,2'-Dioxydiphenyläther. Sm. 119 bis 120° (*Am.* 26, 368).
- $C_{14}H_{12}O_7N_4$  C 48,3 — H 3,4 — O 32,2 — N 16,1 — M. G. 348.  
 1) Äthyläther d. 2,4,6-Trinitro-3-Oxydiphenylamin. Sm. 174° (*R.* 21, 326 *C.* 1903 [1] 80).  
 2) Äthyläther d. 2,4,6-Trinitro-2'-Oxydiphenylamin. Sm. 136—137° (*J. pr.* [2] 79, 553 *C.* 1909 [2] 429).  
 3) Äthyläther d. 2,4,6-Trinitro-4'-Oxydiphenylamin. Sm. 123—124° (*J. pr.* [2] 79, 553 *C.* 1909 [2] 429).  
 4) Dimethyläther d. 5,5'-Dinitro-3,3'-Dioxyazoxybenzol. Sm. 170 bis 200° (*R.* 28, 111 *C.* 1909 [1] 1647).
- $C_{14}H_{12}O_7N_6$  C 44,7 — H 3,2 — O 29,8 — N 22,3 — M. G. 376.  
 1) 4,6-Dinitro-5-Methylnitramido-2-Methyldiphenylnitrosamin. Sm. 141° u. Zers. (*J. pr.* [2] 67, 563 *C.* 1903 [2] 241). — \*IV, 1115.
- $C_{14}H_{12}O_8N_2$  C 50,0 — H 3,6 — O 38,1 — N 8,3 — M. G. 336.  
 1) Dimethyläther d.  $\beta$ -Dinitrotetraoxybiphenyl. Sm. 283° u. Zers. (*B.* 38, 3008 *C.* 1905 [2] 1248).  
 2)  $\alpha\beta$ -Di[Furalamido]- $\alpha\beta$ -Dioxybernsteinsäure. (NH<sub>4</sub>)<sub>2</sub> + 2H<sub>2</sub>O (*A. ch.* [6] 24, 545). — III, 724.
- $C_{14}H_{12}O_8N_6$  C 42,9 — H 3,1 — O 32,6 — N 21,4 — M. G. 392.  
 1)  $\alpha\beta$ -Di[2,4-Dinitrophenylamido]äthan. Sm. 302—303° (307—308°) (*J. pr.* [2] 48, 201; *Soc.* 77, 1020). — II, 343; \*II, 158.  
 2) isom.  $\alpha\beta$ -Di[ $\beta$ -Dinitrophenylamido]äthan. Sm. 85° (*Soc.* 77, 1021). — \*II, 158.  
 3)  $\beta$ -Tetranitro-4,4'-Di[Methylamido]biphenyl. Zers. oberhalb 200° (*B.* 19, 2127). — IV, 962.
- $C_{14}H_{12}O_8Cl_2$  1) Benzol-1,4-Di[ $\beta$ -Chloräthyl- $\beta\beta$ -Dicarbonsäure]. Sm. 179° u. Zers. K<sub>2</sub> (*B.* 34, 2786).  
 2) Tetracetat d. 3,6-Dichlor-1,2,4,5-Tetraoxybenzol. Sm. 235° (*A.* 146, 34). — II, 1032.
- $C_{14}H_{12}O_8Br_2$  1) Methylester d. 2,6-Dibrom-3,4,5-Triacetoxybenzol-1-Carbonsäure. Sm. 150° (*Bl.* [3] 9, 696). — II, 1924.
- $C_{14}H_{12}O_8S_2$  1) Acetat d. Anhydrid d. 1-Oxybenzol-4-Sulfonsäure (*A.* 178, 175). — II, 831.
- $C_{14}H_{12}O_9N_6$  C 41,2 — H 2,9 — O 35,3 — N 20,6 — M. G. 408.  
 1)  $\beta$ -Tetranitro-4-Dimethylamido-4'-Oxydiphenylamin. Sm. 228° u. Zers. (*B.* 35, 3086 *C.* 1902 [2] 1116; *J. pr.* [2] 69, 166 *C.* 1904 [1] 1268). — \*IV, 382.
- $C_{14}H_{12}O_{12}N_2$  C 42,0 — H 3,0 — O 48,0 — N 7,0 — M. G. 400.  
 1) Tetramethylester d. 3,6-Dinitrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 180,6° (*A.* 258, 317). — II, 2074.
- $C_{14}H_{12}NCl$  1) 2-[ $\alpha$ -Chlorbenzyliden]amido-1-Methylbenzol (*B.* 19, 282). — II, 1164.  
 2) 4-[ $\alpha$ -Chlorbenzyliden]amido-1-Methylbenzol. Sm. 52° (*B.* 19, 980). — II, 1165.  
 3) 2-[4-Chlorbenzyliden]amido-1-Methylbenzol. Sm. 35,5° (*J. pr.* [2] 65, 264 *C.* 1902 [1] 1213). — \*III, 23.  
 4) 3-[4-Chlorbenzyliden]amido-1-Methylbenzol. Sm. 32° (*J. pr.* [2] 65, 264 *C.* 1902 [1] 1213). — \*III, 23.

- C<sub>14</sub>H<sub>12</sub>NCI** 5) 4-[4-Chlorbenzyliden]amido-1-Methylbenzol. Sm. 125° (*J. pr.* [2] 65, 264 *C.* 1902 [1] 1213). — \*III, 23.  
 6)  $\alpha$ -Chlor- $\alpha$ -Benzylimido- $\alpha$ -Phenylmethan. Sd. 110°<sub>80</sub> (*B.* 30, 1788; *B.* 36, 19 *C.* 1903 [1] 510; *Soc.* 83, 326 *C.* 1903 [1] 581, 876). — \*II, 731.  
 7)  $\alpha$ -Chlor- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Phenylmethan (Benz-o-Toluidimidechlorid). Sd. bei 173°<sub>10</sub> (*B.* 31, 241). — \*II, 731.  
 8) 2-[3-Chlorphenyl]-1,3-Dihydroisindol. Sm. 101° (*B.* 31, 629). — \*IV, 139.  
 9) 2-[4-Chlorphenyl]-1,3-Dihydroisindol. Sm. 170° (*B.* 31, 629). — \*IV, 139.  
 10) Chlormethylat d. Akridin + 2H<sub>2</sub>O. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*B.* 42, 2003 *C.* 1909 [2] 225).  
 11) Chlormethylat d. Phenanthridin. 2 + PtCl<sub>4</sub> (*A.* 266, 150). — IV, 407.  
 12) Chlormethylat d.  $\alpha$ -Naphtochinolin. Sm. 133° (*J. pr.* [2] 57, 72). — \*IV, 247.  
 13) Chlormethylat d.  $\beta$ -Naphtochinolin + 2H<sub>2</sub>O. Sm. 138—140° (236° wasserfrei) (*J. pr.* [2] 57, 50). — \*IV, 248.
- C<sub>14</sub>H<sub>12</sub>NBr** 1)  $\beta$ -Brom- $\alpha$ -[2-Amidophenyl]- $\alpha$ -Phenyläthen. Sm. 87—88°. (2HCl, PtCl<sub>4</sub>) (*B.* 42, 3121 *C.* 1909 [2] 1353).  
 2) 2-[3-Bromphenyl]-1,3-Dihydroisindol. Sm. 112° (*B.* 31, 629). — \*IV, 139.  
 3) 2-[4-Bromphenyl]-1,3-Dihydroisindol. Sm. 184° (*B.* 31, 629). — \*IV, 139.
- C<sub>14</sub>H<sub>12</sub>NJ** 1)  $\beta$ -Jod- $\alpha$ -Phenylacetylenanilid. Sm. 44—46° (*A.* 308, 299). — \*II, 91.  
 2) Jodmethylat d. Akridin (*B.* 35, 2536; *B.* 37, 576 *C.* 1904 [1] 897). — \*IV, 245.  
 3) Jodmethylat d.  $\alpha$ -Naphtochinolin + 2H<sub>2</sub>O. Sm. 179° (*M.* 4, 460; *J. pr.* [2] 57, 71). — IV, 408; \*IV, 247.  
 4) Jodmethylat d.  $\beta$ -Naphtochinolin + 2H<sub>2</sub>O. Sm. 200—205° u. Zers. (186° u. Zers.) (*M.* 4, 441; *J. pr.* [2] 57, 50). — IV, 409; \*IV, 248.  
 5) Jodmethylat d. Phenanthridin. Sm. 202° (*A.* 266, 149). — IV, 407; \*IV, 247.
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) 4,4'-Di[Chlorimido]-3,3'-Dimethylbiphenylen. Zers. bei 135—142° (*A.* 363, 320 *C.* 1909 [1] 180).  
 2) 2-Chlorbenzyliden-2-Chlorbenzylhydrazin. Sm. 83—84° (*B.* 34, 852). — \*IV, 542.  
 3) 3,3'-Dichlor-2,2'-Dimethylazobenzol. Sm. 153—154° (*M.* 22, 490). — \*IV, 1019.
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>Br<sub>2</sub>** 1)  $\alpha$ -[4-Bromphenylamido]- $\alpha$ -[4-Bromphenylimido]äthan. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 13, 233). — II, 347.  
 2)  $\beta$ -Dibrom-2,2'-Dimethylazobenzol. — IV, 1376.  
 3) 3,3'-Dibrom-4,4'-Dimethylazobenzol. Sm. 75° (*B.* 21, 1219). — IV, 1379.
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>Br<sub>4</sub>** 1) 3,5,3',5'-Tetrabrom-4,4'-Diamido-2,2'-Dimethylbiphenyl. Sm. 229 bis 230° (*A.* 363, 338 *C.* 1909 [1] 181).  
 2)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[ $\alpha$ -Brombenzyl]hydrazin (Tetrabrombenzalazin). Sm. 134° (*B.* 28, 2347; *J. pr.* [2] 58, 385). — III, 38; \*III, 29.
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>S** 1) Thioharnstoff (aus 4,4'-Diamidodiphenylmethan). Sm. 205° u. Zers. (*B.* 40, 3255 *C.* 1907 [2] 1072).  
 2) Dehydrothio-o-Toluidin. Sm. 120° (*B.* 22, 425). — II, 820.  
 3) 1-[4-Amidophenyl]-5-Methylbenzthiazol (Dehydrothio-p-Toluidin). Sm. 190—191°; Sd. 434° (*B.* 22, 333, 424, 969, 1066; 25, 1064; *J. pr.* [2] 53, 548; D.R.P. 52509, 53938; *G.* 27 [2] 165; *C.* 1899 [2] 950). — II, 822; \*II, 483.  
 4) Phenylimidophenylthiocarbaminsäuremethylenäther. Sm. 68°. (2HCl, PtCl<sub>4</sub>) (*B.* 21, 1872). — II, 396.  
 5) Methyläther d. 2-Merkapto-1-[1-Naphtyl]imidazol. Sm. 127°. 2 + PtCl<sub>4</sub>, Pikrat (*B.* 25, 2372). — IV, 504.  
 6) 1-[4-Amido-3-Methylphenyl]benzthiazol? Sm. 190° (D.R.P. 83089). — \*IV, 678.  
 7) 2-Thiocarbonyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 260° (245—246°) (*B.* 25, 2857; 27, 1868, 2432; *J. pr.* [2] 52, 376). — IV, 634.

- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>S** 8) 2-Thiocarbonyl-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 230° (B. 29, 1305). — IV, 973.
- 9) 3-Phenylimido-3,4-Dihydro-2,4-Benzthiazin (Phenylimidocumothiazon; Benzophenyldihydrothiomiazin). Sm. 197° (2 HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 22, 1671; 27, 2426, 2432; 28, 1033). — IV, 878.
- 10) Verbindung (aus d. Phenylamid d. Thioameisensäure). Sm. 140°. (2 HCl, PtCl<sub>4</sub>) (B. 15, 211; G. 39 [1] 417 C. 1909 [2] 189). — II, 360.
- 11) Verbindung (aus d. Amid d. 3-Amidobenzol-1-Thiocarbonsäure). (2,5-Di-[3-Amidophenyl]-1,3,4-Thiodiazol). Sm. 128—129°. (2 HCl, PtCl<sub>4</sub>) (B. 6, 333). — II, 1294.
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>S<sub>2</sub>** 1) 5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 156,5°. Na + 3 H<sub>2</sub>O, K (B. 28, 2644; D.R.P. 85568). — IV, 750; \*IV, 482.
- 2) 2-Amidophenyläther d. 1-Merkaptomethylbenzthiazol. Sm. 88 bis 89°. HBr (B. 30, 608, 2398). — \*II, 474.
- 3) Di[Phenylamid] d. Dithiooxalsäure. Sm. 134° (133°) (B. 13, 527; R. 12, 293; C. 1902 [2] 121; B. 37, 3722 C. 1904 [2] 1450). — II, 412.
- C<sub>14</sub>H<sub>12</sub>N<sub>2</sub>S<sub>4</sub>** 1) Biphenyl-4,4'-Di[Amidodithioameisensäure]. (NH<sub>4</sub>)<sub>2</sub> (B. 40, 2974 C. 1907 [2] 805).
- C<sub>14</sub>H<sub>12</sub>N<sub>3</sub>Cl** 1) 3-Chlor-4,6-Dimethyl-2-Phenyl-2,1,5-Benztriazol. Sm. 179—180° (B. 36, 521 C. 1903 [1] 649). — \*IV, 798.
- C<sub>14</sub>H<sub>12</sub>N<sub>3</sub>Br<sub>2</sub>** 1) 2,4,6-Tribrom-4'-Dimethylamidoazobenzol. Sm. 161°. HCl (J. pr. [2] 27, 124; B. 41, 1184 C. 1908 [1] 1885). — IV, 1356.
- C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) 4,4'-Bisdiazo-3,3'-Dimethylbiphenylchlorid. + CuCl (B. 21, 1097; Soc. 81, 1439). — IV, 1543; \*IV, 1120.
- C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>Br<sub>2</sub>** 1) αβ-Diimido-αβ-Di[4-Bromphenylamido]äthan (p-Dibromcyananilin). Sm. 245°. (2 HBr, Br<sub>2</sub>) (J. pr. [2] 35, 525). — II, 449.
- 2) αβ-Di[4-Bromphenylhydrazon]äthan (p-Dibromglyoxalosazon). Sm. 241° (B. 30, 2877). — IV, 755.
- C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>S** 1) 3,5-Diimido-2,4-Diphenyltetrahydro-1,2,4-Thiodiazol. Sm. 198° (181°). HCl, (2 HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, + AgNO<sub>3</sub> + H<sub>2</sub>O, + CS<sub>2</sub> (B. 22, 1177; 25 [2] 799; B. 39, 863 C. 1906 [1] 1413; M. 27, 278 C. 1906 [2] 510; B. 42, 3806 C. 1909 [2] 1858). — IV, 1235; \*IV, 901.
- 2) 2,5-Di[2-Amidophenyl]-1,3,4-Thiodiazol. Sm. 170°. 2 HCl, (2 HCl, PtCl<sub>4</sub>), 2 HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 42, 3718 C. 1909 [2] 1806).
- 3) 2,5-Di[3-Amidophenyl]-1,3,4-Thiodiazol. Sm. 239—240°. 2 HCl (B. 35, 3935 C. 1903 [1] 38).
- 4) 5-Phenylimido-3-Merkapto-4-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 206°. K (B. 35, 1712 C. 1902 [2] 29). — \*IV, 899.
- 5) 2-Phenylimido-5-Thiocarbonyl-1-Phenyltetrahydro-1,3,4-Triazol (Phenylimidophenylthiourazol). Sm. 239—240° (B. 26, 2880; 27, 1775). — II, 402.
- 6) 3-Merkapto-1,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 208° (J. pr. [2] 67, 233 C. 1903 [1] 1262). — \*IV, 940.
- 7) Verbindung (aus d. Verb. C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>S vom Sm. 181°). Sm. 198° (B. 39, 865 C. 1906 [1] 1413).
- 8) Verbindung (aus d. Phenylamid d. Hydrazin-αβ-Di[Thiocarbonsäure]). Sm. 237° (J. pr. [2] 74, 225 C. 1906 [2] 1725).
- C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>S<sub>2</sub>** 1) 5-Phenylhydrazido-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 142° (B. 23, 2830). — IV, 687.
- 2) 3-Hydrothiamido-5-Thiocarbonyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 130° (B. 34, 311). — \*IV, 751.
- C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>S<sub>3</sub>** 1) 3,4-Diamidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 159—160° (J. pr. [2] 60, 192). — \*IV, 415.
- 2) 3,5-Diamidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 164—165° (J. pr. [2] 60, 193). — \*IV, 445.
- C<sub>14</sub>H<sub>12</sub>ClJ** 1) α-Chlor-β-Jod-αβ-Diphenyläthan. Sm. 131° u. Zers. (C. 1902 [1] 1402).
- C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>S** 1) Di[4-Chlorbenzyl]sulfid. Sm. 42° (A. 167, 187; Am. 2, 166). — II, 1057.
- C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>S<sub>2</sub>** 1) Di[4-Chlorbenzyl]disulfid. Sm. 59° (Am. 2, 166). — II, 1057.
- C<sub>14</sub>H<sub>12</sub>Br<sub>2</sub>S** 1) Di[4-Brombenzyl]sulfid. Sm. 58—59° (Am. 5, 267). — II, 1058.



- C<sub>14</sub>H<sub>12</sub>Br<sub>2</sub>S<sub>2</sub>** 1) Di[4-Brombenzyl]disulfid. Sm. 87–88° (*Am.* 5, 267). — II, 1058.  
 2) Di[4-Brom-3-Methylphenyl]disulfid. Sm. 76–78° (*A.* 169, 42). — II, 822.
- C<sub>14</sub>H<sub>12</sub>S<sub>3</sub>P<sub>2</sub>** 1) Phenylphosphorthiocarbaminsäureanhydrid (*B.* 12, 339). — IV, 1648.  
**C<sub>14</sub>H<sub>13</sub>ON** C 79,6 — H 6,2 — O 7,6 — N 6,6 — M. G. 211.
- 1) 4-Oxy-3-Phenylimidomethyl-1-Methylbenzol. Sm. 70° (u. 74°). HCl (*B.* 38, 3994 *C.* 1906 [1] 235; *B.* 40, 3471 *C.* 1907 [2] 1332).  
 2) 3-Oxy-4-Phenylimidomethyl-1-Methylbenzol. Sm. 93° (*B.* 38, 3997 *C.* 1906 [1] 236).  
 3) 2-Oxy-1-Benzylimidomethylbenzol. Sm. 29°. Cu (*Bl.* [3] 21, 945; *Soc.* 65, 192). — III, 73.  
 4) 4-Oxy-1-Benzylimidomethylbenzol (Benzyl-4-Oxybenzylidenamin). Sm. 205–206° (*Soc.* 65, 192). — III, 85.  
 5) 2-Oxy-1-[2-Methylphenylimido]methylbenzol. Sm. 47–48° (*B.* 34, 833 *Ann.*). — \*III, 52.  
 6) 2-Oxy-1-[3-Methylphenylimido]methylbenzol. Sm. 39,5° (*Soc.* 95, 443 *C.* 1909 [1] 1654).  
 7) 2-Oxy-1-[4-Methylphenylimido]methylbenzol. Sm. 100°. (2HCl, PtCl<sub>4</sub>) (*Z.* 1865, 440). — III, 73.  
 8) 4-Oxy-1-[4-Methylphenylimido]methylbenzol. Sm. 213° (*B.* 10, 2196). — III, 85.  
 9) 2-Benzylidenamido-1-Oxymethylbenzol. Sm. 115° (*B.* 25, 2970). — III, 32.  
 10) 4-Benzylidenamido-1-Oxymethylbenzol. Sm. 67–68° (29°); Sd. 178°<sub>11</sub> (*B.* 28, 881; *Soc.* 85, 1174 *C.* 1904 [2] 1215). — III, 32.  
 11) 6-Benzylidenamido-3-Oxy-1-Methylbenzol. Sm. 133° (*D.R.P.* 213592 *C.* 1909 [2] 1097).  
 12) 4-[3-Oxybenzyliden]amido-1-Methylbenzol. Sm. 129° (*C.* 1899 [2] 1078). — \*III, 57.  
 13) Methyläther d. α-Phenylimido-α-Oxyphenylmethan. Sd. 145–150° (*B.* 33, 1471; *Soc.* 81, 595 *C.* 1902 [1] 1055). — \*II, 760.  
 14) Methyläther d. 2-Oxy-1-Phenylimidomethylbenzol (M. d. Phenyl-2-Oxybenzylidenamin). Sd. 235–236°<sub>30</sub> (330–334°) (*B.* 36, 1537 *C.* 1903 [2] 53; *B.* 40, 3474 *C.* 1907 [2] 1332).  
 15) Methyläther d. 3-Oxy-1-Phenylimidomethylbenzol. Sd. 223–225°<sub>18</sub> (*B.* 36, 1538 *C.* 1903 [2] 53).  
 16) Methyläther d. 4-Oxy-1-Phenylimidomethylbenzol. Sm. 53° (63°). HCl, HJ (*A.* 150, 195 *Ann.*; *B.* 31, 2606; *B.* 36, 1539 *C.* 1903 [2] 53; *M.* 26, 340 *C.* 1905 [1] 1144; *B.* 40, 3474 *C.* 1907 [2] 1332; *Soc.* 93, 1916 *C.* 1909 [1] 279). — III, 85.  
 17) Methyläther d. 4-Benzylidenamido-1-Oxybenzol. Sm. 62° (72°; 142°). HCl (*B.* 25, 3248; 31, 2706; 34, 832; *Soc.* 93, 1915 *C.* 1909 [1] 279). — III, 32; \*III, 24.  
 18) 5-Amido-2-Methyldiphenylketon. Fl. HCl, H<sub>2</sub>SO<sub>4</sub> + 1/2 H<sub>2</sub>O (*B.* 32, 2029). — \*III, 160.  
 19) 4-Amido-3-Methyldiphenylketon. Sm. 112°. HCl, H<sub>2</sub>SO<sub>4</sub> (*Soc.* 85, 592 *C.* 1904 [1] 1554).  
 20) 6-Amido-3-Methyldiphenylketon. Sm. 64° (66°). HCl, Pikrat (*B.* 32, 2023; *Soc.* 85, 595 *C.* 1904 [1] 1554). — \*III, 160.  
 21) 2-Amido-4[?]-Methyldiphenylketon (*B.* 5, 685). — III, 214.  
 22) 2'-Amido-4-Methyldiphenylketon. Sm. 96° (95°). Pikrat (*B.* 30, 1133; *B.* 35, 4277 *C.* 1903 [1] 333). — \*III, 162.  
 23) 3'-Amido-4-Methyldiphenylketon. Sm. 111°. HCl, H<sub>2</sub>SO<sub>4</sub> (*A.* 286, 312). — III, 215.  
 24) 4'-Amido-4-Methyldiphenylketon. Sm. 179°. H<sub>2</sub>SO<sub>4</sub> (*A.* 286, 325). — III, 215.  
 25) 2-Methylamidodiphenylketon. Sm. 66° (*B.* 35, 4276 *C.* 1903 [1] 333).  
 26) β-Amido-α-Keto-αβ-Diphenyläthan (Desylamin). Sm. 109°. HCl, 2HCl, (HCl, SnCl<sub>2</sub> + H<sub>2</sub>O), Pikrat (*B.* 22, 557; 23, 996; *B.* 35, 2740 *C.* 1902 [2] 645). — III, 220.  
 27) α-Keto-β-[4-Amidophenyl]-α-Phenyläthan. Sm. 95°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (*J. r.* 6, 114; 11, 101). — III, 219.  
 28) Phenylamidobenzoylmethan (Phenylamidomethylphenylketon). Sm. 93°. HCl, HBr (*B.* 14, 172; 15, 2466; 25, 2860). — III, 125.

- $C_{14}H_{13}ON$  29)  $\beta$ -Oximido- $\alpha\alpha$ -Diphenyläthan. Sm. 120° (106°) (B. 24, 1780; B. 39, 1755 C. 1906 [2] 54). — III, 64.
- 30)  $\alpha$ -Oximido- $\alpha\beta$ -Diphenyläthan (Desoxybenzoinoxim). Sm. 98° (96°) (B. 21, 1298; B. 36, 1497 C. 1903 [1] 1351). — III, 218.
- 31) anti- $\alpha$ -Oximido-2-Methyldiphenylmethan. Sm. 105° (B. 24, 4046). — III, 211.
- 32) syn- $\alpha$ -Oximido-2-Methyldiphenylmethan. Sm. 69° (B. 24, 4047). — III, 211.
- 33)  $\alpha$ -Oximido-3-Methyldiphenylmethan. Sm. 100—101° (B. 24, 2807). — III, 212.
- 34) anti- $\alpha$ -Oximido-4-Methyldiphenylmethan. Sm. 153—154° (B. 23, 402, 2326; A. 252, 11). — III, 215.
- 35) syn- $\alpha$ -Oximido-4-Methyldiphenylmethan. Sm. 115—116° (B. 23, 2326; 24, 58). — III, 215.
- 36) Methyläther d.  $\alpha$ -Oximidodiphenylmethan. Sm. 92° (102°) (M. 5, 204; G. 37 [1] 509 C. 1907 [2] 684). — III, 189.
- 37) O-Benzyläther d. anti-Benzaldoxim. Sm. 30—31°; Sd. 183°<sub>18</sub> (B. 28, 1278; 33, 1981). — III, 42; \*III, 34.
- 38) N-Benzyläther d. syn-Benzaldoxim. Sm. 81—82° (82,5—83°). HCl (A. 257, 223; 263, 191; B. 22, 435, 1534; 26, 2272; 33, 3199; J. pr. [2] 56, 231; A. 367, 280 C. 1909 [2] 1231). — III, 43; \*III, 34.
- 39)  $\alpha$ -Benzyläther d. anti-Benzaldoxim. Fl. (B. 22, 435, 1534). — III, 42.
- 40) N-[2-Methylphenyl]äther d. Benzaldoxim. Sm. 119—120° (117—118°) (B. 29, 3041; A. 367, 277 C. 1909 [2] 1231). — \*III, 34.
- 41) N-[3-Methylphenyl]äther d. Benzaldoxim. Sm. 95—96° (91—92°) (B. 29, 3041; A. 367, 279 C. 1909 [2] 1231). — \*III, 34.
- 42) N-[4-Methylphenyl]äther d. Benzaldoxim. Sm. 123—124° (124—125°) (B. 29, 3041; C. 1898 [2] 80; A. 367, 276, 286 C. 1909 [2] 1230). — \*III, 34.
- 43) Dibenzoylimid (A. 81, 122). — III, 28.
- 44) 2-Acetylamidobiphenyl. Sm. 119° (117,5°); Sd. 335° (A. 260, 236; 279, 266; B. 29, 1184). — II, 633; \*II, 349.
- 45) 3-Acetylamidobiphenyl. Sm. 148° (B. 37, 883 C. 1904 [1] 1143).
- 46) 4-Acetylamidobiphenyl. Sm. 171° (167°) (A. 209, 344; 260, 236; J. pr. [2] 63, 456). — II, 633.
- 47) 3-Acetylamidoacenaphthen. Sm. 176° (186°) (B. 21, 1457; A. 327, 82 C. 1903 [1] 1227). — II, 634.
- 48)  $\gamma$ -Keto- $\gamma$ -[ $\beta$ -Methyl-2-Pyrryl]- $\alpha$ -Phenylpropen (Methylpyrrylcinnamylketon). Sm. 193° (B. 22, 1919). — IV, 101.
- 49) isom.  $\gamma$ -Keto- $\gamma$ -[ $\beta$ -Methyl-2-Pyrryl]- $\alpha$ -Phenylpropen. Sm. 156—157° (B. 22, 1919). — IV, 101.
- 50) 4-Methyl-2-[1-Naphtyl]-4,5-Dihydrooxazol. Fl. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 33, 2639). — \*II, 864.
- 51) 5-Methyl-2-[2-Naphtyl]-4,5-Dihydrooxazol. Fl. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 33, 2639). — \*II, 866.
- 52)  $\alpha$ -[2-Oxymethylphenyl]- $\beta$ -[4-Pyridyl]äthen. Fl. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ, HNO<sub>3</sub> (B. 38, 163 C. 1905 [1] 453).
- 53)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen. Sm. 199°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 42, 1196 C. 1909 [1] 1577).
- 54) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[2-Pyridyl]äthen (Anisilidenpyridylalkin). Sm. 75° (97°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 23, 2719; B. 35, 2788 C. 1902 [2] 994). — IV, 395; \*IV, 236.
- 55) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[4-Pyridyl]äthen. Sm. 99—100°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, HgCl<sub>2</sub>) (B. 42, 1452 C. 1909 [1] 1935).
- 56)  $\alpha$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[2-Pyridyl]propan (Phenyläthyl-2-Pyridylketon). Fl. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 34, 4244 C. 1902 [1] 209). — \*IV, 135.
- 57) 1-Oxy-2-[2-Pyridyl]-2,3-Dihydroinden. Sd. 140—160°<sub>10</sub>. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (B. 36, 1655 C. 1903 [2] 39). — \*IV, 238.
- 58) 3,8-Dimethylphenoxazin? Sm. 179° (B. 34, 1623; A. 322, 20 C. 1902 [2] 221). — \*IV, 238.
- 59) 3,9-Dimethylphenoxazin. Sm. 204—205° (B. 34, 1623; A. 322, 19 C. 1902 [2] 221). — \*IV, 238.

- C<sub>14</sub>H<sub>13</sub>ON** 60) **2-Keto-3,3-Dimethyl-2,3-Dihydro- $\alpha$ -Naphtindol.** Sm. 201° (*M.* 29, 423 *C.* 1908 [2] 879).
- 61) **2-Keto-1,1-Dimethyl-1,2-Dihydro- $\beta$ -Naphtindol.** Sm. 145,5° (*M.* 29, 426 *C.* 1908 [2] 879).
- 62) **Methylhydroxyd d. Akridin.** Jodid, Pikrat (*B.* 37, 576 *C.* 1904 [1] 897; *B.* 39, 2721 *C.* 1906 [2] 1205).
- 63) **Methylhydroxyd d. Phenanthridin.** Sm. 109°. Chlorid, Jodid (*A.* 266, 149; *B.* 35, 2535 *C.* 1902 [2] 457). — *IV*, 407.
- 64) **Methylhydroxyd d.  $\alpha$ -Naphtochinolin.** Chlorid + xH<sub>2</sub>O, Jodid, Sulfat + xH<sub>2</sub>O, Bichromat (*M.* 4, 460; *J. pr.* [2] 57, 71). — *IV*, 247.
- 65) **Methylhydroxyd d.  $\beta$ -Naphtochinolin.** Chlorid + 2H<sub>2</sub>O, Jodid + 2H<sub>2</sub>O, Sulfat + xH<sub>2</sub>O, Bichromat + 2H<sub>2</sub>O (*J. pr.* [2] 57, 50). — *\*IV*, 248.
- 66) **Base (aus Isopyrophtalon).** Fl. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 36, 1660 *C.* 1903 [2] 40). — *\*IV*, 243.
- 67) **Aldehyd d. Methyl-diphenylamin-4-Carbonsäure** (*C.* 1899 [2] 927).
- 68) **Aldehyd d. 4-Benzylamidobenzol-1-Carbonsäure** (*C.* 1899 [2] 927). — *\*III*, 13.
- 69) **Amid d. Diphenylessigsäure.** Sm. 165—166° (167,5—168°) (*A.* 233, 347; 250, 141; *Soc.* 87, 685 *C.* 1905 [2] 244). — *II*, 1464.
- 70) **Amid d. Diphenylmethan-2-Carbonsäure.** Sm. 163° (164°) (*B.* 25, 3022; 27, 2789; *A.* 291, 24). — *II*, 1465.
- 71) **Phenylamid d. Phenylessigsäure.** Sm. 117° (*B.* 13, 1225; *A.* 252, 68; 279, 125; *G.* 20, 177; *B.* 37, 4307 *C.* 1905 [1] 177; *C.* 1906 [2] 1835; *B.* 39, 3307 *C.* 1906 [2] 1569). — *II*, 1311.
- 72) **Phenylamid d. 1-Methylbenzol-2-Carbonsäure.** Sm. 125° (*B.* 24, 4047; *B.* 36, 1012 *C.* 1903 [1] 1078). — *II*, 1330.
- 73) **Phenylamid d. 1-Methylbenzol-4-Carbonsäure.** Sm. 140—141° (139°; 145°) (*A.* 205, 132; 252, 12; *B.* 12, 616; *J. pr.* [2] 41, 306). — *II*, 1341.
- 74) **Phenylamid d.  $\Delta^{24}$ -Norcaradien-7-Carbonsäure** (Ph. d. Pseudophenyl-essigsäure). Sm. 141—142° (*B.* 34, 993). — *\*II*, 832.
- 75) **Methylphenylamid d. Benzolcarbonsäure.** Sm. 65—68° (59°); Sd. 315—330° (331—332°) (*B.* 10, 329; 18, 865; 33, 1471; *B.* 37, 2681 *C.* 1904 [2] 521; *B.* 37, 2815 *C.* 1904 [2] 648). — *II*, 1163; *\*II*, 730.
- 76) **2-Methylphenylamid d. Benzolcarbonsäure.** Sm. 131° (142—143°; 145—146°) (*A.* 205, 130; *B.* 21, 2553; 27, 2422; *Am.* 18, 387; *G.* 38 [1] 656 *C.* 1908 [2] 787; *C.* 1908 [2] 1427). — *II*, 1164.
- 77) **3-Methylphenylamid d. Benzolcarbonsäure.** Sm. 125° (*B.* 19, 983; *C.* 1908 [2] 1427). — *II*, 1164.
- 78) **4-Methylphenylamid d. Benzolcarbonsäure.** Sm. 158°; Sd. 232° (*Z.* 1865, 440; *B.* 8, 875; 27, 653; 32, 220; 33, 3524; *A.* 205, 127; 208, 310; 214, 217; *G.* 38 [1] 657 *C.* 1908 [2] 787; *C.* 1908 [2] 1427). — *II*, 1164; *\*II*, 731.
- 79) **Benzylamid d. Benzolcarbonsäure.** Sm. 105—106° (108°). Na (*B.* 23, 3332; 26, 2273; 28, 434; 31, 2646; *R.* 16, 319; *Am.* 23, 465; *C. r.* 135, 974 *C.* 1903 [1] 232; *B.* 36, 2289 *C.* 1903 [2] 564; *B.* 42, 1557 *C.* 1909 [1] 1803). — *II*, 1165; *\*II*, 731.
- 80) **Diphenylamid d. Essigsäure.** Sm. 103° (101—102°) (*B.* 5, 284; 6, 1511; 14, 2366; *A.* 214, 235; *J.* 1888, 683, 685; *B.* 42, 3482 *C.* 1909 [2] 1642). — *II*, 367.
- 81) **Phenylbenzylamid d. Ameisensäure.** Sm. 48° (*A.* 343, 71 *C.* 1906 [1] 357).
- 82) **Diphenylmethylamid d. Ameisensäure.** Sm. 132°; Sd. oberhalb 360° (*B.* 19, 2129; 31, 1772). — *II*, 635; *\*II*, 350.
- C<sub>14</sub>H<sub>13</sub>ON<sub>2</sub>** 1) **Verbindung (aus 4-Nitro-1-Methylbenzol) = (C<sub>14</sub>H<sub>13</sub>ON<sub>2</sub>)<sub>x</sub>** (*B.* 16, 943). — *II*, 92.
- C<sub>14</sub>H<sub>13</sub>ON<sub>3</sub>** *C* 70,3 — H 5,4 — O 6,7 — N 17,6 — M. G. 239.
- 1)  **$\alpha$ -Amido- $\alpha$ -Phenylamido- $\alpha$ -Benzoylimidomethan** (Benzoylphenylguanidin). Sm. 90—91°. Pikrat (*Am.* 26, 417).
- 2)  **$\alpha$ -Benzylidenamido- $\alpha$ -Phenylharnstoff.** Sm. 154° (*B.* 36, 1358 *C.* 1903 [1] 1340; *C. r.* 144, 622 *C.* 1907 [2] 803). — *\*IV*, 482.
- 3) **Diphenylmethylenamidoharnstoff** (Benzophenonsemicarbazon). Sm. 164 bis 165° (*B.* 37, 3180 *C.* 1904 [2] 991).
- 4)  **$\beta$ -Oximido- $\alpha$ -Phenylamid- $\alpha$ -Phenylimidoäthan.** Sm. 131—132° (*D.R.P.* 113848 *C.* 1900 [2] 927 *D.R.P.* 113981 *C.* 1900 [2] 929). — *\*II*, 160.



- $C_{14}H_{18}ON_3$  5)  $\alpha$ -Semicarbazondiphenylmethan. Sm. 167° (*Bl.* [3] 35, 599 *C.* 1906 [2] 861).
- 6)  $\beta$ -Phenylhydrazon- $\beta$ -Amido- $\alpha$ -Keto- $\alpha$ -Phenyläthan (Benzoylamidrazon). Sm. 152° (*B.* 27, 2789; *J. pr.* [2] 65, 147 *C.* 1902 [1] 1002). — *IV*, 1166.
- 7)  $\beta$ -Nitroso- $\alpha$ -Benzyliden- $\beta$ -Benzylhydrazin. Sm. 89° (*B.* 28, 2346; 33, 2562; *J. pr.* [2] 58, 379; [2] 62, 91, 94). — *IV*, 811; \**IV*, 539.
- 8)  $\alpha$ -[ $\alpha$ -Oximidobenzyl]- $\beta$ -Benzylidenhydrazin. Sm. 120° u. Zers. (*B.* 42, 4202 *C.* 1909 [2] 1922).
- 9)  $\beta$ -Formyl- $\alpha$ -Benzylidenamido- $\alpha$ -Phenylhydrazin. Sm. 182—183° u. Zers. (*B.* 33, 2759). — \**IV*, 777.
- 10)  $\alpha$ -[ $\alpha$ -Benzoylamidobenzyliden]hydrazin (Hydrazinbenzoylbenzamidin). Sm. 189°. *HCl* (*A.* 296, 288, 293). — *IV*, 1137.
- 11)  $\alpha$ -Benzoyl- $\beta$ -[ $\alpha$ -Amidobenzyliden]hydrazin (Benzoylbenzenylhydrazidin). Sm. 188° u. Zers. 2*HCl*, (*HCl*, *AuCl*<sub>3</sub>) (*B.* 26, 2131; 27, 993, 999; *A.* 297, 244, 253). — *II*, 1214; \**II*, 761.
- 12) Acetyldiazoamidobenzol. Sm. 129—130° u. Zers. (*B.* 24, 4157). — *IV*, 1560.
- 13) 3-Acetylamidoazobenzol. Sm. 130—131° (*Soc.* 67, 927). — *IV*, 1354.
- 14) 4-Acetylamidoazobenzol. Sm. 144° (141°). *HCl*, *HBr*, *H*<sub>2</sub>*SO*<sub>4</sub> (*G.* 28 [1] 242; *B.* 17, 463, 1400; 34, 884; *B.* 35, 113 *C.* 1902 [1] 414; *B.* 41, 1182 *C.* 1908 [1] 1884). — *IV*, 1357; \**IV*, 1010.
- 15) 5-Amido-3,5-Diphenyl-4,5-Dihydro-1,2,4-Oxiazol. Sm. 124—125° u. Zers. *HCl*, (2*HCl*, *PtCl*<sub>4</sub> + 2*H*<sub>2</sub>*O*), *HBr*, (*HBr*, *Br*<sub>2</sub>), *Pikrat* (*B.* 22, 3149; 28, 2228, 2231). — *II*, 1205; \**II*, 755.
- 16) 2-[2-Amidophenyl]-5[oder 6]-Methyl-2,3-Dihydrobenzimidazol-2,3-Oxyd? Sm. 240° (*B.* 32, 1469). — \**IV*, 842.
- 17) 3-Keto-4,6-Dimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol. Sm. 233—234° (*B.* 36, 518 *C.* 1903 [1] 649). — \**IV*, 785.
- 18) Methyläther d. 2-[4-Oxyphenyl]-5 oder 6-Methyl-2,1,3-Benzotriazol. Sm. 102—103° (*C. r.* 134, 607 *C.* 1902 [1] 874). — \**IV*, 794.
- 19) Äthyläther d. 5-Oxy-1-Phenyl-1,2,3-Benzotriazol. Sm. 99° (*J. pr.* [2] 53, 97).
- 20) Äthyläther d. 6-Oxy-1-Phenyl-1,2,3-Benzotriazol. Sm. 107—108° (*B.* 25, 998; *J. pr.* [2] 53, 97). — *IV*, 1575.
- 21) 6-Amido-2-Keto-1-Phenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 158° (*B.* 38, 96 *C.* 1905 [1] 540).
- 22) Methyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,2,3-Benzotriazin. Sm. 139° u. Zers. *HCl*, (2*HCl*, *PtCl*<sub>4</sub>), *Pikrat* (*J. pr.* [2] 52, 405). — *IV*, 1148.
- 23) 5-Acetylamido-2-Methyl- $\alpha$ -Naphtimidazol. Sm. 287° u. Zers. (288 bis 290). *Ag*, *HCl* + *H*<sub>2</sub>*O*, *Acetat*, *Pikrat* (*Soc.* 75, 1013; 77, 1163; *B.* 31, 1176; *Soc.* 83, 1186 *C.* 1903 [2] 1444). — *IV*, 1127; \**IV*, 828.
- 24) isom. 5-Acetylamido-2-Methyl- $\beta$ -Naphtimidazol. Sm. 281—284°. *HCl* + *H*<sub>2</sub>*O* (*Soc.* 77, 1163; *B.* 31, 1176). — \**IV*, 828.
- 25) *N*-Äthylsafraninon (*B.* 31, 1186). — *IV*, 1178.
- 26) Aldehyd d. 1-[4-Methylphenyl]amidodiazobenzol-4-Carbonsäure. Sm. 145° (*J. pr.* [2] 56, 120). — *IV*, 1579.
- 27) Amid d. Phenylamidophenylimidoessigsäure. Sm. 154—155° (*C.* 1900 [2] 929; *J. pr.* [2] 74, 75 *C.* 1906 [2] 1250). — \**II*, 207.
- 28) Phenylamid d. 2-Methyldiazobenzol-*N*-Carbonsäure. Sm. 132 bis 133° (*B.* 36, 1372 *C.* 1903 [1] 1343). — \**IV*, 530.
- 29) Phenylamid d. 4-Methyldiazobenzol-*N*-Carbonsäure. Sm. 129° u. Zers. (*B.* 36, 1376 *C.* 1903 [1] 1344). — \**IV*, 1051.
- 30) Benzylidenhydrazid d. Phenylamidoameisensäure. Sm. 174° (*J. pr.* [2] 53, 529; [2] 58, 219). — \**III*, 32.
- 31) Benzylidenhydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 195° (*J. pr.* [2] 69, 97 *C.* 1904 [1] 729).
- 32) Benzylidenhydrazid d. 3-Amidobenzol-1-Carbonsäure. Sm. 180° (*J. pr.* [2] 52, 242). — *III*, 39.
- 33) Verbindung (aus uns-Phenyl-2-Amidobenzylhydrazin). Sm. 281° (*B.* 27, 2901). — *IV*, 1130.
- $C_{14}H_{18}ON_5$  C 62,9 — H 4,9 — O 6,0 — N 26,2 — M. G. 267.
- 1) 6-Phenylureido-1-Methyl-1,2,3-Benzotriazol. Sm. noch nicht bei 305° (*B.* 30, 2854). — *IV*, 1259.

- $C_{14}H_{13}OCl$  1)  $\beta$ -Chlor- $\alpha$ -Oxy- $\alpha$ -Diphenyläthan. Sm.  $66^\circ$  (B. 39, 1754 C. 1906 [2] 53).  
 $C_{14}H_{13}OJ$  1)  $\beta$ -Jod- $\alpha$ -Oxy- $\alpha$ -Diphenyläthan (C. 1907 [1] 1579).  
 $C_{14}H_{13}O_2N$  C 74,0 — H 5,7 — O 14,1 — N 6,2 — M. G. 227.  
 1)  $\alpha$ -Nitro- $\alpha\beta$ -Diphenyläthan. Fl. (B. 28, 1860). — \*II, 113.  
 2) 2-[2-Oxybenzyliden]amido-1-Oxymethylbenzol. Sm.  $117^\circ$  (B. 25, 2971). — III, 74.  
 3) 2-[4-Oxybenzyliden]amido-1-Oxymethylbenzol. Sm.  $137^\circ$  (B. 25, 2971). — III, 85.  
 4) 4-[2-Oxybenzyliden]amido-1-Oxymethylbenzol. Sm.  $155^\circ$  (B. 28, 881). — III, 74.  
 5) 3,5-Dioxy-2-Phenylimidomethyl-1-Methylbenzol. Sm.  $125$ — $126^\circ$  (B. 12, 1002). — III, 105.  
 6) 5-Methyläther d. 2,5-Dioxy-1-Phenylimidomethylbenzol. Sm.  $59^\circ$  (B. 14, 1992). — III, 98.  
 7) 2-Oxyphenyl-2-Methoxybenzylidenamin. Sm.  $188^\circ$  (B. 25, 2754). — III, 73.  
 8) 2-Oxyphenyl-4-Methoxybenzylidenamin. Sm.  $89^\circ$  (B. 25, 2755). — III, 73.  
 9) 4-Methoxyphenyl-2-Oxybenzylidenamin. Sm.  $86^\circ$  (A. 325, 248 C. 1903 [1] 632).  
 10) 3-Methyläther d. 3,4-Dioxybenzylidenamidobenzol. Sm.  $152$ — $153^\circ$  (M. 26, 342 C. 1905 [1] 1144).  
 11) 3-Acetylamidodiphenyläther. Sm.  $83^\circ$  (A. 350, 105 C. 1907 [1] 159).  
 12) 4-Acetylamido-4'-Oxybiphenyl. Sm.  $225^\circ$  (B. 27, 2630; D.R.P. 85988). — \*II, 538.  
 13) N-Formyl-3'-Oxy-2-Methyldiphenylamin. Sm.  $169^\circ$  (J. pr. [2] 34, 71). — II, 1465.  
 14) N-Formyl-4'-Oxy-2-Methyldiphenylamin. Sm.  $136,5^\circ$  (J. pr. [2] 34, 60). — II, 718.  
 15) N-Formyl-3'-Oxy-4-Methyldiphenylamin. Sm.  $146^\circ$  (J. pr. [2] 33, 214). — II, 715.  
 16) 3-Benzoylamido-4-Oxy-1-Methylbenzol. Sm.  $191^\circ$  ( $189$ — $190^\circ$ ) (B. 31, 2695; A. 360, 14 Anm. C. 1908 [1] 2032; J. pr. [2] 80, 146 C. 1909 [2] 1325; A. 369, 224 C. 1909 [2] 1995). — \*II, 741.  
 17) 2-Benzoylamido-1-Oxymethylbenzol. Sm.  $132$ — $133^\circ$  (B. 37, 2261 C. 1904 [2] 212).  
 18) 3-Benzoylamido-1-Oxymethylbenzol. Sm.  $115^\circ$  (B. 37, 3941 C. 1904 [2] 1597).  
 19) 4-Benzoylamido-1-Oxymethylbenzol. Sm.  $150$ — $151^\circ$  (B. 28, 881). — \*II, 646.  
 20) 2-Methylbenzoylamido-1-Oxybenzol. Sm.  $160$ — $162^\circ$  (Am. 23, 34). — \*II, 739.  
 21) Methyläther d. 2-Benzoylamido-1-Oxybenzol. Sm.  $59,8^\circ$  (A. 207, 244; Ph. Ch. 30, 540). — II, 1176; \*II, 739.  
 22) Methyläther d. 4-Benzoylamido-1-Oxybenzol. Sm.  $153$ — $154^\circ$  (A. 175, 299; Ph. Ch. 30, 540). — II, 1177; \*II, 740.  
 23) Phenyläther d. 4-Acetylamido-1-Oxybenzol. Sm.  $127^\circ$  (B. 29, 1447). — \*II, 398.  
 24) 4'-Amido-6-Oxy-3-Methyldiphenylketon. Sm.  $137^\circ$  (B. 40, 3519 C. 1907 [2] 1410).  
 25) 4-Amido-4'-Oxy-3-Methyldiphenylketon? (B. 16, 1930). — III, 216; \*III, 161.  
 26) 5'-Amido-2'-Oxy-4-Methyldiphenylketon. Sm.  $93^\circ$ . HCl (B. 29, 3036). — \*III, 162.  
 27) Methyläther d. 2-Amido-4'-Oxydiphenylketon. Sm.  $76^\circ$  (B. 35, 4278 C. 1903 [1] 333).  
 28) 4-Amidophenyläther d. Oxymethylphenylketon. Sm.  $95^\circ$ . HCl,  $HNO_3$ ,  $H_2SO_4$ , Pikrat (C. 1897 [1] 411). — \*III, 102.  
 29) 5-[2-Methylphenyl]amido-2-Methyl-1,4-Benzochinon. Sm.  $145$  bis  $146^\circ$  (A. 287, 192). — III, 360.  
 30) 5-[3-Methylphenyl]-2-Methyl-1,4-Benzochinon. Sm.  $142^\circ$  (A. 287, 198). — III, 360.  
 31)  $\alpha$ -Oximido- $\alpha$ -(4-Oxyphenyl)- $\beta$ -Phenyläthan. Sm.  $85^\circ$  (M. 26, 990 C. 1905 [2] 1181).

- $C_{14}H_{18}O_2N$  32) 1- $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 163,5—164,5° (Soc. 95, 1587 C. 1909 [2] 2006).
- 33)  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan ( $\alpha$ -Benzoïnoxim). Sm. 151—152° (B. 16, 504; 20, 492; B. 38, 72 C. 1905 [1] 532). — III, 226.
- 34) isom.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan ( $\beta$ -Benzoïnoxim). Sm. 98 bis 99° (B. 23, 2334; B. 38, 73 C. 1905 [1] 532). — III, 226.
- 35)  $\alpha$ -Oximido-6-Oxy-3-Methyldiphenylmethan. Sm. 126—128,5° (B. 31, 2694). — \*III, 161.
- 36)  $\alpha$ -Oximido-2'-Oxy-4-Methyldiphenylmethan. Sm. 175° (B. 35, 2813 C. 1902 [2] 1117).
- 37) 4-Methyläther d. anti- $\alpha$ -Oximido-4-Oxydiphenylmethan. Sm. 137 bis 138° (B. 24, 53; A. 264, 158). — III, 194.
- 38) 4-Methyläther d. syn- $\alpha$ -Oximido-4-Oxydiphenylmethan. Sm. 115 bis 116° (B. 24, 53; A. 264, 158). — III, 194.
- 39) 4-Methyläther d. N-Phenyl-4-Oxybenzaldoxim. Sm. 118—119° (117°) (C. 1905 [2] 764; A. 365, 203 C. 1909 [1] 1812; A. 367, 274, 285 C. 1909 [2] 1230).
- 40)  $\beta$ -Phenyläther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 113—114° (B. 28, 3030; 30, 1126). — III, 132; \*III, 102.
- 41) 1-Benzyläther d. 2-Oxybenzaldoxim. Sm. 62—63° (B. 23, 3321; A. 298, 194). — III, 76; \*III, 57.
- 42) 2-Benzyläther d. 2-Oxybenzaldoxim. Sm. 71,5° (B. 31, 3041). — \*III, 57.
- 43) 4-Benzyläther d. 4-Oxybenzaldoxim. Sm. 110—111,5° (B. 31, 3042). — \*III, 63.
- 44) N-Phenyläther d. 2-Oxy-3-Methylbenzaldoxim. Sm. 160° (C. 1905 [2] 764).
- 45) N-Benzyläther d. 2-Oxybenzaldoxim. Sm. 101—102° (B. 23, 3321; 26, 2626; A. 298, 194). — III, 76.
- 46) N-Benzyläther d. 4-Oxybenzaldoxim. Sm. 203° (A. 298, 193). — \*III, 62.
- 47) N-[2-Methylphenyl]äther d. 2-Oxybenzaldoxim. Sm. 99—100° (A. 367, 279 C. 1909 [2] 1231).
- 48) N-[3-Methylphenyl]äther d. 2-Oxybenzaldoxim (A. 367, 280 C. 1909 [2] 1231).
- 49) N-[4-Methylphenyl]äther d. 2-Oxybenzaldoxim. Sm. 112—113° (A. 367, 277 C. 1909 [2] 1231).
- 50) N-Benzoylbenzylhydroxylamin. Sm. 106—107° (B. 26, 2629, 2632). — II, 1209.
- 51) Benzyläther d. Benzoylhydroxylamin. Sm. 102—103° (103—104°) (B. 26, 2633; A. 310, 24). — II, 1209; \*II, 750.
- 52) 3-[ $\alpha$ -Oximidoäthyl]acenaphten. Sm. 165° (A. 327, 93 C. 1903 [1] 1228).
- 53) 3,9-Dimethylphenoxazoniumhydroxyd., Bromid, Pikrat (B. 34, 1624; A. 322, 21 C. 1902 [2] 221). — \*IV, 238.
- 54)  $\alpha$ -Phenylamido- $\alpha$ -Phenylelessigsäure. Sm. 164—168° u. Zers. (183°; 173—175°). HCl, HNO<sub>3</sub>, Ba (J. 1878, 779; B. 15, 2030; 32, 3058; B. 37, 4084 C. 1904 [2] 1723). — II, 1324; \*II, 819.
- 55) Methyldiphenylamin-4-Carbonsäure. Sm. 184°. Ba, Ag (B. 14, 2180). — II, 1272.
- 56) 2-Methyldiphenylamin-2'-Carbonsäure. Sm. 179° (185°; 188—189°). Ag (A. 279, 277; B. 36, 2384 C. 1903 [2] 664; D.R.P. 145189 C. 1903 [2] 1097; A. 355, 323 C. 1907 [2] 1506). — II, 1248.
- 57) 3-Methyldiphenylamin-2'-Carbonsäure. Sm. 139° (A. 355, 324 C. 1907 [2] 1506).
- 58) 4-Methyldiphenylamin-2'-Carbonsäure. Sm. 191,5° (191—192°; 196°). Ba (A. 279, 272; D.R.P. 145189 C. 1903 [2] 1097; A. 355, 325 C. 1907 [2] 1506). — II, 1248.
- 59) 2-Benzylamidobenzol-1-Carbonsäure. Sm. 176° (173°). HCl, (2HCl, PtCl<sub>4</sub>) (B. 16, 1285; 32, 3059; B. 37, 593 C. 1904 [1] 881; B. 39, 3237 C. 1906 [2] 1419). — II, 1249; \*II, 782.
- 60) 1-Phenylamidomethylbenzol-4-Carbonsäure (B. 28, 1145). — \*II, 830.
- 61)  $\beta$ -[2-Naphtyl]amidocrotonsäure. Sm. 92° (B. 17, 543; 21, 532). — II, 622.



- $C_{14}H_{13}O_2N$  62) 4-Biphenylamidoessigsäure (B. 13, 1966). — III, 634.
- 63)  $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthan- $\alpha^2$ -Carbonsäure. HCl (B. 36, 3917 C. 1904 [1] 97).
- 64) 4-[ $\beta$ -Phenyläthyl]pyridin-3-Carbonsäure. Sm. 156—157°. Ag (B. 37, 2146 C. 1904 [2] 235).
- 65) 2,6-Dimethyl-4-Phenylpyridin-3-Carbonsäure + 2H<sub>2</sub>O. Sm. 189 bis 190° (wasserfrei). (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), Cu (B. 17, 2911; D.R.P. 32280; C. 1899 [2] 440). — IV, 382; \*IV, 229.
- 66) 1,2,3,4-Tetrahydroakridin-5-Carbonsäure. Sm. 284—286°. HCl (B. 41, 2207 C. 1908 [2] 332).
- 67)  $\beta$ -[6,8-Dimethyl-2-Chinoly]akrylsäure. Zers. bei 180° (B. 20, 42). — IV, 383.
- 68) Methylester d. Diphenylamin-2-Carbonsäure. Sd. 216,5—217,5° (B. 37, 3201 C. 1904 [2] 1472).
- 69) Äthylester d.  $\delta$ -Cyan- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 114° (118—120°) (J. pr. [2] 50, 13; A. ch. [6] 29, 493; C. 1903 [2] 714; A. 336, 328 C. 1905 [1] 88). — II, 1442.
- 70) Äthylester d. Chinolin-2-Äthenyl- $\beta$ -Carbonsäure (Ä. d.  $\beta$ -[2]-Chinolyakrylsäure). Sm. 73° (A. 287, 28). — IV, 381.
- 71) Allylester d. 1-Naphthylamidoameisensäure. Sm. 109° (C. 1909 [2] 1380).
- 72) Phenylester d. Phenylamidoessigsäure. Sm. 82—83° (Bl. [3] 21, 964). — \*II, 360.
- 73) Phenylester d. Methylphenylamidoameisensäure. Sm. 58° (B. 24, 2108). — II, 663.
- 74) Phenylester d. 2-Methylphenylamidoameisensäure. Sm. 92° (B. 23, 699). — II, 664.
- 75) Phenylester d. 4-Methylphenylamidoameisensäure. Sm. 115° (B. 23, 698). — II, 664.
- 76) Phenylester d. 2-Methylamidobenzol-1-Carbonsäure. Sm. 70—71° (B. 42, 3194 C. 1909 [2] 1333).
- 77) Benzylester d. Phenylamidoameisensäure. Sm. 78° (B. 34, 2809 Anm.).
- 78) 2-Methylphenylester d. Phenylamidoameisensäure. Sm. 145° (J. pr. [2] 41, 319; B. 33, 3018). — II, 738.
- 79) 4-Methylphenylester d. Phenylamidoameisensäure. Sm. 114° (J. pr. [2] 41, 319; B. 33, 3018). — II, 750.
- 80) 2-Amidobenzylester d. Benzolcarbonsäure. Fl. HCl (B. 25, 2964; B. 37, 2260 C. 1904 [2] 212). — II, 1144.
- 81) 4-Amidobenzylester d. Benzolcarbonsäure. Sm. 223° (B. 24, 726). — II, 1144.
- 82) Benzoat d. 4-Methylamido-1-Oxybenzol. Sm. 173—174° (B. 42, 1524 C. 1909 [1] 1809).
- 83) Benzoat d. Benzylhydroxylamin. Fl. HCl (B. 26, 2282, 2632). — II, 1209.
- 84) Benzoat d. 2-[ $\beta$ -Oxyäthyl]pyridin. Fl. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 24, 1620; A. 301, 127). — IV, 131; \*IV, 104.
- 85) Nitril d. 6-Oxy-4-Keto-3-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 174° (A. 294, 287; 308, 198). — \*II, 1085.
- 86) Nitril d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzoldimethyläther-3-Carbonsäure. Sm. 173° (A. 294, 285). — \*II, 1084.
- 87) Amid d.  $\alpha$ -Oxydiphenylessigsäure. Sm. 154—155° (B. 22, 1214). — II, 1697.
- 88) Amid d. 2-Oxydiphenylessigsäure. Sm. 161—162° (B. 31, 2814). — \*II, 995.
- 89) Amid d.  $\alpha$ -Oxy- $\alpha$ -Phenylessigphenyläthersäure. Sm. 139—140° (B. 39, 1011 C. 1906 [1] 1343).
- 90) Phenylamid d.  $\alpha$ -Oxyphenylessigsäure. Sm. 151—152° (146°) (B. 23, 3702; 24, 4083; 34, 2798; A. 279, 123; C. 1895 [2] 442; Bl. [3] 19, 775; B. 37, 4309 C. 1905 [1] 177). — II, 1552.
- 91) Phenylamid d. 2-Oxyphenylessigsäure. Sm. 151—152° (A. 313, 86). — \*II, 916.
- 92) Phenylamid d. Oxyessigphenyläthersäure. Sm. 99° (100°; 101,5°) (J. pr. [2] 20, 280; B. 34, 1838; Bl. [3] 17, 359; [3] 21, 969; H. 27, 552). — II, 664; \*II, 363.

- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N** 93) Phenylamid d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 127° (123°) (*B.* 35, 3645 *C.* 1902 [2] 1456; *A.* 346, 344 *C.* 1906 [2] 335).
- 94) Phenylamid d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 158 bis 159° (53°) (*A.* 245, 44; *B.* 31, 2696). — *II*, 1547; \**II*, 920.
- 95) Phenylamid d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 193° (*B.* 35, 3646 *C.* 1902 [2] 1456).
- 96) Phenylamid d. 2-Oxybenzylmethyläther-1-Carbonsäure. Sm. 62° (78–79°) (*C.* 1895 [2] 442; *Ph. Ch.* 30, 540; M. DOHRN, Dissert. Heidelberg 1899, S. 12). — \**II*, 892.
- 97) Phenylamid d. 3-Oxybenzylmethyläther-1-Carbonsäure. Sm. 120° (*D.R.P.* 65952). — \**II*, 903.
- 98) Phenylamid d. 4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 168 bis 169° (170°) (*A.* 175, 292; *J. pr.* [2] 41, 312; *C.* 1895 [2] 442; *B.* 38, 3823 *C.* 1905 [2] 1726). — *II*, 1530.
- 99) Benzylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 134° (*B.* 26, 2627). — *II*, 1500.
- 100) 2-Methylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 144° (*B.* 29, 1191). — \**II*, 892.
- 101) 3-Methylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 135–136° (*Soc.* 95, 444 *C.* 1909 [1] 1654).
- 102) 4-Methylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 155–156° (*B.* 6, 337; *B.* 42, 1524 *C.* 1909 [1] 1809). — *II*, 1500; \**II*, 892.
- 103) 2-Oxybenzylamid d. Benzolcarbonsäure. Sm. 139–140° (*J. pr.* [2] 51, 283). — \**II*, 741.
- 104) 4-Methoxyphenylamid d. Benzolcarbonsäure. Sm. 154,5° (*B.* 39, 3806 *C.* 1907 [1] 106; *G.* 38 [1] 657 *C.* 1908 [2] 787).
- 105) 2-Oxydiphenylamid d. Essigsäure. Sm. 144–146° (*B.* 42, 4011 *C.* 1909 [2] 1928).
- 106) Imid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure. Sm. 137° (*B.* 36, 1002 *C.* 1903 [1] 1132).
- 107) 1-Naphtylimid d. Essigsäure (1-Diacetylamidonaphtalin). Sm. 128 bis 129° (130°) (*B.* 32, 1803; *Soc.* 79, 539). — \**II*, 334.
- 108) 2-Naphtylimid d. Essigsäure (2-Diacetylamidonaphtalin). Sm. 66,5° (*Soc.* 79, 540).
- 109) Verbindung (aus d. Amid d.  $\alpha$ -Oxy- $\alpha$ -Phenylessigphenyläthersäure). Sm. oberhalb 255° (*B.* 39, 1011 *C.* 1906 [1] 1343).  
C 65,9 — H 5,1 — O 12,5 — N 16,5 — M. G. 255.
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>**
- 1) 1-Methylamid-2-[2-Nitrobenzyliden]amidobenzol. Sm. 144° (*B.* 25, 2842). — *IV*, 563.
- 2) 4-Nitroso-4'-Acetylamidodiphenylamin (*D.R.P.* 176046 *C.* 1906 [2] 1788).
- 3)  $\alpha\beta$ -Dioximido- $\beta$ -Phenylamido- $\alpha$ -Phenyläthan. Sm. 180° u. Zers. (*A.* 358, 63 *C.* 1908 [1] 650).
- 4) s-Phenyl-[ $\alpha$ -Oximidobenzyl]harnstoff. Sm. 115° (*B.* 18, 1059). — *II*, 1205.
- 5) uns-Phenyl-[ $\alpha$ -Oximidobenzyl]harnstoff. Sm. 165–167° (*B.* 19, 1671). — *II*, 1205.
- 6)  $\alpha$ -Formylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 164° (171–172°) (*B.* 26, 2871; 27, 1516). — *IV*, 674.
- 7)  $\alpha$ -Formylphenylamido- $\beta$ -Phenylharnstoff. Sm. 170° u. Zers. (*J. pr.* [2] 67, 263 *C.* 1903 [1] 1266). — \**IV*, 432.
- 8) Benzoylphenylamidoharnstoff. Sm. 210–211° (202–203°) (*B.* 20, 1716; 29, 1951; *C.* 1898 [1] 95; *Soc.* 71, 202). — *IV*, 675.
- 9)  $\alpha$ -Benzoylamido- $\beta$ -Phenylharnstoff. Sm. 210° (*B.* 37, 2330 *C.* 1904 [2] 313).
- 10) 4-Benzoylphenylamidoharnstoff. Sm. 215,5° u. Zers. (*Soc.* 55, 614). — *III*, 186.
- 11) 4-Methyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]nitrosomethan. Zers. bei 69,5° (*B.* 36, 68 *C.* 1903 [1] 452). — \**IV*, 493.
- 12) 4-Hydrazido-2-Nitro- $\alpha\beta$ -Diphenyläthan. Sm. 125° (*B.* 39, 903 *C.* 1906 [1] 1168).
- 13)  $\alpha$ -Phenylhydrazon- $\beta$ -Nitro- $\alpha$ -Phenyläthan. Sm. 105–105,5° (*A.* 325, 12 *C.* 1903 [1] 287). — \**IV*, 502.
- 14)  $\alpha$ -[2-Nitrophenyl]hydrazon- $\alpha$ -Phenyläthan. Sm. 138° (*R.* 24, 37 *C.* 1905 [1] 1278).

- $C_{11}H_{13}O_2N_3$  15)  $\alpha$ -[3-Nitrophenylhydrazon]- $\alpha$ -Phenyläthan. Sm. 160° (163°) (B. 22, 2814; R. 24, 36 C. 1905 [1] 1277). — IV, 770.
- 16)  $\alpha$ -[4-Nitrophenyl]hydrazon- $\alpha$ -Phenyläthan. Sm. 184—185° (B. 32, 1814; 34, 1788, 2375; B. 34, 3893 C. 1902 [1] 122). — \*IV, 502.
- 17)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]äthan. Sm. 126° (Bl. [3] 21, 596). — \*IV, 502.
- 18)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Nitrophenyl]äthan. Sm. 132° (B. 22, 203). — IV, 771.
- 19)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[2-Nitrobenzyliden]hydrazin. Sm. 77° (B. 32, 3061). — \*IV, 486.
- 20)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 112° (112 bis 113°) (B. 32, 3061; B. 36, 373 C. 1903 [1] 577). — \*IV, 486.
- 21)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Nitrobenzyliden]hydrazin. Sm. 132° (B. 32, 3060). — \*IV, 486.
- 22) 2-Nitrophenyl-4-Methylbenzylidenhydrazin. Sm. 181° (183°) (B. 32, 1286; R. 24, 37 C. 1905 [1] 1278). — \*IV, 488.
- 23) 3-Nitrophenyl-4-Methylbenzylidenhydrazin. Sm. 155° (R. 24, 36 C. 1905 [1] 1277).
- 24) 4-Nitrophenyl-4-Methylbenzylidenhydrazin. Sm. 198° (196°) (B. 32, 1286; R. 22, 439 C. 1904 [1] 15). — \*IV, 488.
- 25) Phenyl-2-Nitro-3-Methylbenzylidenhydrazin. Sm. 141—142° (C. 1900 [2] 751). — \*III, 40.
- 26) Phenyl-4-Nitro-3-Methylbenzylidenhydrazin. Sm. 150° (B. 31, 392). — IV, 754.
- 27) Phenyl-6-Nitro-3-Methylbenzylidenhydrazin. Sm. 131—132° (C. 1900 [2] 751). — \*III, 40.
- 28) Phenyl-3-Nitro-4-Methylbenzylidenhydrazin. Sm. 112° (B. 32, 1288). — \*IV, 488.
- 29)  $\alpha$ -Benzyliden- $\beta$ -[2-Nitro-4-Methylphenyl]hydrazin. Sm. 166° (Soc. 79, 1143). — \*IV, 537.
- 30)  $\alpha$ -Nitroso- $\beta$ -Benzoyl- $\alpha$ -Methyl- $\beta$ -Phenylhydrazin. Sm. 108° (B. 35, 1944 C. 1902 [2] 112). — \*IV, 427.
- 31)  $\alpha$ -Nitroso- $\beta$ -[4-Methylbenzoyl]- $\alpha$ -Phenylhydrazin. Sm. 115—116° u. Zers. (G. 38 [1] 528 C. 1908 [2] 407).
- 32) 4-Benzoylhydrazon-1-Oximido-2-Methyl-1,4-Dihydrobenzol. Zers. bei 200—202° (A. 343, 189 C. 1906 [1] 837).
- 33) Methyl-4-Benzoylamidodiazobenzol. Molybdat (Soc. 95, 1325 C. 1909 [2] 978).
- 34)  $\alpha$ -Nitro- $\alpha$ -Phenylazo- $\alpha$ -Phenyläthan. Fl. (B. 36, 708 C. 1903 [1] 818).
- 35) 4'-Nitro-2,4-Dimethylazobenzol. Sm. 126,5—127° (128,5—129,5°) (B. 33, 3656; 35, 1424, 3891; B. 40, 1913 C. 1907 [2] 229). — \*IV, 1024.
- 36) 4'-Nitro-3,4-Dimethylazobenzol. Sm. 135,5° (B. 36, 1627 C. 1903 [2] 31). — \*IV, 1025.
- 37) p-Nitro-2,2'-Dimethylazobenzol. Sm. 63—67°. — IV, 1376.
- 38) p-Nitro-2,2'-Dimethylazobenzol. Sm. 87° (J. r. 20, 609). — IV, 1376.
- 39) p-Nitro-3,3'-Dimethylazobenzol. Sm. 192—195° (B. 22, 837). — IV, 1377.
- 40) 2-Nitro-4,4'-Dimethylazobenzol. Sm. 76° (80°) (B. 6, 556; M. 10, 586). — IV, 1379.
- 41) 3'-Acetylamido-4-Oxyazobenzol? Sm. bei 280° (B. 15, 3021). — IV, 1411.
- 42) 4'-Acetylamido-4-Oxyazobenzol. Sm. 203° (198°) (C. 1899 [2] 1113; Soc. 95, 1294 C. 1909 [2] 978). — \*IV, 1036.
- 43) 4-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -Phenylazo- $\alpha$ -[4-Oxyphenyl]methan (Phenylazoanisaldoxim). Sm. 147° u. Zers. (B. 36, 66 C. 1903 [1] 451). — \*IV, 1070.
- 44) Methyläther d. 5-Methyl-2-[4-Oxyphenyl]-1,1-Dihydro-2,1,3-Benzotriazol-1-Oxyd. Sm. 161—163° (C. r. 134, 606 C. 1902 [1] 874). — \*IV, 794.
- 45) 2-[3-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 84—85° (J. pr. [2] 53, 424). — IV, 638.



- $C_{14}H_{13}O_2N_8$  46) Dimethyldiamidochinoxazon. Sm. 223° (B. 25, 1061). — IV, 1180.
- 47) 2-Amido- $\beta$ -Phenylhydrazonmethylbenzol-1-Carbonsäure. Sm. 230°. Ba, Ag (Soc. 77, 214). — \*IV, 455.
- 48)  $\alpha\beta$ -Diphenylguanidin-2-Carbonsäure. Sm. 248° (C. 1903 [2] 831).
- 49)  $\alpha\beta$ -Diphenylguanidin-3-Carbonsäure. Sm. 165° u. Zers. HCl + H<sub>2</sub>O (B. 15, 2120; 16, 336). — II, 1269.
- 50) 2-Methyldiazoamidobenzol-2'-Carbonsäure. Sm. 95—96° u. Zers. Na (J. pr. [2] 63, 303). — \*IV, 1138.
- 51) 3-Methyldiazoamidobenzol-2'-Carbonsäure. Sm. 114° u. Zers. (J. pr. [2] 63, 296). — \*IV, 1138.
- 52) 4-Methyldiazoamidobenzol-2'-Carbonsäure. Sm. 118° u. Zers. (J. pr. [2] 63, 297). — \*IV, 1138.
- 53) Azobenzol-4-Amidoessigsäure. Sm. 140°. Na, Ba (B. 35, 580 C. 1902 [1] 581). — \*IV, 1012.
- 54) Methylester d. Diazoamidobenzol-2-Carbonsäure. Sm. 71° (J. pr. [2] 63, 263; [2] 64, 79). — \*IV, 1137.
- 55) Methylester d. Azobenzol-4-Amidoameisensäure (B. 35, 582 C. 1902 [1] 581). — \*IV, 1011.
- 56) Methylester d. Phenylazobenzylidennitronsäure. Sm. 92° (B. 36, 90 C. 1903 [1] 453). — \*IV, 1024.
- 57) Amid d. 3-[3-Amidobenzoyl]amidobenzol-1-Carbonsäure. Sm. 176°. HCl + 7H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> (A. 251, 169). — II, 1267.
- 58) Amid d.  $\alpha\beta$ -Diphenylharnstoff- $\alpha$ -Carbonsäure ( $\beta$ -Diphenylbiuret). Sm. 165° (B. 4, 250; J. pr. [2] 73, 23 C. 1906 [1] 825). — II, 382.
- 59) Phenylamid d.  $\alpha$ -Phenylharnstoff- $\beta$ -Carbonsäure ( $\alpha$ -Diphenylbiuret). Sm. 210° (B. 4, 265; 21, 504; J. pr. [2] 7, 479; A. 352, 77 C. 1907 [1] 954). — II, 382.
- 60) Phenylamid d. Phenylnitrosamidoessigsäure. Sm. 144° (A. 301, 65). — \*II, 226.
- 61) Phenylamid d.  $\alpha$ -Oximido- $\alpha$ -Phenylamidoessigsäure. Sm. 180° (B. 39, 3917 C. 1907 [1] 113).
- 62) Phenylamid d. 4-Oxy-3-Methylphenylazoameisensäure. Sm. 198 bis 199° u. Zers. (A. 334, 190 C. 1904 [2] 835).
- 63) 2-Methylphenylamid d. 4-Oxyphenylazoameisensäure. Sm. 164 bis 165° (B. 38, 836 C. 1905 [1] 867).
- 64) 4-Methylphenylamid d. 4-Oxyphenylazoameisensäure. Sm. 173 bis 174° (B. 38, 835 C. 1905 [1] 867).
- 65) 3-Amidobenzoylamid d. 3-Amidobenzol-1-Carbonsäure. Sm. oberhalb 300° (A. 251, 160). — II, 1257.
- 66) 1-Amid-2-Phenylhydrazid d. Benzol-1,2-Dicarbonsäure. Sm. 146° (156—158°) (J. pr. [2] 35, 280; C. 1905 [2] 1251). — IV, 710.
- 67) Phenylhydrazid d. Phenylloxaminsäure. Sm. 235° (228° u. Zers.) (J. pr. [2] 48, 79; Soc. 81, 1567 C. 1903 [1] 157). — \*IV, 459.
- 68)  $\beta$ -Benzoylhydrazid d. Phenylamidoameisensäure. Sm. 212° (J. pr. [2] 53, 518). — \*II, 809.
- 69) 2-Oxybenzylidenhydrazid d. Phenylamidoameisensäure. Sm. 198 bis 200° (J. pr. [2] 53, 529; B. 34, 4300 C. 1902 [1] 304). — \*III, 56.
- 70) Verbindung (aus 9-Oxyxanthen). Sm. 170—171° u. Zers. (Bl. [3] 35, 1006 C. 1907 [1] 116).
- $C_{14}H_{13}O_2N_5$  C 59,4 — H 4,6 — O 11,3 — N 24,7 — M. G. 283.
- 1)  $\alpha$ -[3-Nitrobenzyliden]amido- $\alpha$ -Phenylguanidin. HNO<sub>3</sub>, Pikrat (G. 31 [1] 531). — \*IV, 889.
- 2)  $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -Methyl- $\beta$ -Benzylidenhydrazin. Sm. 148° u. Zers. (B. 33, 2755). — \*IV, 1142.
- 3) 2,2'-Di[Oximidomethyl]diazoamidobenzol. Zers. bei 73—74° (B. 34, 1332). — \*IV, 1138.
- 4) Amid d. s-Diphenylharnstoff-4-Azocarbonsäure. Zers. bei 202° (B. 40, 3809 C. 1907 [2] 1503).
- 5) Amid d. Diazoamidobenzol-3,3'-Dicarbonsäure (A. 251, 163). — IV, 1577.
- $C_{14}H_{13}O_2N_7$  C 51,7 — H 4,0 — O 9,8 — N 34,4 — M. G. 325.
- 1)  $\alpha$ -Imidoamidomethyl- $\beta$ -[ $\alpha$ -3-Nitrophenylazobenzyliden]hydrazin (m<sup>2</sup>-Nitroguanazylobenzol). Sm. 206° (B. 30, 447). — IV, 1494.

- $C_{14}H_{13}O_2N_7$  2)  $\alpha$ -Imidoamidomethyl- $\beta$ -[ $\alpha$ -Phenylazo-4-Nitrobenzyliden]hydrazin (p<sup>1</sup>-Nitroguanazybenzol). Sm. 209° (B. 30, 448). — IV, 1494.
- $C_{14}H_{13}O_2Br$  1) Äthyläther d. 1-Oxy- $\beta$ -Bromacetylnaphtalin. Sm. 119° (B. 31, 174). — \*III, 142.
- 2) 1-Naphtylester d.  $\alpha$ -Brombuttersäure. Sd. 198°<sub>15</sub> (B. 39, 3847 C. 1907 [1] 93).
- 3) 2-Naphtylester d.  $\alpha$ -Brombuttersäure. Sm. 54°; Sd. 202°<sub>15</sub> (B. 39, 3849 C. 1907 [1] 94).
- 4) 1-Naphtylester d.  $\alpha$ -Bromisobuttersäure. Sd. 186,5°<sub>15</sub> u. Zers. (B. 39, 3847 C. 1907 [1] 94).
- 5) 2-Naphtylester d.  $\alpha$ -Bromisobuttersäure. Sm. 97–98°; Sd. 185°<sub>15</sub> (B. 39, 3850 C. 1907 [1] 94).
- $C_{14}H_{13}O_2J$  1) Acetat d. Diphenyljodoniumhydroxyd. Sm. 120° u. Zers. (B. 27, 1593). — \*II, 41.
- $C_{14}H_{13}O_3N$  C 69,1 — H 5,3 — O 19,8 — N 5,8 — M. G. 243.
- 1)  $\alpha$ -Oxy- $\alpha\alpha$ - $\beta$ -Nitrodiphenyläthan. Sm. 106–107° (B. 18, 664). — II, 1080.
- 2)  $\beta$ -Nitro-2-Oxy- $\beta$ -Methyldiphenylmethan. Sm. 117° (B. 26, 1854). — II, 898.
- 3) 1-Methyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol. Sm. 161–161,5° (B. 31, 176). — \*III, 72.
- 4) 4<sup>3</sup>-Methyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol. Sm. 203° (B. 31, 175). — \*III, 73.
- 5) Äthyläther d. 5-Nitro-2-Oxybiphenyl. Sm. 110,6° (Am. 33, 10 C. 1905 [1] 509).
- 6) Benzyläther d. 3-Nitro-2-Oxy-1-Methylbenzol. Fl. (B. 39, 3246 C. 1906 [2] 1412).
- 7) Benzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 54° (A. 224, 142). — II, 1049.
- 8) 4-Nitrobenzyläther d. 4-Oxy-1-Methylbenzol. Sm. 91° (A. 224, 144). — II, 1060.
- 9) 1,2-Dioxy- $\beta$ -Benzoylamidomethylbenzol. Sm. 270° u. Zers. (A. 343, 235 C. 1906 [1] 924).
- 10) 2,5-Dioxy-1-Benzoylamidomethylbenzol (N-Benzoyl-2,5-Dioxybenzylamin). Sm. 270° u. Zers. (A. 343, 237 C. 1906 [1] 924).
- 11) Benzoylderivat d. 2-Amido-1,3-Dioxybenzol-1-Methyläther. Sm. 163° (B. 35, 1481 C. 1902 [1] 1209).
- 12) Phenylamidomethyl-3,4-Dioxyphenylketon. Sm. 149° (160°). H<sub>2</sub>SO<sub>4</sub> (B. 27, 1985; D.R.P. 71312; J. r. 25, 279). — III, 138; \*III, 109.
- 13)  $\alpha$ -Oximido- $\alpha$ -[2,4-Dioxyphenyl]- $\beta$ -Phenyläthan. Sm. 170° (M. 26, 1128 C. 1905 [2] 1181).
- 14)  $\beta$ -[2-Oxyphenyl]äther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 109° (Bl. [4] 5, 503 C. 1909 [2] 21).
- 15) 3-Methyläther d. N-Phenyl-3,4-Dioxybenzaldoxim. Sm. 207–208° (C. 1898 [2] 80; 1905 [2] 764). — \*III, 77.
- 16) 2-Oximido-3-Keto-4-Acetyl-5-Methyl-1-Phenyl-2,3-Dihydro-R-Penten. Sm. 129–130° (Soc. 89, 686 C. 1906 [2] 45).
- 17) 3-Acetyl-2,4-Diketo-6-Methyl-1-Phenyl-1,2,3,4-Tetrahydropyridin. Sm. 217–218° (A. 273, 209). — II, 424.
- 18)  $\alpha$ -Amido-2-Oxydiphenylessigsäure. Sm. 210–215°. HCl (B. 31, 2816). — \*II, 995.
- 19) 2-Oxydiphenylaminmethyläther-2-Carbonsäure. Sm. 171° (A. 355, 343 C. 1907 [2] 1508).
- 20) 4-Oxydiphenylaminmethyläther-2-Carbonsäure. Sm. 158° (B. 38, 2125 C. 1905 [2] 247).
- 21) 5-Oxydiphenylaminmethyläther-2-Carbonsäure. Sm. 178° (A. 355, 370 C. 1907 [2] 1511).
- 22) 3'-Oxydiphenylaminmethyläther-2-Carbonsäure. Sm. 132° (A. 355, 346 C. 1907 [2] 1508).
- 23) 1-Naphtylacetylamidoessigsäure. Sm. 154° (156°). Ba + 5H<sub>2</sub>O (G. 19, 364; B. 25, 2292; Ph. Ch. 10, 643). — II, 613.
- 24) 2-Naphtylacetylamidoessigsäure. Sm. 172° (B. 25, 2298; Ph. Ch. 10, 643). — II, 621.

- C<sub>14</sub>H<sub>13</sub>O<sub>3</sub>N** 25) 1-Naphtylsuccinaminsäure. Sm. 171° (A. 248, 158; C. 1896 [1] 109). — II, 611.
- 26) 2-Naphtylsuccinaminsäure. Sm. 190—192° (184—185°). Ag (A. 248, 159; 292, 190; C. 1896 [1] 997). — II, 620; \*II, 339.
- 27) 4-Keto-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 265—267° u. Zers. Ba + 4H<sub>2</sub>O (B. 20, 161, 947, 1399; 22, 84; Soc. 51, 498). — II, 2005.
- 28) Äthylester d. 1-Naphtyloxaminsäure. Sm. 106° (B. 6, 249; 30, 771). — II, 611.
- 29) Äthylester d. 2-Naphtyloxaminsäure. Sm. 119,5° (121°) (B. 30, 771; Soc. 79, 846 Anm.). — \*II, 339.
- 30) Äthylester d.  $\delta$ -Cyan- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 104° (B. 21 [2] 644). — II, 1680.
- 31) Äthylester d.  $\alpha$ -Keto- $\beta$ -[2-Chinolyl]äthan- $\alpha$ -Carbonsäure. Sm. 130 bis 132°. K (B. 42, 1141 C. 1909 [1] 1577).
- 32) Äthylester d.  $\alpha$ -Keto- $\beta$ -[4-Chinolyl]äthan- $\alpha$ -Carbonsäure. Sm. 194 bis 196° (B. 42, 1142 C. 1909 [1] 1578).
- 33) 2-Methoxyphenylester d. Phenylamidoameisensäure. Sm. 136° (Bl. [3] 21, 827). — \*II, 550.
- 34) 2-Methoxyphenylester d. 4-Amidobenzol-1-Carbonsäure. Sm. 145° (D.R.P. 67923). — \*II, 789.
- 35) Acetat d. 2-Acetylamido-1-Oxynaphtalin. Sm. 116° (117,5°) (B. 39, 2496 C. 1906 [2] 833; A. 359, 381 C. 1908 [1] 1774).
- 36) Acetat d. 4-Acetylamido-1-Oxynaphtalin. Sm. 158°; subl. bei 110° (B. 25, 978; 29, 2947). — II, 865.
- 37) Acetat d. 8-Acetylamido-1-Oxynaphtalin. Sm. 118,5° (B. 39, 3334 C. 1906 [2] 1616).
- 38) Acetat d. 1-Acetylamido-2-Oxynaphtalin. Sm. 206° (116°) (Soc. 55, 121; B. 25, 3432; B. 39, 2495 C. 1906 [2] 833). — II, 885.
- 39) Acetat d. 3-Acetylamido-2-Oxynaphtalin (B. 27, 764). — II, 885.
- 40) Acetat d. 5-Acetylamido-2-Oxynaphtalin. Sm. 186° (D.R.P. 173522 C. 1906 [2] 931; B. 39, 3025 C. 1906 [2] 1432).
- 41) 1-Acetat d. Methyl-4-Amido-1-Oxy-2-Naphtylketon. Sm. 107° (B. 28, 1949). — III, 175.
- 42) Acetat d. Verb. C<sub>13</sub>H<sub>11</sub>O<sub>2</sub>N. Sm. 149° (G. 36 [1] 393 C. 1906 [2] 431).
- 43)  $\beta$ -Mononitrit d.  $\alpha\beta$ -Dioxy- $\alpha\alpha$ -Diphenyläthan. Sm. 106—107° (107 bis 108°) (A. 233, 330; C. 1905 [2] 825). — II, 231.
- 44) Nitril d. 4-Oxy-7-Methyl-1,2-Benzpyron-4-Propyläther-3-Carbonsäure. Sm. 223° (A. 367, 234 C. 1909 [2] 1237).
- 45) Amid d. Dioxyessigdiphenyläthersäure. Sm. 108° (B. 27, 2797). — \*II, 364.
- 46) Phenylamid d. Dehydracetsäure. Sm. 115° (B. 9, 1100). — II, 1756.
- 47) Phenylamid d. Oxyessig-2-Oxyphenyläthersäure. Sm. 161° (165°); Sd. 250° (J. pr. [2] 61, 357; Soc. 77, 1223). — \*II, 552.
- 48) Phenylamid d. Oxyessig-3-Oxyphenyläthersäure. Sm. 125° (Soc. 77, 1225). — \*II, 566.
- 49) Phenylamid d. Oxyessig-4-Oxyphenyläthersäure. Sm. 101° (Soc. 77, 1226). — \*II, 573.
- 50) 4-Oxyphenylamid d. Oxyessigphenyläthersäure. Sm. 158—159° (D.R.P. 82105). — \*II, 408.
- 51) 4-Methoxyphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 159 bis 160° (J. pr. [2] 61, 547). — \*II, 892.
- 52) 4-Oxyphenylimid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure. Sm. 178° (B. 36, 1002 C. 1903 [1] 1132).
- 53) Verbindung (aus Benzaldehyd u. 3-Amidobenzol-1-Carbonsäure) (B. 24, 3521). — III, 7.
- 54) Verbindung (aus  $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan). Sm. 125° (C. 1909 [2] 976).
- C<sub>14</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>** C 62,0 — H 4,8 — O 17,7 — N 15,5 — M. G. 271.
- 1) 2-Nitro-1-[2-Methylphenyl]nitrosamidomethylbenzol (2-Nitrobenzyl-2-Methylphenylnitrosamin). Sm. 64—65° (J. pr. [2] 51, 276). — \*II, 292.
- 2) 2-Nitro-1-[4-Methylphenyl]nitrosamidomethylbenzol (2-Nitrobenzyl-4-Methylphenylnitrosamin). Sm. 80° (J. pr. [2] 51, 271). — \*II, 292.



- $C_{14}H_{13}O_3N_3$  3) **4-Nitro-2-Acetylamidodiphenylamin.** Sm. 163—164° (173—174°) (B. 28, 2971; A. 313, 262; J. pr. [2] 69, 41 C. 1904 [1] 521; J. pr. [2] 74, 192 C. 1906 [2] 1435). — IV, 556; \*IV, 363.
- 4) **4-Nitro-2'-Acetylamidodiphenylamin.** Sm. 178° (B. 28, 2977). — IV, 556.
- 5) **2-Nitro-4'-Acetylamidodiphenylamin.** Sm. 147—148° (135—136°) (J. pr. [2] 46, 527; C. 1900 [2] 852). — IV, 588; \*IV, 385.
- 6) **4-Nitro-4'-Acetylamidodiphenylamin.** Sm. 22° (C. 1900 [2] 852). — \*IV, 385.
- 7) **5-Nitro-4-Benzoylamido-3-Amido-1-Methylbenzol.** Sm. 137—138° (A. 208, 317). — IV, 617.
- 8) **2-Amidophenyl-2-Nitrobenzylformylamin.** Sm. 158° (J. pr. [2] 54, 267). — IV, 558.
- 9)  **$\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]harnstoff.** Sm. 230° (B. 24, 2112). — II, 380.
- 10) **s-Phenyl-[2-Nitro-4-Methylphenyl]harnstoff.** Sm. 194° u. Zers. (J. pr. [2] 41, 323). — II, 494.
- 11) **s-3-Nitrophenylbenzylharnstoff.** Sm. 188° (B. 24, 3817). — II, 526.
- 12) **s-2-Nitrophenyl-2-Methylphenylharnstoff.** Sm. 189° (Am. 19, 316). — \*II, 253.
- 13)  **$\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oximido-2-Oxybenzyl]harnstoff (2-Oxybenzenylphenyluramidoxim).** Sm. 119° u. Zers. (B. 22, 2788). — II, 1502.
- 14) **N-Benzyläther d. 3-Nitro-1-Amidooximidomethylbenzol (Benzyläther d. 3-Nitrophenyloximidoamidomethan).** Sm. 58° (B. 18, 1065). — II, 1235.
- 15) **4-Nitrobenzyläther d. Amidooximidomethylbenzol (4-Nitrobenzyläther d. Benzenylamidoxim).** Sm. 105—106° (B. 25, 46). — II, 1200.
- 16)  **$\beta$ -[4-Nitrophenyl]hydrazon- $\alpha$ -Phenyläthan.** Sm. 158°. +  $C_2H_5O$  (B. 42, 2372 C. 1909 [2] 347).
- 17) **Methyläther d. Phenylhydrazon-4-Oxyphenylnitromethan.** Sm. 113,5—114° (B. 34, 2027; B. 36, 71 C. 1903 [1] 452). — \*IV, 494.
- 18)  **$\alpha$ -[2-Oxybenzyliden]- $\beta$ -[2-Nitro-4-Methylphenyl]hydrazin.** Sm. 226° (Soc. 79, 1143). — \*IV, 538.
- 19)  **$\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]hydrazin +  $H_2O$ .** Sm. 206—207° (wasserfrei) (B. 37, 3917 C. 1904 [2] 1594).
- 20)  **$\alpha$ -Phenyl- $\beta$ -[5-Nitro-4-Oxy-3-Methylbenzyliden]hydrazin.** Sm. 153 bis 155° (B. 37, 3927 C. 1904 [2] 1595).
- 21)  **$\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]hydrazin.** Sm. 164 bis 166° (B. 37, 3923 C. 1904 [2] 1594).
- 22) **Methyläther d.  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Nitro-4-Oxybenzyliden]hydrazin.** Sm. 113° (C. 1908 [2] 945).
- 23) **Methyläther d. Phenyl-2-Nitro-3-Oxybenzylidenhydrazin.** Sm. 134° (B. 22, 2351). — IV, 760.
- 24) **Methyläther d. Phenyl-4-Nitro-3-Oxybenzylidenhydrazin.** Sm. 103° (B. 22, 2363). — III, 80.
- 25) **Methyläther d. Phenyl-5-Nitro-3-Oxybenzylidenhydrazin.** Sm. 126° (B. 22, 2355). — IV, 760.
- 26) **Methyläther d. Phenyl-6-Nitro-3-Oxybenzylidenhydrazin.** Sm. 154° (B. 22, 2353). — IV, 760.
- 27) **Methyläther d. Phenyl-3-Nitro-4-Oxybenzylidenhydrazin.** Sm. 130,5° (132°) (A. 243, 71; Soc. 95, 1164 C. 1909 [2] 811). — IV, 761.
- 28) **Methyläther d.  $\beta$ -[4-Oxybenzoyl]- $\alpha$ -Nitroso- $\alpha$ -Phenylhydrazin.** Sm. 123° (117°) (B. 36, 367 C. 1903 [1] 577; G. 38 [1] 531 C. 1908 [2] 407). — \*IV, 454.
- 29)  **$\beta$ -Formyl- $\alpha$ -Phenyl- $\alpha$ -[2-Nitrobenzoyl]hydrazin.** Sm. 141—142° (B. 25, 2900). — IV, 812.
- 30) **p-Nitro-4,4'-Dimethylazoxybenzol.** Sm. 84° (B. 6, 557). — IV, 1340.
- 31) **isom. Nitro-4,4'-Dimethylazoxybenzol.** Sm. 51° (M. 10, 600). — IV, 1340.
- 32) **isom. Nitro-4,4'-Dimethylazoxybenzol.** Sm. 82° (M. 10, 600). — IV, 1340.
- 33) **4'-Nitro-4-Oxy-2,5-Dimethylazobenzol.** Sm. 222—223° (A. 356, 164 Anm. C. 1907 [2] 1700).

- $C_{14}H_{19}O_8N_3$  34) 4'-Nitro-6-Oxy-2,5-Dimethylazobenzol. Sm. 193° (A. 356, 164 Anm. C. 1907 [2] 1700).
- 35) 4'-Nitro-4-Oxy-2,6-Dimethylazobenzol. Sm. 166—167° (A. 356, 165 Anm. C. 1907 [2] 1700).
- 36) Äthyläther d. 3-Nitro-4-Oxyazobenzol. Sm. 93° (Soc. 79, 159). — \*IV, 1036.
- 37) 5-Nitro-2-Oxy-3-Methyl-1-Phenyl-2,3-Dihydrobenzimidazol. Sm. 200° (J. pr. [2] 74, 241 C. 1906 [2] 1436).
- 38) 3,4-Dioximido-6-Äthyl-3,4-Dihydrophenoxazin +  $1\frac{1}{2}H_2O$ . Sm. 140° u. Zers. (B. 31, 498). — \*IV, 235.
- 39) Acetat d. 1-Acetyl-3-Oxy-5-[ $\beta$ -Phenyläthenyl]-1,2,4-Triazol. Sm. 137—138° (Soc. 77, 231). — \*IV, 819.
- 40) Phenylamidoformiat d.  $\alpha$ -Oxy- $\beta$ -Phenylharnstoff (Carbanilidophenyl-oxyharnstoff). Sm. 178° u. Zers. (A. 263, 263). — II, 402.
- 41) Amid d.  $\alpha$ -[3-Nitrophenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 151° (B. 35, 3338 C. 1902 [2] 1193).
- 42) 5-Amido-2-Methylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 177° (D. R. P. 208968 C. 1909 [1] 1624).
- 43) 5-Amido-2-Methylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 196° (D. R. P. 208968 C. 1909 [1] 1623).
- 44) 3-Amido-4-Methylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 154° (D. R. P. 208968 C. 1909 [1] 1623).
- 45) 3-Amido-4-Methylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 211° (D. R. P. 208968 C. 1909 [1] 1623).
- 46) Hydroxylimid d. Phenylamidoameisensäure (Diphenyloxybiuret). Sm. 178° u. Zers. (B. 22, 1934). — II, 453.
- 47) Phenylnitrosohydrazid d.  $\alpha$ -Oxyphenylelessigsäure. Zers. bei 70° (B. 23, 3705). — IV, 693.
- $C_{14}H_{13}O_8N_5$  C 56,2 — H 4,3 — O 16,0 — N 23,4 — M. G. 299.
- 1) 2,4-Diamidoazobenzol-3'-Oxaminsäure. Zers. bei 189°. Ag +  $3H_2O$  (B. 30, 2204). — IV, 1363.
- $C_{14}H_{13}O_3Cl$  1) Äthylester d. 3-Oxy-2-Chlormethylnaphtalin-2-Carbonsäure. Sm. 116° (C. 1900 [2] 796).
- $C_{14}H_{13}O_4N$  C 64,9 — H 5,0 — O 24,7 — N 5,4 — M. G. 259.
- 1) Benzyl-2,6-Dinitro-4-Methylphenylamin. Sm. 80° (D. R. P. 194951 C. 1908 [1] 1115).
- 2) 6-Nitro-4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 187° (B. 25, 1034). — II, 993.
- 3) Phenyl-2-Nitrophenyläther d.  $\alpha\beta$ -Dioxyäthan. Sm. 86° (J. pr. [2] 24, 245). — II, 680.
- 4) Diacetylderivat d. 3-Amido-1,2-Dioxynaphtalin. Sm. 195° (A. 295, 14). — \*II, 593.
- 5) Phenylamidomethyl-2,3,4-Trioxyphenylketon (Gallanilidoacetophenon). Sm. 132° (J. r. 25, 122; D. R. P. 71312). — III, 139; \*III, 109.
- 6)  $\alpha$ -Oximido- $\alpha$ -[p-Trioxyphenyl]- $\beta$ -Phenyläthan. Sm. 166° (B. 39, 2058 C. 1906 [2] 246).
- 7) 4-Methyläther d.  $\alpha$ -Oximido-2,4,6-Trioxydiphenylmethan (Cotoinoxim) (B. 27, 416). — III, 203.
- 8) Oxyessig-1-Acetylamido-2-Oxynaphtyläthersäure. Sm. 234—235° (B. 34, 3201). — \*II, 525.
- 9) 1-Naphtylamidobernsteinsäure. Sm. 210° u. Zers. Na<sub>2</sub>, K<sub>2</sub>, Ca, Ba (B. 25, 966). — II, 614.
- 10) 2-Naphtylamidobernsteinsäure. Sm. 189° u. Zers. Na<sub>2</sub>, Ca, Ba (B. 25, 970). — II, 622.
- 11) 1-Naphtylimidodiessigsäure. Sm. 133—133,5° (B. 23, 2004; Ph. Ch. 10, 645). — II, 613.
- 12) 2-Naphtylimidodiessigsäure. Zers. bei 182° (B. 23, 2008; Ph. Ch. 10, 645). — II, 621.
- 13) 2-Methyl-5-Phenylpyrazol-1-Methylcarbonsäure-3-Carbonsäure. Sm. 152° (B. 19, 3160). — IV, 357.
- 14) 2,5-Dimethyl-1-Phenylpyrrol-3,4-Dicarbonsäure. Zers. bei 224°. Ca (B. 18, 303; A. 236, 305). — IV, 92.
- 15)  $\gamma\epsilon$ -Lakton d.  $\epsilon$ -Oxy- $\beta$ -Phenylamidoformoxyl- $\beta\delta$ -Hexadien- $\gamma$ -Carbon-säure. Sm. 102° (A. 303, 141). — \*II, 181.

- $C_{14}H_{19}O_4N$  16)  $\alpha,3$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -[2-Chinolyl]- $\beta$ -Oxymethylpropan-3-Carbonsäure +  $H_2O$ . (L. d. Trimethylolchinaldin- $\beta$ -Carbonsäure). Sm. 167 bis 168° wasserfrei. HCl, (2HCl,  $PtCl_4 + 2H_2O$ ), (HCl,  $AuCl_3$ ), Pikrat (B. 34, 4333 C. 1902 [1] 320). — \*IV, 218.
- 17) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Acetoxy- $\beta$ -Phenylakrylsäure. Fl. (Bl. [3] 31, 337 C. 1904 [1] 1135).
- 18) Äthylester d.  $\alpha$ -Cyan- $\beta$ -[4-Acetoxyphenyl]akrylsäure. Sm. 87,5° (J. pr. [2] 54, 536). — \*II, 1132.
- 19) Äthylester d. 2,6-Dioxy-4-Phenylpyridin-3-Carbonsäure. Sm. 200° (Soc. 75, 248). — \*IV, 229.
- 20) Isopropylester d. 5-Nitronaphtalin-1-Carbonsäure. Sm. 101,5° (B. 16, 2252). — II, 1448.
- 21) Isopropylester d. 5[oder 8]-Nitronaphtalin-2-Carbonsäure (vom Sm. 295°). Sm. 75—76° (B. 16, 2252). — II, 1457.
- 22) Acetat d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\beta$ -[2-Furanyl]- $\alpha$ -Phenyläthan. Sm. 115° (B. 38, 83 C. 1905 [1] 533).
- 23) Acetat d. isom.  $\beta$ -Oximido- $\alpha$ -Oxy- $\beta$ -[2-Furanyl]- $\alpha$ -Phenyläthan. Sm. 96° (B. 38, 84 C. 1905 [1] 533).
- 24) Diacetat d. 4,7-Dioxy-2-Methylchinolin. Sm. 225—232° (B. 32, 3704). — \*IV, 200.
- 25) 2-Methylphenylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure. BiOH (Bl. [3] 29, 533 C. 1903 [2] 244).
- 26) 4-Methylphenylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure. Sm. 211°. Zn (Bl. [3] 11, 83). — II, 1923.
- 27)  $\beta\gamma$ -Phenylimid d.  $\beta$ -Penten- $\beta\gamma\epsilon$ -Tricarbonsäure. Sm. 120° (H. 54, 544 C. 1908 [1] 1398).
- 28)  $\beta\gamma$ -Phenylimid d. Propen- $\alpha\beta\gamma$ -Tricarbonsäure- $\alpha$ -Äthylester. Sm. 112° (B. 38, 1618 C. 1905 [1] 1532).
- 29) Verbindung (aus 3,5-Dioxy-1-Methylbenzol) (B. 7, 247; 8, 1650). — II, 966.
- $C_{14}H_{18}O_4N_8$  C 58,6 — H 4,5 — O 22,3 — N 14,6 — M. G. 287.
- 1) Di[2-Nitrobenzyl]amin. Sm. 99—100° (102°). HCl, (2HCl,  $PtCl_4$ ) (B. 24, 3093; J. pr. [2] 55, 360). — II, 520; \*II, 292.
- 2) Di[4-Nitrobenzyl]amin (4,4'-Dinitrodibenzylamin). Sm. 93°. HCl, (2HCl,  $PtCl_4$ ) (B. 6, 1057). — II, 520.
- 3) isom. Dinitrodibenzylamin. Sm. bei 100°. (HCl Sm. 173°) (B. 6, 1059). — II, 520.
- 4) 4-Methylphenyl-2,4-Dinitrobenzylamin. Sm. 93° (B. 35, 1266 C. 1902 [1] 1102; M. 23, 548 C. 1902 [2] 742).
- 5) Methylbenzyl-2,4-Dinitrophenylamin. Sm. 73° (143—144°) (C. 1906 [2] 1314; R. 25, 109 C. 1906 [2] 33).
- 6) 2,2'-Dinitro-4,4'-Dimethyldiphenylamin. Sm. 191° (B. 15, 832). — II, 486; \*II, 266.
- 7) Äthyl-2,4-Dinitrodiphenylamin. Sm. 97,5° (95°) (C. 1904 [1] 1570; R. 25, 111 C. 1906 [2] 33; C. 1906 [2] 1314).
- 8) Methyl-2,4'-Dinitro-2-Methyldiphenylamin. Sm. 155° (J. pr. [2] 68, 258 C. 1903 [2] 1064).
- 9)  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[2-Nitrobenzyl]harnstoff. Sm. 141° (B. 30, 518). — \*II, 305.
- 10) 2-Nitro-1,4-Di[Acetylamido]naphtalin. Sm. bei 295° u. Zers. (B. 19, 335). — IV, 922.
- 11)  $\alpha$ -Phenylhydrazon- $\alpha$ -[p-Nitro-2,4-Dioxyphenyl]äthan. Sm. 232 bis 234° (C. 1908 [2] 308).
- 12) 3-Methyläther d.  $\alpha$ -[4-Nitrophenylhydrazon]- $\beta$ -[3,4-Dioxybenzyliden]methan. Sm. 227° (A. 324, 323 C. 1902 [2] 1505). — \*IV, 496.
- 13) 3-Methyläther d. 2-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 161—162° (B. 32, 3409). — \*IV, 496.
- 14) 4-Methyläther d. 2-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 157—158° (B. 35, 4396 C. 1903 [1] 340). — \*IV, 496.
- 15) 4-Methyläther d. 5-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 170° (B. 35, 4398 C. 1903 [1] 341). — \*IV, 498.
- 16) 4-Methyläther d. 6-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 200—201° (B. 35, 4396 C. 1903 [1] 340). — IV, 496.



- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>** 17) Dimethyläther d. 2'-Nitro-3,4-Dioxyazobenzol. Sm. 152° (*C.* 1908 [1] 23, 128).
- 18) 1,3-Diacetyl-2,5-Difuranyl-2,3-Dihydro-1,3,4-Triazol(Diacetyldifurylamin). Sm. 138° (*B.* 28, 473; *A.* 298, 34). — **IV**, 1167.
- 19) 5-Nitro-2-Phenylamidophenylamidoessigsäure. Sm. 96° (*B.* 38, 94 *C.* 1905 [1] 539).
- 20) Antipyrin tartronylimid. Sm. 258° u. Zers. (*A.* 255, 239). — **IV**, 548.
- 21) Verbindung (aus d. Säure C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>N<sub>2</sub>) (*B.* 23, 916). — **IV**, 1508.
- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>N<sub>5</sub>** C 53,3 — H 4,1 — O 20,3 — N 22,2 — M. G. 315.
- 1) 4,4'-Dinitro-2,2'-Dimethyldiazoamidobenzol. Sm. 237° (*Bl.* [3] 31, 641 *C.* 1904 [2] 96).
- 2) 5,5'-Dinitro-2,2'-Dimethyldiazoamidobenzol. Sm. 212° u. Zers. (200 bis 201°) (*B.* 22, 2567; 25, 3155; *B.* 37, 2579 *C.* 1904 [2] 659). — **IV**, 1568.
- 3) 6,6'-Dinitro-2,2'-Dimethyldiazoamidobenzol. Sm. 191° (*B.* 37, 2583 *C.* 1904 [2] 659).
- 4) 2,2'-Dinitro-4,4'-Dimethyldiazoamidobenzol. Sm. 163° (*B.* 22, 2565). — **IV**, 1568.
- 5) Äthyl-3,3'-Dinitrodiazoamidobenzol. Sm. 119° (*B.* 19, 3245; *Soc.* 51, 441). — **IV**, 1563.
- 6) Äthyl-3,4'-Dinitrodiazoamidobenzol. Sm. 151—155° u. Zers. (*B.* 19, 3241; *Soc.* 51, 442; 55, 417; 57, 785). — **IV**, 1564.
- 7) isom. Äthyl-3,4'-Dinitrodiazoamidobenzol. Sm. 174—175° (*Soc.* 51, 442; *B.* 19, 3246). — **IV**, 1564.
- 8) Äthyl-4,3'-Dinitrodiazoamidobenzol. Sm. 187° (*B.* 19, 3247; *Soc.* 51, 442). — **IV**, 1564.
- 9) Äthyl-4,4'-Dinitrodiazoamidobenzol. Sm. 191—192° (*B.* 19, 3247; *Soc.* 49, 630). — **IV**, 1565.
- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>Br<sub>5</sub>** 1) Diacetat d. αα-Dibrom-β-Oxy-β-[2,3,5-Tribrom-4-Oxyphenyl]butan. Sm. 164—165° (*A.* 362, 214 *C.* 1908 [2] 943).
- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>J** 1) Diacetat d. 1-Jodosonaphtalin. Sm. 170—175° u. Zers. (Zers. bei 192°) (*G.* 30 [2] 10; *B.* 33, 694).
- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>P** 1) 4-Methyldiphenylphosphinsäure-4'-Carbonsäure (p-Tolylbenzophosphinsäure). Sm. oberhalb 300° (*A.* 315, 64). — **\*IV**, 1180.
- C<sub>14</sub>H<sub>13</sub>O<sub>5</sub>N** C 61,1 — H 4,7 — O 29,1 — N 5,1 — M. G. 275.
- 1) 1,2,3-Trioxyp-[2-Oxybenzoylamidomethyl]benzol. Sm. 195—197° u. Zers. (*A.* 343, 263 *C.* 1906 [1] 925).
- 2) 8-Diacetylamid-7-Oxy-4-Methyl-1,2-Benzpyron. Sm. 261—262° (*B.* 34, 674). — **\*II**, 1041.
- 3) 4-[α,2,4-Trioxymethyl]amidobenzol-1-Carbonsäure. HCl (*A.* 357, 336 *C.* 1908 [1] 355).
- 4) Methylester d. 3-Acetoxy-1-Acetylinol-2-Carbonsäure. Sm. 83 bis 84° (*B.* 34, 1855; D.R.P. 131400 *C.* 1902 [1] 1343).
- 5) Äthylester d. Oxyessig-1-Nitro-2-Naphtyläthersäure. Sm. 100° (*B.* 34, 3195). — **\*II**, 524.
- 6) Äthylester d. 2-Acetoxybenzoylcyanessigsäure. Sm. 65° (*A.* 367, 178 *C.* 1909 [2] 702).
- 7) Äthylester d. γ-Phtalylamido-β-Ketopropan-α-Carbonsäure. Sm. 110° (*B.* 42, 1245 *C.* 1909 [1] 1693).
- 8) 2-Methylester-245-Äthylester d. β-Cyan-α-Keto-α-Phenyläthan-β,2-Dicarbonsäure. Sm. 64—65°. Na, Ag (*A. ch.* [7] 1, 491). — **II**, 1962.
- 9) 2-Methoxyphenylamid d. 3,4,5-Trioxymethylbenzol-1-Carbonsäure. Sm. 238—239° (*J. pr.* [2] 63, 79).
- 10) 4-Methoxyphenylamid d. 3,4,5-Trioxymethylbenzol-1-Carbonsäure. Sm. 214° (*J. pr.* [2] 63, 79).
- C<sub>14</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>** C 55,4 — H 4,3 — O 26,4 — N 13,9 — M. G. 303.
- 1) Di[2-Nitrobenzyl]hydroxylamin. Sm. 124° (*B.* 30, 59). — **\*II**, 306.
- 2) Di[4-Nitrobenzyl]hydroxylamin. Sm. 157—158°. HCl (*A.* 263, 189). — **II**, 535.
- 3) Methyläther d. 4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 139° (*B.* 37, 2094 *C.* 1904 [2] 34).
- 4) Äthyläther d. 4,6-Dinitro-2-Oxydiphenylamin. Sm. 155° (*R.* 24, 41 *C.* 1905 [1] 1233).

- $C_{14}H_{18}O_5N_3$  5) Äthyläther d. 2',4'-Dinitro-2-Oxydiphenylamin. Sm. 164° (B. 22, 902). — II, 704.
- 6) Äthyläther d. 2,6-Dinitro-3-Oxydiphenylamin. Sm. 125° (R. 27, 54 C. 1908 [1] 726).
- 7) Äthyläther d. 4,6-Dinitro-3-Oxydiphenylamin. Sm. 170° (R. 23, 123 C. 1904 [2] 206).
- 8) 4,2-Dinitro-1-Acetyläthylamidonaphtalin. Sm. 221–222° (Soc. 89, 1434 C. 1906 [2] 1614).
- $C_{14}H_{13}O_5N_5$  C 50,8 — H 3,9 — O 24,2 — N 21,1 — M. G. 331.
- 1) 4,6-Dinitro-5-Methylnitrosamido-2-Methyldiphenylamin. Sm. 122° (J. pr. [2] 67, 563 C. 1903 [2] 241). — \*IV, 399.
- 2) Dinitroamidooxydimethylazobenzol (Am. 2, 242). — IV, 1414.
- $C_{14}H_{13}O_5Cl_3$  1) Trichlorfilixsäure. Pb (Gm. 7, 1064). — II, 1968.
- $C_{14}H_{13}O_5P$  1) Benzoylverbindung d.  $\alpha$ -Oxybenzylphosphinsäure. Sm. 93° (C. r. 135, 1120 C. 1903 [1] 285). — \*IV, 1177.
- $C_{14}H_{13}O_6N$  C 57,7 — H 4,5 — O 33,0 — N 4,8 — M. G. 291.
- 1)  $\alpha$ -[2-Nitrophenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 205–207° u. Zers. Ba + H<sub>2</sub>O (B. 39, 295 C. 1906 [1] 761).
- 2)  $\alpha$ -[3-Nitrophenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 228°. Ba + H<sub>2</sub>O (B. 39, 296 C. 1906 [1] 761).
- 3)  $\alpha$ -[4-Nitrophenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 234° u. Zers. Ba + H<sub>2</sub>O (B. 39, 297 C. 1906 [1] 761).
- 4) Dimethylester d. 4-Succinylamidobenzol-1,2-Dicarbonsäure. Sm. 153,4° (C. 1908 [2] 1027).
- 5) Äthylester d. 4,5-Diketo-2-[3,4-Dioxyphenylmethylenäther]tetrahydropyrrol-3-Carbonsäure + H<sub>2</sub>O. Zers. bei 155°. NH<sub>4</sub>, K, Cu + 2C<sub>2</sub>H<sub>5</sub>O<sub>2</sub> (C. r. 138, 979 C. 1904 [1] 1415; C. 1907 [2] 1787).
- 6) 1,6-Diacetat d. 4,5,6-Trioxy-2-Äthylen-1-Oximidomethylbenzol-4,5-Methylenäther. Sm. 100–101° (B. 36, 1534 C. 1903 [2] 52).
- 7) Phenylimid d. d-Diacetylweinsäure. Sm. 124° (C. 1908 [2] 2005).
- 8) Verbindung (aus Phenylimidodiessigsäurediäthylester d. Oxalsäuredimethylester). Sm. 188° (Soc. 87, 448 C. 1905 [1] 1640).
- 9) Verbindung (aus Phenylimidodiessigsäurediäthylester). Sm. 159° (Soc. 87, 450 C. 1905 [1] 1640).
- 10) isom. Verbindung (aus Phenylimidodiessigsäurediäthylester). Sm. 195° (Soc. 87, 450 C. 1905 [1] 1640).
- $C_{14}H_{13}O_6N_3$  C 52,7 — H 4,0 — O 30,1 — N 13,2 — M. G. 319.
- 1) 2-Trinitro-2-Pseudobutylnaphtalin. Sm. 79–80° (B. 27, 1623). — \*II, 107.
- 2) Dimethyläther d. 4,6-Dinitro-2,5-Dioxydiphenylamin. Sm. 143° (R. 24, 317 C. 1905 [2] 1177).
- 3) Dimethyläther d. 2,6-Dinitro-3,4-Dioxydiphenylamin. Sm. 136° (R. 24, 318 C. 1905 [2] 1177).
- 4) Dimethyläther d. 2,6-Dinitro-3,5-Dioxydiphenylamin. Sm. 190° (R. 27, 253 C. 1908 [2] 1923).
- 5) Dimethyläther d. Dinitrodioxydiphenylamin (Dimethyläther d. 2-Dinitro-2-Phenylamido-1,3-Dioxybenzol). Sm. 196° (Am. 13, 177). — II, 930.
- 6) 2-Äthyläther d. 4,6-Dinitro-2,5-Dioxydiphenylamin. Sm. 122°. K (B. 24, 3824). — II, 949.
- $C_{14}H_{13}O_6N_5$  C 48,4 — H 3,7 — O 27,7 — N 20,2 — M. G. 347.
- 1) 2,4,6-Trinitro-3'-Dimethylamidodiphenylamin (B. 31, 1182). — \*IV, 371.
- 2) 4,6-Dinitro-5-Methylnitramido-2-Methyldiphenylamin. Sm. 134° (J. pr. [2] 67, 523 C. 1903 [2] 238). — \*IV, 1115.
- 3)  $\alpha$ -[2,4,6-Trinitrophenyl]- $\beta$ -[4-Äthylphenyl]hydrazin. Sm. 145° (J. pr. [2] 71, 412 C. 1905 [2] 41).
- 4)  $\alpha$ -[2,4,6-Trinitrophenyl]- $\beta$ -[2,4-Dimethylphenyl]hydrazin. Sm. 160° (J. pr. [2] 60, 103). — \*IV, 544.
- 5)  $\alpha$ -[2,4,6-Trinitrophenyl]- $\beta$ -[2,5-Dimethylphenyl]hydrazin. Sm. 169° u. Zers. (J. pr. [2] 71, 400 C. 1905 [2] 40).
- 6) Dimethyläther d. 5,5'-Dinitro-2,2'-Dioxydiazamidobenzol (A. 121, 278). — IV, 1575.
- 7) 7-Nitro-3-Diacetyläureido-4-Keto-2-Methyl-3,4-Dihydro-1,3-Benzodiazin. Sm. 229–230° (C. 1906 [2] 688).

- C<sub>14</sub>H<sub>13</sub>O<sub>6</sub>Br<sub>3</sub>** 1)  $\alpha\beta$ -Diacetat d. 2,5,6-Tribrom-3,4-Dioxy-1-[ $\alpha\beta$ -Dioxypropyl]benzol-3,4-Methylenäther. Sm. 154—156° (B. 40, 1108 C. 1907 [1] 1255).  
 2) Triacetat d. 3,5,6-Tribrom-4-Oxy-1,2-Di[Oxymethyl]benzol. Sm. 133—134° (B. 32, 3025). — \*II, 696.  
 3) Triacetat d. 2,5,6-Tribrom-4-Oxy-1,3-Di[Oxymethyl]benzol. Sm. 98—99° (B. 32, 3009; A. 320, 227 C. 1902 [1] 656). — \*II, 697.
- C<sub>14</sub>H<sub>13</sub>O<sub>7</sub>Br** 1) Triacetat d. Brommethyl-2,3,4-Trioxypheylketon (Tr. d. Bromgallacetophenon). Sm. 103° (B. 30, 1466). — \*III, 109.
- C<sub>14</sub>H<sub>13</sub>NCl<sub>2</sub>** 1) Di[2-Chlorbenzyl]amin. HCl (B. 38, 1417 C. 1905 [1] 1385).  
 2) Di[4-Chlorbenzyl]amin. Sm. 29°. HCl, (2HCl, PtCl<sub>4</sub>), HBr (A. 151, 141; Am. 2, 94). — II, 519.  
 3) isom. ?-Dichlordibenzylamin (A. 151, 141; Am. 2, 94). — II, 519.
- C<sub>14</sub>H<sub>13</sub>NBr<sub>2</sub>** 1) Di[2-Brombenzyl]amin. Sm. 36°. HCl, (2HCl, PtCl<sub>4</sub>) (Am. 2, 318). — II, 519.  
 2) Di[4-Brombenzyl]amin. Sm. 50°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 151, 370; Am. 3, 251; 23, 499). — II, 519.  
 3) 2,5-Dibrom-4,4'-Dimethyldiphenylamin. Sm. 59° (B. 40, 4275 C. 1907 [2] 1908).  
 4)  $\alpha\beta$ -Dibrom- $\alpha$ -[3-Methylphenyl]- $\beta$ -[2-Pyridyl]äthan. Sm. 145—146° (B. 39, 2836 C. 1906 [2] 1326).  
 5)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Pyridyl]äthan. HBr (B. 35, 2775 C. 1902 [2] 992). — \*IV, 227.  
 6)  $\alpha\beta$ -Dibrom- $\alpha$ -[3-Methylphenyl]- $\beta$ -[4-Pyridyl]äthan. Sm. 125—127° (B. 39, 2835 C. 1906 [2] 1326).  
 7)  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[6-Methyl-2-Pyridyl]äthan (Methylstilbazoldibromid). Sm. 156° u. Zers. (B. 25, 2401). — IV, 380.  
 8) 4-Methyl-2-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]pyridin. Sm. 139—140° (B. 21, 3075). — IV, 397.
- C<sub>14</sub>H<sub>13</sub>NJ<sub>2</sub>** 1) Di[4-Jodbenzyl]amin. Sm. 76°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 11, 58; Am. 2, 250). — II, 519.
- C<sub>14</sub>H<sub>13</sub>NS** 1) N-Äthylthiodiphenylamin. Sm. 102° (A. 230, 94). — II, 806.  
 2)  $\alpha$ -Imidodibenzylsulfid. HCl (Sm. 181°) (A. 197, 350). — II, 1294.  
 3) Phenyläther d.  $\beta$ -Imido- $\beta$ -Merkapto- $\alpha$ -Phenyläthan. HCl (B. 36, 3466 C. 1903 [2] 1243).  
 4) 5-Methyl-2-[1-Naphtyl]-4,5-Dihydrothiazol. Fl. (2HCl, PtCl<sub>4</sub>) (B. 33, 2635). — \*II, 865.  
 5) 2-[1-Naphtyl]-4,5-Dihydro-1,3-Thiazin ( $\alpha$ -Naphtylpenthiazolin). Sm. 103°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 33, 2636). — \*II, 865.  
 6) 2-[2-Naphtyl]-4,5-Dihydro-1,3-Thiazin ( $\beta$ -Naphtylpenthiazolin). Sm. 82°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 33, 2635). — \*II, 867.  
 7) 3,9-Dimethylphenythiazin. Sm. 219—220° (B. 39, 915 C. 1906 [1] 1258).  
 8) Amid d. Diphenylmethan-2-Thiocarbonsäure. Sm. 153° (B. 25, 3024). — II, 1466.  
 9) Phenylamid d. Phenylthioessigsäure. Sm. 87° (88°) (B. 37, 875 C. 1904 [1] 1004; B. 39, 3307 C. 1906 [2] 1569).  
 10) Phenylamid d. 1-Methylbenzol-4-Thiocarbonsäure. Sm. 140—141° (B. 25, 3527; J. pr. [2] 59, 576). — II, 1354; \*II, 831.  
 11) 2-Methylphenylamid d. Benzolthiocarbonsäure. Sm. 85—86° (B. 22, 3159). — II, 1293.  
 12) 4-Methylphenylamid d. Benzolthiocarbonsäure. Sm. 128—129° (B. 10, 2134; 11, 1759). — II, 1294.  
 13) Diphenylamid d. Thioessigsäure. Sm. 110,5—111° (A. 192, 39). — II, 369.
- C<sub>14</sub>H<sub>13</sub>NS<sub>2</sub>** 1) Phenylbenzylamidodithioameisensäure. NH<sub>4</sub> (J. pr. [2] 67, 287 C. 1903 [1] 1306).  
 2) Phenylester d. Methylphenylamidodithioameisensäure. Sm. 99,5° (Bl. [4] 1, 740 C. 1907 [2] 1160).  
 3) Benzylester d. Phenylamidodithioameisensäure. Sm. 84° (B. 32, 2213; Bl. [3] 27, 813 C. 1902 [2] 695; B. 35, 3384 C. 1902 [2] 1363). — \*II, 640.
- C<sub>14</sub>H<sub>13</sub>N<sub>2</sub>Cl** 1)  $\beta$ -Imido- $\beta$ -Phenylamido- $\alpha$ -[2-Chlorphenyl]äthan. Sm. 117° (J. pr. [2] 62, 555). — \*IV, 571.  
 2)  $\beta$ -Imido- $\beta$ -Phenylamido- $\alpha$ -[4-Chlorphenyl]äthan. Sm. 153—154°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 78, 478 C. 1909 [1] 280).



- C<sub>14</sub>H<sub>13</sub>N<sub>2</sub>Cl** 3)  $\beta$ -Imido- $\beta$ -[3-Chlorphenyl]amido- $\alpha$ -Phenyläthan. Sm. 91—93° (*J. pr.* [2] 78, 484 *C.* 1909 [1] 280).  
 4)  $\beta$ -Imido- $\beta$ -[4-Chlorphenyl]amido- $\alpha$ -Phenyläthan. Sm. 112—113° (*J. pr.* [2] 78, 483 *C.* 1909 [1] 280).  
 5)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Chlorphenyl]äthan. Sm. 114° (*Bl.* [3] 21, 69). — \*IV, 502.  
 6) 6-Chlor-3,4'-Dimethylazobenzol. Sm. 97° (*B.* 19, 3026). — IV, 1378.  
 7) Chlormethylat d.  $\beta$ -Amido- $\beta$ -Naphtochinolin + 2H<sub>2</sub>O. Sm. 256° (*J. pr.* [2] 57, 67). — IV, 1012.
- C<sub>14</sub>H<sub>13</sub>N<sub>2</sub>Cl<sub>3</sub>** 1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[Phenylamido]äthan. Sm. 107,5° (100—101°). (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (*B.* 5, 251; 9, 198; *A.* 302, 359; 316, 131; *B.* 39, 1664 *C.* 1906 [2] 104). — II, 443; \*II, 235.  
 2)  $\beta$ -Chlor- $\alpha\alpha$ -Di[4-Chlorphenylamido]äthan. Sm. 78—79° (*A.* 302, 358). — \*II, 235.  
 3) 4-Phenylhydrazon-1-Trichlormethyl-1-Methyl-1,4-Dihydrobenzol. Sm. 130° u. Zers. (*B.* 39, 4153 *C.* 1907 [1] 241).
- C<sub>14</sub>H<sub>13</sub>N<sub>2</sub>Br** 1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Bromphenyl]äthan. Sm. 126° (*B.* 24, 3767). — IV, 771.  
 2)  $\alpha$ -[4-Bromphenyl]hydrazon- $\alpha$ -Phenyläthan. Sm. 112—113° (113 bis 115°) (*Am.* 21, 30; *B.* 36, 756 *C.* 1903 [1] 833). — \*IV, 502.  
 3)  $\alpha$ -Benzyliden- $\beta$ -[2-Brom-4-Methylphenyl]hydrazin. Sm. 84° (*Soc.* 73, 178). — IV, 810.  
 4)  $\beta$ -Brom-2,2'-Dimethylazobenzol. — IV, 1376.  
 5) 2-Brom-4,4'-Dimethylazobenzol. Sm. 139° (*B.* 6, 557; 21, 1214). — IV, 1379.  
 6) 3-Brom-4,4'-Dimethylazobenzol. Sm. 128° (*B.* 21, 1217). — IV, 1379.  
 7) 5-Brom-2-Methyl-1-Äthyl- $\alpha$ -Naphtimidazol. Sm. 110°. Pikrat (*Soc.* 85, 1606 *C.* 1905 [1] 615).
- C<sub>14</sub>H<sub>13</sub>N<sub>2</sub>J** 1) Benzyliden-4-Jod-2-Methylphenylhydrazin. Sm. 102—103° (*J. pr.* [2] 74, 314 *C.* 1906 [2] 1821).  
 2) 4'-Jod-2,3'-Dimethylazobenzol. Sm. 64° (*J. pr.* [2] 69, 322 *C.* 1904 [2] 35).  
 3) Jodmethylat d. 1-[1-Naphtyl]imidazol. Sm. 195° (*B.* 25, 2373). — IV, 502.  
 4) Jodmethylat d. 2-Phenylindazol. Sm. 211° u. Zers. (188°) (*B.* 24, 963; *Bl.* [3] 29, 746 *C.* 1903 [2] 629). — IV, 866.  
 5) Jodmethylat d. 1-Phenylbenzimidazol. Sm. 200° (*B.* 34, 4204 *C.* 1902 [1] 262). — \*IV, 583.  
 6) Jodmethylat d.  $\beta$ -Amido- $\beta$ -Naphtochinolin + 2H<sub>2</sub>O. Sm. 237° (*J. pr.* [2] 57, 66). — IV, 1012.  
 7) Jodäthylat d. Phenazon. Sm. 185—187° (*J. pr.* [2] 65, 298 *C.* 1902 [1] 1235). — \*IV, 1030.  
 8) Jodäthylat d. 5,10-Naphtdiazin (*J. d. Phenazin*). + J (*B.* 26, 182). — IV, 1000.
- C<sub>14</sub>H<sub>13</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) 2,3'-Dichlor-4-Dimethylamidoazobenzol. Sm. 84—85° (*B.* 31, 2531 *Anm.*). — IV, 1356.  
 2) Äthyl-4,4'-Dichlordiazoamidobenzol. Sm. 85,5° (*Soc.* 53, 671). — IV, 1561.
- C<sub>14</sub>H<sub>13</sub>N<sub>3</sub>S** 1)  $\alpha$ -Benzylidenamido- $\alpha$ -Phenylthioharnstoff. Sm. 163° (*G.* 37 [1] 623 *C.* 1907 [2] 803).  
 2)  $\alpha$ -Benzylidenamido- $\beta$ -Phenylthioharnstoff. Sm. 191° (189°) (*B.* 27, 616; *B.* 35, 3236 *C.* 1902 [2] 1044). — III, 40.  
 3)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Imidobenzyliden]thioharnstoff. Sm. 125° (*B.* 22, 1609). — IV, 846.  
 4) Methyläther d.  $\alpha$ -Phenylimido- $\alpha$ -Phenylazomerkaptoethan. Sm. 66° (*B.* 34, 337). — \*IV, 442.  
 5) s-Dimethylthionin. HJ (*B.* 20, 931; 22, 2066). — II, 809.  
 6) uns-Dimethylthionin. (2HCl, PtCl<sub>4</sub>), HJ, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (*C.* 1900 [2] 342; *A.* 251, 91; *B.* 33, 3294). — II, 809; \*II, 478.  
 7) Amid d. Phenylimidophenylamidothioessigsäure. Sm. 161—162° (*C.* 1900 [2] 928, 929). — \*II, 207.  
 8) Verbindung (aus uns-Phenyl-2-Amidobenzylhydrazin). Sm. 243° (*B.* 27, 2902). — IV, 1130.
- C<sub>14</sub>H<sub>13</sub>N<sub>4</sub>Cl** 1)  $\alpha$ -Chlor- $\alpha\beta$ -Di[Phenylhydrazon]äthan (*Bl.* [3] 17, 549). — IV, 756.

- C<sub>14</sub>H<sub>13</sub>N<sub>4</sub>Cl** 2) isom.  $\alpha$ -Chlor- $\alpha\beta$ -Di[Phenylhydrazon]äthan. Sm. 142,5° (B. 38, 2988 C. 1905 [2] 1454).
- 3) **4-Chlor-1-[Imido-4-Methylphenylamidomethyl]azobenzol** (4-Chlor-diazobenzol-4-Tolyguanidin). Sm. 167° (B. 28, 2080). — IV, 1453.
- 4) **3,4'-Dimethylazobenzol-6-Diazochlorid**. 2 + PtCl<sub>4</sub> (B. 19, 1455). — IV, 1532.
- 5) **2-Chlorphenylat d. 4-Methyl-1-Phenyl-1,2,3,5-Tetrazol**. 2 + PtCl<sub>4</sub> (B. 31, 1756). — IV, 1234.
- 6) **3-Chlor-2-Amido-8-Dimethylamido-5,10-Naphtdiazin** (Dimethyl-diamidochlorphenazin). HNO<sub>3</sub> (M. 21, 277). — \*IV, 952.
- 7) **Verbindung** (aus Formazylmethan). Sm. 232° (B. 30, 2999).
- C<sub>14</sub>H<sub>13</sub>N<sub>4</sub>Br<sub>3</sub>** 1) **2,3'-Dimethylazobenzol-4'-Diazotribromid**. Sm. 96° (B. 20, 1181). — IV, 1532.
- 2) **3,4'-Dimethylazobenzol-6-Diazotribromid**. Sm. 125° (B. 19, 1455). — IV, 1532.
- C<sub>14</sub>H<sub>13</sub>N<sub>5</sub>S** 1) **3-Merkapto-5-Phenylhydrazido-1-Phenyl-1,2,4-Triazol**. Sm. 177° (A. 361, 329 C. 1908 [2] 882).
- 2) **3-Thiocarbonyl-5-[4-Amidophenyl]imido-1-Phenyltetrahydro-1,2,4-Triazol**. Sm. 218° (A. 361, 332 C. 1908 [2] 882).
- 3) **6-Phenylthiureido-1-Methyl-1,2,3-Benzotriazol**. Sm. 227–228° (B. 30, 2854). — IV, 1259.
- C<sub>14</sub>H<sub>13</sub>ClJ<sub>2</sub>** 1) **P-Joddi[2-Methylphenyl]jodoniumchlorid**. Sm. 162,5°. + HgCl<sub>2</sub> (B. 28, 1814). — \*II, 42.
- 2) **P-Joddi[3-Methylphenyl]jodoniumchlorid**. Sm. 160°. 2 + PtCl<sub>4</sub> (A. 327, 283 C. 1903 [2] 351).
- 3) **P-Joddi[4-Methylphenyl]jodoniumchlorid**. Sm. 165,5°. + HgCl<sub>2</sub> (B. 28, 99). — \*II, 42.
- C<sub>14</sub>H<sub>13</sub>Cl<sub>2</sub>P** 1) **4-[ $\beta$ -Phenyläthyl]phenyldichlorphosphin**. Sm. 2°; Sd. 250°<sub>00</sub> (A. 315, 49). — \*IV, 1184.
- C<sub>14</sub>H<sub>13</sub>Cl<sub>4</sub>P** 1) **4-[ $\beta$ -Phenyläthyl]phenylphosphortetrachlorid**. Sm. 65° (A. 315, 50). — \*IV, 1184.
- C<sub>14</sub>H<sub>13</sub>BrJ<sub>2</sub>** 1) **P-Joddi[2-Methylphenyl]jodoniumbromid**. Sm. 162° (B. 28, 1814). — \*II, 42.
- 2) **P-Joddi[3-Methylphenyl]jodoniumbromid**. Sm. 154° (A. 327, 283 C. 1903 [2] 351).
- 3) **P-Joddi[4-Methylphenyl]jodoniumbromid**. Sm. 163° (B. 28, 99). — \*II, 42.
- C<sub>14</sub>H<sub>14</sub>ON<sub>2</sub>** 1)  **$\alpha$ -Phenylnitrosoamido- $\alpha$ -Phenyläthan** ( $\alpha$ -Phenylnitrosamidoäthylbenzol). Fl. (B. 37, 2692 C. 1904 [2] 519).
- 2) **Dibenzylnitrosamin**. Sm. 61° (52°) (A. 151, 368; B. 19, 3288; 33, 2704; 34, 557). — II, 519; \*II, 292.
- 3) **Di[4-Methylphenyl]nitrosamin**. Sm. 103° (100–101°) (B. 13, 1092, 1544). — II, 486.
- 4) **Benzyl-4-Methylphenylnitrosamin**. Sm. 53° (A. 241, 360). — II, 518.
- 5) **Methyl-4-Nitrosophenylbenzylamin**. Sm. 56° (52–53°). HCl (A. 263, 311; J. pr. [2] 76, 492 C. 1908 [1] 860). — II, 517.
- 6) **4-Nitroso-2-Benzylamido-1-Methylbenzol**. Sm. 115° (A. 263, 308; D. R. P. 90565). — II, 518; \*II, 292.
- 7) **4-Nitroso-3-Benzylamido-1-Methylbenzol**. Sm. 121° (A. 263, 211). — II, 518.
- 8) **1-Methylamido-2-[2-Oxybenzyliden]amidobenzol**. Sm. 110–111° (B. 25, 2843). — IV, 564.
- 9)  **$\alpha$ -Phenylimido- $\alpha$ -Benzylhydroxylamidomethan**. Sm. 165° u. Zers. HCl, Cu, (Cu, 2HCl), Ni (B. 40, 701 C. 1907 [1] 885).
- 10)  **$\alpha$ -Phenylimido- $\alpha$ -[4-Methylphenyl]hydroxylamidomethan**. Sm. 248° (B. 35, 1453 C. 1902 [1] 1157).
- 11)  **$\alpha$ -Methyl- $\alpha\beta$ -Diphenylharnstoff**. Sm. 104°; Sd. 203–205° (B. 17, 2093, 3036). — II, 380.
- 12) **s-Phenylbenzylharnstoff**. Sm. 168° (170°) (B. 5, 93; A. 309, 203; J. pr. [2] 56, 89; B. 40, 703 C. 1907 [1] 885). — II, 526; \*II, 296.
- 13) **s-Phenyl-2-Methylphenylharnstoff**. Sm. 196° (212°; 207–208°) (B. 19, 2410; Soc. 79, 105; J. pr. [2] 65, 440 C. 1902 [2] 38). — II, 464.
- 14) **s-Phenyl-3-Methylphenylharnstoff**. Sm. 173–174° (165°) (B. 22, 840; Soc. 67, 562; J. pr. [2] 65, 426 C. 1902 [2] 36). — II, 479; \*II, 261.

- $C_{11}H_{14}ON_2$  15) **s-Phenyl-4-Methylphenylharnstoff**. Sm. 212° (213—214°; 218°; 231°) (B. 27, 2426; Soc. 67, 562; 79, 103; G. 29 [2] 142; J. pr. [2] 65, 440 C. 1902 [2] 38; B. 36, 1374 C. 1903 [1] 1343; C. 1907 [1] 246; C. r. 144, 1164 C. 1907 [1] 633; B. 42, 1958 C. 1909 [2] 272). — \*II, 272.
- 16) **Diphenylmethylharnstoff** (Benzhydrylharnstoff). Sm. 143° (B. 19, 2130). — II, 635.
- 17) **4-Acetylamidodiphenylamin**. Sm. 158° (B. 12, 1402). — IV, 588.
- 18) **4-Amido-4'-Acetylamidobiphenyl**. Sm. 199° (A. 207, 332). — IV, 964.
- 19) **4-Benzoylamido-2-Amido-1-Methylbenzol**. Sm. 142° (B. 7, 1505). — IV, 606.
- 20) **4-Benzoylamido-3-Amido-1-Methylbenzol**. Sm. 193—194° (A. 208, 314; B. 24, 633). — IV, 417.
- 21) **4,4'-Diamido-3-Methyldiphenylketon**. Sm. etwas über 220° (B. 16, 1929). — III, 216; \*III, 161.
- 22) **3,4'-Diamido-4-Methyldiphenylketon**. Sm. 178°.  $H_2SO_4$  (A. 286, 327). — III, 215.
- 23)  **$\alpha$ -Keto- $\alpha$ -Di[4-Amidophenyl]äthan**. Sm. 145°. 2HCl (D.R.P. 45371; A. 325, 74 C. 1903 [1] 463). — \*III, 163.
- 24) **6-Amido-4-[4-Methylphenyl]imido-1-Keto-3-Methyl-1,4-Dihydrobenzol**. Sm. 143—145° (B. 17, 2442; 26, 2775; J. r. 19, 146). — III, 359.
- 25) **4-[4-Dimethylamidophenyl]imido-1-Keto-1,4-Dihydrobenzol** (Phenolblau; Chinondimethylanilimid). Sm. 133—134° (160°) (B. 16, 2851; 18, 2914; 21, 889; 35, 3085; Bl. [3] 11, 1133; A. 289, 129; J. pr. [2] 69, 162 C. 1904 [1] 1268). — IV, 598; \*IV, 396.
- 26) **Äthyläther d.  $\beta$ -Oxy- $\alpha$ -Cyan- $\alpha$ -[2-Cyanphenyl]- $\alpha$ -Buten**. Sm. 58° (B. 27, 2242). — II, 1966.
- 27)  **$\alpha$ -Oximido- $\beta$ -[4-Amidophenyl]- $\alpha$ -Phenyläthan**. Sm. 141° (B. 21, 2449). — III, 220.
- 28)  **$\alpha$ -Oximido- $\alpha$ -[3-Amidophenyl]- $\alpha$ -[4-Methylphenyl]methan**. Sm. 146° (A. 286, 315). — III, 215.
- 29)  **$\alpha$ -Oximido- $\alpha$ -Benzylamido- $\alpha$ -Phenylmethan**. Sm. 120° (B. 32, 2695). — \*II, 754.
- 30)  **$\alpha$ -Oximido- $\alpha$ -[2-Methylphenyl]amido- $\alpha$ -Phenylmethan** (Benzenyl-2-Methylphenylamidoxim). Sm. 147° (142°) (B. 22, 3160; 31, 241). — II, 1204; \*II, 754.
- 31)  **$\alpha$ -Oximido- $\alpha$ -[4-Methylphenyl]amido- $\alpha$ -Phenylmethan** (Benzenyl-4-Methylphenylamidoxim). Sm. 176°. HCl (B. 22, 2406). — II, 1204.
- 32) **Benzyläther d. Amidooximidomethylbenzol** (Benzyläther d. Benzenylamidoxim). Sm. 90,5° (B. 18, 1056; 19, 1480). — II, 1200.
- 33) **4-Acetylhydrazidobiphenyl**. Sm. 203° (B. 27, 3106). — IV, 970.
- 34) **Benzyl-2-Oxybenzylidenhydrazin**. Sm. 90° (J. pr. [2] 62, 96). — \*IV, 542.
- 35)  **$\alpha$ -[2-Methylphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin**. Sm. 110—111° (A. 365, 320 C. 1909 [1] 1866).
- 36)  **$\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin**. Sm. 142° (A. 324, 324 C. 1902 [2] 1505). — \*IV, 537.
- 37)  **$\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin** (Agathin). Sm. 71° (72°) (B. 32, 3061; D.R.P. 68176). — \*IV, 492.
- 38) **Phenyl-4-Oxy-2-Methylbenzylidenhydrazin**. Sm. 88° u. Zers. (B. 35, 4105 C. 1903 [1] 149). — \*IV, 494.
- 39) **Phenyl-2-Oxy-3-Methylbenzylidenhydrazin**. Sm. 95° (97°) (B. 24, 3668; B. 35, 4104 C. 1903 [1] 149). — IV, 761; \*IV, 494.
- 40) **Phenyl-4-Oxy-3-Methylbenzylidenhydrazin**. Sm. 151° (147°) (B. 24, 3671; B. 35, 4105 C. 1903 [1] 149). — IV, 761; \*IV, 495.
- 41) **Phenyl-6-Oxy-3-Methylbenzylidenhydrazin**. Sm. 149° (B. 35, 4104 C. 1903 [1] 149). — \*IV, 494.
- 42) **Phenyl-2-Oxy-4-Methylbenzylidenhydrazin**. Sm. 136° (B. 35, 4104 C. 1903 [1] 149). — \*IV, 495.
- 43) **isom. Phenyl-2-Oxy-4-Methylbenzylidenhydrazin**. Sm. 168° (161°) (B. 35, 4104 C. 1903 [1] 149; B. 39, 872 Anm. C. 1906 [1] 1247). — \*IV, 495.
- 44) **Methyläther d. 4-Oxybenzylidenphenylhydrazin**. Sm. 120—121° (A. 248, 103). — IV, 760.



- $C_{14}H_{14}ON_2$  45) Methyläther d. Benzyliden-2-Oxyphenylhydrazin (B. 33, 1304). — \*IV, 548.
- 46) 4-Phenylhydrazonmethyl-1-Oxymethylbenzol (Bl. [3] 11, 382).
- 47) 3-Oxy-2-Phenylhydrazonmethyl-1-Methylbenzol. Sm. 170,2—171,4° (Bl. [3] 35, 141 C. 1906 [1] 1014).
- 48) 3-Oxy-4-Phenylhydrazonmethyl-1-Methylbenzol. Sm. 160—160,5° (Bl. [3] 35, 136 C. 1906 [1] 1013).
- 49)  $\beta$ -Hydrazon- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan (Benzoïnhydrazin). Sm. 75°. Na, Na<sub>2</sub> (J. pr. [2] 52, 124). — III, 225.
- 50)  $\beta$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -Phenyläthan (Phenylhydrazon d.  $\alpha$ -Oxyphenylessigsäurealdehyd). Sm. 142° (J. pr. [2] 49, 406).
- 51)  $\alpha$ -Phenylhydrazon- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 112° (A. 243, 245). — IV, 771.
- 52)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 107° (108°) (B. 25, 1309; Soc. 75, 69). — IV, 772.
- 53)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]äthan. Sm. 136° (148°) (B. 30, 1770; C. r. 133, 743). — IV, 772; \*IV, 503.
- 54) Phenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxyäthan. Sm. 86° (M. 15, 744). — IV, 755.
- 55) 2-Phenylhydrazon-1-Keto-3,4-Dimethyl-1,2-Dihydrobenzol (B. 42, 2919 C. 1909 [2] 1323).
- 56)  $\beta$ -Acetyl- $\alpha\alpha$ -Diphenylhydrazin. Sm. 184° (B. 25, 414, 1077). — IV, 665.
- 57)  $\alpha$ -Acetyl- $\alpha\beta$ -Diphenylhydrazin. Sm. 159° (B. 17, 380; J. pr. [2] 64, 151). — IV, 1496; \*IV, 1089.
- 58)  $\beta$ -Benzoyl- $\alpha$ -Methyl- $\alpha$ -Phenylhydrazin. Sm. 153° (B. 18, 1743; 35, 1566). — IV, 669.
- 59)  $\beta$ -Benzoyl- $\beta$ -Methyl- $\alpha$ -Phenylhydrazin. Sm. 136° (B. 35, 1945 C. 1902 [2] 112; B. 42, 3527 C. 1909 [2] 1460). — \*IV, 427.
- 60) 2,2'-Dimethylazoxybenzol. Sm. 59—60° (B. 6, 557; 18, 2555; 20, 2016; 31, 559, 990; 33, 2333; C. 1904 [2] 1383). — IV, 1339; \*IV, 998.
- 61) 2,2'-Dimethylisazoxybenzol. Sm. 82° (B. 42, 1369 C. 1909 [1] 1702).
- 62) 3,3'-Dimethylazoxybenzol. Sm. 37—39° (B. 22, 835; 30, 2278; 35, 3700). — IV, 1340; \*IV, 998.
- 63) 4,4'-Dimethylazoxybenzol. Sm. 70° (75°) (B. 3, 551; 22, 41, 1173; 30, 2278; 31, 559; 32, 219, 2920; Z. 1870, 30; M. 9, 832; 10, 596; C. 1904 [2] 1383; B. 42, 1371 C. 1909 [1] 1702). — IV, 1340; \*IV, 998.
- 64) 5-Oxy-2,4-Dimethylazobenzol. Sm. 113,5—114° (B. 40, 2264 C. 1907 [2] 592).
- 65) 4'-Oxy-2,4-Dimethylazobenzol. Sm. 134° (A. 287, 211). — IV, 1414.
- 66) 6-Oxy-3,4-Dimethylazobenzol. Sm. 130° (A. 365, 297 C. 1909 [1] 1864; B. 42, 2918 C. 1909 [2] 1323).
- 67) 2-Oxy-3,5-Dimethylazobenzol. Sm. 90° (175°?) (B. 19, 148; A. 365, 295 C. 1909 [1] 1864). — IV, 1424.
- 68) 4-Oxy-3,5-Dimethylazobenzol. Sm. 95—96° (B. 41, 2340 C. 1908 [2] 784).
- 69) 4-Oxy-2,2'-Dimethylazobenzol + H<sub>2</sub>O. Sm. 83° (111° wasserfrei). Na, HCl (B. 32, 3099; A. 287, 186). — IV, 1422; \*IV, 1041.
- 70) 4-Oxy-2,3'-Dimethylazobenzol. Sm. 106—107° (A. 287, 187). — IV, 1422.
- 71) 4'-Oxy-2,3'-Dimethylazobenzol. Sm. 132° (B. 23, 3259; J. pr. [2] 65, 431 C. 1902 [2] 37). — IV, 1421.
- 72) 6'-Oxy-2,3'-Dimethylazobenzol. Sm. 98° (B. 23, 3263). — IV, 1422.
- 73) 4-Oxy-2,4'-Dimethylazobenzol. Sm. 135° (A. 287, 189). — IV, 1422.
- 74) 4-Oxy-3,3'-Dimethylazobenzol. Sm. 115° (A. 287, 185). — IV, 1422.
- 75) 6-Oxy-3,3'-Dimethylazobenzol (m-Toluol-azo-p-kresol). Sm. 95° (B. 27, 2703). — IV, 1422.
- 76) 4-Oxy-3,4'-Dimethylazobenzol. Sm. 163°. HCl (B. 23, 3261; 30, 1627; J. pr. [2] 65, 433 C. 1902 [2] 37). — IV, 1422; \*IV, 1041.
- 77) 6-Oxy-3,4'-Dimethylazobenzol (p-Toluolazo-p-kresol). Sm. 112—113°. HCl (B. 17, 354, 362; 27, 2706; J. pr. [2] 65, 439 C. 1909 [2] 37). — IV, 1422; \*IV, 1041.
- 78) 2-Oxymethyl-4'-Methylazobenzol. Sm. 93° (C. r. 138, 1276 C. 1904 [2] 120; Bl. [3] 31, 868 C. 1904 [2] 661).

- $C_{14}H_{14}ON_2$  79) Methyläther d. 4'-Oxy-2-Methylazobenzol. Sm. 59° (B. 32, 3097). — \*IV, 1037.
- 80) Äthyläther d. 2-Oxyazobenzol. Sm. 43—44° (2HCl, PtCl<sub>4</sub>) (C. 1899 [2] 583; B. 36, 4071 C. 1904 [1] 267; B. 36, 4108 C. 1904 [1] 272). — \*IV, 1034.
- 81) Äthyläther d. 3-Oxyazobenzol. Sm. 63,5—64°; Sd. 200°<sub>22</sub> (B. 36, 4099 C. 1904 [1] 271).
- 82) Äthyläther d. 4-Oxyazobenzol. Sm. 85° (77—78°); Sd. 325—326° (2HCl, PtCl<sub>4</sub>), (2HCl, AuCl<sub>3</sub>) (Bl. [3] 11, 897; B. 25, 994; 30, 1629; B. 39, 4160 C. 1907 [1] 227). — IV, 1408; \*IV, 1034.
- 83) 2-Oxy-1-Methyl-3-Phenyl-2,3-Dihydrobenzimidazol. Sm. 168° (B. 34, 4205 C. 1902 [1] 262). — \*IV, 571.
- 84) 2-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 167—168° (J. pr. [2] 53, 425). — IV, 639.
- 85) Äthyläther d. 2-Methyl-5-Oxy- $\alpha$ -Naphtimidazol. Sm. 179° (J. pr. [2] 45, 552). — II, 866.
- 86) 2-Acetyl-2-Methyl-2,3-Dihydro-peri-Naphtimidazol. Sm. 181—183° (A. 365, 151 C. 1909 [1] 1822).
- 87) 4-Nitroso-3-Methyl-1,2,3,4-Tetrahydro- $\beta$ -Naphtochinolin. Sm. 69 bis 69,5° (B. 24, 2647). — IV, 379.
- 88) 3-Keto-1-Äthyl-1,2,3,4-Tetrahydro-1,4-Naphtisodiazin. Sm. 99 bis 100° (D.R.P. 196563 C. 1908 [1] 1590).
- 89) Methylharmin. Sm. 209° (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HJ (B. 18, 402; 30, 2482). — \*III, 659.
- 90) Nitril d. 1-Keto-3-Butyl-1,2-Dihydroisochinolin-4-Carbonsäure. Sm. 227—229° (B. 30, 895). — IV, 342.
- 91) Nitril d. 1-Keto-2-Methyl-3-Isopropyl-1,2-Dihydroisochinolin-4-Carbonsäure. Sm. 200—210° (B. 30, 892). — IV, 339.
- 92) Amid d. 1-Phenylamidomethylbenzol-4-Carbonsäure. Sm. 150° (B. 28, 1144). — \*II, 830.
- 93) Amid d.  $\alpha$ -Phenylamid- $\alpha$ -Phenylessigsäure. Sm. 122—123° (B. 15, 2030; B. 37, 4084 C. 1904 [2] 1723). — II, 1324.
- 94) Phenylamid d. Phenylamidoessigsäure. Sm. 112—113° (110—111°) (Z. 1868, 74; B. 8, 1156; 21, 112; 27, 1988; 30, 2316; 31, 386; A. 301, 66; Bl. [3] 21, 965). — II, 428; \*II, 225.
- 95) Phenylamid d. 2-Amidophenylessigsäure. Sm. 132° (B. 32, 793). — \*II, 818.
- 96) Phenylamid d. 4-Amido-1-Methylbenzol-3-Carbonsäure. Sm. 240° (J. pr. [2] 33, 67). — II, 1338.
- 97) Methylphenylamid d. 2-Amidobenzol-1-Carbonsäure. Sm. 127° (C. 1897 [1] 413). — \*II, 780.
- 98) 2-Methylphenylamid d. 2-Amidobenzol-1-Carbonsäure. Sm. 104° (J. pr. [2] 63, 283).
- 99) 3-Methylphenylamid d. 2-Amidobenzol-1-Carbonsäure. Sm. 118° (J. pr. [2] 63, 284).
- 100) 4-Methylphenylamid d. 2-Amidobenzol-1-Carbonsäure. Sm. 151° (J. pr. [2] 63, 284).
- 101) 2-Amidobenzylamid d. Benzolcarbonsäure. Sm. 108—109° (B. 23, 2809; J. pr. [2] 51, 284). — IV, 631.
- 102) Methyl-4-Amidophenylamid d. Benzolcarbonsäure. Sm. 153—154° (Soc. 95, 1322 C. 1909 [2] 977).
- 103) Diphenylamid d. Amidoessigsäure. Sm. 38—40° (D.R.P. 59121). — \*II, 175.
- 104) Phenylhydrazid d. Phenylessigsäure. Sm. 173° (168°; 175—176°) (B. 27 [2] 592; 27, 1518; 29, 1989; A. 236, 196; G. 20, 176). — IV, 670.
- 105) Phenylhydrazid d. 1-Methylbenzol-4-Carbonsäure. Sm. 167° (R. 16, 326; G. 38 [1] 528 C. 1908 [2] 407; G. 39 [1] 600 C. 1909 [2] 805; G. 39 [2] 323 C. 1909 [2] 1802). — IV, 670.
- 106) 2-Methylphenylhydrazid d. Benzolcarbonsäure. Sm. 180° (B. 25, 1079). — IV, 801.
- 107) 4-Methylphenylhydrazid d. Benzolcarbonsäure (s-Benzoyl-p-Tolylhydrazin). Sm. 146° (B. 27, 1696). — IV, 809.

- C<sub>14</sub>H<sub>14</sub>ON<sub>2</sub>** 108) Verbindung (aus o-Nitrobenzacetat). (2HCl, PtCl<sub>4</sub>) (Bl. [3] 31, 452 C. 1904 [1] 1498).
- 109) Verbindung (aus α-[4-Dimethylamidophenyl]imido-α-Phenyllessigsäurenitril). Sm. 228° (B. 32, 2345).  
C 66,1 — H 5,5 — O 6,3 — N 22,0 — M. G. 254.
- C<sub>14</sub>H<sub>14</sub>ON<sub>4</sub>**
- 1) α-[2-Oxybenzyliden]amido-α-Phenylguanidin. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Pikrat (G. 31 [1] 529). — \*IV, 889.
  - 2) α-Oxy-αβ-Di[Phenylhydrazon]äthan. Sm. 146°. Ba, SbOH (Bl. [3] 17, 549). — IV, 756.
  - 3) 4,4'-Dimethyldiazobenzolanhydrid. K<sub>2</sub> (B. 29, 457). — IV, 1531.
  - 4) 4-Acetylamidodiazamidobenzol. Sm. 150—152° (B. 39, 3490 C. 1906 [2] 1648).
  - 5) 4'-Diazo-2,3'-Dimethylazobenzol. Tribromid, Nitrat (B. 20, 1181). — IV, 1532.
  - 6) 6-Diazo-3,4'-Dimethylazobenzol. Salze, siehe (B. 19, 1454). — IV, 1532.
  - 7) 4-Amido-4'-Acetylamidoazobenzol. Sm. 212°. HCl (B. 17, 345; D. R. P. 88013). — IV, 1362; \*IV, 1013.
  - 8) α-Phenylazo-α-Methyl-β-Phenylharnstoff. Sm. 104° (B. 38, 677 C. 1905 [1] 731; B. 40, 2386 C. 1907 [2] 314).
  - 9) 4-Ureido-2-Methylazobenzol. Sm. 152° (C. r. 143, 342 C. 1906 [2] 1055).
  - 10) 4-Ureido-3-Methylazobenzol. Sm. 207° (C. r. 143, 342 C. 1906 [2] 1055).
  - 11) Amid d. α-[4-Benzylidenamidophenyl]hydrazin-β-Carbonsäure. Sm. 204° u. Zers. (B. 40, 3807 C. 1907 [2] 1503).
  - 12) Phenylamid d. 4-Amido-2-Methyldiazobenzol-1-Carbonsäure. Sm. 137° (B. 40, 3815 C. 1907 [2] 1504).
  - 13) Phenylamid d. 4-Amido-3-Methyldiazobenzol-1-Carbonsäure. Zers. bei 150—151° (B. 40, 3814 C. 1907 [2] 1504).
  - 14) Verbindung (aus d. Nitril d. Brompyridonmessigsäure). Sm. 150° (B. 41, 2120 C. 1908 [2] 698).
- C<sub>14</sub>H<sub>14</sub>ON<sub>6</sub>** C 59,6 — H 4,9 — O 5,7 — N 29,8 — M. G. 282.
- 1) α-Imidoamidomethyl-β-[α-Phenylazo-2-Oxybenzyliden]hydrazin (2-Oxyguanazylbenzol). Sm. 191—192° (B. 31, 2354). — IV, 1494.
- C<sub>14</sub>H<sub>14</sub>OBr<sub>2</sub>** 1) ?-Dibrom-9-Keto-1,2,3,4,9,10-Hexahydroanthracen. Sm. 123—124° (C. r. 140, 252 C. 1905 [1] 679).
- C<sub>14</sub>H<sub>14</sub>OJ<sub>2</sub>** 1) ?-Joddi[2-Methylphenyl]jodoniumhydroxyd. Salze, siehe (B. 28, 1814). — \*II, 42.
- 2) ?-Joddi[3-Methylphenyl]jodoniumhydroxyd. Salze, siehe (A. 327, 283 C. 1903 [2] 351).
- 3) ?-Joddi[4-Methylphenyl]jodoniumhydroxyd. Salze, siehe diese (B. 28, 98). — \*II, 42.
- C<sub>14</sub>H<sub>14</sub>OS** 1) α-Oxydibenzylsulfid. Sm. 43° (B. 42, 3810 C. 1909 [2] 1858).
- 2) 1-Methyläther-4-Benzyläther d. 4-Merkapto-1-Oxybenzol. Sm. 45 bis 46° (Bl. [3] 33, 839 C. 1905 [2] 618).
- 3) Dibenzylsulfoxyd. Sm. 133° (130°) (A. 136, 90; B. 15, 1284; B. 36, 543 C. 1903 [1] 707; B. 39, 3317 C. 1906 [2] 1603; Soc. 93, 1835 C. 1909 [1] 351; B. 41, 2839 C. 1908 [2] 1348; Soc. 95, 349 C. 1909 [1] 1650; B. 42, 3808 C. 1909 [2] 1858). — II, 1055.
- 4) Di[4-Methylphenyl]sulfoxyd. Sm. 92°. + FeCl<sub>3</sub> (B. 23, 1845; B. 40, 4931 C. 1908 [1] 459). — II, 825.
- C<sub>14</sub>H<sub>14</sub>OSe** 1) Di[2-Methylphenyl]selenoxyd. Sm. bei 116° (B. 28, 1672). — \*II, 487.
- 2) Di[4-Methylphenyl]selenoxyd. Sm. bei 90° (B. 28, 1673). — \*II, 488.
- C<sub>14</sub>H<sub>14</sub>OSi** 1) Dibenzylsiliciumoxyd. Sm. 98° (Soc. 93, 452 C. 1908 [1] 1687).
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** C 69,4 — H 5,8 — O 13,2 — N 11,6 — M. G. 242.
- 1) β-Nitro-α-Phenylamido-α-Phenyläthan. Sm. 90°. HCl (B. 20, 2986; 29, 360; B. 36, 2564 C. 1903 [2] 494; Bl. [3] 33, 398 C. 1905 [1] 1317). — \*II, 86.
  - 2) 5-Nitro-4'-Amido-2-Methyldiphenylmethan. Sm. 119°. HCl (B. 26, 1853, 2811; D. R. P. 75261). — II, 637; \*II, 350.
  - 3) 4-Nitro-4'-Amido-3,3'-Dimethylbiphenyl. Sm. 142—143° (A. 352, 121 C. 1907 [1] 1797).



- $C_{14}H_{14}O_2N_2$  4) 2-Nitro-1-Benzylamidomethylbenzol (2-Nitrodibenzylamin). Fl. HCl (*J. pr.* [2] 51, 258). — \*II, 292.
- 5) 2-Nitro-4,4'-Dimethyldiphenylamin. Sm. 85° (*B.* 15, 831). — II, 486; \*II, 266.
- 6) Benzyl-5-Nitro-2-Methylphenylamin. Sm. 124° (*B.* 35, 338 *C.* 1902 [1] 595; D.R.P. 128754 *C.* 1902 [1] 610; D.R.P. 141297 *C.* 1903 [1] 1163).
- 7) 2-Nitrobenzyl-2-Methylphenylamin. Sm. 96° (*B.* 25, 3582). — II, 518; \*II, 292.
- 8) 3-Nitrobenzyl-2-Methylphenylamin. Sm. 62° (*G.* 30 [2] 258). — \*II, 292.
- 9) 4-Nitrobenzyl-2-Methylphenylamin. Sm. 93° (*B.* 25, 3582). — II, 518.
- 10) 3-Nitrobenzyl-3-Methylphenylamin. Sm. 67° (*G.* 30 [2] 259). — \*II, 292.
- 11) 2-Nitrobenzyl-4-Methylphenylamin. Sm. 72°. HCl (*B.* 19, 1609). — II, 518.
- 12) 4-Nitrobenzyl-4-Methylphenylamin. Sm. 68° (*B.* 25, 3582). — II, 518.
- 13) Methylphenyl-2-Nitrobenzylamin (Methylphenylamido-2-Nitrophenylmethan). Sm. 72° (*B.* 28, 932). — \*II, 291.
- 14) Methylphenyl-3-Nitrobenzylamin. Sm. 51–52°. Pikrat (*J. pr.* [2] 76, 505 *C.* 1908 [1] 861).
- 15) 2-Oxybenzyl-4-Methylphenylnitrosamin. Sm. 74,5–75° (*A.* 313, 116). — \*II, 427.
- 16) Methyläther d. Phenyl-4-Oxybenzylnitrosamin. Sm. 104° (*A.* 241, 338; 315, 141). — II, 754.
- 17) Äthyläther d. 4-Oxydiphenylnitrosamin. Sm. 73–75° (*B.* 26, 696). — II, 717.
- 18) Äthyläther d. 4-Nitroso-4'-Nitrodiphenylamin. Sm. 150–155° (*B.* 26, 697). — II, 717.
- 19) Dibenzylnitrosohydroxylamin. Sm. 73–74° (*A.* 275, 136; *Ph. Ch.* 22, 373; 26, 60). — II, 534; \*II, 306.
- 20) 4'-Nitroso-2,3'-Dimethyldiphenylhydroxylamin + H<sub>2</sub>O. Sm. 110 bis 115° (*B.* 31, 1517). — \*II, 262.
- 21) Benzyläther d. Benzylnitrosohydroxylamin. Sm. 58–59° (*A.* 263, 218; *Ph. Ch.* 22, 373; 26, 60). — II, 534; \*II, 305.
- 22) Bisnitrosylbenzyl (Bisnitrosotoluol). Sm. 128–130° (*B.* 23, 1774; 30, 1896, 1969; *A.* 263, 210). — III, 45; \*III, 35.
- 23)  $\alpha$ -Phenyl- $\beta$ -[6-Oxy-3-Methylphenyl]harnstoff. Sm. 158–159° (*A.* 364, 175 *C.* 1909 [1] 919).
- 24)  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -Benzylharnstoff. Sm. 162° (163°) u. Zers. (*A.* 273, 28; *J. pr.* [2] 56, 75). — II, 533; \*II, 304.
- 25) s-Phenyl-2-Oxymethylphenylharnstoff. Sm. 191° (*B.* 22, 1670). — II, 1062.
- 26) s-Phenyl-2-Oxybenzylharnstoff. Sm. 155° (*B.* 23, 2746). — II, 743.
- 27) Methyläther d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenylharnstoff. Sm. 74° (*J. pr.* [2] 56, 85). — \*II, 245.
- 28) Methyläther d. 2-Oxy-s-Diphenylharnstoff. Sm. 144° (*Am.* 23, 40; *B.* 33, 204). — \*II, 391.
- 29) Benzyläther d.  $\alpha$ -Oxy- $\beta$ -Phenylharnstoff. Sm. 106° (*B.* 24, 384). — II, 532.
- 30) Benzyläther d. 4-Oxyphenylharnstoff. Sm. 174° (*B.* 34, 1945).
- 31) 1,2-Di[Acetylamido]naphtalin. Sm. 234° (*B.* 18, 801). — IV, 918.
- 32) 1,3-Di[Acetylamido]naphtalin. Sm. 263° (263–265°) (*B.* 28, 1953; *Soc.* 89, 1922 *C.* 1907 [1] 729). — IV, 921.
- 33) 1,4-Di[Acetylamido]naphtalin. Sm. 303–304° (*B.* 19, 334). — IV, 922.
- 34) 1,6-Di[Acetylamido]naphtalin. Sm. bei 257° (263,5°) (*B.* 25, 2080; *B.* 39, 3022 *C.* 1906 [2] 1432). — IV, 924.
- 35) 1,7-Di[Acetylamido]naphtalin. Sm. 213° (*B.* 25, 2083). — IV, 924.
- 36) 2,3-Di[Acetylamido]naphtalin. Sm. 247° (*B.* 27, 764). — IV, 925.
- 37) 2,6-Di[Acetylamido]naphtalin (*B.* 26, 3034). — IV, 925.
- 38) 1,5-Di[Methylamido]-9,10-Anthrachinon (D.R.P. 164293 *C.* 1905 [2] 1700).

- $C_{14}H_{14}O_2N_2$  39) 1,8-Di[Methylamido]-9,10-Anthrachinon (D.R.P. 164293 C. 1905 [2] 1700).
- 40) 6-[4-Methylphenyl]amido-4-Oximido-1-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 190° (B. 34, 4350 C. 1902 [1] 253). — \*III, 268.
- 41)  $\beta$ -[4-Amidophenyl]äther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -Phenyläthan (C. 1897 [1] 411).
- 42) 2-Methyläther d. Phenyl-2,4-Dioxybenzylidenhydrazin. Sm. 151 bis 152° (B. 24, 3653). — IV, 763.
- 43) 3-Methyläther d. Phenyl-3,4-Dioxybenzylidenhydrazin. Sm. 105° (B. 18, 1662; M. 23, 913). — IV, 763; \*IV, 496.
- 44) Monomethyläther d. Phenyl- $\beta$ -Dioxybenzylidenhydrazin. Sm. 137 bis 138° (C. 1908 [2] 159).
- 45)  $\alpha^2$ -Methyläther d.  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 93–94° (A. 365, 321 C. 1909 [1] 1866).
- 46)  $\alpha$ -Benzoyl- $\beta$ -(4-Oxy-3-Methylphenyl)hydrazin. Sm. 175° (A. 340, 104 C. 1905 [2] 322).
- 47)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,4-Dioxyphenyl]äthan (Resacetophenonphenylhydrazon). Sm. 158° (139°) (Am. 7, 276; Bl. [3] 6, 154). — IV, 772.
- 48) 4-Oxy-3-Phenylhydrazonmethyl-1-Oxymethylbenzol. Sm. 142° (B. 34, 2457). — \*IV, 497.
- 49) 2-Oxyphenyläther d.  $\alpha$ -Hydrazon- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 91° (Bl. [4] 5, 503 C. 1909 [2] 21).
- 50) 4-Methylbenzolzoorescin. Sm. 203–206° (G. 12, 223). — IV, 1447.
- 51) 2,4-Dioxy- $\beta$ -Dimethylazobenzol. Sm. 205–206° (B. 15, 28; 20, 1579). — IV, 1445.
- 52) 3,3'-Di[Oxymethyl]azobenzol. Sm. 106° (C. r. 141, 595 C. 1905 [2] 1534).
- 53) 4,4'-Di[Oxymethyl]azobenzol (C. r. 141, 595 C. 1905 [2] 1534).
- 54) 2'-Methyläther d. 5,2'-Dioxy-2-Methylazobenzol? Sm. 161° (J. r. 17, 369). — IV, 1423.
- 55) 3'-Methyläther d. 3,4'-Dioxy-2-Methylazobenzol. Sm. 85° (C. 1908 [1] 128).
- 56) 5-Methyläther d. 5,6-Dioxy-3-Methylazobenzol. Sm. 112° (A. 365, 298 C. 1909 [1] 1864).
- 57) 4'-Methyläther d. 6,4'-Dioxy-3-Methylazobenzol. Sm. 94–95° (A. 365, 305 C. 1909 [1] 1865).
- 58) 2-Methyläther d. 2,2'-Dioxy- $\beta$ -Methylazobenzol. Sm. 68° (J. r. 17, 370). — IV, 1423.
- 59) Dimethyläther d. 2,4-Dioxyazobenzol. Sm. 92° (B. 22, 2375). — IV, 1442.
- 60) Dimethyläther d. 2,6-Dioxyazobenzol. Sm. 96–97° (B. 22, 2377). — IV, 1441.
- 61) Dimethyläther d. 3,4-Dioxyazobenzol. Sm. 44,5–45° (53–54°) (B. 29, 2686; C. 1908 [1] 23, 127). — IV, 1440.
- 62) Dimethyläther d. 2,2'-Dioxyazobenzol. Sm. 141° (153°) (J. r. 17, 369; A. 320, 131; D.R.P. 100234; J. pr. [2] 59, 207). — IV, 1405; \*IV, 1032.
- 63) Dimethyläther d. 3,3'-Dioxyazobenzol. Sm. 73–74° (B. 41, 865 C. 1908 [1] 1621).
- 64) Dimethyläther d. 4,4'-Dioxyazobenzol. Sm. 160–162°; Sd. oberhalb 315° (B. 36, 3162 C. 1903 [2] 947; B. 36, 3876 C. 1904 [1] 23; B. 40, 1583 C. 1907 [1] 1687).
- 65) Monoäthyläther d. 2,4-Dioxyazobenzol. Sm. 87 (88°) (B. 20, 1123; Am. 26, 162). — IV, 1442; \*IV, 1049.
- 66) Monoäthyläther d. 2,6-Dioxyazobenzol. Sm. 150° (B. 20, 1146). — IV, 1441.
- 67) 2-Äthyläther d. 2,4'-Dioxyazobenzol. Sm. 131° (128–129°). HCl (A. 287, 213; B. 31, 2117; 33, 1309; C. 1897 [2] 549). — IV, 1406; \*IV, 1033.
- 68) 3-Äthyläther d. 3,4'-Dioxyazobenzol. Sm. 105–106° (107°). +  $\frac{1}{2}$  H<sub>2</sub>O (Sm. 89–91°). HCl (A. 287, 215; B. 31, 2118). — IV, 1407.
- 69) Monoäthyläther d. 4,4'-Dioxyazobenzol. Sm. 125°. + H<sub>2</sub>O (Sm. 104 bis 109°). HCl (C. 1897 [2] 549; A. 287, 215; B. 31, 2119). — IV, 1406.
- 70) 2,4,2',4'-Tetramethylpyrokoll. Sm. 272–272,5° (B. 21, 2877). — IV, 85.

- $C_{14}H_{14}O_2N_2$  71) Glyoxalbenzidin (B. 11, 832). — IV, 967.
- 72) 6-Oxy-4-Methyl-5- $[\beta$ -Ketopropyl]-2-Phenyl-1,3-Diazin. Sm. 225° (B. 22, 2621). — IV, 991.
- 73) 4'-Amido-2-Methyldiphenylamin-2'-Carbonsäure. Zers. oberhalb 200°. HCl (A. 279, 276). — II, 1274.
- 74) 2'-Amido-2-Methyldiphenylamin-4'-Carbonsäure. Sm. 167° (169°) (B. 23, 3452; A. 332, 85 C. 1904 [1] 1569). — II, 1275.
- 75) 4'-Amido-4-Methyldiphenylamin-2'-Carbonsäure. Sm. 220°. HCl (A. 279, 271). — II, 1274.
- 76) 2'-Amido-4-Methyldiphenylamin-4'-Carbonsäure. Sm. 185,5° (183°) (B. 23, 3453; A. 332, 88 C. 1904 [1] 1569). — II, 1275.
- 77) 2,2'-Diamido-4-Methylbiphenyl-4'-Carbonsäure. Sm. 169—171°. 2HCl (B. 42, 650 C. 1909 [1] 1012).
- 78) Diamidomethylbiphenylcarbonsäure. Sm. 183° (D.R.P. 145063 C. 1903 [2] 973).
- 79) lab. 4,4'-Diamidodiphenylelessigsäure (B. 41, 3026 C. 1908 [2] 1344).
- 80) stab. 4,4'-Diamidodiphenylelessigsäure. Zers. bei 110—120°.  $+ C_2H_6O$  (B. 41, 3022 C. 1908 [2] 1344; B. 41, 3031 C. 1908 [2] 1345).
- 81) Di[Phenylamido]essigsäure. Sm. 88—93° (B. 11, 1560; B. 41, 3031 C. 1908 [2] 1345). — II, 431.
- 82)  $\beta$ -Phenylhydrazidophenylelessigsäure. Sm. 158° u. Zers. (A. 227, 345). — IV, 741.
- 83) 2-Methyl-s-Diphenylhydrazin-2'-Carbonsäure. Sm. 136° (D.R.P. 145063 C. 1903 [2] 973).
- 84) 4-Methyl-s-Diphenylhydrazin-2'-Carbonsäure. Sm. 144° (B. 25, 3171). — IV, 1507.
- 85)  $\alpha$ -Phenyl- $\beta$ -Benzylhydrazin- $\alpha^2$ -Carbonsäure ( $\beta$ -2-Benzylhydrazidobenzol-1-Carbonsäure). Sm. 134° u. Zers. (B. 35, 2316 C. 1902 [2] 452). — \*IV, 1094.
- 86) 4-Phenylamido-2,6-Dimethylpyridin-3-Carbonsäure  $+ H_2O$ . Sm. 244°. Ag (A. 366, 354 C. 1909 [2] 285).
- 87) Säure (aus 4-Methylazobenzol-2'-Carbonsäure). Sm. 198°. HCl (B. 25, 3171). — IV, 1507.
- 88) Methylester d. 4,4'-Diamidobiphenyl-3-Carbonsäure. Sm. 153 bis 154° (A. 367, 328 C. 1909 [2] 1225).
- 89) Methylester d. s-Diphenylhydrazin-4-Carbonsäure. Sm. 114—115° (A. 303, 389). — IV, 1507.
- 90) Phenylester d.  $\beta$ -Phenylhydrazidoessigsäure. Sm. 93—94° (Bl. [3] 21, 965). — \*IV, 476.
- 91) Phenylester d.  $\beta$ -3-Methylphenylhydrazidoameisensäure. Sm. 134° (D.R.P. 162823 C. 1905 [2] 1060).
- 92) 2-Amidophenylester d. Methylphenylamidoameisensäure. Sm. 103° (B. 24, 2110). — II, 709.
- 93) 3-Amidophenylester d. Methylphenylamidoameisensäure. Sm. 94° (B. 24, 2110). — II, 715.
- 94) 4-Amidophenylester d. Methylphenylamidoameisensäure. Sm. 104° (B. 24, 2110). — II, 716.
- 95) Dibenzylester d. Untersalpetrigen Säure. Sm. 43—45° u. Zers. (A. 292, 329). — \*II, 637.
- 96) Acetat d. 4-Oxy-s-Diphenylhydrazin. Sm. 114—115° (B. 24, 2309; A. 303, 341). — IV, 1504.
- 97) Phenylamidoformiat d. 3-Amido-4-Oxy-1-Methylbenzol. Sm. 169° (A. 364, 176 C. 1909 [1] 919).
- 98) Amid d.  $\alpha$ -Amido-2-Oxydiphenylelessigsäure. Sm. 150—151° u. Zers. (B. 31, 2815). — \*II, 996.
- 99) Amid d.  $\alpha$ -[4-Oxyphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 142° (B. 39, 999 C. 1906 [1] 1342).
- 100) Phenylamid d. Oxyessig-4-Amidophenyläthersäure. Sm. 104—105° (J. pr. [2] 55, 116). — \*II, 407.
- 101) Phenylamid d. 2-Keto-1-Cyan-1-Methyl-R-Pentamethylen-3-Carbonsäure. Sm. 163° (Soc. 95, 703 C. 1909 [2] 16).
- 102) 5-Amido-2-Oxybenzylamid d. Benzolcarbonsäure. Sm. 186°. (HCl,  $SnCl_2$ ) (A. 343, 248 C. 1906 [1] 924; D.R.P. 167572 C. 1906 [1] 1069).



- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** 103) **3-Amido-4-Oxybenzylamid d. Benzolcarbonsäure.** HCl (A. 343, 239 C. 1906 [1] 924).
- 104) **Mono-2-Naphtyldiamid d. Bernsteinsäure.** Sm. 219° (A. 292, 190). — \*II, 339.
- 105) **Hydrazid d. 2-Oxydiphenylessigsäure.** Sm. 220° u. Zers. (B. 33, 767). — \*II, 995.
- 106) **Phenylhydrazid d. 1-Oxymethylbenzol-2-Carbonsäure.** Sm. 173 bis 174° (B. 19, 1707, 2132; 20, 401). — IV, 694.
- 107) **Phenylhydrazid d. 4-Oxybenzylmethyläther-1-Carbonsäure.** Sm. 179° (R. 16, 329; G. 38 [1] 531 C. 1908 [2] 407; G. 39 [2] 323 C. 1909 [2] 1802). — IV, 747; \*IV, 454.
- 108) **Phenylhydrazid d. α-Oxyphenylessigsäure.** Sm. 182° (B. 22, 2928). — IV, 693.
- 109) **Phenylhydrazid d. 2-Oxyphenylessigsäure.** Sm. 180° (A. 313, 87). — \*IV, 455.
- 110) **Phenylhydrazid d. Oxyessigphenyläthersäure.** Sm. 180° (C. 1898 [1] 988).
- 111) **Verbindung (aus 2-Amido-3-Oxy-1-Methylbenzol).** Sm. 176°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (B. 39, 137 C. 1906 [1] 757).
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>** 1) αβ-Di[Phenylnitrosamido]äthan. Sm. 157° (B. 12, 1794; 31, 3256; Soc. 71, 423). — II, 343; \*II, 158.
- 2) αβ-Di[4-Nitrosophenylamido]äthan. 2HCl (Soc. 71, 423). — \*II, 158.
- 3) β-[2-Methylphenyl]nitrosamido-α-Phenylharnstoff. Sm. 116° (B. 36, 1371 C. 1903 [1] 1343). — \*IV, 530.
- 4) α-Ureido-αβ-Diphenylharnstoff. Sm. 210° u. Zers. (C. 1904 [2] 1028).
- 5) 4,4'-Diureidobiphenyl (C. 1896 [1] 489; B. 11, 833). — IV, 965.
- 6) 1,4,5,8-Tetraamido-9,10-Anthrachinon (D. R. P. 156803 C. 1905 [1] 314).
- 7) αβ-Dioximido-αβ-Di[Phenylamido]äthan (Oxanilidodioxim). Sm. 215° u. Zers. (R. 12, 294; 26, 1406). — II, 409.
- 8) N-Di[4-Amidophenyl]glyoxim. Sm. 208° (B. 31, 295). — \*IV, 396.
- 9) 2-Methylamido-1-[4-Nitrophenylhydrazon]methylbenzol. Sm. 245 bis 246° (B. 37, 984 C. 1904 [1] 1079).
- 10) αβ-Dinitroso-αβ-Dibenzylhydrazin. Sm. 35—40° (J. pr. [2] 62, 94). — \*IV, 540.
- 11) αβ-Dioximido-β-[β-Phenylhydrazido]-α-Phenyläthan. Sm. 173° (A. 358, 63 C. 1908 [1] 650).
- 12) 3-Nitro-1-[Methyl-4-Methylphenylamido]diazobenzol. Sm. 101 bis 102° (Soc. 57, 793). — IV, 1571.
- 13) 4-Nitro-4'-[P]-Äthylamidoazobenzol. Sm. 114—115° (B. 28, 845, 1894). — IV, 1358.
- 14) 2[oder 3]-Nitro-4-Dimethylamidoazobenzol. Sm. 198° (B. 20, 2993). — IV, 1358.
- 15) 3-Nitro-4'-Dimethylamidoazobenzol. Sm. 159—160° (157—158°) (B. 19, 1954; Soc. 45, 120). — IV, 1358.
- 16) 4-Nitro-4'-Dimethylamidoazobenzol. Sm. 229—230°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 20, 2994; 28, 842; C. 1903 [1] 399; Soc. 45, 107). — IV, 1358; \*IV, 1012.
- 17) 4'-Nitro-4-Methylamido-3-Methylazobenzol. Sm. 193—194°. HCl (C. 1903 [1] 400). — \*IV, 1023.
- 18) 4'-Nitro-4-Amido-3,5-Dimethylazobenzol. Sm. 174—177° (M. 19, 641). — \*IV, 1025.
- 19) **Azoverbindung (aus 4-Nitrodiazobenzolchlorid u. 4-Amido-1,3-Dimethylbenzol).** Sm. 141°. (2HCl, PtCl<sub>4</sub>) (Soc. 43, 428). — IV, 1388.
- 20) **2,6-Diketo-1,3-Dimethyl-7-Benzylpurin.** Sm. 158°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (C. 1906 [1] 1242; Ar. 245, 324 C. 1907 [2] 1238).
- 21) **Dimethyläther d. 3,8-Diamido-2,9-Dioxydiphenazon.** Sm. 244°. 2HCl (B. 37, 35 C. 1904 [1] 524).
- 22) **4,6-Diketo-2,3,7,8-Tetramethyl-3,4,6,7-Tetrahydro-1,3,7,9-Napht-tetrazin.** Sm. oberhalb 350° (C. 1909 [2] 2013).
- 23) α<sup>1</sup>-Imido-α<sup>2</sup>-[4-Amidophenyl]amido-α<sup>3</sup>-Phenylamidomethan-α<sup>4</sup>-2-Carbonsäure (4-Amidophenylbenzglykocycin). 2HCl (B. 16, 338). — IV, 595.

- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>** 24) Methylester d. 2',4'-Diamidoazobenzol-2-Carbonsäure. Sm. 138°. HCl + H<sub>2</sub>O (*J. pr.* [2] 63, 293). — \*IV, 1055.
- 25) Äthylester d.  $\alpha$ -Phenylhydrazon- $\beta\gamma$ -Dicyanbuttersäure. Sm. 150 bis 151° (*B.* 41, 3765 *C.* 1908 [2] 1858).
- 26) Phenylamid d. 4-Oximido-2-Methyl-1,4-Dihydrobenzol-1-Hydrazon-carbonsäure. Zers. bei 225° (*A.* 343, 196 *C.* 1906 [1] 837).
- 27) Phenylamid d. 4-Oximido-3-Methyl-1,4-Dihydrobenzol-1-Hydrazon-carbonsäure. Zers. bei 228—229° (*A.* 343, 197 *C.* 1906 [1] 837).
- 28) Phenylamid d. Hydrazin- $\alpha\beta$ -Dicarbonsäure. Sm. 245° (*J. pr.* [2] 58, 223). — \*II, 191.
- 29) Di[Phenylhydrazid] d. Oxalsäure. Sm. 277—278° (265—266°; 280°) (*A.* 190, 131; *B.* 33, 2593; *B.* 35, 3688 *C.* 1902 [2] 1451; *B.* 39, 3979 *C.* 1907 [1] 156). — IV, 701; \*IV, 459.
- 30) Cinnamylidenhydrazid d. 5-Keto-4,5-Dihydropyrazol-3-Methyl-carbonsäure. Sm. 145° u. Zers. (*J. pr.* [2] 64, 347). — \*IV, 351.
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>N<sub>6</sub>** C 56,4 — H 4,5 — O 10,7 — N 28,2 — M. G. 298.
- 1) 4-[ $\beta$ -Phenylsemicarbazon]-1-Semicarbazon-1,4-Dihydrobenzol. Zers. bei 242° (*A.* 334, 171 *C.* 1904 [2] 834).
- 2) 2,4-Diureidoazobenzol. Sm. 238—240° u. Zers. (*C.* 1908 [2] 1589).
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>Br<sub>2</sub>** 1) Äthylester d. Dibrombenznorcarencarbonsäure. Sm. 95—96° (*B.* 36, 3505 *C.* 1903 [2] 1273).
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>S** 1) Di[6-Oxy-3-Methylphenyl]sulfid (*B.* 20, 676). — II, 959.
- 2) Di[p-Oxy-p-Methylphenyl]sulfid (aus o-Kresol). Sm. 123—124° (*G.* 17, 93). — II, 966.
- 3) Di[p-Oxy-p-Methylphenyl]sulfid (aus p-Kresol). Sm. 101—103° (*C.* 1907 [2] 1408).
- 4) Di[p-Oxy-p-Methylphenyl]sulfid (aus p-Kresol). Sm. 117—118° (*G.* 17, 93). — II, 967.
- 5) Dimethyläther d. 2,2'-Dioxydiphenylsulfid. Sm. 73°; Sd. 252—253° (*B.* 39, 1349 *C.* 1906 [1] 1788).
- 6) Dimethyläther d. 3,3'-Dioxydiphenylsulfid. Sd. 214—215°<sub>10</sub> (*B.* 39, 3597 *C.* 1907 [1] 30).
- 7) Dimethyläther d. 4,4'-Dioxydiphenylsulfid. Sm. 46°; Sd. 215°<sub>12</sub> (*B.* 27, 2540; *B.* 39, 3596 *C.* 1907 [1] 30). — \*II, 575.
- 8) 4-Benzyläther d. 4-Merkapto-2,5-Dioxy-1-Methylbenzol. Sm. 113 bis 114,5° (*A.* 336, 164 *C.* 1904 [2] 1300).
- 9)  $\alpha$ -Phenylsulfon- $\alpha$ -Phenyläthan. Sm. 115° (*B.* 38, 652 *C.* 1905 [1] 739).
- 10)  $\beta$ -Phenylsulfon- $\alpha$ -Phenyläthan. Sm. 58° (*B.* 38, 651 *C.* 1905 [1] 739).
- 11) Dibenzylsulfon. Sm. 150° (151°) (*A.* 165, 375; *B.* 13, 1277, 1284; *B.* 36, 545 *C.* 1903 [1] 707; *B.* 39, 3314 *C.* 1906 [2] 1603; *B.* 39, 3319 *C.* 1906 [2] 1604; *B.* 41, 3418 *C.* 1908 [2] 1809). — II, 1055.
- 12) Benzyl-2-Methylphenylsulfon. Fl. (*J. pr.* [2] 54, 526). — \*II, 639.
- 13) Benzyl-4-Methylphenylsulfon. Sm. 144—145° (146—147°) (*B.* 13, 1278; *B.* 41, 3410 *C.* 1908 [2] 1809; *B.* 42, 483 *C.* 1909 [1] 740; *C.* 1909 [2] 1800; *B.* 42, 3821 *C.* 1909 [2] 1860). — II, 1055.
- 14) 2,4-Dimethyldiphenylsulfon? Sm. 80° (*B.* 11, 2069). — II, 827.
- 15) 2,2'-Dimethyldiphenylsulfon. Sm. 134—135° (*G.* 20, 31). — II, 820.
- 16) 4,4'-Dimethyldiphenylsulfon. Sm. 158°; Sd. 404,6—405,2°<sub>714</sub> (*A.* 44, 306; 154, 193; *B.* 10, 584; 11, 2068; 12, 1177; 19, 2426). — II, 825.
- 17) Verbindung (aus Merkaptomethylbenzol u. 2-Methyl-1,4-Benzochinon). Sm. 101—103,5° (*A.* 336, 162 *C.* 1904 [2] 1300).
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub>** 1) Di[2-Oxybenzyl]disulfid. Sm. 103,5° (*A.* 345, 322 *C.* 1906 [1] 1695).
- 2) Dimethyläther d. Di[2-Oxyphenyl]disulfid. Sm. 119—120° (*B.* 32, 1148; *M.* 4, 168). — II, 913; \*II, 562.
- 3) Dimethyläther d. Di[4-Oxyphenyl]disulfid. Sm. 44—45° (*B.* 32, 1148; *Bl.* [3] 33, 837 *C.* 1905 [2] 618; *C.* 1908 [2] 1350). — \*II, 574.
- 4) Dibenzyldisulfoxyd. Sm. 108° (109°) (*B.* 39, 3316 *C.* 1906 [2] 1603; *B.* 41, 2839 *C.* 1908 [2] 1348; *Soc.* 95, 352 *C.* 1909 [1] 1651).
- 5) Di[2-Methylphenyl]disulfoxyd. Sm. 95—96° (*J. pr.* [2] 54, 518). — \*II, 483.
- 6) Di[4-Methylphenyl]disulfoxyd. Sm. 76° (77,5°) (*A.* 136, 83; 145, 13; 149, 101; *J.* 1882, 1013; *B.* 15, 131; 19, 1240; 20, 2091; 34, 239; *J. pr.* [2] 56, 214). — II, 826; \*II, 487.

- $C_{14}H_{14}O_2S_2$  7) 4-Methylphenylester d. 1-Methylbenzol-4-Thiolsulfonsäure (1-Methylbenzol-4-Disulfoxyd). Sm. 78° (*Am.* 25, 197).
- $C_{14}H_{14}O_2S_3$  1) Benzaldehydhydrotrisulfid. Zers. bei 28° (*C.* 1908 [2] 588).
- $C_{14}H_{14}O_2As_2$  1) 4,4'-Dioxy-3,3'-Dimethylarsenobenzol (D.R.P. 206456 *C.* 1909 [1] 965).  
2) Dimethyläther d. 4,4'-Dioxyarsenobenzol (Arsenobenzol). Sm. 200° u. Zers. (*A.* 320, 299 *C.* 1902 [1] 920). — \*IV, 1187.
- $C_{14}H_{14}O_2Hg$  1) Dimethyläther d. Quecksilberdi[2-Oxyphenyl]. Sm. 108° (*B.* 27, 256; *B.* 35, 2853 *C.* 1902 [2] 1037). — IV, 1708; \*IV, 1213.  
2) Dimethyläther d. Quecksilberdi[4-Oxyphenyl]. Sm. 202° (*B.* 23, 2344). — IV, 1709.  
3) Butyrat d. Quecksilber-1-Naphtylhydroxyd. Sm. 200° (*A.* 154, 193). — IV, 1712.
- $C_{14}H_{14}O_2Se$  1) Dimethyläther d. Di[p-Oxyphenyl]selenid. Sm. 48° (*B.* 28, 610). — \*II, 576.
- $C_{14}H_{14}O_2Te$  1) Dimethyläther d. Di[4-Oxyphenyl]tellurid. Sm. 50° (*A.* 315, 10).  
 $C_{14}H_{14}O_3N_2$  1) C 65,1 — H 5,4 — O 18,6 — N 10,9 — M. G. 258.  
2)  $\alpha$ -Oxy-4-Nitro-4'-Methylamidodiphenylmethan. Sm. 108° (D.R.P. 45806). — \*II, 658.  
3) 4-Methoxyphenyl-2-Oxybenzylnitrosamin. Sm. 91° (*A.* 325, 249 *C.* 1903 [1] 632).  
4) Dimethyläther d. Di[4-Oxyphenyl]nitrosamin. Sm. 79° (*B.* 41, 3503 *C.* 1908 [2] 1823).  
5) Methyläther d. 2-Oxyphenyl-2-Nitrobenzylamin. Sm. 80°. HCl (*J. pr.* [2] 52, 401; [2] 54, 277). — \*II, 387.  
6) Methyläther d. 4-Oxyphenyl-2-Nitrobenzylamin. Sm. 73°. HCl (*J. pr.* [2] 54, 283). — \*II, 400.  
7) Methyläther d. 2-Oxyphenyl-4-Nitrobenzylamin. Sm. 95° (*B.* 32, 1253). — \*II, 387.  
8) Äthyläther d. 6-Nitro-3-Oxydiphenylamin. Sm. 106—106,5° (*B.* 26, 684). — II, 718.  
9) Äthyläther d. 2'-Nitro-4-Oxydiphenylamin. Sm. 84° (*B.* 26, 683). — II, 718.  
10) Benzyl-4-Nitrobenzylhydroxylamin. Sm. 125,5—126,5°. HCl, Br (*A.* 257, 245; 263, 194). — II, 535.  
11) Benzyläther d. 4-Nitrobenzylhydroxylamin. Sm. 49°.  $H_2SO_4$  (*A.* 257, 241). — II, 535.  
12) 4-Nitro-1-Acetyläthylamidonaphtalin. Sm. 112—113° (*Soc.* 89, 1435 *C.* 1906 [2] 1614).  
13) 4,8-Di[Acetyl-amido]-1-Oxynaphtalin +  $H_2O$ . Sm. 247° (*B.* 39, 3333 *C.* 1906 [2] 1616).  
14) 1,4-Di[Acetyl-amido]-2-Oxynaphtalin. Sm. 250—260° u. Zers. (*B.* 29, 1418). — \*II, 526.  
15) 1,6-Di[Acetyl-amido]-2-Oxynaphtalin. Sm. 235° (*B.* 31, 2413). — \*II, 526.  
16) 1,7-Di[Acetyl-amido]-2-Oxynaphtalin. Sm. 226° (*B.* 33, 1540). — \*II, 526.  
17)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,3,4-Trioxyphe-nyl]äthan. Sm. 146° (*Bl.* [3] 6, 158). — IV, 772.  
18) 2,2'-Di[Oxymethyl]azoxybenzol. Sm. 123° (*B.* 36, 837 *C.* 1903 [1] 1028). — \*IV, 1002.  
19) 3,3'-Di[Oxymethyl]azoxybenzol. Sm. 86° (*C. r.* 141, 594 *C.* 1905 [2] 1534).  
20) Dimethyläther d. 2,2'-Dioxyazoxybenzol. Sm. 81° (*J. pr.* [2] 59, 206; *J. pr.* [2] 67, 150 *C.* 1903 [1] 870). — \*IV, 1001.  
21) Dimethyläther d. 3,3'-Dioxyazoxybenzol. Sm. 51° (*B.* 41, 865 *C.* 1908 [1] 1620).  
22) Dimethyläther d. 4,4'-Dioxyazoxybenzol. Sm. 144—146° (118,5°) (*B.* 23, 1738; *Ph. Ch.* 27, 167; 28, 629; 29, 491; 32, 58; *B.* 36, 3159 *C.* 1903 [2] 947; *B.* 36, 3874 *C.* 1904 [1] 23; *B.* 37, 45 *C.* 1904 [1] 654; *B.* 37, 3421 *C.* 1904 [2] 1294). — IV, 1342; \*IV, 1001.  
23) 3-Äthyläther d. 3,4'-Dioxy-4-Diazobiphenyl. Salze, siehe (*Soc.* 87, 7 *C.* 1905 [1] 743).  
24) 2,4,6-Trioxo-3,5-Dimethylazobenzol. Sm. 200° (*A.* 318, 308). — \*IV, 1051.



- $C_{14}H_{14}O_3N_2$  24) 4'-Äthyläther d. 2,4,4'-Trioxyazobenzol? Sm. 165—167° (B. 17, 883). — IV, 1446.
- 25)  $\alpha$ -Oxy- $\alpha$ -[3-Nitrophenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthan +  $H_2O$ . Sm. 82—83° (96° wasserfrei). HCl, (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), Pikrat (B. 36, 1686 C. 1903 [2] 47). — \*IV, 227.
- 26)  $\alpha$ -Oxy- $\alpha$ -[4-Triphenyl]- $\beta$ -[4-Methyl-2-Pyridyl]äthan. Sm. 168 bis 169°. HCl, Pikrat +  $H_2O$  (B. 35, 2791 C. 1902 [2] 994). — \*IV, 227.
- 27) 4-Amidodiphenylamin-4'-Oxyessigsäure. Sm. 225° (B. 34, 3939 C. 1902 [1] 117). — \*IV, 1035.
- 28) 1- $\alpha$ -[ $\beta$ -1-Naphtylureido]propionsäure. Sm. 202° (C. 1907 [2] 1157).
- 29) r- $\alpha$ -[ $\beta$ -1-Naphtylureido]propionsäure. Sm. 198° (B. 38, 2363 C. 1905 [2] 460).
- 30) s-Diphenylhydrazin-4-Oxyessigsäure. Sm. 239°. Ba (B. 34, 3940 C. 1902 [1] 117). — \*IV, 1093.
- 31) 6-Oxy-2-[4-Isopropylphenyl]-1,3-Diazin-4-Carbonsäure. Sm. 266° u. Zers. (B. 30, 2009). — IV, 990.
- 32) 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin-5-Äthyl- $\beta$ -Carbonsäure. Sm. 215° (B. 22, 2620). — IV, 990.
- 33) 7-Acetylamido-2,8-Dimethylechinolin-5-Carbonsäure. Ag (A. 274, 363). — IV, 950.
- 34) Laktone d.  $\zeta$ -Phenylhydrazon- $\beta$ -Oxy- $\delta$ -Keto- $\beta$ -Hepten- $\epsilon$ -Carbonsäure (Dehydracetsäurephenylhydrazon). Sm. 207° u. Zers. (202°) (Soc. 51, 494; B. 41, 4166 C. 1909 [1] 157). — IV, 709.
- 35) Äthylester d.  $\alpha$ -[1-Naphtyl]harnstoff- $\beta$ -Carbonsäure. Sm. 170 bis 170,5° (Soc. 79, 845).
- 36) Äthylester d.  $\alpha$ -[2-Naphtyl]harnstoff- $\beta$ -Carbonsäure. Sm. 140° (Soc. 79, 846).
- 37) Äthylester d. 5-Acetyl-4-Phenylpyrazol-3-Carbonsäure. Sm. 113° (A. 325, 184 C. 1903 [1] 646). — \*IV, 628.
- 38) Äthylester d. 5-Benzoyl-4-Methylpyrazol-3-Carbonsäure. Sm. 119 bis 120° (A. 325, 187 C. 1903 [1] 647). — \*IV, 628.
- 39) Äthylester d. 6-Oxy-2-Phenyl-1,3-Diazin-4-Methylcarbonsäure. Sm. 155° (B. 28, 480). — IV, 988.
- 40) Äthylester d. 3-Keto-4-Methyl-2-Phenyl-2,3-Dihydro-1,2-Diazin-6-Carbonsäure. Sm. 125° (B. 22, 284 C. 1903 [2] 108). — \*IV, 528.
- 41) Acetat d. 6-Oxy-4-Methyl-2-[ $\alpha$ -Oxybenzyl]-1,3-Diazin. Sm. 180°. Ag, HCl, Pikrat (PINNER, Imidoäther 283). — IV, 972.
- 42) Äthylcarbonat d. 1-Amidooximidomethylnaphtalin (Äthylester d. 1-Naphtenylamidoximkohlsäure). Sm. 111° (B. 22, 2458). — II, 1446.
- 43) Äthylcarbonat d. 2-Amidooximidomethylnaphtalin (Äthylester d. 2-Naphtenylamidoximkohlsäure). Sm. 121° (B. 22, 2453). — II, 1455.
- 44) 3-Phenylamid d. 2,4-Dimethylpyrrol-3,5-Dicarbonsäure (A. 236, 327). — IV, 93.
- 45) 4-Oxyphenylamid d. 4-Oxyphenylamidoessigsäure. Sm. 190° (B. 41, 1369 C. 1908 [1] 2101).
- 46) Phenylhydrazid d. Oxyessig-2-Oxyphenyläthersäure. Sm. 193° u. Zers. (191°) (Bl. [3] 21, 103; J. pr. [2] 61, 361). — \*IV, 451.
- 47) 1-Naphtylhydrazid d. Oxalsäuremonoäthylester. Sm. 163° (B. 24, 4192). — IV, 927.
- 48) 2-Naphtylhydrazid d. Oxalsäuremonoäthylester. Sm. 159° (B. 24, 4182). — IV, 930.
- $C_{14}H_{14}O_3N_4$  C 58,7 — H 4,9 — O 16,8 — N 19,6 — M. G. 286.
- 1) 4-Nitro-2-Amido-4'-Acetylamidodiphenylamin. Sm. 254—255° (228°?) (B. 31, 3084; D.R.P. 87337). — \*IV, 821.
- 2) 2,6,8-Triketo-1,3,7-Trimethyl-9-Phenylpurin (1,3,7-Trimethyl-9-Phenylharnsäure). Sm. 258—259° (B. 33, 1708). — \*IV, 929.
- 3) Phenyläther d. 8-Oxy-2,6-Diketo-1,3,7-Trimethylpurin (Ph. d. Oxykaffein). Sm. 143°. — III, 961.
- 4) 1,9-Dimethyläther d. 7,8-Diamido-1,2,9-Trioxypheazin (B. 39, 3341 C. 1906 [2] 1606).
- 5) Hydrocyannitroharmalin (A. 72, 307). — III, 885.
- 6) Methylester d. 2-Phenyl-1,2,3,4-Tetrazin-6-Dimethylmalonsäure. Sm. 88—89° (Soc. 83, 1254 C. 1903 [2] 1422).

- $C_{14}H_{14}O_8N_6$  C 53,5 — H 4,5 — O 15,3 — N 26,7 — M. G. 314.  
 1) 8-[4-Oxyphenyl]azo-2,6-Diketo-1,3,7-Trimethylpurin (Kaffein-p-Azophenol) (*Am.* 23, 59). — \*IV, 1087.  
 2) 8-Phenylnitrosamido-2,6-Diketo-1,3,7-Trimethylpurin (Phenylnitrosamidokaffein). Zers. bei 225° (*B.* 27, 3091). — III, 960.
- $C_{14}H_{14}O_8Br_4$  1)  $\alpha\beta\gamma\delta$ -Tetrabrom- $\epsilon$ -Keto- $\alpha$ -Phenylheptan- $\eta$ -Carbonsäure. Sm. 203° (*B.* 38, 1119 *C.* 1905 [1] 1241).
- $C_{14}H_{14}O_8S$  1) Di[p-Oxy-p-Methylphenyl]sulfoxyd (aus p-Kresol). Sm. 191° (*C.* 1907 [2] 1407).  
 2) Dimethyläther d. Di[4-Oxyphenyl]sulfoxyd (Thionylanisol). Sm. 96° (93—94°) (*B.* 27, 2542; *Soc.* 93, 755 *C.* 1908 [2] 238; *B.* 41, 3320 *C.* 1908 [2] 1681). — \*II, 575.  
 3) Äthylester d. Biphenylsulfonsäure. Sm. 73—74° (*B.* 13, 388). — II, 225.  
 4) 2-Methylphenylester d. 1-Methylbenzol-2-Sulfonsäure. Sm. 50 bis 51° (D.R.P. 162322 *C.* 1905 [2] 727).  
 5) 2-Methylphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 54 bis 55° (52°) (*B.* 35, 1443 *C.* 1902 [1] 1201; D.R.P. 162322 *C.* 1905 [2] 727).  
 6) 3-Methylphenylester d. 1-Methylbenzol-2-Sulfonsäure. Sm. 60° (D.R.P. 162322 *C.* 1905 [2] 727).  
 7) 3-Methylphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 51° (48°) (*B.* 35, 1444 *C.* 1902 [1] 1201; D.R.P. 162322 *C.* 1905 [2] 727).  
 8) 4-Methylphenylester d. 1-Methylbenzol-2-Sulfonsäure. Sm. 70 bis 71° (D.R.P. 162322 *C.* 1905 [2] 727).  
 9) 4-Methylphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 69 bis 70° (67—68°) (*B.* 35, 1444 *C.* 1902 [1] 1201; D.R.P. 162322 *C.* 1905 [2] 727).  
 10) 2,5-Dimethylphenylester d. Benzolsulfonsäure. Sm. 51—52° (*C.* 1900 [1] 543). — \*II, 446.  
 11) 3,4-Dimethylphenylester d. Benzolsulfonsäure. Sm. 72—80° (*C.* 1900 [1] 543). — \*II, 440.
- $C_{14}H_{14}O_8S_2$  1) Anhydrid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 75° (*B.* 41, 3326 *C.* 1908 [2] 1682).
- $C_{14}H_{14}O_8Hg$  1) Dimethyläther d. Di[4-Oxyphenylquecksilber]oxyd. Sm. 177° (*B.* 23, 2345). — IV, 1709.
- $C_{14}H_{14}O_8Si$  1) Anhydrid d. 4-Methylphenylsiliconsäure (*A.* 173, 166). — IV, 1702.
- $C_{14}H_{14}O_4N_2$  C 61,3 — H 5,1 — O 23,4 — N 10,2 — M. G. 274.  
 1) Äthyläther d. 3-Nitro-4-Acetylamido-1-Oxynaphtalin. Sm. 221° (*J. pr.* [2] 45, 550). — II, 866.  
 2)  $\beta$ -[p-Naphtyl]ureido- $\alpha$ -Oxypropionsäure. Sm. 181° (*C.* 1907 [1] 1029).  
 3)  $r$ - $\alpha$ -[ $\beta$ -1-Naphtylureido]- $\beta$ -Oxypropionsäure. Sm. 192° (*C.* 1907 [2] 1157).  
 4) Phenylhydrazonmethronsäure. Sm. 211—212° u. Zers. (*A.* 250, 188). — IV, 715.  
 5) 4,5-Dicyan-1,2,3,6-Tetramethyl-1,2-Dihydrobenzol-1,2-Dicarbon-säure (*C.* 1907 [1] 459).  
 6) 1-Phenylamido-2,5-Dimethylpyrrol-3,4-Dicarbon-säure (*B.* 18, 308, 1568). — IV, 549.  
 7)  $\alpha$ ,2-Lakton d.  $\gamma$ -Hydrazon- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ ,2-Dicarbon-säure- $\beta$ -Äthylester. Sm. oberhalb 290° (*B.* 38, 1912 *C.* 1905 [2] 43).  
 8) Esoanhydrid d. Methylbenzenylamidoximfumar-säureäthylester. Sm. 104° (*B.* 31, 2111). — \*II, 754.  
 9) Esoanhydrid d. Phenyläthenylamidoximfumar-säureäthylester. Sm. 158° (*B.* 31, 2112). — \*II, 816.  
 10) Äthylester d. 5-[4-Acetylamidophenyl]isoxazol-3-Carbon-säure (*B.* 36, 2697 *C.* 1903 [2] 952).  
 11) Monoäthylester d. 5-Methyl-1-Phenylpyrazol-3,4-Dicarbon-säure. Sm. 185° (*B.* 33, 264). — \*IV, 353.  
 12) Monoäthylester d. 1,4-Benzdiazin-2,3-Di[Methylcarbon-säure]. Na (*Bl.* [3] 25, 713). — \*IV, 629.  
 13) Methyläthylester d. 4-Phenylpyrazol-3,5-Dicarbon-säure. Sm. 105° (*B.* 35, 33 *C.* 1902 [1] 424). — \*IV, 628.
- $C_{14}H_{14}O_4N_4$  C 55,6 — H 4,6 — O 21,2 — N 18,6 — M. G. 302.  
 1) 4-Nitrophenyl-5-Nitro-2-Methylamidobenzylamin. Sm. 243—244° (*B.* 35, 742 *C.* 1902 [1] 753). — \*IV, 408.

- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>N<sub>4</sub>** 2) 4,6-Dinitro-5-Methylamido-2-Methyldiphenylamin. Sm. 197° (*J. pr.* [2] 67, 536 *C.* 1903 [2] 239). — \*IV, 399.
- 3) 2',4'-Dinitro-2-Dimethylamidodiphenylamin. Sm. 120° (D.R.P. 117066 *C.* 1901 [1] 211). — \*IV, 364.
- 4) 2',4'-Dinitro-3-Dimethylamidodiphenylamin. Sm. 136–137° (*B.* 28, 511). — IV, 572; \*IV, 371.
- 5) 2',4'-Dinitro-4-Dimethylamidodiphenylamin. Sm. 168°. HCl (*B.* 23, 2739; D.R.P. 117066 *C.* 1901 [1] 211). — IV, 584; \*IV, 381.
- 6)  $\alpha\alpha$ -Di[4-Nitrophenylamido]äthan. Sm. 167° (*A.* 302, 353). — \*II, 235.
- 7)  $\alpha\beta$ -Di[2-Nitrophenylamido]äthan. Sm. 190° (*J. pr.* [2] 48, 194; *B.* 40, 5015 *C.* 1908 [1] 472). — II, 343.
- 8)  $\alpha\beta$ -Di[3-Nitrophenylamido]äthan. Sm. 206° (206–208°) (*B.* 17, 778; *B.* 40, 5013 *C.* 1908 [1] 472). — II, 343.
- 9)  $\alpha\beta$ -Di[4-Nitrophenylamido]äthan. Sm. 216° (220–221°) (*J. pr.* [2] 48, 199). — II, 343.
- 10) 5,5'-Dinitro-4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm. 266–267° (*B.* 21, 749; 25, 1033). — IV, 981.
- 11) 6,6'-Dinitro-4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm. 215–217° (GERBER, Dissert., Basel 1889; *B.* 24, 2597; 25, 1033). — \*IV, 654.
- 12) 1-Nitro-2-Naphtyläther d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 208° (*B.* 31, 759). — \*II, 524.
- 13) uns-Di[2-Nitrobenzyl]hydrazin. Sm. 94–95°. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 2706). — \*IV, 540.
- 14) uns-Di[4-Nitrobenzyl]hydrazin. Sm. 137–138° (*B.* 33, 2710). — \*IV, 540.
- 15) 2',4'-Dinitro-2,4-Dimethyl-s-Diphenylhydrazin. Zers. bei 179° (*J. pr.* [2] 60, 109). — \*IV, 544.
- 16) 2',4'-Dinitro-2,5-Dimethyl-s-Diphenylhydrazin. Sm. 190° (*J. pr.* [2] 71, 403 *C.* 1905 [2] 40).
- 17) Dimethyläther d. 3,3'-Dioxy-4,4'-Tetrazobiphenyl. Chlorid, Sulfat (*J. pr.* [2] 59, 221). — \*IV, 1125.
- 18) 4,4'-Dihydrazidobiphenyl-3,3'-Dicarbonsäure (*B.* 31, 2580). — \*II, 1093.
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Diacetat d. Dichlornaphtyldrenglykol. Sm. 130–131° (*Bl.* 18, 208). — II, 184.
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>Cl<sub>4</sub>** 1) Dibutyrat d. 2,3,5,6-Tetrachlor-1,4-Dioxybenzol. Sm. 137° (*C.* 1899 [2] 337). — \*II, 574.
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Dimethylester d.  $\gamma\delta$ -Dibrom- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha\alpha$ -Dicarbonsäure. Sm. 93° (*B.* 37, 1125 *C.* 1904 [1] 1210; *A.* 336, 223 *C.* 1904 [2] 1733).
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>4</sub>** 1) Curcuminetetrabromid. Sm. bei 185° u. Zers. (*Am.* 4, 364). — III, 660.
- 2) Dimethylester d.  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha$ -Phenylbutan- $\delta\delta$ -Dicarbonsäure. Sm. 135° (*A.* 336, 225 *C.* 1904 [2] 1733).
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>J<sub>4</sub>** 1) Dipropylester d. 2,3,5,6-Tetrajodbenzol-1,4-Dicarbonsäure. Sm. 239° (*B.* 29, 2837). — \*II, 1065.
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>S** 1) Di[4-Oxymethylphenyl]sulfon. Sm. 156° (*Bl.* [3] 9, 708). — II, 1055; \*II, 682.
- 2) Di[p-Oxy-p-Methylphenyl]sulfon. Sm. 209° (*G.* 19, 348). — II, 967.
- 3) Di[p-Oxy-p-Methylphenyl]sulfon. Sm. 236° u. Zers. (*G.* 19, 346). — II, 967.
- 4) Dimethyläther d. 2,2'-Dioxydiphenylsulfon. Sm. 157–158° (*B.* 39, 1349 *C.* 1906 [1] 1788).
- 5) Dimethyläther d. 4,4'-Dioxydiphenylsulfon (Anisolsulfon). Sm. 120° (130°) (*B.* 27, 2542; *A.* 74, 311; 172, 45; *Soc.* 93, 755 *C.* 1908 [2] 238). — II, 839; \*II, 576.
- 6) p-Oxy- $\alpha\beta$ -Diphenyläthan-p-Disulfonsäure (*B.* 7, 239). — II, 899.
- 7)  $\alpha$ -[1-Naphtyl]sulfonbuttersäure + H<sub>2</sub>O. Sm. 82°. Ba + 3H<sub>2</sub>O (*J. pr.* [2] 59, 326). — \*II, 509.
- 8)  $\alpha$ -[2-Naphtyl]sulfonbuttersäure + H<sub>2</sub>O. Sm. 110°. Ba + 3H<sub>2</sub>O (*J. pr.* [2] 59, 328). — \*II, 530.
- 9)  $\alpha$ -[1-Naphtyl]sulfonisobuttersäure. Sm. 183–184°. Na, Ba (*J. pr.* [2] 59, 332). — \*II, 509.
- 10)  $\alpha$ -[2-Naphtyl]sulfonisobuttersäure. Sm. 170°. Na, Ba (*J. pr.* [2] 59, 333; *J. pr.* [2] 72, 338 *C.* 1905 [2] 1785). — \*II, 530.
- 11) Äthylester d. 2-Naphtylsulfonessigsäure +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 82° (*J. pr.* [2] 66, 144 *C.* 1902 [2] 797).



- $C_{14}H_{14}O_4S$  12) 2-Methoxyphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 85° (B. 34, 2998).
- 13) 4-Benzolsulfonat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Fl. (C. 1900 [1] 543). — \*II, 580.
- $C_{14}H_{14}O_4S_2$  1)  $\alpha\alpha$ -Di[Phenylsulfon]äthan. Sm. 101° (B. 19, 2815; 28, 1120; 32, 2768). — II, 790; \*II, 472.
- 2)  $\alpha\beta$ -Di[Phenylsulfon]äthan. Sm. 179,5—180° (B. 4, 717; 13, 1280; 27, 3056; J. pr. [2] 30, 174, 321; [2] 40, 530; [2] 49, 389). — II, 783; \*II, 469.
- 3) Di[4-Methylphenyl]disulfon. Sm. 212° u. Zers. (210°; 221°) (Am. 22, 222; J. pr. [2] 63, 171; Soc. 93, 1526 C. 1908 [2] 1428). — \*II, 487.
- 4)  $\alpha$ -Phenylsulfon- $\alpha$ -Benzylsulfonmethan. Sm. 145—147° (B. 36, 300 C. 1903 [1] 500).
- $C_{14}H_{14}O_4S_3$  1) Sulfid d. 1-Methylbenzol-2-Thiolsulfonsäure. Sm. 138—139° (J. pr. [2] 60, 127). — \*II, 84.
- 2) Sulfid d. 1-Methylbenzol-4-Thiolsulfonsäure. Sm. 133—134° (136°) (B. 24, 1136; J. pr. [2] 60, 118, 124). — II, 163; \*II, 84.
- $C_{14}H_{14}O_4S_4$  1) Äthylenester d. Benzolthiolsulfonsäure. Sm. 84—85° (B. 20, 2079; 25, 1482). — II, 162.
- 2) Disulfid d. 1-Methylbenzol-4-Thiolsulfonsäure. Sm. 109° (B. 24, 1127; J. pr. [2] 60, 118). — II, 163; \*II, 84.
- $C_{14}H_{14}O_4S_5$  1) Trisulfid d. 1-Methylbenzol-2-Thiolsulfonsäure. Sm. 124—125° (J. pr. [2] 60, 120, 132). — \*II, 84.
- 2) Trisulfid d. 1-Methylbenzol-4-Thiolsulfonsäure. Sm. 180° (B. 3, 963; 24, 1129; J. pr. [2] 60, 119, 131; J. pr. [2] 66, 348 C. 1902 [2] 1301). — II, 163; \*II, 84.
- $C_{14}H_{14}O_4S_6$  1) Tetrasulfid d. 1-Methylbenzol-2-Thiolsulfonsäure. Fl. (J. pr. [2] 60, 129). — \*II, 84.
- 2) Tetrasulfid d. 1-Methylbenzol-4-Thiolsulfonsäure. Sm. 108° (J. pr. [2] 60, 128). — \*II, 84.
- $C_{14}H_{14}O_5N_2$  1) C 57,9 — H 4,8 — O 27,6 — N 9,7 — M. G. 290.
- 2) 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-[Äthyl- $\alpha\beta$ -Dicarbonsäure]. Sm. 210—212° (B. 23, 3758). — IV, 727.
- 3) Phtaloximacetessigsäureäthylesteroxim. Sm. 224° (B. 38, 1912 C. 1905 [2] 43).
- 4) 5-Äthylester d. 2-Keto-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Diazin-5,6-Dicarbonsäure (Ä. d. Benzuramidofumarsäure). Sm. 232° u. Zers. (G. 23 [1] 402). — II, 1954.
- $C_{14}H_{14}O_5N_4$  1) C 52,8 — H 4,4 — O 25,2 — N 17,6 — M. G. 318.
- 2) Acetat d. 4-Diacetylamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol (Triacetylphenylurazin). Sm. 128° (B. 33, 462; C. 1901 [1] 936). — \*IV, 899.
- $C_{14}H_{14}O_5Br_2$  1) 2,2-Diäthyläther d. 5,7-Dibrom-2,2,6-Trioxy-1,3-Diketo-4-Methyl-2,3-Dihydroinden. Sm. 182—184° (B. 34, 2163). — \*III, 216.
- $C_{14}H_{14}O_5S$  1) Gem. Anhydrid d. Essigsäure u. 1-Oxynaphtalinäthyläther-4-Sulfonsäure (B. 34, 3183). — \*II, 511.
- $C_{14}H_{14}O_5S_2$  1) Äthylester d. Diphenylsulfon-3-Sulfonsäure. Sm. 89° (B. 19, 2421). — II, 814.
- $C_{14}H_{14}O_6N_2$  1) C 54,9 — H 4,6 — O 31,4 — N 9,2 — M. G. 306.
- 2) Diäthyläther d. p-Dinitro-p-Dioxynaphtalin. Sm. 228—229° (Bl. 36, 435). — II, 985.
- 3) 4-Äthyläther d. 5-Oxy-2,4,6-Triketo-5-[4-Oxybenzoyl]methylhexahydro-1,3-Diazin. Sm. 214° u. Zers. (B. 38, 3006 C. 1905 [2] 1241).
- 4) Diacetat d. 3,4-Dioxy-1-[ $\alpha\beta$ -Dioximidopropyl]benzol-3,4-Methylenäther. Sm. 138° (G. 22 [2] 475). — II, 979.
- $C_{14}H_{14}O_6N_4$  1) C 50,3 — H 4,2 — O 28,7 — N 16,8 — M. G. 334.
- 2) Amidobenzol + 2,4,6-Trinitro-1-Äthylbenzol. Sm. 44—45° (M. 21, 45). — \*II, 139.
- 3) 4-Amido-1-Methylbenzol + 2,4,6-Trinitro-1-Methylbenzol. Sm. 68° (C. 1906 [2] 32).
- 4) Äthylamidobenzol + 1,3,5-Trinitrobenzol. Sm. 55—56° (Soc. 83, 1342 C. 1904 [1] 100).
- 5) Dimethylamidobenzol + 1,3,5-Trinitrobenzol. Sm. 108—109° (106 bis 108°) (A. 215, 358; Soc. 83, 1341 C. 1904 [1] 100). — II, 328.

- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>N<sub>4</sub>** 5) Dimethyläther d. 6,6'-Dinitro-4,4'-Diamido-3,3'-Dioxybiphenyl. Sm. 222° (*J. pr.* [2] 59, 219; *B.* 37, 35 *C.* 1904 [1] 524). — \*II, 602.
- 6) 5-Cyan-2,4,6-Tri[Acetylamido]-3-Oxybenzol-1-Carbonsäure (*B.* 33, 1794). — \*II, 1118.
- 7) Difurfurylidenhydrazid d. d-Weinsäure. Sm. 204° (*Soc.* 83, 1364 *C.* 1904 [1] 85).
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>N<sub>6</sub>** 1) 1-Amid d. α-[4-Nitrophenyl]azo-α-[5-Keto-4,5-Dihydropyrazolyl-3]-essigsäureäthylester-1-Carbonsäure. Sm. 214—215° (*B.* 34, 88). — \*IV, 1080.
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>S<sub>2</sub>** 1) αβ-Di[3-Oxyphenylsulfon]äthan? Sm. 266° (*A.* 294, 246).
- 2) 4-Methyldiphenylmethan-β-Disulfonsäure. Sm. 38°. K<sub>2</sub> + 3½ H<sub>2</sub>O, Ba + 8½ H<sub>2</sub>O, Cu + 4½ H<sub>2</sub>O (*B.* 5, 685). — II, 237.
- 3) s-Diphenyläthandisulfonsäure (Bibenzylidisulfonsäure) + 5 H<sub>2</sub>O. K<sub>2</sub> + 2 H<sub>2</sub>O, Ba + 1½ H<sub>2</sub>O, Pb + H<sub>2</sub>O (*B.* 6, 953). — II, 235.
- 4) 3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba + 5 H<sub>2</sub>O (*A.* 270, 363). — II, 236.
- 5) Dimethylester d. Biphenyl-3,3'-Disulfonsäure. Sm. 132,5° (*B.* 39, 3345 *C.* 1906 [2] 1645).
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>S<sub>3</sub>** 1) Dimethylester d. Diphenylsulfid-4,4'-Disulfonsäure. Sm. 97° (118°) (*R.* 22, 358 *C.* 1904 [1] 23).
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>S<sub>4</sub>** 1) Di[2-Methylphenyl]disulfid-4,4'-Disulfonsäure. K<sub>2</sub> + 2 H<sub>2</sub>O (*Soc.* 73, 758). — \*II, 483.
- 2) Di[2-Methylphenyl]disulfid-5,5'-Disulfonsäure. K<sub>2</sub> + H<sub>2</sub>O (*Soc.* 73, 756). — \*II, 483.
- 3) Di[4-Methylphenyl]disulfid-3,3'-Disulfonsäure. K<sub>2</sub> + H<sub>2</sub>O (*Soc.* 73, 754).
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>N<sub>2</sub>** C 49,7 — H 4,1 — O 37,9 — N 8,3 — M. G. 338.
- 1) Diäthylester d. α-[2,4-Dinitrophenyl]äthen-ββ-Dicarbonsäure. Sm. 97° (*M.* 23, 542 *C.* 1902 [2] 743).
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>N<sub>4</sub>** C 45,9 — H 3,8 — O 35,0 — N 15,3 — M. G. 366.
- 1) αβ-Di[3-Nitrophenylsulfonamido]äthan. Sm. 189—191° (*Soc.* 87, 387 *C.* 1905 [1] 1587).
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>N<sub>6</sub>** C 42,6 — H 3,5 — O 32,5 — N 21,3 — M. G. 394.
- 1) 6-Nitro-3-Dimethylamido-1-Amidobenzol + 1,3,5-Trinitrobenzol. Sm. 130° (*R.* 14, 69). — IV, 570.
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>S<sub>2</sub>** 1) 4,4'-Dioxy-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. K<sub>2</sub> + 3 H<sub>2</sub>O, Ba + 8 H<sub>2</sub>O (*A.* 270, 366). — II, 994.
- 2) 1-Oxybenzoläthylenäther-4-Sulfonsäure (Äthylenglykoldiphenyläther-disulfonsäure). Ba, Pb (*Z.* 1869, 447). — II, 832.
- C<sub>14</sub>H<sub>14</sub>O<sub>8</sub>Hg<sub>2</sub>** 1) Tetracetat d. Phenyl-1,2,4,5-Tetraquecksilberhydroxyd (*C.* 1899 [1] 734). — IV, 1707.
- C<sub>14</sub>H<sub>14</sub>O<sub>10</sub>N<sub>2</sub>** C 45,4 — H 3,8 — O 43,2 — N 7,6 — M. G. 370.
- 1) αα-Diäthylester d. 2,6-Dinitrophenylmethan-α,α,4-Tricarbonsäure. Sm. 176°. (NH<sub>4</sub>, Ag) (*B.* 28, 3064; *Am.* 19, 22). — \*II, 1168.
- C<sub>14</sub>H<sub>14</sub>O<sub>12</sub>S<sub>4</sub>** 1) αβ-Diphenyläthan-β-Tetrasulfonsäure. K<sub>4</sub> + 3 H<sub>2</sub>O (*B.* 6, 954). — II, 235.
- C<sub>14</sub>H<sub>14</sub>NCl** 1) Dibenzylchloramin. Sm. 56° (*A. ch.* [7] 3, 330; *Soc.* 79, 464). — II, 519; \*II, 292.
- 2) 2-Chlorbenzyl-4-Methylphenylamin. Sm. 58—61°. HCl (*J. pr.* [2] 51, 270).
- 3) γ-Pyridoniumchlorid d. α-Phenylpropen (Styrylpyridinchlorid). 2 + PtCl<sub>4</sub> + AuCl<sub>3</sub> (*Ar.* 244, 280 *C.* 1906 [2] 1421; *Ar.* 247, 349 *C.* 1909 [2] 1439; *Ar.* 247, 372 *C.* 1909 [2] 1441).
- C<sub>14</sub>H<sub>14</sub>NBr** 1) Methyl-4-Bromphenylbenzylamin. Sm. 25°; Sd. 218—220° (*Soc.* 93, 1236 *C.* 1908 [2] 779).
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) αα-Di[4-Chlorphenylamido]äthan. Sm. 64—65° (*A.* 302, 354). — \*II, 235.
- 2) ββ-Dichlor-αα-Di[Phenylamido]äthan. Sm. 70—71° (*A.* 302, 358). — \*II, 235.
- 3) 2,2'-Dichlor-4,4'-Diamido-3,3'-Dimethylbiphenyl (Dichlortolidin). Sm. 197° (202°) (*D.R.P.* 82140; *C.* 1898 [2] 522; *M.* 22, 490). — \*IV, 654.
- 4) 5,5'-Dichlor-4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm. 160—161° (*D.R.P.* 97101; *A.* 353, 336 *C.* 1909 [1] 181). — \*IV, 654.

- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>Cl<sub>2</sub>** 5) s-Di[2-Chlorbenzyl]hydrazin. Sm. 86—87°. HCl, Pikrat (*B.* 34, 849). — \*IV, 540.
- 6) Bischlormethylat d. Pseudophenanthrolin + H<sub>2</sub>O (*B.* 42, 2615 *C.* 1902 [2] 542).
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>Br<sub>2</sub>** 1) 5,5' - Dibrom - 4,4' - Diamido-3,3'-Dimethylbiphenyl. Sm. 195° (197 bis 197,5°) (*Soc.* 91, 1310 *C.* 1907 [2] 1071; *A.* 363, 337 *C.* 1909 [1] 181).
- 2) αβ-Dibrom-α-[4-Amidophenyl]-β-[4-Methyl-2-Pyridyl]äthan. Zers. bei 157° (*B.* 35, 2793 *C.* 1902 [2] 995). — \*IV, 657.
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>J<sub>2</sub>** 1) Bisjodmethylat d. Pseudophenanthrolin + H<sub>2</sub>O. Sm. 265° u. Zers. (*M.* 4, 576; *B.* 42, 2615 *C.* 1909 [2] 541). — IV, 999.
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>S** 1) α-Methyl-αβ-Diphenylthioharnstoff. Sm. 87°; Sd. 204—206° (*B.* 17, 2089, 3034). — II, 396.
- 2) s-Phenylbenzylthioharnstoff. Sm. 153—154° (*Soc.* 59, 562; *J. pr.* [2] 56, 88). — II, 528; \*II, 298.
- 3) uns-Phenylbenzylthioharnstoff. Sm. 136,5° (*B.* 26 [2] 607; *Soc.* 67, 571; *B.* 35, 1284 *C.* 1902 [1] 1094). — II, 528.
- 4) s-Phenyl-2-Methylphenylthioharnstoff. Sm. 139° (140°) (*B.* 13, 137; 15, 1419; *B.* 36, 1141 *C.* 1903 [1] 1220; *B.* 36, 3848 *C.* 1904 [1] 89; *J. pr.* [2] 74, 226 *C.* 1906 [2] 1725). — II, 465.
- 5) isom. s-Phenyl-2-Methylphenylthioharnstoff. Sm. 166—168° (*B.* 37, 159 *C.* 1904 [1] 582; *J. pr.* [2] 74, 228 *Anm. C.* 1906 [2] 1725).
- 6) s-Phenyl-3-Methylphenylthioharnstoff. Sm. 91—92° (*Soc.* 67, 557; *J. pr.* [2] 74, 226 *C.* 1906 [2] 1725). — \*II, 262.
- 7) s-Phenyl-4-Methylphenylthioharnstoff. Sm. 141—142° (136—137°) (*B.* 13, 137; 15, 1420; 17, 3035; 25, 3099; *J. pr.* [2] 74, 227 *C.* 1906 [2] 1725). — II, 498.
- 8) isom. s-Phenyl-4-Methylphenylthioharnstoff. Sm. 176—178° (*B.* 37, 159 *C.* 1904 [1] 582; *J. pr.* [2] 74, 228 *Anm. C.* 1906 [2] 1725).
- 9) Diphenylmethylthioharnstoff. Sm. 189° (*Am.* 26, 355).
- 10) s-Allyl-1-Naphthylthioharnstoff. Sm. 145° (130°) (*A.* 84, 347; *B.* 22, 3000). — II, 609.
- 11) Methyläther d. α-Phenylimido-α-Phenylamidomerkaptomethan. Sm. 110°. HJ (*B.* 14, 1489; 34, 337). — II, 395.
- 12) Benzyläther d. Phenylamidoimidomerkaptomethan. Sm. 81—82°. HCl, (HCl, Hg<sub>2</sub>Cl<sub>2</sub>), Pikrat (*Soc.* 57, 275; *Soc.* 91, 144 *C.* 1907 [1] 1111). — II, 1053.
- 13) 2-[1-Naphtyl]amido-5-Methyl-4,5-Dihydrothiazol. Sm. 134°. Pikrat (*B.* 22, 3001). — II, 609.
- 14) 3-Amido-4-Methylphenylamid d. Benzolthiocarbonsäure (Thiobenztoluylendiamin). Sm. 197° (*B.* 11, 1760). — IV, 606.
- C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>S<sub>2</sub>** 1) Dimethyläther d. 2,2'-Dimerkaptoazobenzol. Sm. 156—158° (*B.* 42, 3466 *C.* 1909 [2] 1552).
- 2) Methyläther d. 5-Merkapto-2-Methyl-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 108° (*J. pr.* [2] 60, 229). — \*IV, 613.
- 3) Benzylester d. β-Phenylhydrazidodithioameisensäure. Sm. 164° (*J. pr.* [2] 60, 218 *Anm.*). — \*IV, 438.
- C<sub>14</sub>H<sub>14</sub>N<sub>3</sub>Cl** 1) 4-Chlor-1-[Methyl-4-Methylphenyl]amidodiazobenzol. Sm. 99,5 bis 100° (*Soc.* 55, 436). — IV, 1571.
- 2) isom. 4-Chlor-1-[Methyl-4-Methylphenyl]amidodiazobenzol. Sm. 80—82° (*Soc.* 55, 436; 57, 786). — IV, 1571.
- 3) 4-Methyl-1-[Methyl-4-Chlorphenyl]amidodiazobenzol. Sm. 91 bis 92° (*Soc.* 55, 436). — IV, 1571.
- 4) 3-Chlor-4'-Dimethylamidoazobenzol. Sm. 98° (*B.* 19, 1955). — IV, 1358.
- C<sub>14</sub>H<sub>14</sub>N<sub>3</sub>Br** 1) 4-Brom-1-[Methyl-4-Methylphenyl]amidodiazobenzol. Sm. 113 bis 114° (*Soc.* 55, 432). — IV, 1571.
- 2) isom. 4-Brom-1-[Methyl-4-Methylphenyl]amidodiazobenzol. Sm. 97 bis 97,5° (*Soc.* 55, 432). — IV, 1571.
- 3) 4-Methyl-1-[Methyl-4-Bromphenyl]amidodiazobenzol. Sm. 99—99,5° (*Soc.* 55, 432). — IV, 1571.
- 4) 4-Brom-4'-Dimethylamidoazobenzol. Sm. 156°. HCl, HBr (*B.* 25, 1374; *B.* 41, 1184 *C.* 1908 [1] 1884). — IV, 1356.



- $C_{14}H_{14}N_3J$  1) Jodäthylat d. 3-Phenyl-1,2,7-Benztriazol. Sm. 189—190° (C. 1907 [2] 456).
- $C_{14}H_{14}N_4S$  1)  $\alpha$ -Amido- $\alpha$ -Phenylimido- $\alpha$ -[ $\beta$ -Phenylthioureido]methan. Sm. 197°. HCl (A. 356, 180 C. 1907 [2] 1797; A. 361, 321 C. 1908 [2] 881).
- $C_{14}H_{14}N_4S_2$  1) Disulfid d.  $\alpha$ -Amido- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 128° (B. 34, 3132).
- 2) 2,4'-Di[Thioureido]biphenyl. Sm. 201° (B. 36, 4092 C. 1904 [1] 269).
- 3) 4,4'-Di[Thioureido]biphenyl (B. 27, 1559). — IV, 965.
- 4) Base (aus 2-Oxy-4-Methylthiazol). Sm. 152° (B. 20, 3130). — IV, 1288.
- 5)  $\beta$ -[Phenylimidophenylamidomethyl]hydrazidodithioameisensäure.  $\alpha$ -Amidodiphenylguanidinsalz (B. 35, 1719 C. 1902 [2] 30).
- 6) Phenylamid d. Hydrazin- $\alpha$ - $\beta$ -Di[Thiocarbonsäure]. Sm. 187° (240°?) (B. 26, 2880; 27, 616; J. pr. [2] 74, 225 C. 1906 [2] 1725). — II, 401; \*II, 201.
- $C_{14}H_{14}N_4S_4$  1) Disulfid d.  $\beta$ -Phenylhydrazidodithioameisensäure (B. 29, 2151). — IV, 677.
- $C_{14}H_{14}ClJ$  1) 4-Äthylidiphenyljodoniumchlorid. Sm. 169°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (A. 327, 292 C. 1903 [2] 352).
- 2) 2,2'-Dimethyldiphenyljodoniumchlorid. Sm. 179°. + HgCl<sub>2</sub>, + AuCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (B. 28, 1815). — \*II, 42.
- 3) 2,3'-Dimethyldiphenyljodoniumchlorid. Sm. 183—185°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (A. 327, 278 C. 1903 [2] 350).
- 4) 3,3'-Dimethyldiphenyljodoniumchlorid. Sm. 206°. + HgCl<sub>2</sub>, + PtCl<sub>4</sub> (A. 327, 273 C. 1903 [2] 350).
- 5) 3,4'-Dimethyldiphenyljodoniumchlorid. Sm. 186°. 2 + PtCl<sub>4</sub> + 2H<sub>2</sub>O (A. 327, 280 C. 1903 [2] 351).
- 6) 4,4'-Dimethyldiphenyljodoniumchlorid. Sm. 178°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (B. 28, 97). — \*II, 42.
- $C_{14}H_{14}ClP$  1) Di[4-Methylphenyl]chlorphosphin. Sd. 345—350° (A. 315, 63). — \*IV, 1177.
- $C_{14}H_{14}ClAs$  1) Di[4-Methylphenyl]chlorarsin. Sm. 45°; Sd. 340—345° (A. 208, 18; A. 321, 160 C. 1902 [2] 43). — IV, 1692; \*IV, 1194.
- $C_{14}H_{14}Cl_2Pb$  1) Bleidi[4-Methylphenyl]dichlorid (B. 21, 3425). — IV, 1716.
- $C_{14}H_{14}Cl_2Se$  1) Di[2-Methylphenyl]selenidchlorid. Sm. 152—153° u. Zers. (B. 28, 1672). — \*II, 487.
- 2) Di[4-Methylphenyl]selenidchlorid. Sm. 177—178° u. Zers. (B. 28, 1673). — \*II, 488.
- $C_{14}H_{14}Cl_2Si$  1) Dibenzylsiliciumdichlorid. Sm. 50—52°; Sd. 241—245°<sub>100</sub> (Soc. 93, 451 C. 1908 [1] 1687; Soc. 95, 307 C. 1909 [1] 1555).
- $C_{14}H_{14}Cl_3P$  1) Di[4-Methylphenyl]phosphortrichlorid (A. 315, 63).
- $C_{14}H_{14}Cl_3As$  1) Di[4-Methylphenyl]arsintrichlorid (A. 208, 20). — IV, 1692.
- $C_{14}H_{14}BrJ$  1) 4-Äthylidiphenyljodoniumbromid. Sm. 127° (A. 327, 292 C. 1903 [2] 352).
- 2) 2,2'-Dimethyldiphenyljodoniumbromid. Sm. 178° (B. 28, 1815). — \*II, 42.
- 3) 2,3'-Dimethyldiphenyljodoniumbromid. Sm. 172° (A. 327, 278 C. 1903 [2] 350).
- 4) 3,3'-Dimethyldiphenyljodoniumbromid. Sm. 146° (A. 327, 274 C. 1903 [2] 350).
- 5) 3,4'-Dimethyldiphenyljodoniumbromid. Sm. 184° (A. 327, 280 C. 1903 [2] 351).
- 6) 4,4'-Dimethyldiphenyljodoniumbromid. Sm. 178° (B. 28, 97). — \*II, 42.
- $C_{14}H_{14}Br_2Pb$  1) Bleidi[4-Methylphenyl]dibromid (B. 21, 3425). — IV, 1716.
- $C_{14}H_{14}Br_2Se$  1) Di[2-Methylphenyl]selenidbromid. Sm. 84° (B. 28, 1671). — \*II, 487.
- 2) Di[4-Methylphenyl]selenidbromid. Sm. 162° u. Zers. (B. 28, 1673). — \*II, 488.
- $C_{14}H_{14}Br_2Te$  1) Di[2-Methylphenyl]telluridbromid. Sm. 182° (B. 28, 1670). — \*II, 488.
- 2) Di[4-Methylphenyl]telluridbromid. Sm. 201° (B. 28, 1671). — \*II, 488.
- $C_{14}H_{14}Br_4S_2$  1) Tetrabromid d. Diphenyläther d.  $\alpha\beta$ -Dimerkaptoäthan (B. 4, 717). — II, 783.
- $C_{14}H_{14}J_2Pb$  1) Bleidi[4-Methylphenyl]dijodid (B. 21, 3426). — IV, 1716.
- $C_{14}H_{14}SPb$  1) Bleidi[4-Methylphenyl]sulfid. Sm. 98° (B. 21, 3428). — IV, 1716.
- $C_{14}H_{14}S_3As_2$  1) 4-Methylphenylarsensensquisulfid. Sm. 119—120° (A. 320, 302 C. 1902 [1] 920). — \*IV, 1193.

$C_{14}H_{15}ON$ 

- C 78,9 — H 7,0 — O 7,5 — N 6,6 — M. G. 213.
- 1)  $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 110—111° (107—108°). HCl, (2HCl,  $PtCl_4$ ), (HCl.  $AuCl_3$ ),  $HNO_3$ , Pikrat (*B.* 38, 1688 *C.* 1905 [1] 1534; *C.* 1905 [2] 825).
  - 2)  $r$ - $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 165° (160—161°). HCl, HCl +  $CH_4O$ , (2HCl,  $PtCl_4$  + 2 $H_2O$ ), Pikrat, Formiat (*B.* 20, 493; 21, 488; 23, 2784; 27, 213; 28, 1866, 2523, 3168; 29, 295, 1213; 30, 1525; *G.* 20, 689; *A.* 307, 131; *J. pr.* [2] 78, 62 *C.* 1908 [2] 689). — II, 1079; \*II, 659.
  - 3) isom.  $r$ - $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan (Isodiphenyloxyäthylamin). Sm. 128° (129°). HCl, HCl +  $CH_4O$ , (2 + 2HCl,  $PtCl_4$ ) (*B.* 28, 1867, 2522, 3170, 3181; 29, 295, 1215; 30, 1525; 32, 2377; *A.* 307, 125; *Soc.* 77, 644; *A.* 337, 319 *C.* 1905 [1] 339). — \*II, 662.
  - 4) d-Isodiphenyloxyäthylamin. Sm. 112—113° (*B.* 32, 2378). — \*II, 662.
  - 5) l-Isodiphenyloxyäthylamin. Sm. 113—114° (*B.* 32, 2378). — \*II, 662.
  - 6) isom. d- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 114°. HCl, Tartrat (*A.* 337, 322 *C.* 1905 [1] 339).
  - 7) isom. l- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 114°. HCl, Tartrat (*A.* 337, 322 *C.* 1905 [1] 339).
  - 8)  $\alpha$ -Oxy- $\alpha$ -(2-Amidophenyl)- $\alpha$ -Phenyläthan. Sm. 84—85° (*B.* 42, 3119 *C.* 1909 [2] 1353).
  - 9)  $\alpha$ -Oxy-6-Amido-3-Methyldiphenylmethan. Sm. 82—84° (*B.* 32, 2026). — \*II, 662.
  - 10)  $\alpha$ -Oxy-2'-Amido-4-Methyldiphenylmethan. Sm. 100—101° (*B.* 30, 1134). — \*II, 662.
  - 11) 6-Benzylamido-3-Oxy-l-Methylbenzol. Sm. 84°. HCl (D.R.P. 213592 *C.* 1909 [2] 1097).
  - 12) Methylphenyl-2-Oxybenzylamin. Fl. (*Ar.* 240, 690 *C.* 1903 [1] 395).
  - 13) Methylphenyl-4-Oxybenzylamin. Sm. 40—41° (*J. pr.* [2] 76, 503 *C.* 1908 [1] 861).
  - 14) 2-Oxybenzyl-4-Methylphenylamin. Sm. 121° (119,5°; 116°). HCl, (2HCl,  $PtCl_4$ ) (*A.* 241, 347; 313, 116; *B.* 27, 1804; *C.* 1900 [2] 457; *B.* 39, 3971 *C.* 1907 [1] 155). — II, 742; \*II, 427.
  - 15) 4-Oxybenzyl-4-Methylphenylamin. Sm. 186°. (2HCl,  $PtCl_4$ ) (*A.* 241, 356). — II, 754.
  - 16) Phenyl-6-Oxy-3-Methylbenzylamin. Sm. 101° (*B.* 41, 622 *C.* 1908 [1] 1268).
  - 17) Methyläther d.  $\alpha$ -Amido-4-Oxydiphenylmethan. Sd. 202—206°<sub>13</sub>. HCl,  $HNO_3$  (*B.* 24, 3513; *J. pr.* [2] 77, 19 *C.* 1908 [1] 630). — II, 897.
  - 18) Methyläther d. Phenyl-4-Oxybenzylamin. Sm. 64,5°. HCl, (2HCl,  $PtCl_4$ ) (*A.* 241, 337; 315, 141; *B.* 42, 3462 *C.* 1909 [2] 1329). — II, 754.
  - 19) Methyläther d. Benzyl-2-Oxyphenylamin. Sd. 217—220°<sub>25</sub>. Pikrat (*B.* 39, 487 *C.* 1906 [1] 921).
  - 20) Methyläther d. Benzyl-4-Oxyphenylamin. Sm. 52°; Sd. 236—238°<sub>32</sub> (*B.* 40, 1010 *C.* 1907 [1] 1252).
  - 21) Methyläther d. Methyl-4-Oxydiphenylamin. Sd. 313° (*B.* 17, 2433). — II, 717.
  - 22) Äthyläther d. 4-Oxydiphenylamin. Sm. 73—74°; Sd. 348° (*B.* 26, 696). — II, 717.
  - 23) Benzyläther d. 3-Amido-2-Oxy-1-Methylbenzol. Fl. HCl (*B.* 39, 3246 *C.* 1906 [2] 1412).
  - 24) Äthyläther d.  $\alpha$ -[1-Naphtyl]imido- $\alpha$ -Oxyäthan. Sd. 175°<sub>13</sub>. HCl (*Soc.* 79, 697).
  - 25) Äthyläther d.  $\alpha$ -[2-Naphtyl]imido- $\alpha$ -Oxyäthan. Sd. 176,5°<sub>13</sub> (*Soc.* 79, 698).
  - 26) Dibenzylhydroxylamin. Sm. 123°. HCl, (2HCl,  $PtCl_4$ ), (HCl,  $HgCl_2$ ),  $HNO_2$ , Pikrat, p-Toluolsulfins. Salz (*B.* 16, 2184; 19, 1626, 3293; 20, 1752; 28, 1278; 29, 2667; *A.* 257, 216; 274, 38; *J. pr.* [2] 56, 230). — II, 534; \*II, 306.
  - 27) Benzyläther d. Benzylhydroxylamin. Fl. HCl (*A.* 257, 228; *A.* 266, 314). — II, 534.
  - 28) l-Acetyläthylamidonaphtalin. Sm. 68° (*Soc.* 89, 1434 *C.* 1906 [2] 1614).

- C<sub>14</sub>H<sub>15</sub>ON** 29) **2-Acetyläthylamidonaphtalin.** Sm. 48—49° (*Bl.* [3] **27**, 971 *C.* **1902** [2] 1211).
- 30) **2-Acetyl-amido-1,4-Dimethylnaphtalin.** Sm. 220° (*B.* **28** [2] 619; *G.* **25** [1] 57; **26** [1] 14). — \*II, 349.
- 31) **1-[ $\alpha$ -Oximidobutyl]naphtalin.** Sd. 206—208°<sub>18</sub> (*Bl.* [3] **15**, 65). — III, 176.
- 32) **2-[ $\alpha$ -Oximidobutyl]naphtalin.** Sm. 89° (*Bl.* [3] **15**, 66). — III, 176.
- 33) **1-[ $\alpha$ -Oximido- $\beta$ -Methylpropyl]naphtalin.** Sm. 140° (*Bl.* [3] **15**, 67). — III, 176.
- 34) **2-[ $\alpha$ -Oximido- $\beta$ -Methylpropyl]naphtalin.** Sm. 121—122°; Sd. 200 bis 203° (*Bl.* [3] **15**, 68). — III, 176.
- 35)  **$\alpha$ -Oxy- $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Pyridyl]äthan.** Sm. 93°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* **35**, 2777 *C.* **1902** [2] 992). — \*IV, 227.
- 36) **Amid d.  $\gamma$ -[1-Naphtyl]buttersäure.** Sm. 160° (*J. pr.* [2] **80**, 183 *C.* **1909** [2] 980).
- 37) **1-Naphtylamid d. Buttersäure.** Sm. 120° (*Soc.* **93**, 1037 *C.* **1908** [2] 504).
- C<sub>14</sub>H<sub>15</sub>ON<sub>3</sub>** C 69,7 — H 6,2 — O 6,6 — N 17,4 — M. G. 241.
- 1) **2-Amidobenzyl-2-Methylphenylnitrosamin.** Sm. 86—87° (*J. pr.* [2] **51**, 277). — IV, 627.
- 2) **4-Dimethylamidodiphenylnitrosamin.** Sm. 116° u. Zers. (*B.* **21**, 2613). — IV, 584.
- 3) **4-Amido-4'-Acetylamidodiphenylamin.** Sm. 178° (*A.* **303**, 364). — \*IV, 821.
- 4) **N-Acetyl-4,4'-Diamidodiphenylamin.** Sm. 195° (*D.R.P.* 156388 *C.* **1905** [1] 55).
- 5) **3,5-Diamido-4-Benzoylamido-1-Methylbenzol.** 2HCl, H<sub>2</sub>SO<sub>4</sub> (*A.* **208**, 318). — IV, 1129.
- 6)  **$\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[3-Amidophenyl]harnstoff.** Zers. bei 190—200° (*B.* **24**, 2112). — IV, 575.
- 7)  **$\alpha$ -Phenyl- $\beta$ -[2-Amido-4-Methylphenyl]harnstoff?** Sm. 197—198° (*J. pr.* [2] **41**, 323). — IV, 614.
- 8)  **$\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -Benzylharnstoff.** Sm. 109—110° (*B.* **37**, 2326 *C.* **1904** [2] 312).
- 9)  **$\alpha$ -Amido- $\alpha$ -[2-Methylphenyl]- $\beta$ -Phenylharnstoff.** Sm. 136° (*B.* **36**, 1369 *C.* **1903** [1] 1342). — \*IV, 530.
- 10)  **$\alpha$ -Amido- $\alpha$ -[3-Methylphenyl]- $\beta$ -Phenylharnstoff.** Sm. 112° (*B.* **36**, 1373 *C.* **1903** [1] 1343). — \*IV, 532.
- 11)  **$\alpha$ -Amido- $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenylharnstoff.** Sm. 184—185°. HCl (*B.* **36**, 1374 *C.* **1903** [1] 1343). — \*IV, 533.
- 12)  **$\beta$ -Phenylamido- $\alpha$ -[2-Methylphenyl]harnstoff.** Sm. 240°. — IV, 674.
- 13)  **$\beta$ -[2-Methylphenyl]amido- $\alpha$ -Phenylharnstoff.** Sm. 142° (*B.* **36**, 1371 *C.* **1903** [1] 1343). — \*IV, 530.
- 14)  **$\beta$ -[3-Methylphenyl]amido- $\alpha$ -Phenylharnstoff.** Sm. 159° (*B.* **36**, 1373 *C.* **1903** [1] 1343). — \*IV, 532.
- 15)  **$\beta$ -[4-Methylphenyl]amido- $\alpha$ -Phenylharnstoff.** Sm. 171° (*B.* **36**, 1375 *C.* **1903** [1] 1343). — \*IV, 533.
- 16) **Phenylbenzylamidoharnstoff.** Sm. 139—140° (103°) (*B.* **41**, 1433 *C.* **1908** [1] 2093; *B.* **41**, 1865 *C.* **1908** [2] 505; *M.* **29**, 910 *C.* **1908** [2] 2007).
- 17) **Diphenylmethylamidoharnstoff (Benzhydrylsemicarbazid).** Sm. 150 bis 160° (*J. pr.* [2] **67**, 171 *C.* **1903** [1] 873). — \*IV, 649.
- 18) **1-Amido-8-[ $\beta$ -Allylureido]naphtalin.** Sm. 225° (*A.* **365**, 148 *C.* **1909** [1] 1822).
- 19) **P-Diamido-4'-Amido-4-Methyldiphenylketon.** Sm. 199° (*A.* **286**, 327). — III, 215.
- 20)  **$\beta$ -Semicarbazon- $\alpha$ -[1-Naphtyl]propan.** Sm. 205° (*C. r.* **147**, 679 *C.* **1908** [2] 1780).
- 21)  **$\alpha$ -Semicarbazon- $\beta$ -[1-Naphtyl]propan.** Sm. 209—210° (*C. r.* **145**, 1343 *C.* **1908** [1] 644).
- 22)  **$\alpha$ -Semicarbazon- $\beta$ -[2-Naphtyl]propan.** Sm. 134—135° (*C. r.* **145**, 1343 *C.* **1908** [1] 644).
- 23)  **$\alpha$ -Phenylhydrazon- $\beta$ -Oxy- $\alpha$ -[4-Amidophenyl]äthan.** Sm. 199° (*B.* **33**, 2647). — \*IV, 502.



- $C_{14}H_{15}ON_3$  24)  $\gamma$ -Oximido- $\beta$ -[2-Naphtyl]hydrazonbutan. Sm. 184° (G. 31 [2] 416 C. 1902 [1] 35). — \*IV, 616.
- 25)  $\beta$ -Formyl- $\alpha$ -Phenyl- $\alpha$ -[2-Amidobenzyl]hydrazin. Sm. 157° (B. 25, 2901). — IV, 1129.
- 26) 4-Acetylamido- $\alpha$ -Diphenylhydrazin. Sm. 146° u. Zers. (B. 17, 463; A. 303, 362). — IV, 1499.
- 27) 1-[2,3-Dimethylphenyl]hydroxylamidodiazobenzol. Sm. 105—105,5° (A. 316, 276). — \*IV, 1141.
- 28) 1-[2,4-Dimethylphenyl]hydroxylamidodiazobenzol. Sm. 82,5—83° (A. 316, 275). — \*IV, 1141.
- 29) 1-[2,5-Dimethylphenyl]hydroxylamidodiazobenzol. Sm. 111,5° (A. 316, 274). — \*IV, 1141.
- 30) 1-[2,6-Dimethylphenyl]hydroxylamidodiazobenzol. Sm. 113° (A. 316, 275). — \*IV, 1141.
- 31) 1-[3,4-Dimethylphenyl]hydroxylamidodiazobenzol. Sm. 140—141° (A. 316, 276). — \*IV, 1141.
- 32) 4-Methyl-1-Benzylhydroxylamidodiazobenzol. Sm. 106,5° (B. 30, 2286). — IV, 1584.
- 33) 2-Methyl-1-[4-Methylphenyl]hydroxylamidodiazobenzol. Sm. 103,5° u. Zers. (Soc. 95, 772 C. 1909 [2] 19).
- 34) 3-Methyl-1-[4-Methylphenyl]hydroxylamidodiazobenzol. Sm. 136,5° (Soc. 95, 772 C. 1909 [2] 19).
- 35) 4-Methyl-1-[4-Methylphenyl]hydroxylamidodiazobenzol. Sm. 130,5° (Soc. 95, 773 C. 1909 [2] 19).
- 36) Äthyläther d. 1-[4-Oxyphenyl]amidodiazobenzol. Sm. 113° (B. 40, 2399 C. 1907 [2] 317).
- 37) 4-Dimethylamido-4'-Oxyazobenzol. Sm. 203—204° u. Zers. (Soc. 95, 1295 C. 1909 [2] 978).
- 38) Äthyläther d. 4-Amido-3-Oxyazobenzol. Sm. 109—110,5° (B. 36, 4097 C. 1904 [1] 270).
- 39) 2-[ $\alpha$ -Oximidoäthyl]-2-Methyl-2,3-Dihydro-peri-Naphtimidazol. HCl (A. 365, 152 C. 1909 [1] 1822).
- 40) Hydrocyanharmalin. HCl (A. 68, 351). — III, 885.
- 41) Base (aus 3,4-Diamido-1-Methylbenzol). Sm. 246—247° (B. 23, 3802). — IV, 611.
- 42) Phenylamid d.  $\alpha$ -Phenylhydrazidoessigsäure. Sm. 149° (B. 28, 1718; A. 301, 59). — IV, 739; \*IV, 476.
- 43) Phenylamid d.  $\beta$ -Phenylhydrazidoessigsäure. Sm. 144°. — IV, 738.
- 44) 2-Amido-4-Methylphenylamid d. 2-Amidobenzol-1-Carbonsäure. Sm. 137° (B. 32, 1467). — \*IV, 407.
- 45) Isopropylidenhydrazid d. 2-Naphtylamidoameisensäure. Sm. 192 bis 193° (B. 34, 4302 C. 1902 [1] 305).
- 46)  $\alpha$ -Phenylhydrazid d. Phenylamidoessigsäure. Sm. 159—160° (153 bis 154°) (A. 301, 83). — IV, 664; \*IV, 425.
- 47) Phenylhydrazid d. 4-Amido-1-Methylbenzol-3-Carbonsäure. Sm. 198° (J. pr. [2] 33, 68). — IV, 670.
- $C_{14}H_{15}ON_5$  C 62,4 — H 5,6 — O 5,9 — N 26,0 — M. G. 269.
- 1) Monacetyl-2,4,3'-Triamidoazobenzol. Sm. 165° (B. 30, 2114). — IV, 1363.
- 2) Verbindung (aus Cyanphenylhydrazin). Sm. 180° (J. pr. [2] 35, 538). — IV, 743.
- $C_{14}H_{15}OCl$  1) Äthyläther d. 1-[ $\beta$ -Chlor- $\alpha$ -Oxyäthyl]naphtalin. Sd. 178—179°, (B. 40, 4999 C. 1908 [1] 449).
- $C_{14}H_{15}OJ$  1) 4-Äthylidiphenyljodoniumhydroxyd. Salze, siehe (A. 327, 292 C. 1903 [2] 352).
- 2) 2,2'-Dimethyldiphenyljodoniumhydroxyd. Salze, siehe (B. 28, 1815). — \*II, 42.
- 3) 2,3'-Dimethyldiphenyljodoniumhydroxyd. Salze, siehe (A. 327, 278 C. 1903 [2] 351).
- 4) 3,3'-Dimethyldiphenyljodoniumhydroxyd. Salze, siehe (A. 327, 273 C. 1903 [2] 350).
- 5) 3,4'-Dimethyldiphenyljodoniumhydroxyd. Salze, siehe (A. 327, 280 C. 1903 [2] 351).

- $C_{14}H_{15}OJ$  6) 4,4'-Dimethyldiphenyljodoniumhydroxyd. Salze, siehe diese u. Nitrat, Bichromat, Bromcamphersulfonat (*B.* 28, 97; *Soc.* 81, 1353 *C.* 1902 [2] 1197). — \*II, 42.
- $C_{14}H_{15}OP$  1) Äthylphenylphosphinoxid. Sm. 121° (*A.* 229, 317). — IV, 1658.
- $C_{14}H_{15}OAs$  1) Verbindung +  $H_2O$  (aus Benzylchlorid u. Arsentrioxyd). Sm. 215—216° (*B.* 41, 2769 *C.* 1908 [2] 1170).
- $C_{14}H_{15}O_2N$  C 73,4 — H 6,5 — O 14,0 — N 6,1 — M. G. 229.
- 1) 4'-Methylamido-2, 4-Dioxydiphenylmethan. Sm. 111—112°. HCl (*M.* 23, 992 *C.* 1903 [1] 289).
- 2) 4,4'-Dioxy-2,5-Dimethyldiphenylamin. Sm. 158° (*D.R.P.* 191863 *C.* 1908 [1] 574).
- 3) 3'-Oxy- $\beta$ -Oxymethyl-4-Methyldiphenylamin. Sm. noch nicht bei 300° (*J. pr.* [2] 65, 76 *C.* 1902 [1] 580).
- 4) Di[ $\alpha$ -Oxybenzyl]amin (Benzaldehyd-Ammoniak). Sm. 45° (*B.* 42, 2217 *C.* 1909 [2] 352).
- 5) Di[2-Oxybenzyl]amin. Sm. 170°. HCl, (2HCl, PtCl<sub>4</sub>) (*A.* 241, 349; *B.* 27, 1800). — II, 742.
- 6) 4-Methylphenyl-2, 4-Dioxybenzylamin? Sm. 165° (*B.* 39, 3971 *C.* 1907 [1] 155).
- 7) 3-Methyläther d. Phenyl-3, 4-Dioxybenzylamin. Fl. (*C.* 1900 [2] 458).
- 8) 2-Methyläther d. 2-Oxyphenyl-4-Oxybenzylamin. Sm. 125° (*B.* 39, 3973 *C.* 1907 [1] 155).
- 9) 4-Methyläther d. 4-Oxyphenyl-2-Oxybenzylamin. Sm. 128° (127°) (*A.* 325, 248 *C.* 1903 [1] 632; *Ar.* 240, 681 *C.* 1903 [1] 395; *B.* 39, 3974 *C.* 1907 [1] 155).
- 10) 2-Methyläther d. 2-Oxyphenyl-2'-Oxybenzylamin. Sm. 70—71° (*Ar.* 240, 689 *C.* 1903 [1] 395; *B.* 39, 3973 *C.* 1907 [1] 155).
- 11) 4'-Methyläther d. 4-Oxyphenyl-4'-Oxybenzylamin. Sm. 102—103° (*D.R.P.* 211869 *C.* 1909 [2] 392).
- 12) Dimethyläther d. Di[4-Oxyphenyl]amin. Sm. 103° (*B.* 41, 3493 *C.* 1908 [2] 1821).
- 13) 1-Benzyläther d. 5-Amido-4-Oxy-1-Oxymethylbenzol. Sm. 76—78° (*D.R.P.* 148977 *C.* 1904 [1] 699).
- 14) Methyläther d. 1-Oxy-2[ $\beta$ ]-[ $\alpha$ -Oximidopropyl]naphtalin. Sm. 172° (*B.* 23, 1209). — III, 176.
- 15) 4-Butyrylamido-1-Oxynaphtalin. Sm. 160—161° (*B.* 29, 2954). — \*II, 507.
- 16) Äthyläther d. 2-Acetylamido-1-Oxynaphtalin. Sm. 147—148° (*B.* 42, 1385 *C.* 1909 [1] 1709).
- 17) Äthyläther d. 4-Acetylamido-1-Oxynaphtalin. Sm. 189° (192°) (*J. pr.* [2] 45, 547; *B.* 25, 3060). — II, 865.
- 18) Äthyläther d. 1-Acetylamido-2-Oxynaphtalin. Sm. 144° (*C.* 1896 [2] 1057).
- 19) Äthyläther d. 8-Acetylamido-2-Oxynaphtalin. Sm. 139° (*J. pr.* [2] 43, 29). — II, 886.
- 20) Äthyläther d.  $\beta$ -Acetylamido-2-Oxynaphtalin. Sm. 184,5° (*J. pr.* [2] 43, 28). — II, 886.
- 21)  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\beta$ -[2-Pyridyl]propan. Sm. 106—107° (2HCl, PtCl<sub>4</sub>), Pikrat (*J. pr.* [2] 69, 312 *C.* 1904 [1] 1613).
- 22)  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\beta$ -[4-Pyridyl]propan. Sm. 194° (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 69, 316 *C.* 1904 [1] 1613).
- 23) 4-Piperidyl-1, 2-Benzpyron. Sm. 104—105° (*A.* 367, 206 *C.* 1909 [2] 704).
- 24) 8-Oxy-3,6-Dimethyl-1-[ $\beta$ -Ketopropyl]isochinolin +  $\frac{1}{3}H_2O$ . Sm. 164 bis 165°. HCl, (2HCl, PtCl<sub>4</sub>) (*Soc.* 69, 300). — IV, 374.
- 25)  $\alpha$ -[1-Naphtyl]amidobuttersäure. Sm. 126° u. Zers. (*B.* 25, 2323). — II, 614.
- 26)  $\alpha$ -[2-Naphtyl]amidobuttersäure. Sm. 158° (*B.* 25, 2324). — II, 622.
- 27)  $\alpha$ -[1-Naphtyl]amidoisobuttersäure. Sm. 146° (*B.* 25, 2346). — II, 614.
- 28)  $\alpha$ -[2-Naphtyl]amidoisobuttersäure. Sm. 188° (*B.* 25, 2349). — II, 622.
- 29)  $\alpha$ -Cyan- $\beta$ -[4-Isopropylphenyl]propen- $\gamma$ -Carbonsäure. Sm. 240° (*C.* 1902 [2] 700; 1907 [1] 459).

- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>N** 30) 2-Isobutylchinolin-4-Carbonsäure + 1½ H<sub>2</sub>O (α-Isobutylchinonsäure). Sm. 186° (wasserfrei). Ag, HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (A. 242, 280). — IV, 359.
- 31) 3,6-Dimethyl-2-Äthylchinolin-8-Carbonsäure. Sm. 182—183° (B. 23, 2273). — IV, 359.
- 32) Aldehyd d. 4-Oxy-2,5,6,8-Tetramethylchinolin-3-Carbonsäure (B. 21, 1976. — IV, 373).
- 33) Äthylester d. 1-Naphtylamidoessigsäure. Sd. 244° (B. 25, 2290). — II, 613.
- 34) Äthylester d. 2-Naphtylamidoessigsäure. Sm. 88° (B. 25, 2296). — II, 621.
- 35) Äthylester d. 2-Methyl-4-Phenylpyrrol-3-Carbonsäure. Sm. 105° (B. 35, 3002 C. 1902 [2] 1120). — \*IV, 214.
- 36) Äthylester d. 2-Methyl-5-Phenylpyrrol-3-Carbonsäure. Sm. 120° (116—117°) (B. 18, 2593; B. 39, 3880 C. 1907 [1] 172). — IV, 356.
- 37) Äthylester d. 2-Methyl-5-Phenylpyrrol-4-Carbonsäure. Sm. 81° (B. 39, 3884 C. 1907 [1] 172).
- 38) Äthylester d. 1-Methylen-2-Methylchinolinammonium-3-Carbonsäure. Sm. 235° (A. 282, 112).
- 39) Propylester d. 1-Naphtylamidoameisensäure. Sm. 80° (C. 1909 [2] 1379).
- 40) Isopropylester d. 1-Naphtylamidoameisensäure. Sm. 78—79° (105 bis 106°) (G. 17, 169; C. 1909 [2] 1379). — II, 608.
- 41) Isopropylester d. 2-Naphtylamidoameisensäure. Sm. 70° (G. 17, 170). — II, 617.
- 42) Propylester d. 2-Methylchinolin-3-Carbonsäure. Sm. 51° (A. 282, 124). — IV, 353.
- 43) Acetat d. 6-Oximido-α-Phenyl-αγ-Hexadien. Sm. 83° (B. 28, 1726). — III, 172.
- 44) Benzoat d. 5-Oximidomethyl-1,2,3,4-Tetrahydrobenzol. Sm. 101 bis 102° (A. 359, 292 C. 1908 [1] 2156).
- 45) Benzoat d. 1-Oximido-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 116° (A. 281, 100). — II, 1209.
- 46) Benzoat d. lab. 4-Oximido-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 142—143° (C. 1903 [1] 329; A. 329, 372 C. 1904 [1] 517; A. 359, 302 C. 1908 [1] 2158).
- 47) Benzoat d. stab. 4-Oximido-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 90—91° (C. 1903 [1] 329; A. 329, 373 C. 1904 [1] 517).
- 48) Benzoat d. 4-[α-Oximidoäthyl]-2,3-Dihydro-R-Penten. Sm. 116 bis 117° (A. 359, 310 C. 1908 [1] 2157; B. 42, 148 C. 1909 [1] 655; A. 365, 274 C. 1909 [1] 1818).
- 49) Benzoat d. Ketonoxim C<sub>7</sub>H<sub>11</sub>ON (aus Holzteeröl). Sm. 167—168° (C. 1898 [2] 1232).
- 50) 1-Naphtylamid d. α-Oxybuttersäure. Sm. 96°; Sd. 335°<sub>162</sub> (A. 279, 107). — \*II, 335.
- 51) 2-Naphtylamid d. α-Oxybuttersäure. Sm. 126° (A. 279, 108). — \*II, 338.
- 52) 1-Naphtylamid d. α-Oxyisobuttersäure. Sm. 159—161° (A. 279, 117). — \*II, 335.
- 53) 2-Naphtylamid d. α-Oxyisobuttersäure. Sm. 157—159°. K (B. 25, 2930; A. 279, 109). — II, 620.
- 54) Phenylimid d. Isotrimethylglutakonsäure. Sm. 148° (Soc. 71, 1186). — \*II, 218.
- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>N<sub>8</sub>** C 65,4 — H 5,8 — O 12,4 — N 16,3 — M. G. 257.
- 1) 6-Nitro-4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm. 156° (B. 25, 1032; D.R.P. 81036). — IV, 981; \*IV, 654.
- 2) Äthyl-4-Nitro-2-Amidodiphenylamin. Sm. 86,5°. H<sub>2</sub>SO<sub>4</sub> (C. 1904 [1] 1570).
- 3) 4-Nitro-4'-Äthylamidodiphenylamin. Sm. 146—149° (C. 1900 [2] 852). — \*IV, 382.
- 4) 4'-Nitroso-4-Dimethylamido-3'-Oxydiphenylamin. Sm. 164° (J. pr. [2] 69, 238 C. 1904 [1] 1269).
- 5) 4-Dimethylamido-3'-Oxydiphenylnitrosamin. Sm. 125,5° (B. 35, 3087 C. 1902 [2] 1116; J. pr. [2] 69, 237 C. 1904 [1] 1269). — \*IV, 381.



- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>N<sub>3</sub>** 6) 1-Naphtyläther d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 103° (A. 312, 313). — \*II, 503.
- 7) 2-Naphtyläther d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 203° (A. 312, 312). — \*II, 520.
- 8) 3-[ $\alpha$ -Semicarbazonäthyl]-2-Methyl-5-Phenylfuran. Sm. 251—252° (C. r. 134, 845 C. 1902 [1] 1164). — \*III, 521.
- 9) 3-Methyläther d. 2-Amido-3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 165° (C. 1903 [2] 31).
- 10) Dimethyläther d. 4,4'-Dioxydiazamidobenzol. Sm. 101,5° (C. 1905 [1] 1105).
- 11) 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 176—177°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 36, 517 C. 1903 [1] 648; A. 366, 359 C. 1909 [2] 286). — \*IV, 785.
- 12) Inn. Anhydrid d.  $\alpha$ -[ $\alpha$ -Amidopropionyl]amido- $\beta$ -[3-Indolyl]propionsäure. Sm. 280° (B. 41, 2859 C. 1908 [2] 1735).
- 13) Amid d. 4-Benzoylmethyl-3,5-Dimethylpyrazol-1-Carbonsäure. Sm. 262—264° u. Zers. (C. r. 133, 47; C. r. 134, 844 C. 1902 [1] 1164). — \*IV, 360.
- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>N<sub>5</sub>** C 58,9 — H 5,3 — O 11,2 — N 24,6 — M. G. 285.
- 1) 8-Phenylamido-2,6-Diketo-1,3,7-Trimethylpurin (Phenylamidokaffein). Sm. bei etwa 260° u. Zers. HCl (B. 27, 3091). — III, 960.
- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>Cl<sub>5</sub>** 1) Chlorid d. 3,4,5,6-Tetrachlordiphenylketon-2-Carbonsäure. Sm. 183° (A. 238, 342). — II, 1704.
- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>P** 1) Dibenzylphosphinsäure. Sm. 191°. NH<sub>4</sub> + 7H<sub>2</sub>O, Na + 7H<sub>2</sub>O, K + 7H<sub>2</sub>O, Mg + 7H<sub>2</sub>O, Ca + 8H<sub>2</sub>O, Ba + 8H<sub>2</sub>O, Cd, Cu, Ag (B. 22, 2145; C. r. 139, 675 C. 1904 [2] 1638). — IV, 1664.
- 2) Benzyl-4-Methylphenylphosphinsäure. Sm. 145° (A. 315, 70). — \*IV, 1180.
- 3) Di[4-Methylphenyl]phosphinsäure. Sm. 135° (A. 315, 63). — \*IV, 1177.
- 4) 4-[ $\beta$ -Phenyläthyl]phenylphosphinige Säure. Sm. 156—157° (A. 315, 50). — \*IV, 1184.
- 5) Äthylester d. Diphenylphosphinsäure. Sm. 165° (B. 11, 888). — IV, 1657.
- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>As** 1) Dibenzylarsinsäure. Sm. 210°. Ca + 6H<sub>2</sub>O, Ba + 8H<sub>2</sub>O, Ag, HCl, HBr, HNO<sub>3</sub> (A. 233, 82). — IV, 1690.
- 2) Di[4-Methylphenyl]arsinsäure. Sm. 167°. Ag (A. 208, 20). — IV, 1692.
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>N** C 68,6 — H 6,1 — O 19,6 — N 5,7 — M. G. 245.
- 1) 4-Methyläther d. 4-Oxyphenyl-2',4'-Dioxybenzylamin? Sm. 149° (B. 39, 3975 C. 1907 [1] 155).
- 2) 3,4-Methylenäther d. 1-Oximido-5-Methyl-3-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 137° u. Zers. (A. 303, 231). — \*III, 139.
- 3)  $\gamma$ -Cyan- $\alpha$ -Keto- $\alpha$ -Phenylhexan- $\gamma$ -Carbonsäure. Sm. 188—189° (Bl. [3] 15, 776). — \*II, 1136.
- 4)  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\epsilon$ -Methyl- $\alpha$ -Hexadien- $\alpha$ -Carbonsäure (Anilidomesityloxydoxalsäure). Sm. 120—121° (A. 291, 135). — \*II, 230.
- 5) 3-Oxy- $\beta$ -Dimethylamidomethylnaphtalin-2-Carbonsäure. Sm. 180° (C. 1901 [1] 1394).
- 6) Lakton d. 2-Oxy-5-Keto-2-Methyl-1-[2-Methylphenyl]tetrahydropyrrol-3-Methylcarbonsäure. Sm. 138° (A. 295, 118). — \*II, 257.
- 7) Lakton d. 2-Oxy-5-Keto-2-Methyl-1-[4-Methylphenyl]tetrahydropyrrol-3-Methylcarbonsäure. Sm. 135° (A. 295, 119). — \*II, 281.
- 8) Methylester d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\gamma$ -Phenylcrotonäthyläthersäure. Fl. (C. 1900 [2] 173). — \*II, 1134.
- 9) Methylester d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylpropyläthersäure. Sm. 84° (C. r. 136, 691 C. 1903 [1] 920; Bl. [3] 31, 342 C. 1904 [1] 1135).
- 10) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakryläthyläthersäure. Sm. 86° (C. 1900 [2] 173). — \*II, 1130.
- 11) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Oxycrotonbenzyläthersäure. Sm. 113° (C. 1900 [1] 1269). — \*II, 639.
- 12) Äthylester d.  $\gamma$ -Keto- $\alpha$ -Cyan- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Fl. (Soc. 85, 1456 C. 1905 [1] 171).

- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>N** 13) Äthylester d. 2-Keto-3-Phenyl-5-Methyl-2,3-Dihydropyrrol-4-Carbonsäure. Sm. 127—128° (128—129°) (B. 18, 795; A. 260, 155; Soc. 85, 1457 C. 1905 [1] 171). — II, 1965.
- 14) Äthylester d. 2-Oxy-3-Äthylechinolin-4-Carbonsäure. Sm. 133 bis 134° (M. 28, 40 C. 1907 [1] 1265).
- 15) Äthylester d. 2-Oxychinolinäthyläther-4-Carbonsäure. Sm. 86° (B. 16, 2156). — IV, 360.
- 16) Acetat d. 2-Oximido-3-Isopropyl-1,2-Benzpyron (A. d.  $\alpha$ -Isopropylcumaroxim). Sm. 85° (B. 24, 3464). — II, 1666.
- 17) 1[oder 2]-Acetat d. 2-Oximido-1-Oxy-1,4-Dimethyl-1,2-Dihydronaphtalin. Sm. 116—117° (G. 26 [1] 28; C. 1907 [2] 1339). — \*II, 537.
- 18) Phenylamidoformiat d. m-Methyldihydroresorcin. Sm. 96—97° (A. 297, 149). — \*II, 180.
- 19) Phenylmonamid d. 1,2,3,4-Tetrahydrobenzol-1,5-Dicarbonsäure. Sm. 190—192° (Soc. 87, 304 C. 1905 [1] 1320).
- 20) Phenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure. Sm. 155° (B. 36, 999 C. 1903 [1] 1131).
- 21) Verbindung (aus Benzylidenpapaverinium). Sm. 165° (J. pr. [2] 56, 327; siehe auch M. 9, 333, 756). — \*IV, 263.
- 22) Verbindung (aus d. Verb. C<sub>15</sub>H<sub>11</sub>O<sub>3</sub>N Sm. 225—230°). Sm. 80° (J. pr. [2] 56, 327).
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>** C 61,5 — H 5,5 — O 17,6 — N 15,4 — M. G. 273.
- 1) Methylenäther d.  $\epsilon$ -Semicarbazon- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadien. Sm. 199—199,5° (Ar. 246, 352 C. 1908 [2] 888; B. 41, 2382 C. 1908 [2] 890).
- 2) Äthylester d. Acetyl-4-Methylphenylhydrazoncyanessigsäure. Lab. Modif. Sm. 216°; stab. Modif. Sm. 218—219° (J. pr. [2] 67, 407 C. 1903 [1] 1347). — \*IV, 1053.
- 3) Acetat d. 5-Oxy-3-Methyl-1-[4-Acetylamidophenyl]pyrazol. Sm. 160—161° (C. 1897 [2] 967). — \*IV, 328.
- 4) 5-Methylcarbonat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-4-Amidoameisensäuremethylester. Sm. 153—154° (D.R.P. 189842 C. 1908 [1] 427).
- 5)  $\gamma$ -Phenylamid d.  $\beta$ -Imido- $\alpha$ -Cyanpropan- $\alpha\gamma$ -Dicarbonsäure- $\alpha$ -Äthylester. Sm. 180° (Soc. 85, 1736 C. 1905 [1] 592).
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>Cl<sub>5</sub>** 1) Heptylester - Pentachlorphenylester d. Kohlensäure. Fl. (Bl. [3] 23, 821).
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>P** 1) 4-[ $\beta$ -Phenyläthyl]phenylphosphinsäure. Sm. 256° (A. 315, 51). — \*IV, 1184.
- C<sub>14</sub>H<sub>15</sub>O<sub>4</sub>N** C 64,4 — H 5,7 — O 24,5 — N 5,4 — M. G. 261.
- 1) l- $\alpha$ -[1,2-Phtalyl]amidopentan- $\alpha$ -Carbonsäure. Sm. 115—116°. NH<sub>4</sub>, Cu, Pt(NH<sub>3</sub>)<sub>2</sub> (A. 242, 9). — II, 1811.
- 2) i- $\alpha$ -[1,2-Phtalyl]amidopentan- $\alpha$ -Carbonsäure (Phtalylamidocapronsäure). Sm. 142°. Pt(NH<sub>3</sub>)<sub>2</sub> + 3 $\frac{1}{2}$ H<sub>2</sub>O (A. 242, 9; B. 37, 1695 C. 1904 [1] 1525). — II, 1811.
- 3)  $\epsilon$ -[1,2-Phtalyl]amidopentan- $\alpha$ -Carbonsäure. Sm. 107—107,5° (B. 41, 2016 C. 1908 [2] 306; B. 42, 557 C. 1909 [1] 861).
- 4) Oximderivat d. Filixsäure. Sm. bei 150° u. Zers. (G. 26 [2] 442). — \*II, 1136.
- 5) isom. Oximderivat d. Filixsäure. Sm. 197—198° (G. 26 [2] 444). — \*II, 1136.
- 6) Monomethylester d.  $\delta$ -[4-Methylphenyl]amido- $\alpha\gamma$ -Butadien- $\alpha\gamma$ -Dicarbonsäure. Sm. 147—148° (A. 273, 182).
- 7) Dimethylester d.  $\delta$ -Phenylamido- $\alpha\gamma$ -Butadien- $\alpha\gamma$ -Dicarbonsäure. Sm. 119—120° (A. 273, 178). — II, 441.
- 8) Äthylester d.  $\alpha$ -Cyan- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure. Sm. 156° (C. 1904 [2] 903).
- 9) Äthylester d.  $\alpha$ -Benzoylamido- $\gamma$ -Keto- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 95° (A. 297, 32). — \*II, 749.
- 10) Äthylester d.  $\gamma$ -Phenylimido- $\beta$ -Ketobutan- $\alpha$ -Ketocarbonsäure. Sm. 139—140° (C. r. 134, 1063 C. 1902 [1] 1321).
- 11) Äthylester d.  $\alpha$ -Phtalylamidobuttersäure. Krystalle. Sd. 333—337° (B. 33, 994). — \*II, 1056.

- $C_{14}H_{15}O_4N$  12) Äthylester d.  $\gamma$ -Phtalylamidobuttersäure. Sm. 71—72° (B. 41, 514 C. 1908 [1] 1163).
- 13) Äthylester d. 4,5-Diketo-1-Methyl-2-Phenyltetrahydropyrrol-3-Carbonsäure. Methylaminsalz (C. 1907 [2] 1788).
- 14) Äthylester d.  $\alpha\beta$ -Dioxy- $\beta$ -[2-Chinolyl]propionsäure. Sm. 107—108° (A. 287, 37). — IV, 369.
- 15) Äthylester d. 2,4-Dioxychinolin-2-Äthyläther-3-Carbonsäure. Sm. 107° (A. 251, 364). — IV, 368.
- 16) 4-Oxyphenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbon-säure. Sm. 170—175° (B. 36, 999 C. 1903 [1] 1131).
- 17)  $\alpha\gamma$ -Imid d.  $\beta$ -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure- $\alpha$ -Äthylester. Sm. 119° (C. 1899 [1] 730; A. 320, 88). — \*II, 1171.
- 18)  $\beta\gamma$ -Phenylimid d. Propan- $\alpha\beta\gamma$ -Tricarbonsäure- $\alpha$ -Äthylester. Sm. 90° (B. 38, 1621 C. 1905 [1] 1533).
- $C_{14}H_{15}O_4N_3$  C 58,1 — H 5,2 — O 22,1 — N 14,5 — M. G. 289.
- 1) p-Dinitro-3,6,8-Trimethyl-2-Äthylchinolin. Sm. 152,5° (B. 23, 2272). — IV, 343.
- 2) Diäthylester d. Phenylhydrazoncyanessigsäure-N-Carbonsäure. Sm. 107° (J. pr. [2] 49, 332). — IV, 1455.
- 3) Diäthylester d. Phenylazocyanmethan- $\alpha\alpha$ -Dicarbonsäure (J. pr. [2] 47, 592). — IV, 1473.
- 4) Diäthylester d. 1-Phenyl-1,2,4-Triazol-3,5-Dicarbonsäure. Sm. 81,5° (B. 23, 3788). — IV, 1117.
- $C_{14}H_{15}O_4N_5$  C 53,0 — H 4,7 — O 20,2 — N 22,1 — M. G. 317.
- 1) 4,6-Dinitro-5-Methylamido-2-Methyl-s-Diphenylhydrazin. Sm. 155° (J. pr. [2] 67, 537 C. 1903 [2] 239). — \*IV, 1091.
- $C_{14}H_{15}O_4N_7$  C 48,7 — H 4,3 — O 18,6 — N 28,4 — M. G. 345.
- 1) Diazoderivat (aus ?-Nitro-2,4-Diamido-1-Methylbenzol) (B. 8, 1212). — IV, 601.
- $C_{14}H_{15}O_4Br$  1)  $\beta\delta$ -Lakton d.  $\gamma$ -Brom- $\beta$ -Oxy- $\beta$ -Phenylbutan- $\gamma\delta$ -Dicarbon-säure- $\gamma$ -Äthylester. Sm. 103—104° (A. 308, 143). — \*II, 1127.
- 2) Dimethylester d.  $\gamma$ -Brom- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta\delta$ -Dicarbon-säure. Fl. (A. 336, 200 C. 1904 [2] 1731).
- $C_{14}H_{15}O_4Br_3$  1) Dimethylester d.  $\alpha\beta\gamma$ -[oder  $\alpha\beta\delta$ ]-Tribrom- $\alpha$ -Phenylbutan- $\delta\delta$ -Dicar-bonsäure. Sm. 126—127° (A. 336, 226 C. 1904 [2] 1733).
- $C_{14}H_{15}O_4P$  1) Di[ $\alpha$ -Oxybenzyl]phosphinsäure. Sm. bei 165°. Ag (Bl. 50, 604). — IV, 1664.
- 2) Di[ $\alpha$ -Oxybenzyl]unterphosphorige Säure. Sm. 230°. Anilinsalz (C. 1904 [2] 1709; 1908 [2] 2004).
- 3) Dibenzylester d. Phosphorsäure. Sm. 78—79°. Ca + 6H<sub>2</sub>O (A. 262, 211). — II, 1050.
- 4) Äthylidiphenylester d. Phosphorsäure. Sd. 250—263° (Bl. [3] 21, 346, 497, 520; D.R.P. 142971 C. 1903 [2] 171). — \*II, 358.
- $C_{14}H_{15}O_4As$  1) Di[4-Oxy-3-Methylphenyl]arsinsäure. Sm. 247° (B. 41, 2372 C. 1908 [2] 783).
- $C_{14}H_{15}O_5N$  C 60,7 — H 5,4 — O 28,9 — N 5,0 — M. G. 277.
- 1) Äthylester d. 4-Acetylamidobenzoylbrenztraubensäure. Sm. 80 bis 124°. Cu (B. 36, 2696 C. 1903 [2] 952).
- 2) Äthylester d. 4-Äthoxyphtalylamidoessigsäure. Sm. 118° (B. 37, 1974 C. 1904 [2] 236).
- 3) Äthylester d. 6-[4-Nitrophenyl]-3,4-Dihydropyran-5-Carbonsäure (Äthylester d. 6-[4-Nitrophenyl]dehydrohexon-5-Carbonsäure). Sm. 62 bis 63° (Soc. 51, 735). — II, 1684.
- 4) Äthylester d. 4,5-Diketo-2-[4-Methoxyphenyl]tetrahydropyrrol-3-Carbonsäure. Zers. bei 160°. NH<sub>4</sub> (C. r. 138, 979 C. 1904 [1] 1415; C. 1907 [2] 1787).
- 5) Äthylester d. 4,6[oder 4,7]-Dioxy-1-Keto-1,2-Dihydroisochinolin-6[oder 7]-Äthyläther-3-Carbonsäure. Zers. bei 233° (B. 37, 1974 C. 1904 [2] 236).
- 6) Diäthylester d. 3-Oxyindol-1,2-Dicarbon-säure (Carboxyäthylindoxyl-säureäthylester) (D.R.P. 126962 C. 1902 [1] 83).
- 7) Phenylmonamid d.  $\beta$ -Penten- $\beta\gamma\delta$ -Tricarbon-säure. Sm. 110°. Anilin-salz (H. 54, 543 C. 1908 [1] 1398).



- $C_{14}H_{15}O_5N_3$  C 55,1 — H 4,9 — O 26,2 — N 13,8 — M. G. 305.
- 1)  $\alpha\gamma$ -Lakton d.  $\delta$ -Semicarbazon- $\gamma$ -Oxy- $\gamma$ -Phenylpentan- $\alpha\beta$ -Dicarbonsäure. Sm. 210° u. Zers. (A. 321, 99 C. 1902 [1] 979).
  - 2) Äthylester d. 2-Keto-6-Methyl-4-[3-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 231–232° (G. 23 [1] 370). — II, 1681.
  - 3) Acetat d. 3-Keto-2-[4-Nitrophenyl]-5-Oxymethyl-1,4-Dimethyl-2,3-Dihydropyrazol. Sm. 163–164° (D. R. P. 214716 C. 1909 [2] 1511).
- $C_{14}H_{15}O_5Cl$  1) Chlorfilixsäure. Pb (Gm. 7, 1064). — II, 1968.
- $C_{14}H_{15}O_5Br$  1) Bromfilixsäure. Sm. 122° (B. 21, 2965). — II, 1968.
- $C_{14}H_{15}O_5Br_3$  1) Methylester d.  $\alpha$ -Brom- $\beta$ -Äthoxyl- $\beta$ -[3,5-Dibrom-4-Acetoxyphenyl]-propionsäure. Sm. 119° (A. 322, 228 C. 1902 [2] 277).
- 2)  $\alpha$ ,4-Diacetat d. 2,5-Dibrom-3,4-Dioxy-1- $\beta$ -Brom- $\alpha$ -Oxypropylbenzol. Sm. 139–140° (A. 329, 27 C. 1903 [2] 1436).
- 3) 2,4-Diacetat d. 3,5,6-Tribrom-4-Oxy-1,2-Di[Oxymethyl]benzol-1-Äthyläther. Sm. 105–107° (B. 32, 3019). — \*II, 696.

$C_{14}H_{15}O_6N$  C 57,3 — H 5,1 — O 32,8 — N 4,8 — M. G. 293.
  - 1) Äthylester d. 4,5-Diketo-2-[4-Oxy-3-Methoxyphenyl]tetrahydropyrrol-3-Carbonsäure +  $H_2O$ . Zers. bei 180°.  $NH_4$  (C. r. 138, 979 C. 1904 [1] 1415; C. 1907 [2] 1787).
  - 2) 6-Methylester-4-Äthylester d. 2-Keto-3,4-Dihydro-1,4-Benzoxazin-4-Methylcarbonsäure-6-Carbonsäure. Sm. 136° (A. 325, 336 C. 1903 [1] 771).
  - 3) Diäthylester d.  $\alpha$ -[2-Nitrophenyl]äthen- $\beta\beta$ -Dicarbonsäure (D. d. o-Nitrobenzalmalonsäure). Sm. 53° (Soc. 47, 158). — II, 1864.
  - 4) Diäthylester d.  $\alpha$ -[3-Nitrophenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sm. 73° (75–76°).  $Na_2$  (Soc. 49, 361; Soc. 83, 723 C. 1903 [2] 55; J. pr. [2] 75, 506 C. 1907 [2] 452). — II, 1864.
  - 5) Diäthylester d.  $\alpha$ -[4-Nitrophenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sm. 93° (94°) (Soc. 47, 158; B. 31, 2593). — II, 1864; \*II, 1075.
  - 6) Diacetat d. 4-Diacetylamido-1,3-Dioxybenzol. Sm. 106–108° (B. 35, 4193 C. 1903 [1] 145; B. 35, 4204 C. 1903 [1] 146; J. pr. [2] 70, 326 C. 1904 [2] 1541).
  - 7) Mono[4-Äthoxyphenylamid] d. Akonitsäure +  $H_2O$ . Sm. 72° (129° wasserfrei). +  $C_2H_4O_2$  (C. 1903 [2] 565).

$C_{14}H_{15}O_6N_3$  C 52,3 — H 4,7 — O 29,9 — N 13,1 — M. G. 321.
  - 1) Diäthylester d. 1,4-Diketo-1,2,3,4-Tetrahydro-2,3-Benzdiazin-2-Carbonsäure-6-Amidoameisensäure. Sm. 148–150° (J. pr. [2] 76, 325 C. 1908 [1] 38).

$C_{14}H_{15}O_6N_5$  C 48,1 — H 4,3 — O 27,5 — N 20,1 — M. G. 349.
  - 1) Verbindung (aus Dimethylamidobenzol u. 2,4,6-Trinitro-1-Amidobenzol). Sm. 139–141° (A. 215, 359). — II, 328.

$C_{14}H_{15}O_6Cl$  1) Triacetat d. 5-Chlor-2,4,6-Trioxy-1,3-Dimethylbenzol. Sm. 170° (M. 20, 418). — \*II, 622.

$C_{14}H_{15}O_6Br$  1) Äthylester d.  $\alpha$ -Brom- $\beta$ -Acetoxy- $\beta$ -[3,4-Dioxyphenyl]propion-3,4-Methylenäthersäure. Sm. 80° (B. 40, 2179 C. 1907 [2] 235).
- 2)  $\alpha\beta$ -Diacetat d.  $\alpha\beta$ -Dioxyäthyl-3-Brom-4-Methoxyphenylketon. Fl. (B. 29, 351).
- 3) Triacetat d. 5-Brom-2,4,6-Trioxy-1,3-Dimethylbenzol. Sm. 168° (M. 21, 503). — \*II, 622.

$C_{14}H_{15}O_6P$  1) Di[ $\alpha$ ,2-Dioxybenzyl]phosphinige Säure. Ba (A. ch. [6] 23, 329). — IV, 1674.
- 2) Di[2-Methoxyphenyl]phosphorsäure. Sm. 97°.  $Na + H_2O$ ,  $Ca + 4H_2O$ ,  $Cu + 3H_2O$  (C. r. 146, 1152 C. 1908 [2] 239).

$C_{14}H_{15}O_7N$  C 54,4 — H 4,8 — O 36,2 — N 4,5 — M. G. 309.
  - 1) 1,2-Dimethylester d. Benzol-1,2-Dicarbonsäure-4-Succinaminsäure. Sm. 173°. Ag (C. 1906 [2] 117).
  - 2) 1,2-Dimethylester-4-Äthylester d. Benzol-1,2-Dicarbonsäure-4-Oxaminsäure. Sm. 126° (C. 1906 [2] 117; 1908 [2] 1027).
  - 3) Diäthylester d.  $\alpha$ -Keto- $\alpha$ -[2-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure (D. d. 2-Nitrobenzoylmalonsäure). Sm. 54°.  $Na$ ,  $K$ ,  $Fe$  (B. 17, 2796; 24, 2031; A. 251, 360). — II, 1961.
  - 4) Triäthylester d. 5,7-Dioxy-2-Keto-2,3-Dihydroindol-4,6-Dicarbonsäure. Sm. 235–236° u. Zers. (Soc. 77, 964). — \*II, 1215.

- C<sub>14</sub>H<sub>15</sub>O<sub>7</sub>N** 5) Triacetat d. 1-Acetylamido-*p*-Trioxybenzol. Sm. 182° (*M.* 16, 251). — \*II, 619.
- C<sub>14</sub>H<sub>15</sub>O<sub>7</sub>Br** 1) Brompikrotoxinsäure. Sm. 250° u. Zers. (*G.* 39 [1] 299 *C.* 1907 [1] 1482).
- C<sub>14</sub>H<sub>15</sub>O<sub>8</sub>N** C 51,7 — H 4,6 — O 39,4 — N 4,3 — *M. G.* 325.
- 1)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\alpha$ -[6-Nitro-3,4-Dioxyphenyl]äthan-3,4-Dimethyläther- $\beta$ ,2-Dicarbonsäure- $\beta$ -Äthylester (Äthylester d. Nitromekoninessigsäure). Sm. 129° (*B.* 19, 2295). — II, 2045.
- 2) Triacetat d. 5-Nitro-4-Oxy-3-Dioxymethyl-1-Methylbenzol. Sm. 132—132,5° (*B.* 37, 3926 *C.* 1904 [2] 1595).
- C<sub>14</sub>H<sub>15</sub>NCl<sub>2</sub>** 1) Base (aus 2[oder 4]-Methyl-1,2,3,4-Tetrahydrocarbazol). Sm. 125—126°. Pikrat (*C.* 1904 [2] 343; *C.* 1908 [1] 2026).
- C<sub>14</sub>H<sub>15</sub>NS** 1) 4-Amido-2,4'-Dimethyldiphenylsulfid (*J. pr.* [2] 68, 289 *C.* 1903 [2] 995).
- 2) 4-Amido-3,4'-Dimethyldiphenylsulfid. Sm. 48—49°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Oxalat, Pikrat (*J. pr.* [2] 68, 279 *C.* 1903 [2] 994).
- C<sub>14</sub>H<sub>15</sub>N<sub>2</sub>Br** 1) 2-Brom-*s*-Di[4-Methylphenyl]hydrazin. Sm. 110° (*B.* 21, 1215). — IV, 1503.
- 2) 3-Brom-*s*-Di[4-Methylphenyl]hydrazin. Sm. 113° (*B.* 21, 1218). — IV, 1503.
- C<sub>14</sub>H<sub>15</sub>N<sub>2</sub>J** 1)  $\beta$ -Jod- $\alpha$ -Di[Phenylamido]äthan (*A. ch.* [6] 16, 154). — II, 443.
- 2) Jodmethylat d. 1,2-Dimethyl- $\alpha$ -Naphtimidazol. Sm. 294° (*J. pr.* [2] 73, 434 *C.* 1906 [2] 253).
- C<sub>14</sub>H<sub>15</sub>N<sub>2</sub>P** 1) Phenylhydrazon-4-Äthylphenylphosphin. Sm. 139° (*A.* 293, 325). — IV, 1674.
- C<sub>14</sub>H<sub>15</sub>N<sub>3</sub>S** 1)  $\alpha$ -Amido- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]thioharnstoff. Sm. 134° (*B.* 32, 1084). — \*IV, 443.
- 2)  $\alpha$ -Amido- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. bei 150° (*Soc.* 61, 1013; *B.* 25, 3107; 34, 320). — IV, 680; \*IV, 443.
- 3)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -Benzylthioharnstoff. Sm. 116° (123°) (*J. pr.* [2] 62, 97; *B.* 37, 2328 *C.* 1904 [2] 313). — \*IV, 541.
- 4)  $\alpha$ -Amido- $\beta$ -Phenyl- $\alpha$ -[4-Methylphenyl]thioharnstoff. Sm. 123° (117°) (*B.* 25, 3107; 32, 1084; 34, 320; *Soc.* 61, 1014). — IV, 806; \*IV, 534.
- 5)  $\alpha$ -Methylamido- $\alpha$ - $\beta$ -Diphenylthioharnstoff? Sm. 175° (*B.* 42, 3527 *C.* 1909 [2] 1460).
- 6)  $\alpha$ -Methylphenylamido- $\beta$ -Phenylthioharnstoff. Sm. 154° (*A.* 190, 166; *B.* 27, 868; *J. pr.* [2] 74, 230 *C.* 1906 [2] 1725). — IV, 679.
- 7)  $\alpha$ -Benzylamido- $\beta$ -Phenylthioharnstoff. Sm. 155° (*B.* 37, 2329 *C.* 1904 [2] 313).
- 8)  $\alpha$ -[2-Methylphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 145—146° u. Zers. (146—147°) (*Soc.* 57, 259; *B.* 32, 1085). — IV, 802; \*IV, 530.
- 9)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 175° (172°) (*B.* 25, 3107; 32, 1084; 34, 320; *Soc.* 61, 1014; *J. pr.* [2] 60, 224). — IV, 806; \*IV, 534.
- 10)  $\alpha$ -Phenylamido- $\alpha$ -Methyl- $\beta$ -Phenylthioharnstoff. Sm. 175° (*B.* 25, 3114). — IV, 680.
- 11)  $\alpha$ -Phenylamido- $\beta$ -Methyl- $\beta$ -Phenylthioharnstoff. Sm. 142° (*B.* 30, 848). — IV, 680.
- 12)  $\alpha$ -Phenylamido- $\beta$ -[2-Methylphenyl]thioharnstoff. Sm. 164° (153°; 156°) (*B.* 30, 846; 32, 1084; *Soc.* 57, 258; *J. pr.* [2] 74, 230 *C.* 1906 [2] 1725). — \*IV, 443.
- 13)  $\alpha$ -Phenylamido- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. 176° (*Soc.* 61, 1013; *B.* 25, 3107; 34, 320; *J. pr.* [2] 74, 229 *C.* 1906 [2] 1725). — IV, 680; \*IV, 443.
- 14)  $\alpha$ -Phenylamido- $\beta$ -Benzylthioharnstoff. Sm. 115—116° (163°) (*Soc.* 61, 1021; *J. pr.* [2] 67, 217 *C.* 1903 [1] 1260). — IV, 680; \*IV, 443.
- 15)  $\alpha$ -Diphenylamido- $\beta$ -Methylthioharnstoff. Sm. 203—204° u. Zers. (*B.* 25, 3113). — IV, 680.
- 16)  $\beta$ -[2-Naphtyl]amido- $\alpha$ -Allylthioharnstoff. Sm. 155° (*B.* 24, 269). — IV, 928.
- 17) 1-Amido-8-[ $\beta$ -Allylthioureido]naphtalin. Sm. 300° (*A.* 365, 147 *C.* 1909 [1] 1822).
- 18) Methyläther d. Phenylimido- $\alpha$ -Phenylhydrazidomerkaptomethan. Sm. 77—78°. (2HCl, PtCl<sub>4</sub>), HJ (*B.* 25, 3108; 34, 335). — IV, 679; \*IV, 441.

- C<sub>14</sub>H<sub>15</sub>N<sub>3</sub>S** 19) Methyläther d. Phenylimido- $\beta$ -Phenylhydrazidomerkaptomethan. Sm. 80°. HJ (B. 25, 3109; 34, 336). — IV, 679; \*IV, 442.
- 20) 2-[2-Naphtyl]hydrazido-5-Methyl-4,5-Dihydrothiazol. Sm. bei 160° (B. 24, 270). — IV, 929.
- 21) 3-Amido-9-Dimethylamidophenthiazin. Sm. 160° (B. 39, 1017 C. 1908 [1] 1359).
- C<sub>14</sub>H<sub>15</sub>N<sub>3</sub>S<sub>2</sub>** 1) Nitril d. 2-[4-Isopropylphenyl]-5,6-Dihydro-1,3,5-Dithioazin-4,6-Dicarbonsäure. Sm. 118° u. Zers. (B. 33, 1777). — \*IV, 155.
- C<sub>14</sub>H<sub>15</sub>N<sub>4</sub>Cl** 1) 5'-Chlor-2',4'-Diamido-2,4-Dimethylazobenzol. Sm. 150° (M. 21, 275). — \*IV, 1026.
- 2) 5-Chlor-2,6-Diamido-3,4'-Dimethylazobenzol. Sm. 152° (Soc. 81, 96 C. 1902 [1] 186). — \*IV, 1021.
- 3) 5-Chlorphenylat d. 2-Amido-3-Methylamido-5,10-Naphtdiazin. HCl + 2H<sub>2</sub>O (B. 26, 380). — IV, 1281.
- C<sub>14</sub>H<sub>15</sub>N<sub>4</sub>Cl<sub>3</sub>** 1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[ $\beta$ -Phenylhydrazido]äthan (Bl. [3] 17, 548). — IV, 747.
- C<sub>14</sub>H<sub>15</sub>N<sub>5</sub>S** 1)  $\alpha$ -Imido- $\alpha$ -[ $\beta$ -Phenylhydrazido]- $\alpha'$ -Phenylimido- $\alpha'$ -Merkaptodimethylamin (Anilguanidophenylthioharnstoff). Sm. 167° (A. 356, 192 C. 1907 [2] 1798).
- C<sub>14</sub>H<sub>15</sub>N<sub>5</sub>S<sub>2</sub>** 1) Dianildithiobiuret. Sm. 178° (A. 361, 326 C. 1908 [2] 881).
- C<sub>14</sub>H<sub>15</sub>ClSi** 1) Äthylidiphenylsiliciumchlorid. Sd. 206—208°<sub>50</sub> (C. 1905 [1] 930; Soc. 93, 207 C. 1908 [1] 1266).
- C<sub>14</sub>H<sub>15</sub>Cl<sub>2</sub>As** 1) Äthylidiphenylarsindichlorid. Sm. 137° (A. 201, 235). — IV, 1688.
- C<sub>14</sub>H<sub>15</sub>ON<sub>2</sub>** C 73,7 — H 7,0 — O 7,0 — N 12,3 — M. G. 228.
- 1) 1-Diäthylnitrosamidonaphtalin. Sm. 165° (Soc. 41, 180). — II, 599.
- 2) Di[2-Amidobenzyl]äther? + PtCl<sub>2</sub> (C. 1905 [1] 674).
- 3) Di[ $\beta$ -Amido-3-Methylphenyl]äther. 2HCl (Am. 36, 551 C. 1907 [1] 545).
- 4) 3[oder 4]-Amido-4[oder 3]-[2-Oxybenzyl]amido-1-Methylbenzol. Sm. 167° (B. 28, 935). — IV, 611.
- 5) 4-Äthylamido-4'-Oxydiphenylamin. Sm. 140° (D.R.P. 133481 C. 1902 [2] 555). — \*IV, 382.
- 6) 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 99°. HCl, H<sub>2</sub>SO<sub>4</sub> (D.R.P. 74196; B. 35, 3087 C. 1902 [2] 1116; J. pr. [2] 69, 232 C. 1904 [1] 1269). — \*IV, 381.
- 7) 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 161° (B. 35, 3085 C. 1902 [2] 1116; D.R.P. 134947 C. 1902 [2] 1023; J. pr. [2] 69, 161 C. 1904 [1] 1267). — \*IV, 381.
- 8) Methyläther d. 4,4'-Diamido-5-Oxy-2-Methylbiphenyl. Sm. 82°. 2HCl (D.R.P. 42006). — \*II, 539.
- 9) Methyläther d. 2-Oxyphenyl-2-Amidobenzylamin. Sm. 99° (95°). 2HCl (J. pr. [2] 52, 401; [2] 54, 279). — IV, 629.
- 10) Methyläther d. 4-Oxyphenyl-2-Amidobenzylamin. Sm. 82° (J. pr. [2] 52, 404). — IV, 629.
- 11) Äthyläther d. 6-Amido-3-Oxydiphenylamin. Sm. 79—80°. HCl (B. 25, 995; 26, 686). — II, 723.
- 12) Äthyläther d. 2-Amido-4'-Oxydiphenylamin. Sm. 95° (B. 26, 683). — IV, 555.
- 13) Äthyläther d. 4-Amido-4'-Oxydiphenylamin. Sm. 98—99,5°. HCl (B. 26, 697). — IV, 584.
- 14) Äthyläther d. 4,4'-Diamido-3-Oxybiphenyl. Sm. 134—135° (139°) (B. 20, 3176; D.R.P. 44209; B. 36, 4072 C. 1904 [1] 267). — II, 894; \*II, 537.
- 15) Äthyläther d. 6,4'-Diamido-3-Oxybiphenyl. Sm. 97°. 2HCl (A. 303, 350; B. 36, 4087 C. 1904 [1] 269). — \*II, 537.
- 16) 4-Acetylamido-1-Dimethylamidonaphtalin. Sm. 194—195° (B. 21, 3125; M. 16, 802). — IV, 921.
- 17) Äthyläther d. 2-Oxy-s-Diphenylhydrazin. Sm. 66° (B. 36, 4072 C. 1904 [1] 267).
- 18) Äthyläther d. 3-Oxy-s-Diphenylhydrazin. Sm. 74—75° (B. 36, 4113 C. 1904 [1] 272).
- 19) Äthyläther d. 4-Oxy-s-Diphenylhydrazin. Sm. 86° (B. 36, 3848 C. 1904 [1] 89).
- 20) 3,3'-Diamido- $\beta$ -Oxy-4,4'-Dimethylazobenzol. Sm. 212° u. Zers. 2HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (A. 229, 346). — IV, 1423.



- C<sub>14</sub>H<sub>16</sub>ON<sub>2</sub>** 21) 1-Phenacetyl-amido-2,5-Dimethylpyrrol. Sm. 110—111°; Sd. 245 bis 265°<sub>88</sub> (B. 35, 4321 C. 1903 [1] 336). — \*IV, 341.
- 22) 1-Benzoyl-3-Methyl-5-Propylpyrazol (oder 1-Benzoyl-5-Methyl-3-Propylpyrazol). Fl. (Bl. [3] 27, 1087 C. 1903 [1] 226).
- 23) Methylphenylecyklotetramethylenpyrazolon. Sm. 135° (A. 317, 107). — \*IV, 561.
- 24) Dihydropyrazolderivat (aus d. Verb. C<sub>8</sub>H<sub>10</sub>O<sub>2</sub>). Sd. 220—225°<sub>30</sub> (B. 34, 3490).
- 25) α-Oxy-α-[4-Amidophenyl]-β-[4-Methyl-2-Pyridyl]äthan. Sm. 130° (HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (B. 35, 2792 C. 1902 [2] 995). — \*IV, 657.
- 26) 6-Oxy-4-Methyl-2-[4-Isopropylphenyl]-1,3-Diazin. Sm. 165° (B. 30, 2007). — IV, 983.
- 27) 6-Oxy-4-Methyl-5-Äthyl-2-Benzyl-1,3-Diazin. Sm. 193,5° (B. 22, 1623). — IV, 983.
- 28) 6-Oxy-4-Methyl-5-Äthyl-2-[4-Methylphenyl]-1,3-Diazin. Sm. 218° (B. 23, 3826). — IV, 983.
- 29) 3-Keto-6-Methyl-2-Phenyl-2,3,4,5,6,7-Hexahydrobenzpyrazol. Sm. 243—245° (A. 342, 322 C. 1905 [2] 1792; A. 350, 235 C. 1907 [1] 251).
- 30) 2-Oxy-1,2,3-Trimethyl-2,3-Dihydro-α-Naphtimidazol. Sm. 218° (J. pr. [2] 73, 434 C. 1906 [2] 253).
- 31) Methylharmalin. Sm. 162° u. Zers. HJ (B. 18, 405; 30, 2484). — \*III, 658.
- 32) Nitril d. 5-Keto-2-Methyl-1-[2,3-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Fl. (B. 38, 1227 C. 1905 [1] 1258).
- 33) Nitril d. 5-Keto-2-Methyl-1-[2,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Fl. (B. 38, 1225 C. 1905 [1] 1257).
- 34) Nitril d. 5-Keto-2-Methyl-1-[2,5-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Fl. (B. 38, 1226 C. 1905 [1] 1257).
- 35) Nitril d. 5-Keto-2-Methyl-1-[3,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Fl. (B. 38, 1226 C. 1905 [1] 1257).
- 36) Amid d. β-[1-Naphtyl]amidoisobuttersäure. Sm. 129—130° (B. 39, 1008 C. 1906 [1] 1343).
- 37) Amid d. β-[2-Naphtyl]amidoisobuttersäure. Sm. 168—169° (B. 39, 1009 C. 1906 [1] 1343).
- 38) Verbindung (aus Benzol u. 4-Nitroso-1-Dimethylamidobenzol) (B. 12, 1824). — II, 329.
- 39) Verbindung (aus α-Oximidodiphenylmethan u. Methylamin). Zers. bei 140° (C. 1906 [2] 1718).
- 40) Verbindung (aus 4,4'-Dimethylazoxybenzol). Sm. 70° (M. 10, 597). — IV, 1340.
- 41) Verbindung (aus d. Verb. C<sub>18</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub> aus d. Dehydrodiacetylävinlensäure). Sm. 137° (G. 22 [1] 443). — I, 734.
- C<sub>14</sub>H<sub>16</sub>ON<sub>4</sub>** C 65,6 — H 6,2 — O 6,2 — N 21,9 — M. G. 256.
- 1) Diazobenzolnitrosodimethylanilin. Sm. 103° u. Zers. (B. 21, 2610; 22, 623). — IV, 797.
- 2) 3,3'-Diamido-2,2'-Dimethylazoxybenzol. Sm. 149° (Soc. 59, 1016). — IV, 1339.
- 3) 5,5'-Diamido-2,2'-Dimethylazoxybenzol. Sm. 148°. 2HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (D.R.P. 44554; B. 11, 1452; J. pr. [2] 63, 563). — IV, 1339; \*IV, 998.
- 4) 4,4'-Diamido-3,3'-Dimethylazoxybenzol. Sm. 188—189° (C. r. 134, 554 C. 1902 [1] 868). — \*IV, 998.
- 5) 3,3'-Diamido-4,4'-Dimethylazoxybenzol. Sm. 168°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2HBr, H<sub>2</sub>SO<sub>4</sub> + ½H<sub>2</sub>O (A. 229, 344; D.R.P. 44045). — IV, 1340; \*IV, 998.
- 6) 5,5'-Diamido-4-Oxy-2,2'-Dimethylazobenzol. Sm. 176—178° u. Zers. (J. pr. [2] 63, 567). — \*IV, 1041.
- 7) Di[β-2-Pyridyläthyl]nitrosamin. Fl. (HCl, PtCl<sub>4</sub>) (B. 37, 173 C. 1904 [1] 673).
- 8) 5-Methylhydroxyd d. 2-Amido-3-Methylamido-5,10-Naphtdiazin. Chlorid + 2H<sub>2</sub>O (B. 26, 380). — IV, 1281.
- 9) Nitril d. 5-Oxy-3-Methyl-1-Phenylpyrazoläthyläther-4-Amidoessigsäure. Sm. 109—110° (D.R.P. 189842 C. 1908 [1] 427).

- $C_{14}H_{16}ON_4$  10) Nitril d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Methylamidoessigsäure. Sm. 75° (D.R.P. 184850 C. 1907 [2] 435).
- 11)  $\alpha$ -Phenylhydrazid d.  $\alpha$ -Phenylhydrazidoessigsäure. Sm. 155° (A. 301, 85). — \*IV, 476.
- 12)  $\beta$ -Phenylhydrazid d.  $\alpha$ -Phenylhydrazidoessigsäure. Sm. 178° (B. 29, 623; A. 301, 74; B. 41, 2411 C. 1908 [2] 860). — \*IV, 476.
- $C_{14}H_{16}O_2N_2$  1)  $\alpha\beta$ -Diamido- $\alpha\beta$ -Di[2-Oxyphenyl]äthan (Dioxystilbendiamin). Sm. 180,5°. 2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O, Pikrat (Soc. 45, 675, 682; B. 17, 2404). — II, 994; III, 286.
- 2) Dimethyläther d. 4,4'-Diamido-3,3'-Dioxybiphenyl. Sm. 131,5°. 2HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>CrO<sub>4</sub>, Oxalat (J. pr. [2] 59, 211). — \*II, 601.
- 3) Dimethyläther d. 6-Amido-3,4-Dioxydiphenylamin. Sm. 151° (B. 29, 2688). — \*II, 561.
- 4) Di[2-Amidophenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 128°. 2HCl + 2H<sub>2</sub>O (J. pr. [2] 27, 201). — II, 702.
- 5) Di[3-Amidophenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 135° (J. pr. [2] 27, 209). — II, 714.
- 6) Di[4-Amidophenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 168—172° (176°). 2HCl, H<sub>2</sub>SO<sub>4</sub>, Oxalat (J. pr. [2] 27, 206; C. 1898 [2] 423). — II, 716; \*II, 398.
- 7)  $\alpha$ -[ $\gamma$ -Furyl- $\beta$ -Phenylpropyl]harnstoff. Sm. 101° (B. 23, 2851). — III, 694.
- 8) Dimethyläther d. s-Di[2-Oxyphenyl]hydrazin. Sm. 102° (J. pr. [2] 59, 209). — \*IV, 1093.
- 9) Dimethyläther d. uns-Di[4-Oxyphenyl]hydrazin. Sm. 111° (B. 41, 3503 C. 1908 [2] 1823).
- 10) 2,5-Diketo-4-Methyl-1-Allyl-3-[2-Methylphenyl]tetrahydroimidazol. Fl. (Ar. 243, 696 C. 1906 [1] 461).
- 11) 2,5-Diketo-4-Methyl-1-Allyl-3-[3-Methylphenyl]tetrahydroimidazol. Sm. 58° (Ar. 243, 701 C. 1906 [1] 461).
- 12) 2,5-Diketo-4-Methyl-1-Allyl-3-[4-Methylphenyl]tetrahydroimidazol. Sm. 96° (Ar. 243, 707 C. 1906 [1] 461).
- 13) 1-[1,2-Phtalylamido]methylhexahydropyridin. Sm. 117—118° (B. 31, 3233). — \*IV, 18.
- 14) 6-Oxy-4-Methyl-5-Äthyl-2-[ $\alpha$ -Oxybenzyl]-1,3-Diazin. Sm. 148 bis 152° (B. 23, 2951). — IV, 983.
- 15) 2'-Äthyläther d. 6-Oxy-4,5-Dimethyl-2-[4-Oxyphenyl]-1,3-Diazin. Sm. 216° (B. 23, 2954). — IV, 972.
- 16) Oxim d. Benzoylnortropinon. Sm. 175° (B. 29, 1584). — III, 791.
- 17) p-Nitro-3,6,8-Trimethyl-2-Äthylechinolin. Sm. 90° (B. 23, 2272). — IV, 343.
- 18) Phenylhydrazonbimethyldicyklopentancarbonsäure. Zers. bei 217° (Soc. 79, 780). — \*IV, 454.
- 19) 3,5-Dimethyl-1-Phenylpyrazol-4-[Äthyl- $\alpha$ -Carbonsäure]. Sm. 129 bis 130° (C. 1902 [2] 346). — \*IV, 357.
- 20) 3,5-Dimethyl-1-Phenylpyrazol-4-[Äthyl- $\beta$ -Carbonsäure]. Sm. 134 bis 135° (C. 1902 [2] 346). — \*IV, 356.
- 21) Laktam d. 2-Amido-5-Keto-2-Methyl-1-[4-Methylphenyl]tetrahydropyrrol-3-Methylcarbonsäure. Sm. 189° (A. 295, 119). — \*II, 281.
- 22) Methylester d. 3,5-Dimethyl-1-Phenylpyrazol-4-Methylcarbonsäure. Sm. 65° (C. 1902 [2] 345). — \*IV, 355.
- 23) Äthylester d.  $\delta$ -Cyan- $\gamma$ -Imido- $\beta$ -Phenylbutan- $\delta$ -Carbonsäure. Sm. 92° (Soc. 89, 1822 C. 1907 [1] 729).
- 24) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Imido- $\gamma$ -[2-Methylphenyl]buttersäure. Sm. 124° (Soc. 91, 1699 C. 1907 [2] 2054).
- 25) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Imido- $\gamma$ -[3-Methylphenyl]buttersäure. Sm. 118° (Soc. 91, 1703 C. 1907 [2] 2055).
- 26) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Imido- $\gamma$ -[4-Methylphenyl]buttersäure. Sm. 117° (Soc. 91, 1707 C. 1907 [2] 2055).
- 27) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Äthylamido- $\beta$ -Phenylakrylsäure. Sm. 90 bis 91° (Bl. [3] 31, 343 C. 1904 [1] 1135).

- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 28) Äthylester d. 2,4-Diamido-1-Methylnaphtalin-3-Carbonsäure. Sm. 75°. H<sub>2</sub>SO<sub>4</sub> (Soc. 89, 1924 C. 1907 [1] 729).
- 29) Äthylester d. 5,7-Diamido-1-Methylnaphtalin-6-Carbonsäure. Sm. 165°. 2HCl (Soc. 91, 1700 C. 1907 [2] 2055).
- 30) Äthylester d. 5,7-Diamido-2-Methylnaphtalin-6-Carbonsäure. Sm. 105°. 2HCl (Soc. 91, 1704 C. 1907 [2] 2055).
- 31) Äthylester d. 6,8-Diamido-2-Methylnaphtalin-7-Carbonsäure. Sm. 101°. 2HCl (Soc. 91, 1708 C. 1907 [2] 2055).
- 32) Äthylester d. 3,5-Dimethyl-1-Phenylpyrazol-4-Carbonsäure. Sm. 68–70°; Sd. 268°<sub>280</sub> (B. 20, 1101). — IV, 546.
- 33) Äthylester d. 3-Methyl-6-Phenyl-4,5-Dihydro-1,2-Diazin-4-Carbonsäure. Sm. 90–91° (B. 41, 1888 C. 1908 [2] 161).
- 34) Acetat d. 3,3-Dimethyl-2-[ $\alpha$ -Oximidoäthyl]pseudoindol. Sm. 149° (G. 32 [2] 431 C. 1903 [1] 838). — \*IV, 168.
- 35) Butyrat d. 5-Oxy-3-Methyl-1-Phenylpyrazol. Sd. 172°<sub>8</sub> (B. 36, 530 C. 1903 [1] 642). — \*IV, 328.
- 36) Benzoylderivat d. Verb. C<sub>7</sub>H<sub>13</sub>ON<sub>2</sub> (aus d. 2-Amidohexahydrobenzol-1-Carbonsäureamid). Sm. 187° (A. 295, 210). — IV, 482; \*II, 704.
- C<sub>14</sub>H<sub>16</sub>O<sub>3</sub>N<sub>4</sub>** C 61,8 — H 5,9 — O 11,8 — N 20,6 — M. G. 272.
- 1) 2,3-Di[ $\beta$ -Acetylhydrazido]naphtalin. Sm. 231° u. Zers. (J. pr. [2] 76, 220 C. 1907 [2] 1338).
- 2) 4,5-Di[Acetylamido]-3-Methyl-1-Phenylpyrazol. Sm. 233° (A. 354, 113 C. 1907 [2] 611; J. pr. [2] 79, 42 C. 1909 [1] 762).
- 3) Verbindung (aus 6,7-Diamido-2,3-Dimethyl-1,4-Benzdiazin) (B. 22, 444). — IV, 1244.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>N<sub>6</sub>** C 56,0 — H 5,3 — O 10,7 — N 28,0 — M. G. 300.
- 1) 4,4'-Disemicarbazidobiphenyl. Sm. 306–308° u. Zers. (A. 239, 209). — IV, 1276.
- 2)  $\alpha\beta$ -Di[Acetylamido]- $\alpha\beta$ -Di[4-Pyrimidyl]äthan. Sm. 255° (B. 35, 1572 C. 1902 [1] 1236). — \*IV, 992.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>N<sub>8</sub>** C 51,2 — H 4,9 — O 9,7 — N 34,1 — M. G. 328.
- 1) 8-[2,4-Diamidophenyl]azo-2,6-Diketo-1,3,7-Trimethylpurin (Kaffeinazo-2,4-Diamidobenzol). Sm. noch nicht bei 285° (Am. 23, 62). — \*IV, 1087.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>Pb** 1) Bleidi[4-Methylphenyl]dihydroxyd. Salze, siehe (B. 21, 3425). — IV, 1716.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>Si** 1) Dibenzylsiliciumdihydroxyd ( $\alpha$ -Dibenzylsilikol). Sm. 101° (Soc. 93, 452 C. 1908 [1] 1687).
- 2) isom. Dibenzylsiliciumdihydroxyd ( $\beta$ -Dibenzylsilikol). Sm. 76° (B. 38, 4135 C. 1906 [1] 462; Soc. 93, 453 C. 1908 [1] 1687).
- C<sub>14</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** C 64,6 — H 6,1 — O 18,5 — N 10,8 — M. G. 260.
- 1) 5-Keto-2-[ $\alpha$ -Benzoylamidoäthyl]-4,4-Dimethyl-4,5-Dihydrooxazol. Sm. 116°; Sd. 138°<sub>0,5</sub> (B. 42, 2522 C. 1909 [2] 606).
- 2) Äthyläther d. 2,4-Diketo-3-Allyl-1-[4-Oxyphenyl]tetrahydroimidazol. Sm. 127–128° (J. pr. [2] 66, 246 C. 1902 [2] 1123).
- 3) 2,4,6-Triketo-5,5-Diäthyl-1-Phenylhexahydro-1,3-Diazin. Sm. 197° (D.R.P. 146496 C. 1903 [2] 1484; A. 335, 349 C. 1904 [2] 1381; A. 340, 334 C. 1905 [2] 891).
- 4) 1-[2,4-Dimethyl-3-Pyrrolyl]-2,4-Dimethylpyrrol-3-Carbonsäure. Ba (B. 22, 36). — IV, 86.
- 5) 2-Keto-6- oder 7-Methyl-1,2-Dihydro-1,4-Benzdiazin-3-[ $\alpha\alpha$ -Dimethyläthyl- $\beta$ -Carbonsäure] (Soc. 79, 758). — \*IV, 407.
- 6) Methylester d. 3,4-Dimethyl-1-Phenylpyrazol-5-Oxyessigsäure. Sm. 55° (J. pr. [2] 55, 164). — IV, 522.
- 7) Methylester d. 3-Keto-4,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-1-Methylcarbonsäure. Sm. 112° (J. pr. [2] 55, 160). — IV, 522.
- 8) Methylester d. 5-Keto-3,4-Dimethyl-1-Phenyl-4,5-Dihydropyrazol-4-Methylcarbonsäure. Sm. 143° (J. pr. [2] 55, 162). — IV, 548.
- 9) Äthylester d.  $\beta$ -Benzylidenureidocrotonsäure (Ä. d.  $\beta$ -Benzuramido-crotonsäure). Sm. 207–208° (G. 21 [1] 498). — III, 32.
- 10) Äthylester d. 5-Äthoxyl-1-Phenylpyrazol-3-Carbonsäure. Sm. 83 bis 84° (Am. 14, 580). — IV, 536.
- 11) Äthylester d. 3-Methyl-1-Phenylpyrazol-5-Oxyessigsäure. Sm. 47° (J. pr. [2] 55, 158). — IV, 512.



- $C_{14}H_{16}O_3N_2$  12) Äthylester d. 5-Keto-4,4-Dimethyl-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure. Sm.  $81^\circ$  (*J. pr.* [2] 80, 101 *C.* 1909 [2] 1321).
- 13) Äthylester d. 3-Keto-5-Methyl-2-Phenyl-2,3-Dihydropyrazol-1-Methylcarbonsäure. Sm.  $118^\circ$ . Pikrat (*J. pr.* [2] 55, 157). — IV, 512.
- 14) Äthylester d. 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Methylcarbonsäure. Sm.  $138^\circ$  (*B.* 17, 2052; *A.* 238, 163; *Soc.* 71, 332). — IV, 546.
- 15) Äthylester d. 5-Keto-4-Methyl-1-Phenyl-4,5-Dihydropyrazol-3-Methylcarbonsäure. Sm.  $129^\circ$  (*B.* 28, 3203; *A.* 289, 59). — IV, 546.
- 16) Äthylester d. 2-Keto-6-Methyl-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm.  $206-206,5^\circ$  (*G.* 23 [1] 363). — II, 1681.
- 17) Äthylester d. 6-Acetylamido-2-Methylindol-1-Carbonsäure. Subl. bei  $340^\circ$  (*B.* 37, 4376 *C.* 1905 [1] 170).
- 18) 5-Acetat d. 5-Oxy-3-Methyl-1-[4-Oxyphenyl]pyrazol-1<sup>4</sup>-Äthyläther. Sm.  $76^\circ$  (*J. pr.* [2] 55, 154). — IV, 514.
- 19) Acetat d. 3-Keto-5-Methyl-1-[ $\beta$ -Oxyäthyl]-2-Phenyl-2,3-Dihydropyrazol. Sm.  $114-116^\circ$  (*D. R. P.* 74912). — \*IV, 327.
- 20) Acetylderivat d. Harmalol (*B.* 22, 639). — III, 885.
- 21) Amid d. *s*-Phtalylamidopentan- $\alpha$ -Carbonsäure. Sm.  $158^\circ$  (*B.* 42, 557 *C.* 1909 [1] 861).
- 22) Verbindung (aus  $\alpha$ -Oximidophenylamidoessigsäureäthylester). Sm. 69 bis  $70^\circ$  (*B.* 30, 2431; *B.* 39, 3823 *C.* 1907 [1] 176).
- $C_{14}H_{16}O_3N_4$  C 58,3 — H 5,5 — O 16,7 — N 19,4 — M. G. 288.
- 1) Methylisoxazolophonphenylhydrazin. Sm.  $102-103^\circ$  u. Zers. (*A.* 296, 54). — IV, 654.
- 2) 5-[4-Dimethylamidophenyl]imido-2,4,6-Triketo-1,3-Dimethylhexahydro-1,3-Diazin (Tetramethylureidindooanilin). Sm.  $168^\circ$  (*A.* 333, 38 *C.* 1904 [2] 770).
- 3) 6,7-Di[Acetylamido]-1-Acetyl-2-Methylbenzimidazol +  $H_2O$ . Sm.  $260^\circ$  (*B.* 22, 1650). — IV, 1243.
- 4) Äthylester d. 5-Keto-4-[4-Methylphenyl]azo-4,5-Dihydropyrazol-3-Methylcarbonsäure. Sm.  $172-173^\circ$  (*J. pr.* [2] 64, 342). — \*IV, 1081.
- $C_{14}H_{16}O_8N_6$  C 53,1 — H 5,1 — O 15,2 — N 26,6 — M. G. 316.
- 1) 4-Methylbenzylidenhydrazid d. 1,2-Dihydro-1,2,4,5-Tetrazin-3,6-Dicarbonsäuremonoäthylester. Sm.  $237^\circ$  (*B.* 41, 3111 *C.* 1908 [2] 1574).
- 2)  $\alpha$ -Phenyläthylidenhydrazid d. 1,2-Dihydro-1,2,4,5-Tetrazin-3,6-Dicarbonsäuremonoäthylester. Sm.  $182-185^\circ$  (*B.* 41, 3111 *C.* 1908 [2] 1574).
- $C_{14}H_{16}O_4N_2$  C 60,9 — H 5,8 — O 23,2 — N 10,1 — M. G. 276.
- 1) Coffearin. Sm.  $140^\circ$  u. Zers.  $HCl + H_2O$ ,  $(2HCl, PtCl_4)$ ,  $(HCl, AuCl_3)$  (*B.* 27 [2] 406; *C.* 1904 [2] 837; *G.* 25 [1] 105). — III, 888.
- 2) 1,4-Phenylendiimidobuttersäure. Sm.  $176^\circ$  (*B.* 17, 545). — IV, 592.
- 3) 5-Methylester-3-Äthylester d. 4-Phenyl-4,5-Dihydropyrazol-3,5-Dicarbonsäure. Sm.  $76^\circ$  (*B.* 26, 259; *B.* 35, 33 *C.* 1902 [1] 424). — IV, 893; \*IV, 596.
- 4) 3-Methylester-5-Äthylester d. 4-Phenyl-4,5-Dihydropyrazol-3,5-Dicarbonsäure. Sm.  $107^\circ$  (*B.* 26, 259; *B.* 35, 33 *C.* 1902 [1] 424). — IV, 893; \*IV, 597.
- 5) Äthylester d.  $\gamma$ -[2-Methoxyphenyl]amido- $\alpha$ -Cyan- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm.  $207-208^\circ$  (*B.* 41, 2408 *C.* 1908 [2] 860).
- 6) Äthylester d.  $\alpha$ -[Acetylphenylhydrazon]acetessigsäure. Sm. 119 bis  $120^\circ$  (*B.* 35, 919 *C.* 1902 [1] 806). — \*IV, 462.
- 7)  $\gamma$ -Äthylester d.  $\alpha$ -Phenylhydrazon- $\gamma$ -Oxybutan- $\alpha\gamma$ -Dicarbonsäure- $\alpha\gamma$ -Lakton. Sm.  $120^\circ$  (*B.* 22, 283 *C.* 1903 [2] 107). — \*IV, 470.
- 8) Äthylester d. 2-Keto-4-[2-Oxyphenyl]-6-Methyl-1,2,3,4-Tetrahydro-1,3-Diazin-5-Carbonsäure (Salicyluramidocrotonsäureäthylester). Sm.  $203-204^\circ$  ( $199-200^\circ$ ) (*G.* 23 [1] 374). — II, 1868.
- 9) Äthylester d. 2,6-Dioxy-1,4-Benzdiazin-6-Äthyläther-2-Carbonsäure. Sm.  $186^\circ$  (*B.* 25, 499). — IV, 947.
- 10) Diacetat d.  $\beta\gamma$ -Dioximido- $\alpha$ -Phenylbutan. Sm.  $80^\circ$  (*B.* 16, 2188). — III, 149.

- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>** 11) **2-Amid d. 5-Keto-2-Methyl-1-Phenyltetrahydropyrrol-1<sup>4</sup>,2-Dicarbonsäure-1<sup>4</sup>-Methylester.** Sm. 171—172° (B. 40, 4051 C. 1907 [2] 1837).
- 12)  **$\alpha\beta$ -Imid d.  $\beta$ -Phenylamidopropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\gamma$ -Äthylester.** Sm. 167° (B. 35, 2082 C. 1902 [2] 207).
- 13)  **$\alpha$ -Imido-4-Methylbenzylamid d. Oxalessigsäureäthylester.** Sm. 190° u. Zers. (B. 25, 1422). — IV, 852.
- 14) **Verbindung (aus 2,6-Dioxy-3-Äthylpyridin).** Zers. bei 170° (Soc. 63, 882). — IV, 132.
- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>N<sub>4</sub>** C 55,3 — H 5,3 — O 21,0 — N 18,4 — M. G. 304.
- 1) **Methylester d. 2-Phenylamido-1,2,3,6-Oxtriazin-5-[Isobutyryl- $\alpha$ -Carbonsäure].** Sm. 139° (u. 154°) (Soc. 83, 1250 C. 1903 [2] 1422).
- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>Br<sub>2</sub>** 1) **1,2-Phenyleneester d.  $\alpha$ -Brombuttersäure.** Sm. 75—76° (B. 40, 2785 C. 1907 [2] 532).
- 2) **1,2-Phenyleneester d.  $\alpha$ -Bromisobuttersäure.** Sd. 195—200°<sub>20</sub> (B. 40, 2786 C. 1907 [2] 532).
- 3) **1,3-Phenyleneester d.  $\alpha$ -Brombuttersäure.** Sd. 225—227° (B. 40, 2796 C. 1907 [2] 534).
- 4) **1,3-Phenyleneester d.  $\alpha$ -Bromisobuttersäure.** Sm. 61°; Sd. 227—228°<sub>20</sub> (B. 40, 2796 C. 1907 [2] 534).
- 5) **1,4-Phenyleneester d.  $\alpha$ -Brombuttersäure.** Sm. 67—68° (B. 40, 2800 C. 1907 [2] 534).
- 6) **1,4-Phenyleneester d.  $\alpha$ -Bromisobuttersäure.** Sm. 120° (B. 40, 2800 C. 1907 [2] 534).
- 7) **Diacetat d. 3,6-Dibrom-2,5-Dioxy-4-Isopropyl-1-Methylbenzol.** Sm. 121—122° (B. 15, 658). — II, 971.
- 8) **2-Acetat-5-Isobutyrylrat d. 3,6-Dibrom-2,5-Dioxy-1,4-Dimethylbenzol.** Sm. 119° (B. 35, 441 C. 1902 [1] 642).
- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>Br<sub>4</sub>** 1) **Dimethylester d. Bis-2,3-Dibrom-2,3-Dihydro-R-Penten-?-Dicarbonsäure.** Sm. 180—185° (B. 34, 70).
- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>S** 1) **Äthylester d. 1-Oxynaphtalinäthyläther-4-Sulfonsäure.** Sm. 102 bis 103° (B. 34, 3182). — \*II, 511.
- 2) **Diäthylester d. Merkaptofumarylphenyläthersäure.** Sd. 201—202°<sub>12</sub> (Soc. 77, 1182). — \*II, 472.
- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>Se** 1) **Dimethyläther d. Di[ $p$ -Oxyphenyl]selendihydroxyd.** Sm. 137° (B. 28, 610). — \*II, 576.
- C<sub>14</sub>H<sub>16</sub>O<sub>4</sub>Te** 1) **Dimethyläther d. Di[ $p$ -Oxyphenyl]telluridihydroxyd.** Chlorid, Nitrat (B. 30, 2830). — \*II, 577.
- C<sub>14</sub>H<sub>16</sub>O<sub>6</sub>N<sub>2</sub>** C 57,5 — H 5,5 — O 27,4 — N 9,6 — M. G. 292.
- 1) **Monooxim d. 4-Acetylamidobenzoylbrenztraubensäureäthylester.** Sm. 177—178° (B. 36, 2697 C. 1903 [2] 952).
- 2) **5-Äthylester d. 2-Keto-4-Phenylhexahydro-1,3-Diazin-5,6-Dicarbonsäure (Ä. d. Benzuramidobernsteinsäure).** Sm. 224—225° (G. 23 [1] 402). — II, 1963.
- 3) **Diäthylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure.** Sm. 72—73° u. Zers. (B. 25, 3451; Bl. [3] 31, 78 C. 1904 [1] 580; Bl. [3] 31, 94 C. 1904 [1] 581). — IV, 727.
- 4) **Diäthylester d. isom.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure.** Sm. 126—127° (Bl. [3] 31, 79 C. 1904 [1] 580; Bl. [3] 31, 95 C. 1904 [1] 581).
- 5) **Diäthylester d. 3-Oxyindol-2-Carbonsäure-3-Amidoameisensäure.** Fl. (D.R.P. 158089 C. 1905 [1] 574).
- 6) **3-Acetat d. 7-Acetylamido-3,4,5-Trioxypseudoisindol-4,5-Dimethyläther.** Zers. bei 242° (B. 31, 935). — \*II, 1114.
- 7) **Diacetat d.  $\alpha$ -Diisonitrosoanethol.** Sm. 89° (G. 23 [2] 177). — II, 852; \*II, 497.
- 8) **Diacetat d.  $\beta$ -Diisonitrosoanethol.** Sm. 104° (G. 23 [2] 182). — II, 853.
- 9)  **$\alpha\beta$ -Imid d.  $\beta$ -[4-Äthoxyphenyl]amidopropan- $\alpha\beta\gamma$ -Tricarbonsäure.** Sm. 153° u. Zers. (B. 38, 3188 C. 1905 [2] 1322).
- C<sub>14</sub>H<sub>16</sub>O<sub>5</sub>Br<sub>2</sub>** 1) **Diacetat d. 2,6-Dibrom-3,4,5-Trioxy-1-Propylbenzolmonomethyläther.** Sm. 79° (M. 4, 185). — II, 1024.
- 2)  **$\alpha$ ,4-Diacetat d. 5-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3-Methyläther.** Sm. 112—114° (A. 329, 19 C. 1903 [2] 1435).

- C<sub>14</sub>H<sub>16</sub>O<sub>5</sub>Br<sub>2</sub>** 3) 2,5-Diacetat d. 3,6-Dibrom-5-Oxy-4-Methyl-1,2-Di[Oxymethyl]-benzol-1-Methyläther. Sm. 107—108° (B. 32, 3461). — \*II, 697.
- C<sub>14</sub>H<sub>16</sub>O<sub>6</sub>N<sub>2</sub>** C 54,5 — H 5,2 — O 31,2 — N 9,1 — M. G. 308.
- 1) Phtalyldisarkosin. Sm. 168° (B. 21, 278). — II, 1810.
  - 2) 1,3-Phenylendisuccinaminsäure. Sm. 215°; Zers. bei 220—221° (A. 327, 31 C. 1903 [1] 1336). — \*IV, 375.
  - 3) 1,4-Phenylendisuccinaminsäure. Sm. 262° (A. 327, 33 C. 1903 [1] 1336). — \*IV, 388.
  - 4) Dinitrourushinsäure. Fe (Soc. 43, 478). — II, 1435.
  - 5) Dilaktam d. γδ-Diimidohexan-ββββ-Tetracarbonsäure-βε-Diäthylester. Sm. 150° (B. 31, 193; A. 332, 127 C. 1904 [2] 189).
  - 6) Dicyanmalonmethylacetessigesterlaktam. Sm. 139° (A. 332, 130 C. 1904 [2] 190).
  - 7) Dimethylester d. 4,6-Di[Acetylamido]benzol-1,3-Dicarbonsäure. Sm. 256° (C. 1909 [2] 1234).
  - 8) Diäthylester d. αζ-Dicyan-βε-Diketohehexan-αζ-Dicarbonsäure (D. d. Succinyldicyanessigsäure). Sm. 135—136°. Na<sub>2</sub> + 5H<sub>2</sub>O, Cu<sub>2</sub>, Ag<sub>2</sub> (B. 26 [2] 6; A. ch. [7] 1, 468). — I, 1226; \*I, 689.
  - 9) Diäthylester d. 1,3-Phenylendioxaminsäure. Sm. 154° (B. 29, 2642). — IV, 577.
  - 10) Diäthylester d. 1,4-Phenylendioxaminsäure. Sm. 215° (B. 29, 2642). — IV, 593.
  - 11) αα-Diäthylester d. Phenylhydrazonmethan - αα 2 - Tricarbonsäure. Sm. 135° (B. 35, 923 C. 1902 [1] 806).
  - 12) Triäthylester d. αγ-Dicyanpropen-αβγ-Tricarbonsäure. Sm. 145 bis 146° u. Zers. Na + 1/2 H<sub>2</sub>O (B. 34, 3708 C. 1902 [1] 49).
  - 13) Diacetat d. 4,6-Di[Acetylamido]-1,3-Dioxybenzol. Sm. 180° (B. 30, 2102). — \*II, 570.
  - 14) Diacetat d. 2,3-Di[Acetylamido]-1,4-Dioxybenzol. Sm. 216° (B. 19, 2248). — II, 948.
  - 15) Diacetat d. 2,5-Di[Acetylamido]-1,4-Dioxybenzol. Sm. 190° (B. 30, 2101). — \*II, 574.
  - 16) Furfurylamid d. d-Weinsäure. Sm. 179° (Soc. 83, 1346 C. 1904 [1] 83).
- C<sub>14</sub>H<sub>16</sub>O<sub>6</sub>Br<sub>2</sub>** 1) α-Acetat d. 6-Brom-2,3,4,5-Tetraoxy-1-[β-Brom-α-Oxypropyl]-benzol-3,4-Methylenäther-2,5-Dimethyläther? Sm. 114—115° (C. 1903 [1] 970).
- C<sub>14</sub>H<sub>16</sub>O<sub>7</sub>N<sub>2</sub>** C 51,9 — H 4,9 — O 34,6 — N 8,6 — M. G. 324.
- 1) Monoureid d. γ-Oxy-α-Keto-α-[4-Äthoxyphenyl]propan-γγ-Dicarbonsäure. Sm. 134°. Pb (B. 42, 1293 C. 1909 [1] 1549).
- C<sub>14</sub>H<sub>16</sub>O<sub>7</sub>N<sub>4</sub>** C 47,7 — H 4,5 — O 31,8 — N 15,9 — M. G. 352.
- 1) Laktond. γ-Semicarbazon-α-Oxy-α-[6-Nitro-3,4-Dimethoxyphenyl]-butan-2-Carbonsäure (Semicarbazon d. Acetonynitromekonin). Sm. 218° (B. 36, 2209 G. 1903 [2] 443).
- C<sub>14</sub>H<sub>16</sub>O<sub>8</sub>N<sub>2</sub>** C 49,4 — H 4,7 — O 37,6 — N 8,2 — M. G. 340.
- 1) Tetramethylester d. 3,6-Diamidobenzol-1,2,4,5-Tetracarbonsäure. Sm. 149,6° (A. 258, 317). — II, 2074.
- C<sub>14</sub>H<sub>16</sub>O<sub>8</sub>J<sub>2</sub>** 1) Tetracetat d. 1,3-Dijodobenzol. Sm. 204° (B. 37, 1305 C. 1904 [1] 1340).
- 2) Tetracetat d. 1,4-Dijodobenzol (p-Phenylendijodidtetraacetat). Sm. 232° u. Zers. (B. 27, 1793).
- C<sub>14</sub>H<sub>16</sub>NCl** 1) 4-[α-Chloräthyl]-1-Methylbenzol + Pyridin. 2 + PtCl<sub>4</sub> (B. 36, 1636 C. 1903 [2] 26). — \*IV, 89.
- 2) Chlormethylat d. 2,6-Dimethyl-4-Phenylpyridin. 2 + PtCl<sub>4</sub> (B. 20, 2594). — IV, 378.
- C<sub>14</sub>H<sub>16</sub>NJ** 1) Dimethyldiphenylammoniumjodid. Sm. 163° (B. 36, 2488 C. 1903 [2] 564).
- 2) Jodmethylat d. 2,6-Dimethyl-4-Phenylpyridin (B. 20, 2593). — IV, 378.
  - 3) Jodmethylat d. 3-Methyl-1,2-Dihydro-β-Naphtindol. Sm. 220—221° (B. 39, 3143 C. 1906 [2] 1268).
  - 4) Jodmethylat d. 1,2,3,4-Tetrahydroakridin. Sm. 202—204° (B. 41, 2206 C. 1908 [2] 331).
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Diphenochinon-NN'-Dimethyldiimoniumchlorid. 2 + PtCl<sub>4</sub> (B. 37, 3774 C. 1904 [2] 1548).



- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>S** 1) Di[4-Methylamidophenyl]sulfid. Sm. 60° (B. 23, 3021). — II, 804.  
 2) Di[6-Amido-3-Methylphenyl]sulfid. Sm. 103°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2HBr, 2HJ, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Pikrat (B. 4, 393; G. 20, 32). — II, 821; \*II, 483.  
 3) Di[2-Amidobenzyl]sulfid. Sm. 81—82° (70%). 2HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), Pikrat (M. 10, 879; B. 27, 3520; 28, 915; A. 305, 122). — II, 1055; \*II, 641.  
 4) Di[4-Amidobenzyl]sulfid. Sm. 104—105°. 2HCl, 2HBr, Dioxalat (B. 24, 724; 28, 879, 914, 1337). — \*II, 646.  
 5) P-[α-Phenylhydrazonäthyl]-2-Äthylthiophen. Sm. 68° (B. 19, 661). — III, 765.  
 6) P-[α-Phenylhydrazonäthyl]-2,4-Dimethylthiophen. Sm. 70° (B. 20, 2020). — III, 765.  
 7) 5-Thiocarbonyl-3-Methyl-4-Isopropyliden-1-[4-Methylphenyl]-4,5-Dihydropyrazol. Sm. 206° (A. 361, 299 C. 1908 [2] 522).  
 8) Di[2,6-Dimethyl-4-Pyridyl]sulfid. Sm. 82—83°. (2HCl, PtCl<sub>4</sub>), 2Pikrat (B. 33, 1564). — \*IV, 103.
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>S<sub>2</sub>** 1) Di[2-Amidobenzyl]disulfid. Sm. 90—91° (B. 28, 1026). — \*II, 645.  
 2) Di[3-Amidobenzyl]disulfid. 2HCl (B. 30, 1070). — \*II, 647.  
 3) Di[4-Amidobenzyl]disulfid. Sm. 96—98°. 2HCl (A. 305, 120). — \*II, 646.  
 4) Di[6-Amido-3-Methylphenyl]disulfid. Sm. 89° (B. 22, 908). — II, 822.  
 5) Di[2-Methylamidophenyl]disulfid. Sm. 67—68° (B. 27, 867). — II, 816.  
 6) Dimethyläther d. 4,4'-Diamido-3,3'-Dimerkaptobiphenyl. Sm. 110 bis 112° (B. 42, 3468 C. 1909 [2] 1552).  
 7) Dimethyläther d. s-Di[2-Merkaptophenyl]hydrazin. Sm. 104° (B. 42, 3467 C. 1909 [2] 1552).  
 8) Di[2,6-Dimethyl-4-Pyridyl]disulfid. Sm. 57°. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, 2Pikrat (B. 33, 1565). — \*IV, 103.
- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>Hg** 1) Quecksilberdi[4-Methylamidophenyl]. Sm. 178—179° (G. 23 [2] 533). — IV, 1706; \*IV, 1211.  
 2) Quecksilberdi[6-Amido-3-Methylphenyl]. Sm. 156° (G. 28 [2] 112). — IV, 1711.
- C<sub>14</sub>H<sub>16</sub>N<sub>3</sub>Cl** 1) Phenylhydrazon d. Acetonylpyridiniumchlorid. Sm. 133—134° (C. 1899 [1] 117). — \*IV, 499.
- C<sub>14</sub>H<sub>16</sub>N<sub>4</sub>J<sub>4</sub>** 1) Dimethyldiphenyltetrazontetrajodid (A. 190, 173). — IV, 1308.
- C<sub>14</sub>H<sub>16</sub>N<sub>4</sub>S** 1) 4-Phenylthiosemicarbazido-2,6-Dimethylpyridin. Sm. 199°. Pikrat (B. 36, 1117 C. 1903 [1] 1185). — \*IV, 780.
- C<sub>14</sub>H<sub>16</sub>ClP** 1) Dimethyldiphenylphosphoniumchlorid. 2 + PtCl<sub>4</sub> (A. 207, 211). — IV, 1658.
- C<sub>14</sub>H<sub>16</sub>ClAs** 1) Dimethyldiphenylarsoniumchlorid. 2 + PtCl<sub>4</sub> (A. 207, 205). — IV, 1688.
- C<sub>14</sub>H<sub>16</sub>JP** 1) Dimethyldiphenylphosphoniumjodid. Sm. 241° (A. 207, 210). — IV, 1658.
- C<sub>14</sub>H<sub>16</sub>JAs** 1) Dimethyldiphenylarsoniumjodid. Sm. 190° (A. 207, 204). — IV, 1688.
- C<sub>14</sub>H<sub>17</sub>ON** C 78,1 — H 7,9 — O 7,4 — N 6,5 — M. G. 215.  
 1) Dimethyldiphenylammoniumhydroxyd. Pikrat (B. 38, 1145 Anm. C. 1905 [1] 1167).  
 2) 3-Phenylamido-5-Oxy-1,1-Dimethyl-1,2-Dihydrobenzol. Sm. 180°. HCl (Soc. 89, 202 C. 1906 [1] 1421).  
 3) 6-Phenylamido-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 181°. HCl (C. 1906 [1] 34).  
 4) 3-Keto-4-Phenylamidomethylen-1-Methylhexahydrobenzol. Sm. 170—171° (C. 1901 [1] 1025).  
 5) 4-Oximido-6-Methyl-2-[4-Methylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 125—126° (B. 34, 791). — \*III, 140.  
 6) 3-Oximido-4-Benzyliden-1-Methylhexahydrobenzol. Sm. 109—110° (B. 29, 1597, 2961). — \*III, 140.  
 7) 9-Oximido-1,2,3,4,9,10-Hexahydroanthracen. Sm. 143° (C. r. 141, 1028 C. 1906 [1] 367).  
 8) 4-[α-Oxyäthyl]-1-Methylbenzol + Pyridin. Chlorid, 2Chlorid + PtCl<sub>4</sub>, Pikrat (B. 36, 1636 C. 1903 [2] 26).  
 9) Acetylderivat d. 2-Methylen-1,3,3-Trimethyl-2,3-Dihydroindol. Sm. 100,5—101,5°. (2HCl, PtCl<sub>4</sub>) (G. 24 [2] 193). — IV, 243; \*IV, 175.

- C<sub>14</sub>H<sub>17</sub>ON** 10) 1-Acetyl-2-Methylen-3,3,5-Trimethyl-2,3-Dihydroindol. Sm. 104° (M. 26, 936 C. 1905 [2] 1183; M. 27, 248 C. 1906 [2] 55).  
 11) 3-[β-Oxyisoamyl]chinolin. Sm. 93°. Pikrat (B. 20, 2041). — IV, 342.  
 12) 4-Oxy-3-Amylchinolin. Sm. 85° (B. 28, 2821). — IV, 342.  
 13) Äthyläther d. 1-Oxy-3-Propylisochinolin. Sd. 287°<sub>756</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 29, 2396). — IV, 338.  
 14) Äthyläther d. 1-Oxy-3-Isopropylisochinolin. Sd. 283—285°<sub>771</sub> (B. 30, 894). — IV, 339.  
 15) Isoamyläther d. 2-Oxychinolin. + HgCl<sub>2</sub> (C. 1909 [1] 1937).  
 16) 2-Keto-1-Isoamyl-1,2-Dihydrochinolin. + HgCl<sub>2</sub> (C. 1909 [1] 1937).  
 17) Acetylcabazolin. Sm. 98° (A. 202, 25). — IV, 229.  
 18) Äthyläther d. 6-Oxy-1,2,3,4-Tetrahydrocarbazol. Sm. 87—88° (A. 359, 65 C. 1908 [1] 1549).  
 19) Nitril d. β-Oxy-α-Heptenphenyläther-α-Carbonsäure. Sd. 175—178°<sub>15</sub> (C. r. 142, 451 C. 1906 [1] 1095; Bl. [3] 35, 532 C. 1906 [2] 760).  
 20) Propylamid d. α-Phenyl-αγ-Butadien-δ-Carbonsäure. Sm. 133° (A. 361, 103 C. 1908 [2] 34).  
 21) Piperidid d. β-Phenylakrylsäure (1-Cinnamylhexahydropyridin). Sm. 122° (B. 22, 2265; A. 320, 91; C. 1899 [1] 730). — IV, 16; \*IV, 13.  
 22) Verbindung (aus Acetylhydrocotarninessigsäure). HCl (B. 20, 2432). — III, 917.
- C<sub>14</sub>H<sub>17</sub>ON<sub>2</sub>** C 69,1 — H 7,0 — O 6,6 — N 17,3 — M. G. 243.  
 1) 4'-Amido-4-Dimethylamido-3'-Oxydiphenylamin (J. pr. [2] 69, 238 C. 1904 [1] 1269).  
 2) Di[2-Amidobenzyl]hydroxylamin. Sm. 142° (B. 30, 60). — IV, 639.  
 3) 3-Semicarbazon-5-Methyl-1-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 170—171° (B. 31, 2474). — \*III, 138.  
 4) isom. 3-Semicarbazon-5-Methyl-1-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 199—200° (B. 31, 2474). — \*III, 138.  
 5) 4-Phenylhydrazon-2-Oxy-3,3,6-Trimethyl-3,4-Dihydropyridin. Sm. 155° (B. 31, 1344). — \*IV, 528.  
 6) 5-Oxy-1-Phenyl-3-Hexahydrophenyl-1,2,4-Triazol. Sm. 196—197° (B. 36, 1096 C. 1903 [1] 1140). — \*IV, 781.  
 7) γ-Oximido-β-[8-Chinolyl]amido-β-Methylbutan. Sm. 153—154° (A. 262, 339). — IV, 915.  
 8) Amid d. α-Cyan-β-[4-Diäthylamidophenyl]akrylsäure. Sm. 134,5° (B. 39, 2171 C. 1906 [2] 235).
- C<sub>14</sub>H<sub>17</sub>OCl** 1) 3-Äthyl-2-Propylbenzopyranchlorid. + FeCl<sub>3</sub> (A. 364, 30 C. 1909 [1] 542).
- C<sub>14</sub>H<sub>17</sub>O<sub>2</sub>N** C 72,7 — H 7,4 — O 13,8 — N 6,1 — M. G. 231.  
 1) βδ-Diketo-γ-[4-Dimethylamidobenzyliden]pentan. Sm. 95° (B. 37, 1744 C. 1904 [1] 1599).  
 2) α-[2,4-Dimethylphenyl]amido-γ-Keto-β-Acetyl-α-Buten. Sm. 146° (B. 35, 2506 C. 1902 [2] 438).  
 3) 3<sup>2</sup>-Methyläther d. 1-Oximido-5-Methyl-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 133° (A. 303, 253). — \*III, 139.  
 4) 3<sup>4</sup>-Methyläther d. 1-Oximido-5-Methyl-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 108° (A. 303, 249). — \*III, 139.  
 5) 7-Dimethylamido-4-Methyl-3-Äthyl-1,2-Benzpyron. Sm. 135° (B. 32, 3695). — \*II, 975.  
 6) 7-Diäthylamido-4-Methyl-1,2-Benzpyron. Fl. (B. 32, 3695).  
 7) 5-Keto-2-Acetyl-2-Methyl-1-Benzyltetrahydropyrrol. Sm. 67—68° (B. 42, 3956 C. 1909 [2] 1811).  
 8) Benzoyltropigenin. Sm. 125° (B. 29, 1580). — III, 792.  
 9) N-Benzoylpseudotropigenin. Sm. 165—166° (B. 29, 1639, 2231). — III, 793.  
 10) Base d. Pyridylumchlorid C<sub>14</sub>H<sub>16</sub>ONCl. Pikrat (B. 36, 3590 C. 1903 [2] 1365).  
 11) 1-Isoamylindol-2-Carbonsäure. Sm. 122° (B. 30, 2821). — \*IV, 172.  
 12) Methylester d. α-[4-Dimethylamidophenyl]-αγ-Butadien-δδ-Di-carbonsäure. Sm. 142° (B. 40, 3901 C. 1907 [2] 1516).  
 13) Äthylester d. α-[2-Cyanphenyl]butan-β-Carbonsäure. Fl. (B. 31, 2888).  
 14) Benzoat d. 2-Oximido-1-Methylhexahydrobenzol. Sm. 70—72° (A. 329, 376 C. 1904 [1] 517).

- C<sub>14</sub>H<sub>17</sub>O<sub>2</sub>N** 15) Benzoat d. d-3-Oximido-1-Methylhexahydrobenzol. Sm. 96—97° (A. 332, 339 C. 1904 [2] 653).
- 16) Benzoat d. l-3-Oximido-1-Methylhexahydrobenzol. Sm. 82—83° (A. 332, 340 C. 1904 [2] 653).
- 17) α-Benzoat d. i-3-Oximido-1-Methylhexahydrobenzol. Sm. 105 bis 106° (A. 332, 345 C. 1904 [2] 653).
- 18) β-Benzoat d. i-3-Oximido-1-Methylhexahydrobenzol. Sm. 70—72° (A. 332, 346 C. 1904 [2] 653).
- 19) Acetylphenylamid d. Brenztraubensäure. Sm. 175° (G. 21 [1] 273). — II, 371.
- 20) Phenylimid d. mal. Hexan-γδ-Dicarbonsäure. Sm. 84—85° (A. 309, 339). — \*II, 215.
- 21) Phenylimid d. β-Methylpentan-γδ-Dicarbonsäure. Sm. 85° (Soc. 69, 283). — \*II, 215.
- 22) Phenylimid d. β-Methylpentan-δε-Dicarbonsäure. Sm. 109° (Soc. 73, 64). — \*II, 215.
- 23) Phenylimid d. βγ-Dimethylbutan-βγ-Dicarbonsäure. Sm. 88° (B. 23, 3623; A. 292, 176). — II, 415; \*II, 215.
- 24) 4-Methylphenylimid d. Pentan-αγ-Dicarbonsäure. Sm. 94—95° (A. 292, 216). — \*II, 278.
- 25) 4-Methylphenylimid d. fum. Pentan-βγ-Dicarbonsäure. Sm. 87 bis 88,5° (A. 309, 335). — \*II, 278.
- 26) 4-Methylphenylimid d. mal. Pentan-βγ-Dicarbonsäure. Sm. 109 bis 110° (A. 298, 163). — \*II, 279.
- 27) 4-Methylphenylimid d. mal. Pentan-βδ-Dicarbonsäure. Sm. 120° (A. 292, 200). — \*II, 278.
- 28) 4-Methylphenylimid d. β-Methylbutan-αβ-Dicarbonsäure. Sm. 64 bis 65° (A. 292, 184; 298, 176). — \*II, 278.
- 29) 4-Methylphenylimid d. β-Methylbutan-βγ-Dicarbonsäure. Sm. 117° (A. 285, 235). — \*II, 279.
- 30) 4-Methylphenylimid d. β-Methylbutan-γδ-Dicarbonsäure. Sm. 139 bis 140° (A. 309, 329). — \*II, 278.
- C<sub>14</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>** C 64,9 — H 6,6 — O 12,3 — N 16,2 — M. G. 259.
- 1) α-Diäthylcyanacetyl-β-Phenylharnstoff. Sm. 156° (D.R.P. 156383 C. 1905 [1] 54; A. 340, 345 C. 1905 [2] 892).
- 2) 4-[3-Nitrophenyl]hydrazon-2,6-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 140° (A. 359, 69 C. 1908 [1] 1550).
- 3) Äthyläther d. 4-Acetylamido-5-Oxy-3-Methyl-1-Phenylpyrazol. Sm. 99° (D.R.P. 189842 C. 1908 [1] 427).
- 4) 3,5-Dicyan-2,6-Diketo-4-Methyl-4-Isohexenylhexahydropyridin. Sm. 183—184,5° (C. 1901 [1] 580).
- 5) 6-Imido-2,4-Diketo-5,5-Diäthyl-3-Phenylhexahydro-1,3-Diazin. Sm. 222° (A. 340, 334 C. 1905 [2] 891).
- 6) 2-Phenylimido-4,6-Diketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 253° (D.R.P. 186456 C. 1907 [2] 957; A. 359, 179 C. 1908 [1] 1538).
- 7) 6-Phenylimido-2,4-Diketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 253° (249°) (D.R.P. 166266 C. 1906 [1] 618; D.R.P. 172979 C. 1906 [2] 984).
- 8) Äthylester d. 2,4,5-Trimethylphenylazocyanessigsäure. Sm. 100°. K (J. pr. [2] 49, 348). — IV, 1457.
- 9) Äthylester d. 2,4,5-Trimethylphenylhydrazoncyanessigsäure. Sm. 136° (J. pr. [2] 49, 348). — IV, 1457.
- 10) Äthylester d. α-Cyan-γ-Phenylhydrazonbutan-α-Carbonsäure. Sm. 144° (C. 1895 [2] 918). — IV, 692.
- 11) Äthylester d. 1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-3-Imido-ameisensäure (Iminopyrinäthylurethan). Sm. 178° (B. 36, 3284 C. 1903 [2] 1190).
- 12) Amylester d. Phenylazocyanessigsäure. α-Modif. Sm. 77—78°; β-Modif. Sm. 57—59° (C. 1896 [1] 1106).
- 13) Imid d. 2,3-Dicyan-1-Methyl-1-Hexyl-R-Trimethylen-2,3-Dicarbon-säure. Sm. 154—155° (C. 1899 [2] 440). — \*I, 783.
- 14) Verbindung (aus Benzenylhydrazidin). Sm. unterhalb 70° (A. 297, 270). — \*II, 763.



- $C_{14}H_{17}O_2Cl$  1) Äthylester d.  $\alpha$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -Penten- $\beta$ -Carbonsäure. Sd. 247 bis 249°<sub>300</sub> (Soc. 49, 162). — II, 1434.
- $C_{14}H_{17}O_2Br_3$  1) Önanthat d. 3,5-Dibrom-2-Oxy-1-Brommethylbenzol. Sm. 41° (B. 42, 276 C. 1909 [1] 647).
- $C_{14}H_{17}O_3N$  C 68,0 — H 6,9 — O 19,4 — N 5,7 — M. G. 247.
- 1) 1'-Äthyläther d. 2,4-Diketo-3,3-Dimethyl-1-[4-Oxyphenyl]tetrahydropyrrol. Sm. 130° (B. 32, 1207). — \*IV, 51.
  - 2) Diäthyläther d. 3-Methyl-5-[2,4-Dioxyphenyl]isoxazol. Sm. 126,5° (B. 37, 356 C. 1904 [1] 670).
  - 3) Diäthyläther d. 5,7-Dioxy-1-Keto-4-Methyl-1,2-Dihydroisochinolin. Sm. 218° (D.R.P. 73700). — \*IV, 205.
  - 4) Anhydrohydrastininaceton. Sm. 72°. (2HCl, PtCl<sub>4</sub>) (B. 37, 214 C. 1904 [1] 590).
  - 5)  $\beta$ -[2-Acetylamido-4-Isopropylphenyl]akrylsäure. Sm. 220° u. Zers. (B. 19, 263). — II, 1434.
  - 6)  $\beta$ -[3-Acetylamido-4-Isopropylphenyl]akrylsäure. Sm. 240° (B. 19, 416). — II, 1434.
  - 7) 2-Benzoylamido-4-hexahydrobenzol-1-Carbonsäure. Sm. 220—221° (A. 295, 202). — \*II, 748.
  - 8) cis- $\epsilon$ -Oximido- $\alpha$ -Phenyl- $\beta$ -Hepten- $\eta$ -Carbonsäure. Sm. 120—121° (B. 38, 1124 C. 1905 [1] 1242).
  - 9) trans- $\epsilon$ -Oximido- $\alpha$ -Phenyl- $\beta$ -Hepten- $\eta$ -Carbonsäure. Sm. 122° (B. 38, 1122 C. 1905 [1] 1242).
  - 10) 5-Keto-2-Methyl-1-[2,3-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 186°. Ba + 1½H<sub>2</sub>O (B. 38, 1227 C. 1905 [1] 1258).
  - 11) 5-Keto-2-Methyl-1-[2,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 169°. Cu + 1½H<sub>2</sub>O (B. 38, 1225 C. 1905 [1] 1257).
  - 12) 5-Keto-2-Methyl-1-[2,5-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 226° (B. 38, 1226 C. 1905 [1] 1257).
  - 13) 5-Keto-2-Methyl-1-[3,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 192°. Ba + 2H<sub>2</sub>O (B. 38, 1226 C. 1905 [1] 1257).
  - 14) Lakton d.  $\gamma$ -Oxy- $\gamma$ -[4-Acetylamidophenyl]pentan- $\gamma^2$ -Carbonsäure. Sm. 121,5—122,5° (B. 41, 505 C. 1908 [1] 1184).
  - 15) Lakton d.  $\beta$ -[ $\alpha$ -Oxyisobutyrylphenyl]amidoisobuttersäure? Sm. 120° (B. 25, 2332; Ph. Ch. 10, 663). — II, 435.
  - 16) Lakton d.  $\alpha$ -Oxyisocapronylphenylamidoessigsäure. Sm. 75—76° (A. 369, 260 C. 1909 [2] 2138).
  - 17)  $\beta\delta$ -Lakton d.  $\delta$ -Oxy- $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure- $\delta$ -Phenylamid. Sm. 97° (A. 292, 229). — \*II, 220.
  - 18) Methylester d. 5-Keto-2-Methyl-1-[3-Methylphenyl]tetrahydropyrrol-2-Carbonsäure (B. 38, 1222 C. 1905 [1] 1257).
  - 19) Methylester d. 5-Keto-2-Methyl-1-[4-Methylphenyl]tetrahydropyrrol-2-Carbonsäure. Fl. (B. 38, 1221 C. 1905 [1] 1257).
  - 20) Äthylester d.  $\alpha$ -Amido- $\delta$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Penten- $\gamma$ -Carbonsäure. Sm. 125—127° (B. 39, 3879 C. 1907 [1] 171).
  - 21) Äthylester d.  $\beta$ -Amido- $\epsilon$ -Keto- $\epsilon$ -Phenyl- $\beta$ -Penten- $\delta$ -Carbonsäure. Sm. 127—128° (B. 39, 3883 C. 1907 [1] 172).
  - 22) Äthylester d.  $\alpha$ -[2-Methylphenyl]amido- $\gamma$ -Keto- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 71° (B. 35, 2510 C. 1902 [2] 438).
  - 23) Äthylester d.  $\beta$ -Methylamido- $\alpha$ -Benzoylerotonsäure. Sm. 69—70° (B. 42, 3923 C. 1909 [2] 1799).
  - 24) Äthylester d.  $\alpha$ -Cyan- $\delta$ -Oxyvalerianphenyläthersäure. Fl. (B. 30, 1056). — \*II, 366.
  - 25) Äthylester-2-Methyl-2,3-Dihydroindol-1-[Ketoäthyl- $\beta$ -Carbonsäure]. Sm. 209° (B. 26, 1298). — IV, 189.
  - 26) Äthylester d. 2-Keto-3-Äthyl-1,2,3,4-Tetrahydrochinolin-3-Carbonsäure. Sm. 114° (B. 20, 440). — II, 1857.
  - 27) Acetat d. 8-Acetylamido-5-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 151—151,5° (B. 22, 962). — II, 854.
  - 28)  $\gamma$ -Phenylamid d.  $\beta$ -Methyl- $\alpha$ -Penten- $\alpha\gamma$ -Dicarbonsäure. Sm. 129° (Soc. 87, 1709 C. 1906 [1] 185).
  - 29)  $\epsilon$ -Phenylamid d.  $\delta$ -Methyl- $\beta$ -Penten- $\gamma\epsilon$ -Dicarbonsäure. Sm. 178 bis 179° (B. 33, 3334). — \*II, 218.

- C<sub>14</sub>H<sub>17</sub>O<sub>3</sub>N** 30) Phenylmonamid d. Isotrimethylglutakonsäure. Sm. 138° u. Zers. (Soc. 71, 1186). — \*II, 218.
- 31) Phenylmonamid d. Norpinsäure. Sm. 212—213° (B. 33, 891). — \*II, 218.
- 32) α-[4-Methylphenyl]amid d. Mesakonsäure-α-Äthylester. Sm. 103° (A. 353, 187 C. 1907 [2] 139).
- 33) β-[4-Methylphenyl]amid d. Mesakonsäure-α-Äthylester. Sm. 99° (A. 353, 186 C. 1907 [2] 139).
- 34) 4-Methylphenylimid d. γ-Oxy-β-Methylbutan-βγ-Dicarbonsäure. Sm. 184—185° (B. 29, 1546, 1624). — \*II, 281.
- 35) 4-Äthoxyphenylimid d. cis-Butan-βγ-Dicarbonsäure (cis-Dimethylpyrantin). Sm. 114—115° (C. 1901 [1] 377; Soc. 81, 797 C. 1902 [2] 108).
- 36) 4-Äthoxyphenylimid d. β-Methylpropan-αβ-Dicarbonsäure (as-Dimethylpyrantin). Sm. 70—71° (C. 1901 [1] 377; Soc. 81, 796 C. 1902 [2] 108). C 61,1 — H 6,2 — O 17,4 — N 15,3 — M. G. 275.
- C<sub>14</sub>H<sub>17</sub>O<sub>3</sub>N<sub>5</sub>**
- 1) 4-[β-Oximido-β-4-Isopropylphenyläthyl]-1,2,3,6-Dioxdiazin. Sm. 167,5° u. Zers. (A. 330, 259 C. 1904 [1] 947).
- 2) Isoamyläther d. 7-Nitro-4-Oxy-2-Methyl-1,4-Benzdiazin. Sm. 104° (C. 1907 [2] 257).
- 3) 5-Nitro-4-Keto-2-Methyl-3-Isoamyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 213—214° (C. 1905 [2] 1802).
- 4) 7-Nitro-4-Keto-2-Methyl-3-Isoamyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 117—118° (C. 1907 [2] 256).
- 5) 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Methylamidoessigsäure (D.R.P. 184850 C. 1907 [2] 435).
- 6) d-α-[α-Amidopropionyl]amido-β-[3-Indolyl]propionsäure (d-Alanyl-d-Tryptophan). Zers. bei 125°. Cu (B. 40, 2745 C. 1907 [2] 464).
- 7) Äthylester d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Amidoameisensäure. Sm. 206° (A. 293, 66). — IV, 1109.
- 8) Äthylester d. 1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd-4-Amidoameisensäure. Sm. 190° (A. 352, 208 C. 1907 [1] 1051).
- 9) Äthylester d. 5-Methoxyl-3-Phenyl-1,2,4-Triazol-1-[Äthyl-α-Carbonsäure). Fl. (B. 33, 1529). — \*IV, 818.
- 10) Verbindung (aus d. Nitril d. 6-Oxy-4-Keto-3-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure). Sm. 155° u. Zers. (A. 294, 288). — \*II, 1085.
- C<sub>14</sub>H<sub>17</sub>O<sub>3</sub>N<sub>5</sub>** C 55,4 — H 5,6 — O 15,8 — N 23,1 — M. G. 303.
- 1) 4-Oximido-3-Methyl-5-[β-Oximido-α-4-Dimethylamidophenylimidoäthyl]-4,5-Dihydroisoxazol. Sm. bei 206° u. Zers. (B. 30, 1305). — IV, 598.
- 2) Acetylhydrazid d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Amidoameisensäure. Sm. 214—215° (Bl. [3] 33, 504 C. 1905 [1] 1630).
- C<sub>14</sub>H<sub>17</sub>O<sub>3</sub>Br** 1) γ-Brom-ε-Keto-α-Phenylheptan-η-Carbonsäure. Sm. 79° (B. 38, 1122 C. 1905 [1] 1241).
- C<sub>14</sub>H<sub>17</sub>O<sub>4</sub>N** C 63,9 — H 6,5 — O 24,3 — N 5,3 — M. G. 263.
- 1) γ-Phenylamidoformoxyl-δ-Methyl-α-Penten-δ-Carbonsäure. Sm. 90 bis 95° (Bl. [3] 35, 365 C. 1906 [2] 319).
- 2) βδ-Lakton d. δ-Oxy-δ-Phenylamidoformoxyl-βγ-Dimethylbutan-β-Carbonsäure. Sm. 133—134° (Bl. [3] 35, 999 C. 1907 [1] 100).
- 3) βδ-Lakton d. δδ-Dioxy-γ-Phenyl-β-Methylbutan-β-Carbonsäure. Sm. 131° (C. r. 141, 41 C. 1905 [2] 457).
- 4) Dimethylester d. 1-Phenyltetrahydropyrrol-2,5-Dicarbonsäure. Sm. 88° (Soc. 95, 277 C. 1909 [1] 1485).
- 5) Äthylester d. β-[3-Nitro-4-Isopropylphenyl]akrylsäure. Sm. 58 bis 59° (B. 19, 414). — II, 1433.
- 6) Äthylester d. 1-Oximido-5-Methyl-3-[2-Furanyl]-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 110—112° (A. 303, 246). — \*III, 510.
- 7) Äthylester d. Oxalessigsäureäthylphenylamid. Sm. 67—69°. Cu (B. 24, 1255). — II, 420.
- 8) Diäthylester d. β-Phenylamidoäthen-αα-Dicarbonsäure. Sm. 48 bis 49° (50°) (B. 27, 2744; 30, 1758; A. 285, 144; 297, 77). — \*II, 231.
- 9) Diäthylester d. α-Phenylamidoäthen-αβ-Dicarbonsäure (Aniloxal-essigsäurediäthylester). Fl. (B. 22, 3349). — II, 420.

- $C_{14}H_{17}O_4N_3$  C 57,7 — H 5,8 — O 22,0 — N 14,4 — M. G. 291.
- 1) 2,4,6 - Triketo - 5 - Oxy - 5 - [4 - Diäthylamidophenyl]hexahydro - 1,3 - Diazin (4 - Diäthylamidophenylalloxan). Sm. 210—212° u. Zers. (C. 1900 [2] 789). — \*II, 221.
  - 2) Diäthyläther d. 4 - Nitro - 5 - Oxy - 1 - [4 - Oxyphenyl] - 3 - Methylpyrazol. Sm. 119° (B. 28, 639). — IV, 514.
  - 3) Äthylester d.  $\alpha$  - Acetoximido -  $\beta$  - Phenylhydrazonbuttersäure. Sm. 123—124° (Bl. [3] 33, 488 C. 1905 [1] 1591).
  - 4) Äthylester d.  $\alpha$  - [4 - Acetylamidophenyl]azoacetessigsäure. Sm. 184° (B. 33, 191). — \*IV, 1057.
- $C_{14}H_{17}O_4Cl$  1) Diacetat d. 6 - Chlor - 2,5 - Dioxy - 4 - Isopropyl - 1 - Methylbenzol. Sm. 87—88° (B. 15, 657). — II, 971.
- 2) Diäthylester d.  $\beta$  - Chlor -  $\alpha$  - Phenyläthan -  $\beta\beta$  - Dicarbonsäure (D. d. Benzylchlorimalonsäure). Sd. 305° u. Zers. (A. 209, 243). — II, 1849.
- $C_{14}H_{17}O_4Br$  1) Diacetat d. 6 - Brom - 2,5 - Dioxy - 4 - Isopropyl - 1 - Methylbenzol. Sm. 91° (B. 15, 658). — II, 971.
- 2) Diacetat d. 6 - Brom - 4 - Oxy - 3 - Oxymethyl - 1,2,5 - Trimethylbenzol. Sm. 88—88,5° (A. 353, 373 C. 1907 [2] 402).
- $C_{14}H_{17}O_4P$  1) Diäthylester - 1 - Naphtylester d. Phosphorsäure. Fl. (B. 27, 2562). — II, 858.
- 2) Diäthylester - 2 - Naphtylester d. Phosphorsäure. Fl. (B. 27, 2564). — II, 877.
- $C_{14}H_{17}O_5N$  C 60,2 — H 6,1 — O 28,7 — N 5,0 — M. G. 279.
- 1) Acetylcotarnin. Sm. 146° (B. 38, 2875 C. 1905 [2] 1103).
  - 2) Oxim d. Mekoninmethyläthylketon. Sm. 109—112° (M. 25, 1056 C. 1904 [2] 1644).
  - 3)  $\beta$  - Diacetylhydroxylamido -  $\beta$  - [4 - Methylphenyl]propionsäure. Sm. 194° (B. 39, 3706 C. 1907 [1] 40).
  - 4) act.  $\alpha$  - [2 - Carboxylbenzoyl]amidopentan -  $\alpha$  - Carbonsäure (Leucin - phtaloylsäure). Sm. 130—132° u. Zers. Na<sub>2</sub>, K<sub>2</sub>, Ba, Pt(NH<sub>3</sub>)<sub>2</sub> (A. 242, 17; B. 21, 277). — II, 1810.
  - 5) inact.  $\alpha$  - [2 - Carboxylbenzoyl]amidopentan -  $\alpha$  - Carbonsäure. Sm. 152 bis 153°. K<sub>2</sub>, Ag<sub>2</sub> (A. 242, 20). — II, 1811.
  - 6)  $\delta$  - Benzoylamido -  $\beta$  - Methylbutan -  $\alpha\delta$  - Dicarbonsäure. Sm. 172—173° (B. 38, 1659 C. 1905 [1] 1536).
  - 7) Hydrocotarninessigsäure. Sm. 116° (B. 38, 2874 C. 1905 [2] 1103).
  - 8) Lakton (aus d. Base C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>N<sub>2</sub>). Sm. 75—78°. HJ (B. 35, 1748 C. 1902 [2] 68). — \*III, 680.
  - 9) Dimethylester d. 4 - Isobutyrylamidobenzol - 1,2 - Dicarbonsäure. Sm. 122—123° (C. 1906 [2] 117).
  - 10) Diäthylester d. 4 - Acetylamidobenzol - 1,3 - Dicarbonsäure. Sm. 108° (D. R. P. 102894). — \*II, 1063.
  - 11) Diäthylester d. Formylphenylamidoessigsäure - 2 - Carbonsäure. Fl. (D. R. P. 127648 C. 1902 [1] 337).
  - 12)  $\alpha$  - Phenylmonamid d. Pentan -  $\alpha\alpha\epsilon$  - Tricarbonsäure. Sm. 165° (A. 316, 105).
  - 13) Phenylmonamid d. Methantricarbonsäurediäthylester. Sm. 124 (126°). Na (J. pr. [2] 35, 451; B. 37, 4635 C. 1905 [1] 238; B. 38, 32 C. 1905 [1] 602). — II, 422.
- $C_{14}H_{17}O_5N_3$  C 54,7 — H 5,5 — O 26,1 — N 13,7 — M. G. 307.
- 1)  $\alpha$  - Benzoylamidopropionylamidoacetylamidoessigsäure. Sm. 204 bis 205°. Ag (J. pr. [2] 70, 156 C. 1904 [2] 1395).
  - 2) Methyl ester d.  $\delta$  - Oximido -  $\epsilon$  - Phenylhydroxyhydrazon -  $\gamma$  - Keto -  $\beta$  - Methylpentan -  $\beta$  - Carbonsäure. Sm. 137—140°. H<sub>2</sub>SO<sub>4</sub> (Soc. 83, 1243 C. 1903 [2] 1421).
  - 3) Acetat d. 2,3,4 [oder 2,3,6] - Tri [Acetylamido] - 1 - Oxybenzol. Sm. 211° (B. 30, 184). — \*II, 415.
  - 4) Acetat d. 2,4,6 - Tri [Acetylamido] - 1 - Oxybenzol. Sm. 255° u. Zers. (M. 16, 264). — \*II, 415.
- $C_{14}H_{17}O_5N_5$  C 50,1 — H 5,1 — O 23,9 — N 20,9 — M. G. 335.
- 1) 4 - Oximido - 2 - [2 - Nitrophenylazo]hydroxylamido - 1 - Oxy - 1,5 - Dimethyl - 1,2,3,4 - Tetrahydrobenzol. Sm. 196,5° (B. 40, 2243 C. 1907 [2] 590).



- C<sub>14</sub>H<sub>17</sub>O<sub>5</sub>N<sub>5</sub>** 2) 4-Oximido-2-[4-Nitrophenylazo]hydroxylamido-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 220,5° (B. 40, 2244 C. 1907 [2] 590).
- 3) Verbindung (aus d.  $\beta$ -Dicyanacetessigsäureäthylester). Sm. 219° (A. 332, 137 C. 1904 [2] 190).
- C<sub>14</sub>H<sub>17</sub>O<sub>6</sub>Br** 1) Äthylester d.  $\alpha$ -Brom- $\beta$ -Oxy- $\beta$ -[3,4-Dioxyphenyl]propion-3,4-Methylenäther- $\beta$ -Äthyläthersäure. Fl. (B. 40, 2178 C. 1907 [2] 235).
- C<sub>14</sub>H<sub>17</sub>O<sub>6</sub>N** C 56,9 — H 5,8 — O 32,5 — N 4,7 — M. G. 295.
- 1) Indikan + 3H<sub>2</sub>O (siehe auch C<sub>28</sub>H<sub>31</sub>O<sub>17</sub>N). Sm. 51° (100–102° wasserfrei; 180° u. Zers.) (R. 19, 166; R. 24, 468 C. 1905 [2] 1255; Soc. 91, 1720 C. 1907 [2] 2060; Soc. 95, 793 C. 1909 [2] 30). — \*III, 443.
- 2) l-Mandelnitrilglykosid. Sm. 147–149° (B. 28, 1510; B. 34, 3810 C. 1902 [1] 128; Soc. 91, 670 C. 1907 [2] 69; Ar. 245, 641 C. 1908 [1] 1191; Soc. 95, 257 C. 1909 [1] 1490). — III, 570.
- 3) Prulaurasin. Sm. 120–122° (123–125°) (C. 1906 [1] 367; 1907 [2] 1078, 1340; Soc. 91, 673 C. 1907 [2] 69; Ar. 245, 465, 473, 474 C. 1907 [2] 1914; Ar. 245, 638 C. 1908 [1] 525).
- 4) Sambunigrin. Sm. 150–152° (C. r. 141, 598 C. 1905 [2] 1503; C. 1905 [2] 1682; 1907 [2] 1078; Ar. 245, 474 C. 1907 [2] 1914; Ar. 245, 204 C. 1907 [2] 164).
- 5) Diäthylbenzylamin- $\alpha\alpha'\alpha''$ -Tricarbonsäure. Zers. bei 206–208° (C. 1909 [2] 1868).
- 6)  $\alpha\gamma$ - $\epsilon$ -Dilakton d.  $\alpha\beta$ -Dioxy- $\theta$ -Oximido- $\zeta$ -Oxymethyl- $\delta\delta$ -Dimethyl- $\beta\epsilon$ -Nonadien- $\gamma\epsilon$ -Dicarbonsäure. Sm. 180° u. Zers. (A. 315, 168).
- 7) Trimethylester d.  $\alpha$ -Phenylamidoäthan- $\alpha\beta$ -Tricarbonsäure. Sm. 95° (78–79°) (B. 35, 517 C. 1902 [1] 658).
- 8) Trimethylester d. Phenylimidodiessigsäure-2-Carbonsäure. Sm. 62° (B. 33, 3182). — \*II, 786.
- 9) Diäthylester d.  $\alpha$ -[2-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure (D. d. 2-Nitrobenzylmalonsäure). Fl. (B. 29, 634). — \*II, 1069.
- 10) Diäthylester d.  $\alpha$ -[4-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 63° (B. 20, 434; 29, 636). — II, 1849.
- 11)  $\alpha$ ,N-Diäthylester d. Phenylamidoessigsäure-2-Carbonsäure-N-Carbonsäure. Sm. 114–116° (D.R.P. 138207 C. 1903 [1] 305).
- 12) 2,N-Diäthylester d. Phenylamidoessigsäure-2-Carbonsäure-N-Carbonsäure. Sm. 106–108° (D.R.P. 138207 C. 1903 [1] 305).
- 13)  $\alpha\alpha$ -Diäthylester d. Phenylamidomalonsäure-2-Carbonsäure. Sm. 127° (B. 33, 2467). — \*II, 786.
- 14) Triäthylester d. Pyridin-2,3,4-Tricarbonsäure. Sd. 300–305° (M. 22, 586). — \*IV, 132.
- 15) Triäthylester d. Pyridin-2,4,6-Tricarbonsäure. Sm. 127,5° (A. 228, 41). — IV, 180.
- 16) Dipropylester d. 2-Nitrobenzol-1,4-Dicarbonsäure. Sd. 224–228°<sub>18</sub> (M. 21, 630). — \*II, 1066.
- C<sub>14</sub>H<sub>17</sub>O<sub>6</sub>N<sub>2</sub>** 1) Verbindung (Base aus Harn) = (C<sub>14</sub>H<sub>17</sub>O<sub>6</sub>N<sub>2</sub>)<sub>x</sub> (B. 25 [2] 46).
- C<sub>14</sub>H<sub>17</sub>O<sub>6</sub>N<sub>8</sub>** C 52,0 — H 5,3 — O 29,7 — N 13,0 — M. G. 323.
- 1)  $\beta$ -Nitro- $\alpha$ -[3,5-Dinitro-2,4-Dimethyl-6-tert. Butylphenyl]äthen. Sm. 206° (B. 32, 3648; D.R.P. 94019). — \*II, 89.
- 2) Diäthylester d. 2-( $\beta$ -Carboxyureido)benzoylamidoameisensäure. Sm. 225° u. Zers. (B. 41, 2396 C. 1908 [2] 498).
- C<sub>14</sub>H<sub>17</sub>O<sub>7</sub>N** C 54,0 — H 5,5 — O 36,0 — N 4,5 — M. G. 311.
- 1) Dhurrin (C. 1902 [2] 288). — \*III, 435.
- 2) Helicincyanhydrin. Sm. 176° u. Zers. (B. 34, 630). — \*II, 1031.
- 3)  $\beta$ -[4-Äthoxyphenyl]amidopropan- $\alpha\beta\gamma$ -Tricarbonsäure + 2H<sub>2</sub>O. Sm. 121–122° u. Zers. (B. 38, 3189 C. 1905 [2] 1322).
- 4) Diäthylester d.  $\alpha$ -Oxyäthan-2-Nitrophenyläther- $\alpha\alpha$ -Dicarbonsäure. Sm. 118–119° (B. 40, 3141 C. 1907 [2] 978).
- 5) Diäthylester d.  $\alpha$ -Oxyäthan-3-Nitrophenyläther- $\alpha\alpha$ -Dicarbonsäure. Sd. 210–212°<sub>16</sub> (B. 40, 3143 C. 1907 [2] 978).
- 6) Diäthylester d.  $\alpha$ -Oxyäthan-4-Nitrophenyläther- $\alpha\alpha$ -Dicarbonsäure. Sm. 141–142° (B. 40, 3149 C. 1907 [2] 979).
- 7) 4-Amid d. 2,6-Dioxybenzol-1,3-Dicarbonsäure-4-Methylcarbon-säure-1,3-Diäthylester. Sm. 186°. Na (B. 31, 2016). — \*II, 1215.
- 8) 4-Äthoxyphenylmonamid d. Citronensäure. Sm. 72° (C. 1896 [1] 172). — \*II, 411.

- C<sub>14</sub>H<sub>17</sub>O<sub>8</sub>N** C 51,4 — H 5,2 — O 39,1 — N 4,3 — M. G. 327.
- 1)  $\alpha\delta$ -Lakton d.  $\delta$ -Imido- $\delta$ -Oxy- $\alpha$ -Buten- $\alpha\alpha\beta\gamma$ -Tetracarbonsäure- $\alpha\beta\gamma$ -Triäthylester + H<sub>2</sub>O (Isoimidodicarboxylakonitsäuretriäthylester). Sm. 70° (B. 34, 3711 C. 1902 [1] 49).
  - 2) Triäthylester d. 2,6-Dioxy-pyridin-3,4,5-Tricarbonsäure. Sm. 137° (B. 34, 3712 C. 1902 [1] 49; J. pr. [2] 80, 59 C. 1909 [2] 1320). — \*IV, 133.
  - 3) Tetracetat d. Fruktosamin. Sm. 174° (R. 18, 75). — \*I, 576.
- C<sub>14</sub>H<sub>17</sub>O<sub>8</sub>N<sub>3</sub>** C 47,3 — H 4,8 — O 36,1 — N 11,8 — M. G. 355.
- 1) Diäthylester d. 3,5-Dinitrobenzol-1-[Äthyl- $\beta$ -Carbonsäure]-2-Amidoameisensäure. Sm. 134,5° (R. 23, 313 C. 1905 [1] 102).
- C<sub>14</sub>H<sub>17</sub>N<sub>2</sub>Cl** 1) Chlormethylat d. 4-Phenylamido-2,6-Dimethylpyridin. Sm. 240°. 2 + PtCl<sub>4</sub> + AuCl<sub>3</sub> + HgCl<sub>2</sub> (A. 354, 97 C. 1907 [2] 610).
- C<sub>14</sub>H<sub>17</sub>N<sub>2</sub>J** 1) Jodmethylat d. 4-Phenylamido-2,6-Dimethylpyridin. Sm. 223° (A. 354, 95 C. 1907 [2] 609).
- C<sub>14</sub>H<sub>18</sub>ON<sub>2</sub>** C 73,1 — H 7,8 — O 6,9 — N 12,2 — M. G. 230.
- 1) 3-[3-Amidophenyl]amido-5-Oxy-1,1-Dimethyl-1,2-Dihydrobenzol. Sm. 234—234,5. 2HCl, (2HCl, PtCl<sub>4</sub>) (Soc. 89, 389 C. 1906 [1] 1698).
  - 2) 3-[4-Amidophenyl]amido-5-Oxy-1,1-Dimethyl-1,2-Dihydrobenzol. Sm. 209—210°. 2HCl, (2HCl, PtCl<sub>4</sub>) (Soc. 89, 394 C. 1906 [1] 1698).
  - 3) Äthyläther d.  $\beta$ -Cyan- $\alpha$ -Imido- $\alpha$ -Oxy- $\beta$ -Benzylbutan. Sd. 170°<sub>22</sub> (Am. 22, 196). — \*II, 1072.
  - 4) 5-Phenylhydrazon-3-Keto-1,1-Dimethylhexahydrobenzol. Sm. 158° u. Zers. (C. 1906 [1] 34).
  - 5) Monophenylhydrazon d. isom. 2,4-Diketo-1,1,3,3-Tetramethyl-R-Tetramethylen. Sm. 66—67° (B. 40, 1149 C. 1907 [1] 1260).
  - 6) 3-Keto-5-Amyl-1-Phenyl-2,3-Dihidropyrazol. Sm. 280° (C. r. 142, 1535 C. 1906 [2] 434).
  - 7) 3-Keto-5-Amyl-2-Phenyl-2,3-Dihidropyrazol. Sm. 96° (C. r. 142, 1535 C. 1906 [2] 434).
  - 8) 3-Keto-1,5-Dimethyl-2-[2,4,5-Trimethylphenyl]-2,3-Dihidropyrazol. Sm. 105—106° (B. 18, 708). — IV, 814.
  - 9) 5-Keto-3-Methyl-4-sec. Butyl-1-Phenyl-4,5-Dihidropyrazol. Sm. 162° (corr.) (C. r. 141, 116 C. 1905 [2] 615).
  - 10) Methylhydroxyd d. 4-Phenylamido-2,6-Dimethylpyridin. Sm. 115°. Salze, siehe (A. 354, 96 C. 1907 [2] 609).
  - 11) 2-Oxy-4,4,6-Trimethyl-1-[2-Methylphenyl]-1,4-Dihydro-1,3-Diazin. Sm. 151° (B. 32, 3176). — \*IV, 343.
  - 12) p-Nitro-3-Methyl-1,2,3,4,7,8,9,10-Oktahydro- $\beta$ -Naphthochinolin. Sm. 86° (B. 24, 2664). — IV, 234.
  - 13) 4-Keto-3-Methyl-2-Isoamyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 40 bis 41° (C. 1901 [2] 891). — \*IV, 624.
  - 14) Äthyläther d. 4-Oxy-1-Isobutyl-2,3-Benzdiazin. Fl. H<sub>2</sub>SO<sub>4</sub> (B. 38, 3926 C. 1906 [1] 247).
  - 15) Nitril d. 4-Oxy-2,2-Dimethyl-6-Phenylhexahidropyridin-4-Carbonsäure. Sm. 123—124° (D. R. P. 91122). — \*IV, 155.
  - 16) Nitril d.  $\alpha$ -[4-Oxyphenyl]- $\alpha$ -[1-Piperidyl]essigmethyläthersäure. Sm. 75—76° (B. 37, 4086 C. 1904 [2] 1724).
  - 17) Amid d.  $\beta$ -Phenyl- $\beta$ -Piperidylakrylsäure. Sm. 135—136° (C. r. 144, 807 C. 1907 [2] 38).
  - 18) Amid d. 2-Methylhexahydrocarbazol-9-Carbonsäure. Sm. 153 bis 154° (A. 359, 72 C. 1908 [1] 1550).
  - 19)  $\beta$ -Phenyläthenylamid d. Hexahidropyridin-1-Carbonsäure. Sm. 140° (Soc. 95, 439 C. 1909 [1] 1655).
  - 20) Verbindung (aus 1,2-Diamidobenzol u. 2,4-Diketo-1,1,3,3-Tetramethyl-R-Tetramethylen). Sm. 248—249° (B. 39, 1643 C. 1906 [2] 26).
- C<sub>14</sub>H<sub>18</sub>ON<sub>4</sub>** C 65,1 — H 7,0 — O 6,2 — N 21,7 — M. G. 258.
- 1) 6-Imido-2-Phenylimido-4-Keto-5,5-Diäthylhexahydro-1,3-Diazin (D. R. P. 186456 C. 1907 [2] 957).
- C<sub>14</sub>H<sub>18</sub>OBr<sub>2</sub>** 1)  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\alpha$ -[4-Isopropylphenyl]pentan. Sm. 141° (A. 330, 259 C. 1904 [1] 947).
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** C 68,3 — H 7,3 — O 13,0 — N 11,4 — M. G. 246.
- 1)  $\gamma$ -Nitrimido- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sm. 169,5° (A. 330, 262 C. 1904 [1] 947).

- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** 2) 1,5-Di[Acetylamido]-1,2,3,4-Tetrahydronaphtalin. Sm. 262° (B. 22, 955). — IV, 861.
- 3) 5,6-Di[Acetylamido]-1,2,3,4-Tetrahydronaphtalin. Sm. 245° (B. 22, 1379). — IV, 861.
- 4) 5,8-Di[Acetylamido]-1,2,3,4-Tetrahydronaphtalin. Sm. 285° (291 bis 292°) (B. 22, 1383; Soc. 85, 755 C. 1904 [2] 448). — IV, 861.
- 5) 2,6-Dioximido-4-Phenyl-1,1-Dimethylhexahydrobenzol. Sm. 235 bis 236° (B. 41, 1275 C. 1908 [1] 1878).
- 6) 2-Phenylhydrazido-4-Keto-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 213—213,5°. Oxalat, Pikrat (B. 40, 2263 C. 1907 [2] 592).
- 7) 1-Phenylamido-2,5-Diketo-3,3,4,4-Tetramethyltetrahydropyrrol (Tetramethylsuccinylphenylhydrazin). Sm. 124° (B. 23, 3624). — IV, 704.
- 8) 5-Keto-2-[ $\alpha$ -Oximidoäthyl]-2-Methyl-1-Benzyltetrahydropyrrol. Sm. 141° (B. 42, 3956 C. 1909 [2] 1811).
- 9) Methyläther d. 3-Oxy-5-Keto-4,4-Diäthyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 94—95° (B. 39, 2285 C. 1906 [2] 435).
- 10) Diäthyläther d. 5-Oxy-1-[4-Oxyphenyl]-3-Methylpyrazol. Sm. 84° (B. 28, 635). — IV, 514.
- 11)  $\beta$ -Oximido- $\alpha$ -Keto- $\gamma$ -[1-Piperidyl]- $\alpha$ -Phenylpropan. Sm. 134—135° u. Zers. (B. 38, 2043 C. 1905 [2] 302).
- 12) 4,6-Diketo-5,5-Diäthyl-2-Phenylhexahydro-1,3-Diazin. Sm. 262° (Soc. 91, 269 C. 1907 [1] 1270).
- 13) 4-Acetylamido-6-Isopropyl-1,3-Dimethylbenzoxazol. Sm. 132—134° (G. 20, 423). — II, 774.
- 14) 4-Acetylamido-3-Isopropyl-1,6-Dimethylbenzoxazol. Sm. 190—192° (G. 20, 428). — II, 768.
- 15) Diäthyläther d. 5,8-Dioxy-2,3-Dimethyl-1,4-Benzdiazin. Sm. 127° (B. 23, 1212). — IV, 935.
- 16) Dipropyläther d. 2,4-Dioxy-1,3-Benzdiazin. Sm. 40—41° (C. 1909 [1] 1938).
- 17) Anagyrin. HCl + 4H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (G. 17, 325; Bl. 50, 626; C. 1896 [1] 375). — III, 777.
- 18) Äthylester d.  $\delta$ -Phenylhydrazon- $\beta$ -Penten- $\gamma$ -Carbonsäure (Soc. 51, 839). — IV, 693.
- 19) Äthylester d. 5-Phenylhydrazido-2,3-Dihydro-R-Penten-4-Carbonsäure. Sm. 93° (A. 317, 59). — \*IV, 454.
- 20) Amid d. 5-Keto-2-Methyl-1-[2,3-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 203° (B. 38, 1227 C. 1905 [1] 1258).
- 21) Amid d. 5-Keto-2-Methyl-1-[2,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 196° (B. 38, 1225 C. 1905 [1] 1257).
- 22) Amid d. 5-Keto-2-Methyl-1-[2,5-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 211° (B. 38, 1226 C. 1905 [1] 1257).
- 23) Amid d. 5-Keto-2-Methyl-1-[3,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 206—207° (B. 38, 1226 C. 1905 [1] 1257).
- 24) 2-Amidophenylimid d.  $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 142,5—143° (A. 292, 178). — IV, 560.
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>N<sub>4</sub>** C 61,3 — H 6,6 — O 11,7 — N 20,4 — M. G. 274.
- 1)  $\gamma$ -Semicarbazon- $\delta$ -Oximido- $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Buten. Sm. 176° u. Zers. (C. 1904 [1] 28; A. 330, 254 C. 1904 [1] 946).
- 2) N-Oxamidbis[2,5-Dimethylpyrrol] (B. 38, 3917 C. 1906 [1] 227).
- 3) 2,4-Diketo-1-Methyl-5-Butyl-3-Phenyltetrahydroimidazol. Sm. 52 bis 53° (C. 1908 [1] 970).
- 4) 5-[4-Nitrophenylhydrazon]methyl-1-Äthyl-1,2,3,6-Tetrahydropyridin. HCl (B. 38, 4166 C. 1906 [1] 447).
- 5) 6-Phenylhydrazon-2,4-Diketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 215—216° (A. 359, 180 C. 1908 [1] 1538; D. R. P. 166266 C. 1906 [1] 618).
- 6) Amid d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Methylamidoessigsäure. Sm. 158—159° (D. R. P. 184850 C. 1907 [2] 435).
- 7) Di[Isopropylidenhydrazid] d. Benzol-1,3-Dicarbonsäure. Sm. 243 bis 244° (J. pr. [2] 54, 76).
- 8) Di[Isopropylidenhydrazid] d. Benzol-1,4-Dicarbonsäure. Sm. 261 bis 262° (J. pr. [2] 54, 83). — \*II, 1064.
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>Cl<sub>4</sub>** 1) Diisobutyläther d. 2,3,5,6-Tetrachlor-1,4-Dioxybenzol (M. 3, 682). — II, 943.



- $C_{14}H_{18}O_2S$  1) Äthyläther d.  $\alpha$ -Merkapto- $\gamma$ -Keto- $\beta$ -Acetyl- $\alpha$ -Phenylbutan. Sm. 75—76° (*Soc.* 87, 20 C. 1905 [1] 741).  
C 64,1 — H 6,9 — O 18,3 — N 10,7 — M. G. 262.
- $C_{14}H_{18}O_3N_2$  1) Äthyläther d. 2,4-Diketo-3-Propyl-1-[4-Oxyphenyl]tetrahydroimidazol. Sm. 121—122° (*J. pr.* [2] 66, 246 C. 1902 [2] 1123).  
2) Hämatoidin (*A.* 78, 353; *Z.* 1867, 414; *J.* 1855, 738; *J. Th.* 1878, 288). — IV, 1620.  
3) 2-Keto-1-Methyl-4,5-Camphyl-1,2-Dihydro-1,3-Diazin-6-Carbonsäure. Sm. 154° (*Am.* 36, 265 C. 1906 [2] 1425).  
4) Äthylester d.  $\alpha$ -[4-Dimethylamidophenyl]imido- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 63,5° (*B.* 36, 3233 C. 1903 [2] 941).  
5) Äthylester d.  $\alpha$ -Phenylureido- $\beta$ -Methylpropen- $\alpha$ -Carbonsäure. Sm. 130° (*C.* 1901 [1] 218; *Bl.* [3] 25, 915). — \*II, 190.  
6) Äthylester d.  $\beta$ -Phenylacetylhydrazonbuttersäure. Sm. 105° (*J. pr.* [2] 64, 318).  
7) Äthylester d.  $\alpha$ -[2,4-Dimethylphenyl]azo- $\beta$ -Ketopropan- $\alpha$ -Carbonsäure. Sm. 121° (*B.* 41, 2362 C. 1908 [2] 519).  
8) Äthylester d. 3-Keto-4-Methyl-6-Phenylhexahydro-1,3-Diazin-5-Carbonsäure (Benzuramidobuttersäureäthylester). Sm. 229—230° u. Zers. (*G.* 23 [1] 366). — II, 1665.  
9) Isobutylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Ketobuttersäure. Sm. 98—99° (*C. r.* 138, 1222 C. 1904 [2] 27; *C. r.* 139, 134 C. 1904 [2] 588).  
10) Phenylmonamid d.  $\beta$ -Äthylamidoäthen- $\alpha$ -Dicarbonsäuremonoäthylester. Sm. 84° (*J. pr.* [2] 80, 58 C. 1909 [2] 1320).  
11)  $\alpha$ -Allylamid- $\beta$ -Benzylamid d.  $\alpha$ -Oxyäthan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 107—108° (*C.* 1900 [2] 1013). — \*II, 300.  
12) Verbindung +  $H_2O$  (aus Gliadin). Zers. bei 249°.  $Cu + 3\frac{1}{2}H_2O$  (*C.* 1908 [1] 865).
- $C_{14}H_{18}O_3N_4$  C 57,9 — H 6,2 — O 16,5 — N 19,3 — M. G. 290.  
1) Isopropylidenmonohydrazid d. 4-Methylphenylhydrazonmalonsäuremonomethylester. Sm. 165° (*B.* 40, 4329 C. 1908 [1] 26).  
2) Verbindung (aus Thiocarbamilidothiooxanilid). Sm. 220° (*J. pr.* [2] 32, 13). — II, 412.
- $C_{14}H_{19}O_3S$  1) Oktohydroanthracen-9-Sulfonsäure. Na, Ba +  $2H_2O$  (*Bl.* [4] 1, 702 C. 1907 [2] 1167).
- $C_{14}H_{18}O_4N_2$  C 60,4 — H 6,5 — O 23,0 — N 10,1 — M. G. 278.  
1)  $\alpha$ -[3-Nitro-2-Oxybenzyliden]amido- $\alpha$ -Phenyl- $\alpha$ -[2-Oxynaphtyl]methan. Sm. 193° (*G.* 37 [2] 8 C. 1907 [2] 992).  
2) Base (aus d. Jodmethylat d. Cyanhydrocotarnin). Sm. 182° (*B.* 35, 1747 C. 1902 [2] 68). — \*III, 680.  
3)  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidoisobuttersäure. Sm. 199° (*B.* 42, 2522 C. 1909 [2] 606).  
4)  $\gamma$ -Hydroxylamido- $\alpha$ -Oximido- $\alpha$ -Phenyl- $\alpha$ -Hepten- $\eta$ -Carbonsäure. Zers. bei 130° (*B.* 38, 1119 C. 1905 [1] 1241).  
5) Methylester d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 104° (*J. pr.* [2] 70, 206 C. 1904 [2] 1459).  
6) Äthylester d.  $\alpha$ -Benzoylamidoacetylamidopropionsäure. Sm. 124 bis 126° (*J. pr.* [2] 70, 116 C. 1904 [2] 1036).  
7) Äthylester d.  $\alpha$ -Benzoylamidopropionylamidoessigsäure. Sm. 108° (*J. pr.* [2] 70, 153 C. 1904 [2] 1395).  
8) Diäthylester d.  $\beta$ -[2-Amidophenyl]amidoäthen- $\alpha$ - $\alpha$ -Dicarbonsäure. Sm. 92—93° (*B.* 30, 2026). — IV, 561.  
9) Diäthylester d.  $\beta$ -Phenylhydrazidoäthen- $\alpha$ - $\alpha$ -Dicarbonsäure. Sm. 112° (*B.* 28, 36). — IV, 714.  
10) Diäthylester d. Phenylhydrazonäthan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 76 bis 78° (*A.* 246, 319). — IV, 713.  
11) Diäthylester d.  $\alpha$ -[3-Carboxylphenyl]hydrazonpropionsäure. Sm. 101—102° (*A.* 236, 168). — II, 1289.  
12) Acetat d. 2,6[oder 2,4]-Di[Acetylamido]-4[oder 2]-Oxy-1-Äthylbenzol. Sm. 259—262° (*M.* 21, 47). — \*II, 439.  
13) Diacetat d. 1,4-Dioximido-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. 2 Modif.  $\alpha$ -Modif. Sm. 110°;  $\beta$ -Modif. Sm. 110° (*B.* 28, 1547). — III, 366.  
14) 4-Nitrobenzoat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridin. Sm. 61—62° (*D. R. P.* 179627 C. 1907 [1] 1364).

- C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>N<sub>2</sub>** 15) Phenylamidoformyllderivat d.  $\gamma$ -Hydroxylamido- $\beta$ -Methylpropen- $\gamma$ -Carbonsäureäthylester. Sm. 128° (*Bl.* [3] 25, 917).  
C 54,9 — H 5,9 — O 20,9 — N 18,3 — M. G. 306.
- C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>N<sub>4</sub>** 1) 1,2,3,5-Tetra[Acetylamido]benzol. Sm. 245° (*B.* 30, 541). — IV, 1243.  
2) 1,2,4,5-Tetra[Acetylamido]benzol. Sm. 285° (*B.* 22, 440). — IV, 1274.  
3) 2,4,6-Triketo-5-Oxy-5-[2,4-Di(Dimethylamido)phenyl]hexahydro-1,3-Diazin. Zers. bei 223° (*B.* 41, 95 C. 1908 [1] 520).  
4) Diäthylester d.  $\alpha\beta$ -Di[3-Pyrazolyl]äthan-5,5'-Dicarbonsäure. Sm. 198—199° (*B.* 33, 1223). — \*IV, 939.  
5) Diäthylester d. 2,5-Dimethyl-1-[1,3,4-Triazolyl-1-]pyrrol-3,4-Dicarbonsäure. Sm. 146—147° (*B.* 39, 2622 C. 1906 [2] 1440).  
6) Diamid d. 1,3-Phenylendisuccinaminsäure. Sm. 245° u. Zers. (*A.* 347, 32 C. 1906 [2] 506).  
7) Phenylmonamid d.  $\beta$ -Semicarbazonpropan- $\alpha\alpha$ -Dicarbonsäuremono-äthylester. Sm. 152—154° (*B.* 38, 43 C. 1905 [1] 603).
- C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>N<sub>6</sub>** C 50,3 — H 5,4 — O 19,2 — N 25,1 — M. G. 334.  
1) Di[Acetylhydrazid] d. 4-Methylphenylhydrazonmalonsäure. Sm. 247° (*B.* 40, 4330 C. 1908 [1] 26).
- C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>Cl<sub>6</sub>** 1) Verbindung (aus d. Limonen u. Trichloressigsäure). Sm. 104° (*Bl.* [3] 15, 367; *B.* 29, 695). — III, 523.
- C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>S** 1) Äthylester d.  $\alpha$ -Merkapto- $\beta$ -Ketopropan-3-Äthoxyphenyläther- $\alpha$ -Carbonsäure. Fl. (*B.* 25, 2983). — II, 934.
- C<sub>14</sub>H<sub>18</sub>O<sub>4</sub>S<sub>2</sub>** 1) 1,4-Diacetat d. 2,5-Dimerkapto-1,4-Dioxybenzol-2,5-Diäthyläther. Sm. 133—134° (*A.* 336, 159 C. 1904 [2] 1300).
- C<sub>14</sub>H<sub>18</sub>O<sub>5</sub>N<sub>2</sub>** C 57,1 — H 6,1 — O 27,2 — N 9,5 — M. G. 294.  
1) 2,6-Dinitro-4-Acetyl-5-Pseudobutyl-1,3-Dimethylbenzol. Sm. 136° (*B.* 31, 1346). — \*III, 127.  
2) Oxim d. Acetylcotarnin. Sm. 156° (*B.* 38, 2876 C. 1905 [2] 1103).  
3) Äthylester d.  $\beta$ -Amido- $\alpha$ -Benzoylamidoacetoxylpropionsäure. Sm. 96° (*J. pr.* [2] 70, 203 C. 1904 [2] 1459).  
4) Diäthylester d. 1-Methylbenzol-2-Oxaminsäure-4-Amidoameisensäure (Oxamäthanotolylurethan). Sm. 128° (*A.* 268, 318). — IV, 604.  
5) Diäthylester d. 1-Methylbenzol-4-Oxaminsäure-4-Amidoameisensäure. Sm. 131° (*A.* 268, 320). — IV, 604.  
6) Diäthylester d.  $\alpha$ -Phenyldimethylnitrosamin- $\alpha\alpha'$ -Dicarbonsäure. *Sd.* 220—221° (*B.* 41, 4365 C. 1909 [1] 370).  
7) Diäthylester d. 2-Methylphenylnitrosamidomalonsäure. Fl. (*Am.* 30, 138 C. 1903 [2] 721).  
8) Diäthylester d. 3-Methylphenylnitrosamidomalonsäure. Sm. 58 bis 58,5° (*Am.* 30, 140 C. 1903 [2] 721).  
9) Diäthylester d. 4-Methylphenylnitrosamidomalonsäure (*Am.* 30, 143 C. 1903 [2] 721).  
10) Acetat d. 3-Nitro-5-Acetylamido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 225—226° (*G.* 25 [2] 406). — \*II, 461.  
11) Acetat d. 2-Nitro-6-Acetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 157—159° (*G.* 25 [2] 404). — \*II, 466.
- C<sub>14</sub>H<sub>18</sub>O<sub>5</sub>Br<sub>2</sub>** 1) 3,4-Methylenäther-2,5-Dimethyläther- $\alpha$ -Äthyläther d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -[6-Brom-2,3,4,5-Tetraoxyphenyl]propan. Sm. 72—73° (*C.* 1902 [1] 1163; 1903 [1] 970).  
2) 4,5-Methylenäther-2,3-Dimethyläther- $\alpha$ -Äthyläther d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -[6-Brom-2,3,4,5-Tetraoxyphenyl]propan. Sm. 82—83° (*Bl.* [4] 5, 928 C. 1909 [2] 1335).
- C<sub>14</sub>H<sub>18</sub>O<sub>5</sub>S<sub>2</sub>** 1) Äthylester d.  $\alpha$ -[2,4-Dimethylphenylthiosulfon]acetessigsäure. Fl. (*J. pr.* [2] 70, 386 C. 1904 [2] 1720).
- C<sub>14</sub>H<sub>18</sub>O<sub>5</sub>Hg<sub>2</sub>** 1) Diacetat d. 3-Oxy-4-Isopropyl-1-Methylphenyldi[Quecksilberhydroxyd]. Sm. 215—216° u. Zers. (*B.* 35, 2865 C. 1902 [2] 1039). — \*IV, 1216.
- C<sub>14</sub>H<sub>18</sub>O<sub>6</sub>N<sub>2</sub>** C 54,2 — H 5,8 — O 31,0 — N 9,0 — M. G. 310.  
1) Methylester d. 2,6-Dinitro-5-Pseudobutyl-1,3-Dimethylbenzol-4-Carbonsäure. Sm. 96° (*B.* 31, 1348). — \*II, 848.
- C<sub>14</sub>H<sub>18</sub>O<sub>7</sub>S** 1) Benzylidenmalonäthylesterhydrosulfonsäure. K + 1½ H<sub>2</sub>O (*B.* 37, 4058 C. 1904 [2] 1649).
- C<sub>14</sub>H<sub>18</sub>O<sub>7</sub>Hg** 1) Verbindung (aus Apio). Sm. 114—115° (*B.* 36, 3582 C. 1903 [2] 1363; *G.* 36 [1] 288 C. 1906 [2] 121).

- $C_{14}H_{18}O_8N_2$  C 49,1 — H 5,3 — O 37,4 — N 8,2 — M. G. 171.  
 1) Verbindung (aus Dimethylacetessigsäuremethylester). Sm. 65° (C. 1902 [1] 28; Soc. 83, 1232 C. 1903 [2] 1420).
- $C_{14}H_{18}O_8N_4$  C 45,4 — H 4,9 — O 34,6 — N 15,1 — M. G. 370.  
 1) Di[Triacetylhydrazid] d. Oxalsäure. Sm. 156—158° (J. pr. [2] 70, 427 C. 1905 [1] 84).
- $C_{14}H_{18}O_8Cl_2$  1) Diacetat d. Dichlorhexaoxydihydrobenzoltetramethyläther (Dichlordimethoxychinondimethyldiacetylacetal). Sm. 177—178° (Am. 20, 421). — \*III, 263.
- $C_{14}H_{18}O_8Br_2$  1) Tetraacetat d. Inositdibromhydrin. Sm. 140° (Soc. 91, 1784 C. 1908 [1] 269).
- $C_{14}H_{18}O_8S_2$  1) 1,3-Phenylendi[ $\alpha$ -Sulfonylbuttersäure]. Ba (J. pr. [2] 68, 329 C. 1903 [2] 1171).  
 2) Diäthylester d. 1,3-Phenylendi[Sulfonylbuttersäure]. Sm. 86—87° (J. pr. [2] 68, 326 C. 1903 [2] 1171).
- $C_{14}H_{18}O_8Hg$  1) Quecksilberderivat d. 2,3,4,5-Tetraoxy-1-[ $\alpha$ -Dioxypropyl]benzol-3,4-Methylenäther-2,5-Dimethyläther. Sm. 174° u. Zers. (179—180°) (B. 36, 3584 C. 1903 [2] 1364; G. 36 [1] 290 C. 1906 [2] 121).
- $C_{14}H_{18}O_9N_6$  C 40,6 — H 4,3 — O 34,8 — N 20,3 — M. G. 414.  
 1) Verbindung (aus Hydantoïn). Sm. 183—188° (A. 365, 46 C. 1909 [1] 1400).
- $C_{14}H_{18}O_{10}N_4$  C 41,8 — H 4,5 — O 39,8 — N 13,9 — M. G. 402.  
 1) Diisobutyläther d. 2,3,5,6-Tetranitro-1,4-Dioxybenzol (M. 3, 686). — II, 947.
- $C_{14}H_{18}NCl$  1) Chlormethylat d. 3,6-Dimethyl-2-Äthylchinolin. 2 +  $PtCl_4$  (B. 18, 3386). — IV, 340.  
 2) Chlormethylat d. 3,7-Dimethyl-2-Äthylchinolin. 2 +  $PtCl_4$  (B. 18, 3399). — IV, 341.  
 3) Chlormethylat d. 3,8-Dimethyl-2-Äthylchinolin. 2 +  $PtCl_4$  (B. 18, 3401). — IV, 341.  
 4) Chlorisoamylat d. Chinolin. 2 +  $PtCl_4$  (B. 16, 1279). — IV, 252.
- $C_{14}H_{18}NBr$  1) Bromisoamylat d. Chinolin +  $H_2O$ . Sm. 87° (140° wasserfrei) (B. 16, 1278). — IV, 252.
- $C_{14}H_{18}NJ$  1) Dimethyläthyl-2-Naphtylammoniumjodid. Sm. 152° (Bl. [3] 27, 971 C. 1902 [2] 1211).  
 2) Jodmethylat d. 3,6-Dimethyl-2-Äthylchinolin +  $H_2O$ . Sm. 218° (B. 18, 3386). — IV, 340.  
 3) Jodmethylat d. 3,7-Dimethyl-2-Äthylchinolin +  $H_2O$  (B. 18, 3399). — IV, 341.  
 4) Jodmethylat d. 3,8-Dimethyl-2-Äthylchinolin +  $2H_2O$  (B. 18, 3401). — IV, 431.  
 5) Jodisobutylat d. 2-Methylchinolin. Sm. 172° (A. 242, 307). — IV, 308.  
 6) Jodisoamylat d. Chinolin. Sm. 184—185° (M. 2, 82; R. 3, 352; 4, 62). — IV, 252.
- $C_{14}H_{18}N_2Cl_2$  1) Bischlormethylat d. 3,3'-Dimethyl-4,4'-Bipyridyl. +  $CdJ_2$ , +  $4HgCl_2$ , +  $PtCl_4$  (J. pr. [2] 48, 8). — IV, 971.
- $C_{14}H_{18}N_2J_2$  1) Bisjodäthylat d. 4,4'-Bipyridyl (A. 153, 280). — IV, 954.  
 2) Bisjodmethylat d. 3,3'-Dimethyl-4,4'-Bipyridyl (J. pr. [2] 48, 7). — IV, 971.
- $C_{14}H_{18}N_2S$  1) 1-[ $\beta$ -Phenylthioureido]-2,3,4,5-Tetrahydro-R-Hepten. Sm. 129,5 bis 130° (A. 317, 246; B. 34, 133).  
 2) 6-[ $\beta$ -Phenylthioureido]-2,3,4,5-Tetrahydro-R-Hepten. Sm. 124 bis 125° (A. 317, 249; B. 34, 133).  
 3) 1-[ $\beta$ -Phenylthioureido]-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 122° (A. 281, 103). — IV, 51.  
 4) Isobutyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sd. 313 bis 314° (A. 331, 236 C. 1904 [1] 1221).  
 5) Methyläther d. 2-Merkapto-4,4,6-Trimethyl-1-Phenyl-1,4-Dihydro-1,3-Diazin. HJ (B. 32, 3158). — \*II, 237.
- $C_{14}H_{18}N_4S_2$  1) Di[4,6-Diamido-3-Methylphenyl]disulfid. Sm. 196—197° (B. 42, 747 C. 1909 [1] 995).  
 2) 1,2-Di[ $\beta$ -Allylthioureido]benzol. Sm. 158,5° (A. 228, 201). — IV, 560.



- $C_{14}H_{18}N_4S_2$  3) 1,3-Di[ $\beta$ -Allylthioureido]benzol. Sm.  $105^\circ$  (A. 221, 26). — IV, 576.  
 4) 1,4-Di[ $\beta$ -Allylthioureido]benzol. Sm.  $200^\circ$  (A. 221, 31). — IV, 592.
- $C_{14}H_{15}N_4S_3$  1) Phenylammoniumthiuramsulfid (A. 166, 142). — II, 388.
- $C_{14}H_{19}ON$  C 77,4 — H 8,7 — O 7,4 — N 6,4 — M. G. 217.
- 1)  $\beta$ -Dimethylamidoäthyläther d. 2-Oxy-1,2-Dihydronaphtalin. Fl. (B. 32, 748). — \*II, 502.
  - 2)  $\gamma$ -Keto- $\alpha$ -[4-Diäthylamidophenyl]- $\alpha$ -Buten. Sm.  $164^\circ$  (B. 39, 2168 C. 1906 [2] 234).
  - 3)  $\gamma$ -Oximido- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sm.  $116,5^\circ$  (A. 330, 262 C. 1904 [1] 947).
  - 4) 2-[ $\alpha$ -Oximidoäthyl]-1-Phenylhexahydrobenzol. Fl. (Soc. 57, 320). — III, 167.
  - 5) 3-Oximido-1-Methyl-4-Benzylhexahydrobenzol. Sm.  $143^\circ$  ( $139^\circ$ ) (Bl. [3] 27, 306 C. 1902 [1] 1221; A. 348, 103 C. 1906 [2] 783). — \*III, 134.
  - 6) 4'-Acetylamido-1,2,3,4,5,6-Hexahydrobiphenyl. Sm.  $128$ — $129,5^\circ$  (A. 318, 324).
  - 7) 2-Äthylacetylamido-1,2,3,4-Tetrahydronaphtalin. Sd.  $328^\circ_{718}$  (B. 22, 1301) — II, 589.
  - 8) N-Benzoylhexahydrobenzylamin. Sm.  $107$ — $108^\circ$  (B. 40, 2068 C. 1907 [2] 52).
  - 9) 1-Benzoylamido-1-Methylhexahydrobenzol. Sm.  $101$ — $101,5^\circ$  (B. 40, 2070 C. 1907 [2] 52).
  - 10) 2-Benzoylamido-1-Methylhexahydrobenzol. Sm.  $146$ — $147^\circ$  (B. 40, 2066 C. 1907 [2] 52).
  - 11) 1-3-Benzoylamido-1-Methylhexahydrobenzol. Sm.  $163$ — $163,5^\circ$  (B. 40, 2063 C. 1907 [2] 51).
  - 12) 4-Benzoylamido-1-Methylhexahydrobenzol. Sm.  $180$ — $181^\circ$  (B. 40, 2067 C. 1907 [2] 52).
  - 13) C-Allylcyancampher. Sd.  $155$ — $165^\circ_{10}$  (C. r. 136, 789 C. 1903 [1] 1085).
  - 14) O-Allylcyancampher. Sd.  $140$ — $150^\circ_{10}$  (C. r. 136, 789 C. 1903 [1] 1085).
  - 15) Äthylnaphtalanmorpholin. Sd.  $322^\circ_{755}$ . HCl, (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O). Pikrolonat (A. 307, 186). — \*II, 501.
  - 16) 1-Benzoyl-2,6-Dimethylhexahydropyridin. Sm.  $111^\circ$  (B. 34, 2427). — \*IV, 27.
  - 17) isom. 1-Benzoyl-2,6-Dimethylhexahydropyridin. Sm.  $84^\circ$  (B. 34, 2427). — \*IV, 27.
  - 18) Hydrat d. Base  $C_{14}H_{17}N$  (aus Tetrahydrocarbazon). Sm.  $57$ — $58^\circ$  (C. 1900 [1] 1028).
  - 19) Nitril d.  $\alpha$ -Oxyheptanphenyläther- $\delta$ -Carbonsäure. Sm.  $318$ — $322^\circ$  (B. 28, 1202). — \*II, 364.
  - 20) Phenylamid d.  $\beta$ -Hepten- $\delta$ -Carbonsäure. Sm.  $72^\circ$  (C. 1907 [2] 293).
  - 21) Phenylamid d. lab.  $\gamma$ -Hepten- $\delta$ -Carbonsäure. Sm.  $40$ — $41^\circ$  (C. 1907 [2] 293).
  - 22) Phenylamid d. stab.  $\gamma$ -Hepten- $\delta$ -Carbonsäure. Sm.  $68^\circ$  (C. 1907 [2] 293).
  - 23) Phenylamid d. cis-1-Methylhexahydrobenzol-2-Carbonsäure. Sm.  $66$ — $68^\circ$  ( $109$ — $110^\circ$ ) (Soc. 67, 126; C. 1899 [2] 100; 1902 [1] 1163; B. 32, 1173). — \*II, 179.
  - 24) Phenylamid d. trans-1-Methylhexahydrobenzol-2-Carbonsäure. Sm.  $148^\circ$  ( $153^\circ$ ) (Soc. 67, 124; C. 1899 [2] 100; 1902 [1] 1163; B. 32, 1173). — \*II, 705.
  - 25) Benzylamid d.  $\delta$ -Methyl- $\beta$ -Penten- $\delta$ -Carbonsäure. Sd.  $190^\circ_{20}$  (Bl. [3] 35, 221 C. 1906 [1] 1604).
- $C_{14}H_{19}ON_3$  C 68,6 — H 7,8 — O 6,5 — N 17,1 — M. G. 245.
- 1)  $\epsilon$ -Semicarbazon- $\alpha$ -Phenyl- $\beta$ -Hepten (B. 38, 1125 C. 1905 [1] 1242).
  - 2)  $\delta$ -Semicarbazon- $\beta$ -Phenyl- $\gamma\gamma$ -Dimethyl- $\alpha$ -Penten. Sm.  $192^\circ$  (Bl. [3] 35, 359 C. 1906 [2] 318).
  - 3) 3-Phenylsemicarbazon-1-Methylhexahydrobenzol. Sm.  $169$ — $170^\circ$  (B. 37, 3181 C. 1904 [2] 991).
  - 4) 4-Dimethylamido-3-Keto-5-Methyl-1-Äthyl-2-Phenyl-2,3-Dihydropyrazol. Sm.  $107^\circ$  (C. 1897 [1] 1140). — \*IV, 758.

- $C_{14}H_{19}ON_3$  5) 4-Dimethylamido-3-Keto-1,5-Dimethyl-2-[4-Methylphenyl]-2,3-Dihydropyrazol. Sm. 104—105° (D.R.P. 92536). — \*IV, 758.
- 6) 4-Methyläthylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 92° (D.R.P. 145603 C. 1903 [2] 1225).
- $C_{14}H_{19}O_2N$  7) 1-Isoamylacetyl-5-Methyl-1,2,3-Benzotriazol. Sm. 52° (*J. pr.* [2] 74, 325 C. 1906 [2] 1823).
- C 72,1 — H 8,2 — O 13,7 — N 6,0 — M. G. 233.
- 1)  $\beta$ -Nitro- $\alpha$ -[2,4-Dimethyl-6-tert. Butylphenyl]äthen. Sm. 97—98° (D.R.P. 94019). — \*II, 89.
- 2)  $\zeta$ -Methylbenzoylamido- $\beta$ -Ketohehexan. Fl. (B. 38, 2475 C. 1905 [2] 968).
- 3) 2-Diacetylamido-4-Isopropyl-1-Methylbenzol. Sm. 66° (A. 279, 375). — \*II, 319.
- 4)  $\beta$ -Oxyäthylnaphtalanmorpholin. Sm. 105—108°; Sd. 300°<sub>180</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (A. 307, 177). — \*II, 501.
- 5) 3-Oxy-2-[4-Morpholyl]-1,2,3,4-Tetrahydronaphtalin? Sd. 300 bis 310°<sub>159</sub> (A. 307, 179 Anm.).
- 6) Methylenäther d.  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[2-Hexahydropyridyl]-äthan (Piperonyl- $\alpha$ -Pipekolin). Sd. 180—182°<sub>100</sub>. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 30, 1581). — \*IV, 151.
- 7) Methyläther d. 4-Keto-2,2-Dimethyl-6-[4-Oxyphenyl]hexahydropyridin (Anisdiacetonamin). Fl. Oxalat (A. 227, 373). — IV, 233.
- 8) 6-Keto-2,4-Dimethyl-2-Äthyl-5-Phenyltetrahydro-1,4-Oxazin. Sm. 65°; Sd. 210°<sub>33</sub>. Pikrat (*Bl.* [4] 3, 1143 C. 1909 [1] 193).
- 9) 5-Oxy-3-Methyl-1-Hexylbenzoxazol. Sm. 99° (B. 37, 3109 C. 1904 [2] 994).
- 10) 2-Heptylidenamidobenzol-1-Carbonsäure. Sm. 93° (B. 28, 2817). — \*II, 787.
- 11) *p*-Önanthylidenamidobenzol-1-Carbonsäure. Fl. Pb (A. 210, 120). — II, 1270.
- 12)  $\alpha$ -2-Methylcamphenpyrrol-3-Carbonsäure. Sm. 246° u. Zers. (B. 34, 3058). — \*IV, 154.
- 13)  $\beta$ -2-Methylcamphenpyrrol-3-Carbonsäure. Sm. 210° u. Zers. (A. 313, 51). — \*IV, 155.
- 14) Methylester d.  $\beta$ -[2,4,5-Trimethylphenyl]amidocrotonsäure. Sm. 60,5° (B. 21, 528). — II, 552.
- 15) Benzoat d. isom.  $\epsilon$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\gamma$ -Pentadiën. Sm. 137° (C. 1908 [2] 711).
- 16) Benzoat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridin. Fl. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HJ (B. 15, 1143; *Soc.* 93, 1801 C. 1909 [1] 145). — IV, 18.
- 17) Benzoat d. 2-[ $\beta$ -Oxyäthyl]hexahydropyridin. HCl (Sm. 181—182°) (B. 24, 1622; A. 301, 131). — IV, 29; \*IV, 25.
- 18) Phenylamidoformiat d.  $\epsilon$ -Oxy- $\epsilon$ -Methyl- $\alpha$ -Hexen. Sm. 82° (*Soc.* 67, 657 C. 1905 [2] 240).
- 19) Phenylamidoformiat d.  $\delta$ -Oxy- $\beta\delta$ -Dimethyl- $\beta$ -Penten. Sm. 111° (*Bl.* [3] 35, 986 C. 1907 [1] 97).
- 20) Phenylamidoformiat d.  $\delta$ -Oxy- $\beta\gamma\gamma$ -Trimethyl- $\alpha$ -Buten. Sm. 73° (*Bl.* [3] 35, 303 C. 1906 [2] 317).
- 21) Phenylamidoformiat d. Oxy-R-Heptamethylen (Suberylester d. Phenylamidoameisensäure). Sm. 85° (*J. r.* 25, 371; *J. pr.* [2] 49, 417). — II, 372.
- 22) Phenylamidoformiat d. Oxymethylhexahydrobenzol. Sm. 82° (C. r. 137, 61 C. 1903 [2] 551; D.R.P. 164294 C. 1905 [2] 1701).
- 23) Phenylamidoformiat d. 1-Oxy-1-Methylhexahydrobenzol. Sm. 105° (C. r. 138, 1324 C. 1904 [2] 219).
- 24) Phenylamidoformiat d. 2-Oxy-1-Methylhexahydrobenzol. Sm. 103 bis 104° (105°) (A. 329, 375 C. 1904 [1] 517; C. r. 140, 351 C. 1905 [1] 742).
- 25) Phenylamidoformiat d. 1-3-Oxy-1-Methylhexahydrobenzol. Sm. 116—117° (118—118,5°) (C. r. 140, 476 C. 1905 [1] 872; B. 40, 2064 C. 1907 [2] 51).
- 26) Phenylamidoformiat d. i-3-Oxy-1-Methylhexahydrobenzol. Sm. 96° (C. r. 140, 352 C. 1905 [1] 742).

- C<sub>14</sub>H<sub>19</sub>O<sub>2</sub>N** 27) Phenylamidoformiat d. cis-3-Oxy-1-Methylhexahydrobenzol. Sm. 91° (A. 297, 153). — \*II, 180.
- 28) Phenylamidoformiat d. trans-3-Oxy-1-Methylhexahydrobenzol. Sm. 90° (A. 289, 143).
- 29) Phenylamidoformiat d. 4-Oxy-1-Methylhexahydrobenzol. Sm. 125° (C. r. 140, 352 C. 1905 [1] 742).
- 30) Phenylamidoformiat d. Alkohol C<sub>7</sub>H<sub>14</sub>O. Sm. 88–89° (C. 1908 [2] 1343).
- 31) Amid d.  $\gamma$ -Keto- $\epsilon$ -Phenyl- $\beta$ -Methylhexan- $\zeta$ -Carbonsäure. Sm. 126° (B. 41, 1274 C. 1908 [1] 1878).
- 32) Phenylamid d. 3-Oxy-1-Methylhexahydrobenzol-3-Carbonsäure. Sm. 90–91° (C. 1907 [1] 1407).
- 33) Phenylamid d. isom. 3-Oxy-1-Methylhexahydrobenzol-3-Carbonsäure. Sm. 118,5–119,5° (C. 1907 [1] 1407).
- C<sub>14</sub>H<sub>19</sub>O<sub>2</sub>N<sub>3</sub>** C 64,4 — H 7,3 — O 12,2 — N 16,1 — M. G. 261.
- 1)  $\alpha$ -[4-Nitrophenyl]hydrazon- $\alpha$ -Hexahydrophenyläthan. Sm. 154° (B. 40, 3948 C. 1907 [2] 1620; A. 360, 47 C. 1908 [1] 2160).
- 2) 4-Nitrophenylhydrazondimethylhexahydrobenzol? Sm. 168° (B. 36, 957 C. 1903 [1] 1022). — \*IV, 501.
- 3) 5-Keto-2-Amidooximidomethyl-2-Methyl-1-[2,3-Dimethylphenyl]-tetrahydropyrrrol. Sm. 122° (B. 38, 1228 C. 1905 [1] 1258).
- 4) 5-Keto-2-Amidooximidomethyl-2-Methyl-1-[3,4-Dimethylphenyl]-tetrahydropyrrrol. Sm. 110° (B. 38, 1227 C. 1905 [1] 1258).
- 5) 3-Keto-2-[4-Dimethylamino-phenyl]-5-Oxymethyl-1,4-Dimethyl-2,3-Dihydropyrazol. Sm. 212–213° (D. R. P. 214716 C. 1909 [2] 1511).
- 6) 3-Diäthylamido-4,5-Diketo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 66,5–67°. Pikrat (B. 36, 1452 C. 1903 [1] 1361). — \*IV, 742.
- 7) Nitril d. 2,6-Diketo-4-Methyl-4-Hexylhexahydropyridin-3,5-Dicarbonsäure. Sm. 156–157° (C. 1899 [2] 439). — \*I, 776.
- 8) Nitril d. 2,6-Diketo-4-Methyl-4-Isohexylhexahydropyridin-3,5-Dicarbonsäure. Sm. 166,5–168,5° (C. 1901 [1] 580).
- C<sub>14</sub>H<sub>19</sub>O<sub>2</sub>Br** 1)  $\alpha$ -Brom- $\delta$ -[ $\beta$ -Propylphenyl]valeriansäure (J. 1877, 381). — II, 1400.
- 2) 2-Methyl-5-Isopropylphenylester d.  $\alpha$ -Brombuttersäure. Sd. 163°<sub>12</sub> (B. 39, 3841 C. 1907 [1] 93).
- 3) 2-Methyl-5-Isopropylphenylester d.  $\alpha$ -Bromisobuttersäure. Sd. 155,5°<sub>12</sub> (B. 39, 3841 C. 1907 [1] 93).
- 4) 3-Methyl-6-Isopropylphenylester d.  $\alpha$ -Brombuttersäure. Sd. 162°<sub>12</sub> (B. 39, 3844 C. 1907 [1] 93).
- 5) 3-Methyl-6-Isopropylphenylester d.  $\alpha$ -Bromisobuttersäure. Sd. 151°<sub>12</sub> (B. 39, 3844 C. 1907 [1] 93).
- C<sub>14</sub>H<sub>19</sub>O<sub>3</sub>N** C 67,5 — H 7,6 — O 19,3 — N 5,6 — M. G. 249.
- 1) lab. 3,4-Methylenäther d. 4-Oxy-2,2-Dimethyl-6-[3,4-Dioxyphenyl]-hexahydropyridin. Sm. 108–109° (D. R. P. 95622, 95623). — \*IV, 172.
- 2) 3-Methyläther d. 4-Keto-2,2-Dimethyl-6-[3,4-Dioxyphenyl]hexahydropyridin (Vanillodiäcetonamin). Fl. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Oxalat (A. 194, 53). — IV, 233.
- 3) 6,7-Methylenäther-8-Methyläther d. 6,7,8-Trioxy-2-Methyl-1-Äthyl-1,2,3,4-Tetrahydroisochinolin (Äthylhydrocotarnin). Sm. 59 bis 60°. HCl, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (B. 39, 2224 C. 1906 [2] 439).
- 4)  $\beta$ -[3-Acetylamido-4-Isopropylphenyl]propionsäure. Sm. 168° (B. 19, 418). — II, 1398.
- 5) d-Cyancampher- $\alpha$ -Propionsäure. Sm. 109°. NH<sub>4</sub>, Cu, Ag (C. r. 140, 1434 C. 1905 [2] 135).
- 6) isom. d-Cyancampher- $\alpha$ -Propionsäure. Sm. 85° (C. r. 140, 1434 C. 1905 [2] 135).
- 7) d- $\beta$ -[1-Piperidyl]- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 256° (B. 39, 793 C. 1906 [1] 1167).
- 8) i- $\beta$ -[1-Piperidyl]- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 255° (A. 271, 157; B. 39, 793 C. 1906 [1] 1167). — IV, 21.
- 9) 4-Oxy-2,2-Dimethyl-6-Phenylhexahydropyridin-4-Carbonsäure. Sm. 250–270° u. Zers. (D. R. P. 91121). — \*IV, 155.
- 10) Methylester d.  $\alpha$ -Benzoylamidoisocaproensäure. Sm. 95–96° (corr.) (A. 369, 279 C. 1909 [2] 2140).



- $C_{14}H_{19}O_3N$  11) Methylester d. Cyancampheressigsäure. Sm.  $67^\circ$ ; Sd.  $150-156^\circ_{25}$  (C. r. 140, 1432 C. 1905 [2] 135).
- 12) Äthylester d.  $\beta$ -[4-Äthoxyphenyl]amidopropen- $\alpha$ -Carbonsäure. Sm.  $52,5-53^\circ$  (B. 28 [2] 991). — \*II, 412.
- 13) Äthylester d. 4-Isopropylbenzoylamidoessigsäure. Sm.  $49^\circ$  (A. 312, 75). — \*II, 843.
- 14) Äthylester d. 2,4,5-Trimethylbenzoylamidoessigsäure. Sm.  $96^\circ$  (A. 312, 80). — \*II, 844.
- 15) Isoamylester d. Benzoylamidoessigsäure. Sm.  $27-28^\circ$  (B. 11, 1247). — II, 1184.
- 16) Phenylamidoformiat d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta\beta$ -Dimethylpentan. Sm.  $62,5^\circ$  (C. 1909 [2] 687).
- 17) Methylmonamid d. 1-Methylbenzol-3-[Äthyl- $\beta\beta$ -Dicarbonsäuremon-äthylester]. Sm.  $118-120^\circ$  (B. 23, 111). — II, 1856.
- 18) Phenylmonamid d. Hexan- $\alpha\zeta$ -Dicarbonsäure (Ph. d. Korksäure; Suber-anilsäure). Sm.  $128^\circ$ . Ca, Ba, Ag (A. 68, 31). — II, 415.
- 19) Phenylmonamid d. cis-Hexan- $\beta\gamma$ -Dicarbonsäure. Sm.  $82-84^\circ$  (Soc. 77, 1302).
- 20) Phenylmonamid d. trans-Hexan- $\beta\gamma$ -Dicarbonsäure. Sm.  $166-167^\circ$  (Soc. 77, 1303).
- 21) Phenylmonamid d. fum. Hexan- $\gamma\delta$ -Dicarbonsäure. Sm.  $183-184^\circ$  (A. 309, 338). — \*II, 215.
- 22) Phenylmonamid d. mal. Hexan- $\gamma\delta$ -Dicarbonsäure. Sm.  $124-125^\circ$  (A. 309, 338). — \*II, 215.
- 23) Phenylmonamid d.  $\beta$ -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm.  $165^\circ$  (A. 292, 224). — \*II, 214.
- 24)  $\delta$ -Phenylmonamid d. cis- $\beta$ -Methylpentan- $\gamma\delta$ -Dicarbonsäure. Sm.  $153^\circ$ ; Zers. bei  $160^\circ$  (Soc. 69, 282). — \*II, 215.
- 25)  $\delta$ -Phenylmonamid d. trans- $\beta$ -Methylpentan- $\gamma\delta$ -Dicarbonsäure. Sm.  $160^\circ$ ; Zers. bei  $170^\circ$  (Soc. 69, 282). — \*II, 215.
- 26) Phenylmonamid d.  $\beta$ -Methylpentan- $\gamma\epsilon$ -Dicarbonsäure. Sm.  $159^\circ$  (C. 1896 [2] 703; Soc. 69, 1497, 1508; G. 26 [2] 519). — \*II, 214.
- 27) Phenylmonamid d.  $\beta$ -Methylpentan- $\delta\epsilon$ -Dicarbonsäure. Sm.  $138$  bis  $139^\circ$  (Soc. 73, 51). — \*II, 215.
- 28) Phenylmonamid d.  $\beta\beta$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm.  $159^\circ$  ( $150-151^\circ$ ) (Soc. 73, 30; 75, 66; G. 29 [2] 524). — \*II, 215.
- 29) Phenylmonamid d.  $\beta\gamma$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm.  $155^\circ$  (Soc. 71, 1187). — \*II, 214.
- 30) Phenylmonamid d.  $\beta$ -Isopropylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm.  $121^\circ$  (C. 1899 [1] 1157; Soc. 77, 944). — \*II, 214.
- 31) 4-Methylphenylamid d.  $\alpha$ -Acetoxyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm.  $79^\circ$  (C. 1909 [2] 686).
- 32) 4-Methylphenylmonamid d. Pentan- $\alpha\gamma$ -Dicarbonsäure.  $\alpha$ -Modif. Sm.  $119-120^\circ$ ;  $\beta$ -Modif. Sm.  $145,5^\circ$  (A. 292, 215). — \*II, 277.
- 33) 4-Methylphenylmonamid d. fum. Pentan- $\beta\gamma$ -Dicarbonsäure. Sm.  $175-176^\circ$  (A. 298, 163). — \*II, 278.
- 34) 4-Methylphenylmonamid d. mal. Pentan- $\beta\gamma$ -Dicarbonsäure. Sm.  $147-148^\circ$  (A. 298, 164). — \*II, 278.
- 35) 4-Methylphenylmonamid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm.  $179^\circ$  ( $176-177^\circ$ ) (A. 285, 237; 292, 202; Bl. [3] 29, 1019 C. 1903 [2] 1315). — \*II, 278.
- 36) 4-Methylphenylmonamid d.  $\beta$ -Methylbutan- $\alpha\beta$ -Dicarbonsäure. Sm.  $162^\circ$  (A. 298, 176). — \*II, 278.
- 37) 4-Methylphenylmonamid d. cis- $\beta$ -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm.  $117-118^\circ$  (C. r. 136, 243 C. 1903 [1] 565).
- 38) 4-Methylphenylmonamid d.  $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm.  $126^\circ$  (A. 285, 235). — \*II, 279.
- 39)  $\delta$ -[4-Methylphenyl]monamid d.  $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm.  $151-152^\circ$  (Bl. [3] 21, 627). — \*II, 278.
- 40) 4-Methylphenylmonamid d.  $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure. Sm.  $143-144^\circ$  (A. 298, 179; 309, 329). — \*II, 278.
- 41) isom. 4-Methylphenylmonamid d.  $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure. Sm.  $152-154^\circ$  (A. 309, 330). — \*II, 278.

- C<sub>14</sub>H<sub>19</sub>O<sub>3</sub>N** 42) 4-Methylphenylmonamid einer isom. Dimethylglutarsäure. Sm. 138° (*C. r.* 134, 1114 *C.* 1902 [2] 26).  
**C<sub>14</sub>H<sub>19</sub>O<sub>3</sub>N<sub>3</sub>** C 60,6 — H 6,9 — O 17,3 — N 15,2 — M. G. 277.  
 1) 2,5-Di[Acetylamido]-4-Acetylmethylamido-1-Methylbenzol. Sm. 257 bis 258° (*J. pr.* [2] 62, 512). — \*IV, 779.  
 2) Amid d.  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidoisobuttersäure. Sm. 209° (*B.* 42, 2522 *C.* 1909 [2] 606).  
**C<sub>14</sub>H<sub>19</sub>O<sub>3</sub>N<sub>5</sub>** C 55,1 — H 6,2 — O 15,7 — N 23,0 — M. G. 305.  
 1) Isopropylidenhydrazid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 234° u. Zers. (*J. pr.* [2] 70, 256 *C.* 1904 [2] 1464).  
**C<sub>14</sub>H<sub>19</sub>O<sub>4</sub>N** C 63,4 — H 7,2 — O 24,1 — N 5,3 — M. G. 265.  
 1) 3,4-Methylenäther d.  $\beta$ -[3,4-Dioxybenzyliden]amido- $\alpha$ -Dioxyäthan-diäthyläther (Piperonalacetalamin). Sd. 238,5°<sub>50</sub> (*A.* 286, 7; D.R.P. 86561). — III, 103; \*III, 75.  
 2) Diäthyläther d. 4-Diacetylamido-1,2-Dioxybenzol. Sm. 120—121° (*M.* 21, 1014). — \*II, 561.  
 3) Äthylhydrocotarninoxyd. (2HCl, PtCl<sub>4</sub>) (*B.* 39, 2226 *C.* 1906 [2] 440).  
 4) Äthyläther d. Oxycotarnin. Sm. 84° (*B.* 35, 1753 *C.* 1902 [2] 69). — \*III, 681.  
 5)  $\gamma$ -Phenylamidoformoxyl- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 100 bis 101° (*Bl.* [3] 35, 218 *C.* 1906 [1] 1603).  
 6)  $\alpha$ -Oxyisocapronylphenylamidoessigsäure. Sm. 129—130° (*A.* 369, 259 *C.* 1909 [2] 2138).  
 7) Methylester d.  $\beta$ -Dimethylamido- $\alpha$ -Benzoxylisobuttersäure. Sd. 220°<sub>75</sub>. HCl (D.R.P. 198306 *C.* 1908 [1] 1957; D.R.P. 202167 *C.* 1908 [2] 1219; *Bl.* [4] 5, 240 *C.* 1909 [1] 1319).  
 8) 2-Äthylester d. 1-Isopropylbenzol-4-Carbonsäure-2-Amidoformyl-essigsäure. Sm. 140° (*J. pr.* [2] 40, 442). — II, 1388.  
 9) Äthylester d.  $\alpha$ -Phenylamidoformoxylvaleriansäure. Fl. (*Bl.* [3] 27, 607 *C.* 1902 [2] 342).  
 10) Äthylester d.  $\alpha$ -Phenylamidoformoxylisovaleriansäure (*Bl.* [3] 27, 610 *C.* 1902 [2] 342).  
 11) Äthylester d. Propionyl-4-Äthoxyphenylamidoameisensäure. Sm. 85—86° (D.R.P. 69328). — \*II, 404.  
 12) Diäthylester d.  $\alpha$ -Phenyltrimethylamin- $\alpha$ - $\alpha'$ -Dicarbonsäure. Sd. 195 bis 196°<sub>17</sub> (*B.* 41, 4365 *C.* 1909 [1] 370; *C.* 1909 [2] 1989).  
 13) Diäthylester d. Phenylimidodiessigsäure. Sd. 195—200°<sub>15</sub> (*B.* 30, 2309; *Soc.* 87, 439 *C.* 1905 [1] 1639). — \*II, 227.  
 14) Diäthylester d. Phenylamidobernsteinsäure. Sd. 214° u. Zers. (*A.* 252, 168). — II, 436.  
 15) Diäthylester d. 2-Methylphenylamidomalonsäure. Fl. HCl (*Am.* 30, 135 *C.* 1903 [2] 720).  
 16) Diäthylester d. 3-Methylphenylamidomalonsäure. Sm. 50,5—51° (*Am.* 30, 138 *C.* 1903 [2] 721).  
 17) Diäthylester d. 4-Methylphenylamidomalonsäure. Sm. 55° (*B.* 31, 1815; *Am.* 30, 142 *C.* 1903 [2] 721). — \*II, 283.  
 18) Diäthylester d. 2,4,6-Trimethylpyridin-3,5-Dicarbonsäure. Sd. 308 bis 310°. HCl, (2HCl, PtCl<sub>4</sub>), HJ, (HJ, J<sub>3</sub>), HNO<sub>3</sub> (*A.* 215, 21; *B.* 14, 1638). — IV, 169; \*IV, 127.  
 19) Isoamylester d. Acetyl-4-Oxyphenylamidoameisensäure. Sm. 63 bis 65° (D.R.P. 69328). — \*II, 404.  
 20) 4-Äthoxyphenylmonamid d. cis-Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 155 bis 156° (*C.* 1901 [1] 376; *Soc.* 81, 791 *C.* 1902 [2] 108).  
 21) 4-Äthoxyphenylmonamid d. trans-Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 184—185° (*C.* 1901 [1] 376; *Soc.* 81, 791 *C.* 1902 [2] 108).  
 22) 4-Äthoxyphenylmonamid d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 160—161° (*C.* 1901 [1] 376; *Soc.* 81, 790 *C.* 1902 [2] 108).  
 23) 4-Äthoxyphenylmonamid d. Äthan- $\alpha$ -Dicarbonsäuremonoäthylester. Sm. 125—126° (*G.* 35 [2] 317 *C.* 1905 [2] 1332).  
**C<sub>14</sub>H<sub>19</sub>O<sub>4</sub>N<sub>3</sub>** C 57,3 — H 6,5 — O 21,8 — N 14,3 — M. G. 293.  
 1) 2-Propyl-1-[2,4-Dinitrophenyl]hexahydropyridin. Sm. 42° (*B.* 24, 2106). — IV, 33.  
 2) Methylester d.  $\beta$ -Benzoylamidoacetylamidopropylamidoameisensäure. Sm. 151° (*J. pr.* [2] 70, 214 *C.* 1904 [2] 1460).

- $C_{14}H_{19}O_4N_3$  3) Äthylester d.  $\alpha$ -Benzoylamidoacetylamidoäthylamidoameisensäure. Sm. 205° (*J. pr.* [2] 70, 120 *C.* 1904 [2] 1037).
- 4) Äthylester d. 1-[4-Nitrophenyl]hexahydropyridin-1<sup>2</sup>-Amidoameisensäure. Sm. 120° (*B.* 39, 2637 *C.* 1906 [2] 1201).
- $C_{14}H_{19}O_4N_5$  C 52,3 — H 5,9 — O 19,9 — N 21,8 — M. G. 321.
- 1) 8-Dipropionylamido-2,6-Diketo-1,3,7-Trimethylpurin. Sm. 140° (*D. R. P.* 139960 *C.* 1903 [1] 859).
- $C_{14}H_{19}O_4Cl$  1)  $\gamma$ -Benzoat d.  $\beta$ -Chlor- $\alpha\alpha\gamma$ -Trioxypropan- $\alpha\alpha$ -Diäthyläther. Sd. 128°<sub>0,3</sub> (*B.* 40, 95 *C.* 1907 [1] 532).
- $C_{14}H_{19}O_4J$  1) Diacetat d. 4-Jodoso-1-tert. Butylbenzol. Sm. 95° (*B.* 34, 3670).
- $C_{14}H_{19}O_5N$  C 59,8 — H 6,8 — O 28,4 — N 5,0 — M. G. 281.
- 1) Diäthylester d. 4-Keto-1,2,6-Trimethyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 193° (*B.* 19, 25; 20, 159). — II, 2005.
- 2) Äthylcarbonat d. Äthyl-4-Oxyphenylamidoameisensäureäthylester. Sm. 60–62° (*A.* 305, 288). — \*II, 406.
- 3) Di[Oxymethyl]amid d. Oxyessig[2-Methoxyl-4-Allylphenyl]äthersäure. Sm. 57° (*D. R. P.* 208255 *C.* 1909 [1] 1281).
- 4) Di[Oxymethyl]amid d. Oxyessig[2-Methoxyl-4-Propenylphenyl]äthersäure. Sm. 108–109° (*D. R. P.* 208255 *C.* 1909 [1] 1281).
- 5) Mono[ $\beta\beta$ -Diäthoxyläthylamid] d. Benzol-1,2-Dicarbonsäure + H<sub>2</sub>O ( $\alpha$ -Benzoylamidoacetalcarbonsäure). Sm. bei 100° u. Zers. (*B.* 27, 3103). — II, 1796.
- 6) 4-Äthoxylphenylmonamid d. Äpfelsäuremonoäthylester. Sm. 235° (*G.* 28 [2] 195). — \*II, 410.
- 7) Verbindung (aus Diacetyl u. Phenylhydroxylamin). Sm. 105° (*A.* 357, 44 *C.* 1907 [2] 1969).
- $C_{14}H_{19}O_5N_3$  C 54,4 — H 6,1 — O 25,9 — N 13,6 — M. G. 309.
- 1) 4,6-Dinitro-2-Acetylamido-5-Pseudobutyl-1,3-Dimethylbenzol. Sm. 192° (*B.* 33, 2564). — \*II, 320.
- 2) 1- $\alpha$ -[d- $\alpha$ -Amidopropionylamidoacetyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure (d-Alanylglycyl-L-Tyrosin). Sm. 140° (*B.* 40, 3707 *C.* 1907 [2] 1691).
- 3) d- $\alpha$ -[ $\alpha$ -Amidoacetylamidopropionyl]amido-1- $\beta$ -[4-Oxyphenyl]propionsäure. Zers. bei 204° (*B.* 41, 2849 *C.* 1908 [2] 1734).
- $C_{14}H_{19}O_5N_5$  C 49,8 — H 5,6 — O 23,7 — N 20,8 — M. G. 337.
- 1) Semicarbazon d. Glyazindihydrotetramethyldimalonsäuremethyl-ester-*e*-Lakton. Sm. 230° (*Soc.* 83, 1258 *C.* 1903 [2] 1423).
- $C_{14}H_{19}O_6N$  C 56,6 — H 6,4 — O 32,3 — N 4,7 — M. G. 297.
- 1) Oxysäure (aus d. Lakton  $C_{14}H_{17}O_6N$ ). Sm. 207° (*B.* 35, 1749 *C.* 1902 [2] 68). — \*III, 680.
- 2) Diäthylester d. 2,5-Dimethylpyrrol-3,4-Dicarbonsäure-1-Methylcarbonsäure. Sm. 169°. Pb (*A.* 236, 314). — IV, 97.
- 3) Triäthylester d.  $\gamma$ -Cyan- $\alpha$ -Buten- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 210 bis 212°<sub>25</sub> (*Soc.* 89, 641 *C.* 1906 [2] 21).
- 4) Triäthylester d.  $\alpha$ -Cyan- $\beta$ -Buten- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 210 bis 212°<sub>25</sub> (*Soc.* 89, 644 *C.* 1906 [2] 21).
- 5) Triäthylester d. 2-Methylpyrrol-3,4,5-Tricarbonsäure. Sm. 104° (*B.* 35, 1560 *C.* 1902 [1] 1229). — \*IV, 79.
- $C_{14}H_{19}O_6N_3$  C 51,7 — H 5,8 — O 29,5 — N 12,9 — M. G. 325.
- 1) Verbindung (aus d. Verb.  $C_{13}H_{18}O_6$ ). Sm. 270° u. Zers. (*G.* 30 [1] 524). — \*II, 1163.
- $C_{14}H_{19}O_7Br$  1) Triäthylester d.  $\alpha$ -Brom- $\delta$ -Keto- $\beta$ -Penten- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 214°<sub>18</sub> (*Soc.* 77, 807).
- $C_{14}H_{19}O_8N$  C 51,1 — H 5,8 — O 38,9 — N 4,2 — M. G. 329.
- 1) Glykovanillinaldoxim. Sm. 152° (*B.* 18, 1664). — III, 578.
- 2) Nitril d. Tetracetylramnonsäure. Sm. 69–70° (*B.* 29, 1380). — \*I, 818.
- $C_{14}H_{19}O_8Cl$  1) Quercittetrachloracetochlorhydrin (*A. ch.* [5] 15, 48).
- $C_{14}H_{19}O_9Cl$  1)  $\beta$ -Acetochlorgalaktose. Sm. 82° (75–76°) (*M.* 22, 379; *Soc.* 79, 704; *B.* 34, 2894; *M.* 22, 1037 *C.* 1902 [1] 180; *B.* 35, 837 *C.* 1902 [1] 758).
- 2)  $\alpha$ -Acetochlorglykose. Sm. 63° (*B.* 34, 2892; *M.* 22, 1037 *C.* 1902 [1] 189).
- 3)  $\beta$ -Acetochlorglykose. Sm. 72–74° (*Soc.* 75, 1054; *M.* 22, 147, 376; *B.* 34, 2890; *A. ch.* [4] 21, 363; *Ann.* 1, 306). — I, 1048; \*I, 574.



- C<sub>14</sub>H<sub>19</sub>O<sub>9</sub>Br** 1)  $\beta$ -Acetobromgalaktose. Sm. 82–83° (*B.* 35, 838 *C.* 1902 [1] 758).  
 2)  $\alpha$ -Acetobromglykose. Sm. 79–80° (*B.* 34, 2893).  
 3)  $\beta$ -Acetobromglykose. Sm. 88–89° (*C.* 1900 [2] 180; *B.* 34, 961, 2892, 3206; *R.* 21, 43 *C.* 1902 [1] 988).
- C<sub>14</sub>H<sub>19</sub>O<sub>12</sub>N** C 42,7 — H 4,8 — O 48,8 — N 3,6 — M. G. 393.  
 1) Tetraacetylnitrogalaktose. Sm. 93–94° (*B.* 34, 978).  
 2) Tetracetylnitroglykose. Sm. 145° (150–151°) (*J.* 1873, 833; *B.* 34, 973; *M.* 22, 1045 *C.* 1902 [1] 181). — *I*, 1048.  
 3) isom. Tetracetylnitroglykose. Sm. 92° (*M.* 22, 1043 *C.* 1902 [1] 181).
- C<sub>14</sub>H<sub>19</sub>N<sub>3</sub>S<sub>2</sub>** 1) Pseudodithiomethyl-p-Tolyldimethylketuret. Sm. 164° u. Zers. (*A.* 348, 169 *C.* 1906 [2] 793).
- C<sub>14</sub>H<sub>20</sub>ON<sub>2</sub>** C 72,4 — H 8,6 — O 6,9 — N 12,1 — M. G. 232.  
 1)  $\alpha$ -Allyl- $\alpha$ -Isobutyl- $\beta$ -Phenylharnstoff. Sm. 37–39° (*B.* 24, 3044). — *II*, 378.  
 2)  $\beta$ -Phenylhydrazon- $\gamma$ -Ketooktan. Sm. 103–104° (*G.* 28 [2] 282; *J. pr.* [2] 58, 402). — *\*IV*, 508.  
 3)  $\zeta$ -Phenylhydrazon- $\gamma$ -Keto- $\beta$ -Methylheptan. Sm. 55–57° (*B.* 34, 3985 *C.* 1902 [1] 193). — *\*IV*, 509.  
 4)  $\zeta$ -Phenylhydrazon- $\epsilon$ -Keto- $\beta$ -Methylheptan. Sm. 99–100° (*B.* 22, 2123). — *IV*, 782.  
 5)  $\epsilon$ -Phenylhydrazon- $\zeta$ -Keto- $\beta$ -Methylheptan. Sm. 92–93° (*G.* 28 [2] 276; *J. pr.* [2] 58, 398). — *\*IV*, 509.  
 6) 1-[2-Acetylamidobenzyl]hexahydropyridin. Sm. 76° (*B.* 33, 2901). — *\*IV*, 409.  
 7) 1-[3-Acetylamidobenzyl]hexahydropyridin. Sm. 95° (*B.* 33, 2903). — *\*IV*, 410.  
 8) 1-[4-Acetylamidobenzyl]hexahydropyridin. Sm. 146°. HCl, Acetat (*B.* 33, 2902). — *\*IV*, 411.  
 9) 6-Oxy-4-Methyl-2-Camphryl-1,3-Diazin. Sm. 124° (PINNER, Imidoäther 289). — *IV*, 889.  
 10) Phenylamid d. 2,6-Dimethylhexahydropyridin-1-Carbonsäure. Sm. 147° (*B.* 34, 2428). — *\*IV*, 27.  
 11) Phenylamid d. isom. 2,6-Dimethylhexahydropyridin-1-Carbonsäure. Sm. 102° (*B.* 34, 2428). — *\*IV*, 27.  
 12) Verbindung (aus Isovalerylcyanessigsäureäthylester) (*Bl.* [3] 15, 133).
- C<sub>14</sub>H<sub>20</sub>ON<sub>4</sub>** C 64,6 — H 7,7 — O 6,2 — N 21,5 — M. G. 260.  
 1) Acetaldehydphenylhydrazin. Sm. 77,5° (*Bl.* [3] 15, 844). — *IV*, 746.  
 2) 1-[5-Acetylamido-2-Methylphenyl]azo-hexahydropyridin. Sm. 154° (*A.* 235, 252). — *IV*, 1580.
- C<sub>14</sub>H<sub>20</sub>OS<sub>2</sub>** 1) Diäthyläther d.  $\gamma\gamma$ -Dimerkapto- $\alpha$ -Keto- $\alpha$ -Phenylbutan. Fl. (*B.* 33, 2991). — *\*III*, 208.
- C<sub>14</sub>H<sub>20</sub>O<sub>2</sub>N<sub>2</sub>** C 67,7 — H 8,1 — O 12,9 — N 11,3 — M. G. 248.  
 1) Diäthyläther d. 1,4-Di[ $\beta$ -Imido- $\beta$ -Oxyäthyl]benzol. 2HCl. Sm. oberhalb 240° u. Zers. (*B.* 21, 2660). — *II*, 1852.  
 2) s-Önanthylphenylharnstoff. Sm. 89° (*B.* 28, 476). — *\*II*, 188.  
 3) s-Caproyl-2-Methylphenylharnstoff. Sm. 99–100° (*Soc.* 85, 810 *C.* 1904 [2] 201, 520).  
 4) s-Caproyl-4-Methylphenylharnstoff. Sm. 131–132° (*Soc.* 85, 810 *C.* 1904 [2] 201, 520).  
 5) 2,5-Di[Acetylamido]-4-Isopropyl-1-Methylbenzol. Sm. 260° (*B.* 23, 3563; *A.* 336, 22 *C.* 1904 [2] 1467). — *IV*, 647.  
 6) 1,4-Di[Acetyläthylamido]benzol. Sm. 186–187° (*A.* 265, 189). — *IV*, 589.  
 7)  $\epsilon$ -Oximido- $\alpha$ -Methylbenzoylamidohexan. Fl. (*B.* 38, 2476 *C.* 1905 [2] 968).  
 8)  $\beta\beta$ -Diisobutyryl- $\alpha$ -Phenylhydrazin. Sm. 158° (*B.* 27, 1967 Anm.). — *IV*, 667.  
 9) 2-Acetylamido-1-Oxy- $\beta$ -Piperidylmethylbenzol. Sm. 82° (D.R.P. 92309). — *\*IV*, 15.  
 10) 4-Acetylamido-1-Oxy- $\beta$ -Piperidylmethylbenzol. Sm. 159° (D.R.P. 92309). — *\*IV*, 15.  
 11)  $\delta$ -Phenylhydrazon- $\beta$ -Methylpentan- $\gamma$ -Methylcarbonsäure. Sm. 100 bis 101° (*A.* 323, 342 *C.* 1902 [2] 1205). — *\*IV*, 454.

- $C_{14}H_{20}O_2N_2$  12) Äthylester d.  $\delta$ -Phenylhydrazonpentan- $\beta$ -Carbonsäure. Sm. 105° (G. 21 [2] 30). — IV, 692.
- 13) Äthylester d.  $\alpha$ -Phenylhydrazon- $\beta\beta$ -Dimethylpropan- $\alpha$ -Carbonsäure. Sm. 42–43° (G. 29 [1] 272). — \*IV, 453.
- 14) Äthylester d. 4,5-Camphylpyrazol-3-Carbonsäure. Sm. 91–92°. HCl (Am. 36, 263 C. 1906 [2] 1425).
- 15) 3-Amidobenzoat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridin. Sm. 73–74°. HCl (D.R.P. 170587 C. 1906 [2] 472; D.R.P. 172301 C. 1906 [2] 472).
- 16) 4-Amidobenzoat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridin. Sm. 90°. HCl (D.R.P. 172568 C. 1906 [2] 473; D.R.P. 179627 C. 1907 [1] 1364; D.R.P. 180291 C. 1907 [1] 1365; D.R.P. 180292 C. 1907 [1] 1366; D.R.P. 194748 C. 1908 [1] 1005).
- 17) Amid d. d-Cyancampher- $\alpha$ -Propionsäure. Sm. 170,5° (C. r. 140, 1434 C. 1905 [2] 135).
- 18) Amid d. isom. d-Cyancampher- $\alpha$ -Propionsäure. Sm. 183° (C. r. 140, 1434 C. 1905 [2] 135).
- 19) 4-Isopropylbenzylidenamid d. Essigsäure (Cumylendiacetamid). Sm. 212° (B. 8, 1150). — III, 56.
- 20) Piperidylmethylanilid d.  $\alpha$ -Oxyphenylessigsäure. Sm. 133–134°. HCl (A. 361, 147 C. 1908 [2] 398).
- 21) Phenylhydrazinderivat d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sm. 96° (D.R.P. 132802). — \*IV, 426.
- $C_{14}H_{20}O_2N_4$  C 60,9 — H 7,2 — O 11,6 — N 20,3 — M. G. 276.
- 1) Äthyläther d. 4-Diäthylamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 76° (C. 1901 [1] 937). — \*IV, 900.
- $C_{14}H_{20}O_2N_6$  C 55,3 — H 6,6 — O 10,5 — N 27,6 — M. G. 304.
- 1) Dipiperidid d. 1,2,4,5-Tetrazin-3,6-Dicarbonsäure. Sm. 196° u. Zers. (B. 42, 3283 C. 1909 [2] 1573).
- $C_{14}H_{20}O_2Cl_2$  1) Diisobutyläther d. 2,6-Dichlor-1,4-Dioxybenzol (M. 3, 682). — II, 942.
- $C_{14}H_{20}O_2Br_2$  1) Diisobutyläther d. 2,5-Dibrom-1,4-Dioxybenzol (M. 3, 683). — II, 944.
- 2) 2-Isoamyläther d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 84,5° (B. 34, 4291 C. 1902 [1] 311). — \*II, 688.
- $C_{14}H_{20}O_2S_4$  1) Tetraäthyläther d. 2,3,5,6-Tetramerkapto-1,4-Benzochinon. Sm. 90 bis 91° (Am. 19, 292). — \*III, 265.
- $C_{14}H_{20}O_3N_2$  C 63,6 — H 7,6 — O 18,2 — N 10,6 — M. G. 264.
- 1) 3,5-Di[Äthylacetylamido]-1-Oxybenzol. Sm. 195° (M. 14, 409). — II, 724.
- 2) 2,6-Di[Acetylamido]-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 260 bis 262° (G. 20, 425). — II, 773.
- 3)  $\delta$ -[ $\alpha$ -Methyl- $\beta$ -Phenylureido]- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 60 bis 61° (C. 1908 [1] 971).
- 4) Methylester d. 2-Diäthylamidoacetylamidobenzol-1-Carbonsäure. Fl. HBr (A. 311, 165). — \*II, 783.
- 5) Methylester d. 3-Diäthylamidoacetylamidobenzol-1-Carbonsäure. Fl. HCl (A. 311, 165). — \*II, 788.
- 6) Methylester d. 4-Diäthylamidoacetylamidobenzol-1-Carbonsäure. Sm. 59–60°. HCl, HBr (A. 311, 166). — \*II, 790.
- 7) Äthylester d. 2,4,5-Trimethylphenylamidoacetylamidoameisensäure. Sm. 154–155° (J. pr. [2] 66, 258 C. 1902 [2] 1125).
- 8) Isobutylester d. Methylphenylamidoacetylamidoameisensäure. Sm. 103° (C. 1899 [2] 421). — \*II, 226.
- 9) Amid d.  $\alpha$ -Oxyisocapronylphenylamidoessigsäure. Sm. 128–129° (corr.) (A. 369, 258 C. 1909 [2] 2138).
- 10) 2-Nitro-4-Methylphenylamid d.  $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sm. 62° (J. pr. [2] 74, 324 C. 1906 [2] 1822).
- 11) Verbindung +  $H_2O$  (aus d. Methyläther d. 3-Oxy-5-Keto-4,4-Diäthyl-1-Phenyl-4,5-Dihydropyrazol). Sm. 166° (wasserfrei) (B. 39, 2285 C. 1906 [2] 435).
- 12) Verbindung (aus Nikotin u. Essigsäureanhydrid). Fl. (HCl,  $PtCl_4$ ) (Bl. [3] 11, 109). — IV, 857.
- $C_{14}H_{20}O_3Br_2$  1) Triäthyläther d.  $\beta$ -Dibrom-1,2,4-Trioxo- $\beta$ -Äthylbenzol. Sm. 65–67° (M. 22, 600).

- $C_{14}H_{20}O_3Br_2$  2) 5,5-Dibrom-2,4,6-Triketo-1,1,3,3-Tetraäthylhexahydrobenzol. Sm. 80—82° (*M.* 10, 753; 14, 378). — II, 1026.
- $C_{14}H_{20}O_4N_2$  C 60,0 — H 7,1 — O 22,9 — N 10,0 — M. G. 280.
- 1) *p*-Dinitro-1-norm. Oktylbenzol. Sm. 226° (*B.* 19, 2724). — II, 107.
  - 2) 2,5-Dinitro-1,4-Dipseudobutylbenzol. Sm. 177° (167—168°) (*Bl.* [3] 19, 73; *B.* 27, 1608). — \*II, 65.
  - 3) 2,6-Dinitro-1,4-Dipseudobutylbenzol. Sm. 190—191° (*Bl.* [3] 35, 836 *C.* 1906 [2] 1725).
  - 4) 3,6-Dinitro-1,2,4,5-Tetraäthylbenzol. Sm. 144° (*B.* 31, 1717). — \*II, 65.
  - 5) *p*-Dinitro-*p*-Tetraäthylbenzol. Sm. 115° (*B.* 16, 1745). — II, 107.
  - 6) Äthyläther d. 2-Nitro-6-Acetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 119° (*C.* 35, 2795 *C.* 1902 [2] 989).
  - 7) 4,6-Diäthyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 245° (*C.* 1905 [1] 815).
  - 8) 4-Methyläther-6-Propyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 237° (*C.* 1905 [1] 815).
  - 9) 4-Methyläther-6-Isopropyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 235° (*C.* 1905 [1] 815).
  - 10) 4-Butyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 170° (*C.* 1905 [1] 815).
  - 11) 4-Isobutyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 213° (*C.* 1905 [1] 815).
  - 12) Allylphenylhydrazon d. Arabinose. Sm. 145° (*R.* 15, 226). — \*IV, 520.
  - 13) Methylester d. 3-Diäthylamidoacetylamido-2-Oxybenzol-1-Carbonsäure. Sm. 41—42° (*A.* 311, 173). — \*II, 897.
  - 14) Methylester d. 5-Diäthylamidoacetylamido-2-Oxybenzol-1-Carbonsäure (Nirvanin). Fl. HCl, (HCl, HgCl<sub>2</sub> + H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O) (*A.* 311, 176; *C.* 1900 [1] 1115; 1900 [2] 303). — \*II, 899.
  - 15) Methylester d. 4-Diäthylamidoacetylamido-3-Oxybenzol-1-Carbonsäure. Sm. 157—158°. HCl (*A.* 311, 169). — \*II, 905.
  - 16) Methylester d. 3-Diäthylamidoacetylamido-4-Oxybenzol-1-Carbonsäure. Sm. 174,5° (*A.* 311, 171). — \*II, 913.
  - 17) Diäthylester d.  $\beta\epsilon$ -Dicyanhexan- $\beta\epsilon$ -Dicarbonsäure. Sd. 300—310° (*B.* 24, 3998). — I, 1226.
  - 18) Diäthylester d. 1,2-Phenylendi[amidoessigsäure]. Sm. 135° (*B.* 16, 515). — IV, 559.
  - 19) Diäthylester d. 1,3-Phenylendi[amidoessigsäure]. Sm. 73° (*B.* 15, 518; 16, 514). — IV, 576.
  - 20) Diäthylester d. 1,4-Phenylendi[amidoessigsäure]. Sm. 83° (*B.* 16, 515). — IV, 590.
  - 21) Diäthylester d. 1,3-Phenylendi[Methylamidoameisensäure]. Sm. 160° (*B.* 36, 1682 *C.* 1903 [2] 30). — \*IV, 416.
  - 22) Diacetat d.  $\beta$ -d-Campherdioxim. Sm. 119° (*Soc.* 85, 910 *C.* 1904 [2] 598).
  - 23) 4-Nitrobenzoat d.  $\alpha$ -Diäthylamido- $\beta$ -Oxypropan. Fl. HCl (*D.R.P.* 179627 *C.* 1907 [1] 1364).
  - 24) 1-Diäthylamidoformiat d. 4-Acetylamido-1,2-Dioxybenzol-2-Methyläther. Sm. 122—123° (*Bl.* [3] 33, 713 *C.* 1905 [2] 321).
  - 25) Base (aus Fibrin). Sm. 248—250° (*G.* 17, 509). — III, 890.
- $C_{14}H_{20}O_4N_8$  C 46,1 — H 5,5 — O 17,6 — N 30,8 — M. G. 364.
- 1) Diacetylporphyrindin. Sm. 170° u. Zers. (*B.* 36, 1302 *C.* 1903 [1] 1256).
- $C_{14}H_{20}O_4Cl_4$  1) Tetrachlordiäthylester d. d-Camphersäure (*A. ch.* [2] 70, 360). — I, 725.
- $C_{14}H_{20}O_4S$  1) 2-Oktylthiophen-*p*-Dicarbonsäure. Sm. 185° u. Zers. Ba + 1½ H<sub>2</sub>O, Cu + 2½ H<sub>2</sub>O, Ag<sub>2</sub> + 3 H<sub>2</sub>O (*B.* 19, 646). — III, 760.
- $C_{14}H_{20}O_5N_2$  C 56,8 — H 6,8 — O 27,0 — N 9,4 — M. G. 296.
- 1) Pupin (*B.* 25 [2] 758). — III, 927.
  - 2) Säure (aus Cyklohexanon u. Cyanessigsäureäthylester) (*Soc.* 93, 1957 *C.* 1909 [1] 288).
  - 3) Diäthylester d. 4-Methoxybenzylidendi[amidoameisensäure]. Sm. 171—172° (*B.* 7, 1080). — III, 85.



- C<sub>14</sub>H<sub>20</sub>O<sub>5</sub>N<sub>2</sub>** 4) 4-Nitrobenzoat d.  $\gamma$ -Diäthylamido- $\alpha\beta$ -Dioxypropan. Fl. (D. R. P. 179627 C. 1907 [1] 1365).
- 5) Nitril d. 4-Methylphenylamidodextrosecarbonsäure. Sm. 128° u. Zers. (B. 27, 1288). — \*II, 284.
- 6) Nitril d. 4-Methylphenylamidogalaktosecarbonsäure. Sm. 145 bis 146° u. Zers. (B. 27, 1289). — \*II, 285.
- 7) Verbindung (aus Oxalessigsäureäthylester u. Phenylhydrazin). Sm. 105 bis 106° (B. 24, 3006). — IV, 712.
- C<sub>14</sub>H<sub>20</sub>O<sub>5</sub>N<sub>4</sub>** C 51,8 — H 6,2 — O 24,7 — N 17,3 — M. G. 324.
- 1) 2,4-Di[4-Nitrobenzylidenamido]-1-Oxybenzol (D. R. P. 135335 C. 1902 [2] 1167).
- C<sub>14</sub>H<sub>20</sub>O<sub>5</sub>Br<sub>2</sub>** 1) Diäthylester d. 5-Keto-3,4-Dibrom-1,3-Dimethylhexahydrobenzol-2,6-Dicarbonsäure. Fl. (A. 281, 108). — II, 1930.
- C<sub>14</sub>H<sub>20</sub>O<sub>5</sub>S<sub>2</sub>** 1)  $\gamma\gamma$ -Di[Äthylsulfon]- $\alpha$ -Keto- $\alpha$ -Phenylbutan. Sm. 110—111° (B. 33, 2991). — \*III, 208.
- C<sub>14</sub>H<sub>20</sub>O<sub>6</sub>N<sub>2</sub>** C 53,8 — H 6,4 — O 30,8 — N 9,0 — M. G. 312.
- 1) Diäthylester d.  $\delta\epsilon$ -Diimido- $\beta\eta$ -Diketooktan- $\gamma\zeta$ -Dicarbonsäure (D. d. Dicyandiacetessigsäure). Sm. 132° (B. 31, 2942; A. 332, 138 C. 1904 [2] 190). — \*I, 447.
- 2) Diäthylester d. isom. Dicyandiacetessigsäure. Sm. 132,5° (A. 332, 139 C. 1904 [2] 190).
- 3) Diäthylester d.  $\beta\gamma$ -Diimido- $\delta$ -Acetyl- $\epsilon$ -Ketohehexan- $\alpha\alpha$ -Dicarbonsäure. Sm. 141—142° (A. 332, 148 C. 1904 [2] 191).
- C<sub>14</sub>H<sub>20</sub>O<sub>7</sub>N<sub>2</sub>** C 51,2 — H 6,1 — O 34,1 — N 8,5 — M. G. 328.
- 1) Triäthyläther d. P-Dinitro-1,2,3-Trioxy-P-Äthylbenzol. Sm. 51° (M. 23, 192 C. 1902 [1] 1332).
- C<sub>14</sub>H<sub>20</sub>O<sub>7</sub>N<sub>4</sub>** C 47,2 — H 5,6 — O 31,5 — N 15,7 — M. G. 356.
- 1) Diäthylester d. Acetylbisdiazoacetessigsäure. Sm. 140° (G. 34 [1] 192 C. 1904 [1] 1333).
- C<sub>14</sub>H<sub>20</sub>O<sub>8</sub>N<sub>2</sub>** C 48,8 — H 5,8 — O 37,2 — N 8,1 — M. G. 344.
- 1) Dimethylester d.  $\delta\epsilon$ -Dioximido- $\gamma\zeta$ -Diketo- $\beta\eta$ -Dimethyloktan- $\beta\eta$ -Dicarbonsäure. Sm. 173° (177°) (C. 1902 [1] 28; Soc. 83, 1261 C. 1903 [2] 1423).
- 2) Dimethylester d. Glyoximperoxyddihydrotetramethylmalonsäure. Sm. 154° u. Zers. (C. 1902 [1] 28; Soc. 83, 1260 C. 1903 [2] 1423).
- C<sub>14</sub>H<sub>20</sub>O<sub>8</sub>Cl<sub>2</sub>** 1) Tetraacetat d. Mannitdichlorhydrin. Sm. 214° (B. 35, 842 C. 1902 [1] 759).
- 2) Tetracetat d. Dichlorhexinalkohol (aus Mannit). Sm. 128—130° (A. ch. [6] 26, 380). — I, 416.
- 3) Tetracetat d. Dichlorhexinalkohol (aus Mannit). Sm. 169—170° (A. ch. [6] 26, 379). — I, 416.
- 4) Dipropylester d.  $\alpha\beta$ -Di[Chloracetoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 204—205°<sub>15</sub> (Bl. [3] 13, 1057). — \*I, 397.
- C<sub>14</sub>H<sub>20</sub>O<sub>10</sub>N<sub>2</sub>** C 44,7 — H 5,3 — O 42,6 — N 7,4 — M. G. 376.
- 1) Tetraäthylester d.  $\alpha\beta$ -Dinitrosoäthan- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Fl. (C. 1906 [1] 449).
- C<sub>14</sub>H<sub>20</sub>O<sub>12</sub>N<sub>2</sub>** C 41,2 — H 4,9 — O 47,1 — N 6,8 — M. G. 408.
- 1) Tetraäthylester d.  $\alpha\beta$ -Dinitroäthan- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Sm. 65—66° (G. 32 [2] 236 C. 1902 [2] 1499).
- C<sub>14</sub>H<sub>20</sub>NCI** 1) Chlorallylat d. 1-Äthyl-1,2,3,4-Tetrahydrochinolin. 2 + PtCl<sub>4</sub> (B. 35, 3909 C. 1903 [1] 36).
- C<sub>14</sub>H<sub>20</sub>NJ** 1) Methyläthylallyl-4-Methylphenylammoniumjodid (Ph. Ch. 45, 239 C. 1903 [2] 979).
- 2) Jodmethylat d. 3,3-Dimethyl-2-Isopropylpseudoindol. Sm. 185° (B. 31, 1499). — \*IV, 170.
- 3) Jodmethylat d. 2-Methyl-3,3-Diäthylpseudoindol. Sm. 189° (B. 29, 2479; A. 242, 361). — IV, 230.
- 4) Jodmethylat d. 1,2-Dimethyl-2-Äthyl-1,2-Dihydrochinolin. Sm. 260—261° (B. 42, 1111 C. 1909 [1] 1764).
- 5) Jodmethylat d. 2-Methyl-1-Allyl-1,2,3,4-Tetrahydrochinolin. Zers. bei 154—155° (B. 38, 1844 C. 1905 [2] 28).
- 6) Jodmethylat d. 3-Methyl-1,2,6,7,8,9-Hexahydro- $\beta$ -Naphtindol. Sm. 236—237° (B. 39, 3144 C. 1906 [2] 1268).

- $C_{14}H_{20}N_3J_2$  1) Bisjodmethylat d. Bipikolin. +  $J_6$  (*J.* 1878, 440). — IV, 126.
- $C_{14}H_{20}N_2S$  1)  $\alpha$ -Allyl- $\alpha$ -Isobutyl- $\beta$ -Phenylthioharnstoff. Sm. 41–43° (*B.* 24, 3045). — II, 393.
- 2) s-Phenyl-3-Methylhexahydrophenylthioharnstoff. Sm. 92° (*B.* 35, 831 *C.* 1902 [1] 713).
- 3) d-sec. Butylamid d. 1,2,3,4-Tetrahydrochinolin-1-Thiocarbonsäure. Sm. 40° (*Ar.* 242, 62 *C.* 1904 [1] 998).
- 4) d-sec. Butylamid d. 1,2,3,4-Tetrahydroisochinolin-2-Thiocarbonsäure. Sm. 117° (*Ar.* 242, 62 *C.* 1904 [1] 998).
- 5) Phenylamid d. 2,6-Dimethylhexahydropyridin-1-Thiocarbonsäure. Sm. 83–84° (*B.* 34, 2428). — \*IV, 27.
- 6) Phenylamid d. isom. 2,6-Dimethylhexahydropyridin-1-Thiocarbonsäure. Sm. 112–113° (*B.* 34, 2429). — \*IV, 27.
- $C_{14}H_{20}N_3J$  1) Jodmethylat d. 3-Methylimido-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 130° (*B.* 36, 3289 *C.* 1903 [2] 1191).
- $C_{14}H_{20}N_6Fe$  1) Ferrocyanäthyl. Zers. bei 212–214° (*B.* 21, 935; *C.* 1897 [2] 195; *Ph. Ch.* 23, 157). — I, 1463; \*I, 805.
- $C_{14}H_{21}ON$  C 76,7 — H 9,6 — O 7,3 — N 6,4 — M. G. 219.
- 1)  $\alpha$ -Phenylimido- $\gamma$ -Oxy- $\beta\beta\delta$ -Trimethylpentan. Sd. 106–109°<sub>18</sub> (*M.* 22, 466).
- 2) 3-Oxy-4-Phenylamidomethyl-1-Methylhexahydrobenzol. Sm. 126 bis 127° (*C.* 1901 [1] 1025).
- 3) 3-Diäthylamido-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Sd. 202°<sub>38</sub>. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 26, 1837; *A.* 288, 120). — II, 855; \*II, 500.
- 4) Äthyläther d.  $\epsilon$ -Benzoylamido- $\alpha$ -Oxypentan. Sd. 225–228°<sub>14</sub> (*B.* 42, 1434 *C.* 1909 [1] 1873).
- 5)  $\alpha$ -Oximido- $\alpha$ -Phenylloktan. Sm. 50° (*B.* 30, 1943). — \*III, 127.
- 6)  $\gamma$ -Oximido- $\epsilon$ -Phenyl- $\beta$ -Methylheptan. Sd. 175°<sub>18</sub> (*Am.* 38, 535 *C.* 1908 [1] 227).
- 7)  $\alpha$ -Oximido- $\alpha$ -[4-Methylphenyl]heptan. Fl. (*Soc.* 67, 505). — III, 156.
- 8)  $\alpha$ -Oximido- $\alpha$ -Phenyl- $\beta$ -Methyl- $\beta$ -Äthylpentan. Sm. 99–100° (*C. r.* 148, 73 *C.* 1909 [1] 648).
- 9)  $\alpha$ -Oximido- $\alpha$ -Phenyl- $\beta\beta$ -Diäthylbutan. Sm. 160–161° (*C. r.* 148, 73 *C.* 1909 [1] 648).
- 10) 2-[ $\alpha$ -Oximidobutyl]-4-Isopropyl-1-Methylbenzol. Fl. (*J. pr.* [2] 46, 487). — III, 157.
- 11) 2-[ $\alpha$ -Oximidoisobutyl]-4-Isopropyl-1-Methylbenzol. Fl. (*J. pr.* [2] 46, 486). — III, 157.
- 12) N-Benzylönanthaldoxim. Sm. 85° (78°; 83°) (*J. pr.* [2] 56, 74; *B.* 25, 2595; *A.* 298, 191; 314, 235 Anm.). — II, 536; \*II, 306.
- 13) O-Propyleycampher (*C. r.* 136, 789 *C.* 1903 [1] 1085).
- 14) Cyanpropylcampher. Sm. 46°; Sd. 140–150°<sub>20</sub> (*B.* 24 [2] 733). — III, 513.
- 15) 2-[ $\beta$ -Oxyäthyl]-1-Benzylhexahydropyridin. Sd. 318–321° (*A.* 301, 143). — \*IV, 26.
- 16) 1-[2-Oxy-3,5-Dimethylbenzyl]hexahydropyridin. Fl. HCl (*A.* 344, 286 *C.* 1906 [1] 1612).
- 17) 1-[4-Oxy-2,3-Dimethylbenzyl]hexahydropyridin. Fl. HCl (*A.* 344, 286 *C.* 1906 [1] 1612).
- 18) 1-[4-Oxy-2,5-Dimethylbenzyl]hexahydropyridin. Sm. 131,5–132° (*A.* 344, 287 *C.* 1906 [1] 1612).
- 19) 1-[4-Oxy-2,6-Dimethylbenzyl]hexahydropyridin. Sm. 98,5° (*A.* 344, 287 *C.* 1906 [1] 1612).
- 20) 1-[4-Oxy-3,5-Dimethylbenzyl]hexahydropyridin. Sm. 117,5–118,5° (*A.* 344, 286 *C.* 1906 [1] 1612).
- 21) 1-[6-Oxy-3,4-Dimethylbenzyl]hexahydropyridin. Sm. 83–84° (*A.* 344, 285 *C.* 1906 [1] 1612).
- 22) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[Hexahydro-2-Pyridyl]äthan. Fl. HCl (*B.* 35, 2789 *C.* 1902 [2] 994). — \*IV, 151.
- 23) Phenyläther d. 1-[ $\gamma$ -Oxypropyl]hexahydropyridin. Sd. 150°<sub>10</sub> (313°<sub>755</sub>). HCl, Pikrat (*B.* 29, 2388; D.R.P. 184968 *C.* 1907 [2] 861; *B.* 42, 2040 *C.* 1909 [2] 450). — IV, 18.
- 24) 3,4,4,6-Tetramethyl-2-Phenyltetrahydro-1,3-Oxazin. Sd. 267 bis 270°<sub>747</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*M.* 25, 863 *C.* 1904 [2] 1241).

- C<sub>14</sub>H<sub>21</sub>ON** 25) Phenylamid d. Heptan- $\alpha$ -Carbonsäure. Sm. 57° (*Soc.* 93, 1037 *C.* 1908 [2] 503).  
 26) Phenylamid d.  $\beta$ -Methylhexan- $\delta$ -Carbonsäure. Sm. 77—78° (*Bl.* [3] 13, 184). — \*II, 178.  
 27) 4-Methylphenylamid d. Hexan- $\alpha$ -Carbonsäure. Sm. 78—79° (80°) (*Soc.* 67, 506; *Soc.* 93, 1037 *C.* 1908 [2] 503). — II, 494; \*II, 271.  
 28) 4-Methylphenylamid d.  $\beta$ -Methylpentan- $\gamma$ -Carbonsäure. Sm. 122,5 bis 123° (*Soc.* 77, 94). — \*II, 271.  
 29) 4-Methylphenylamid d.  $\beta$ -Methylpentan- $\delta$ -Carbonsäure. Sm. 86° (*Soc.* 67, 512). — \*II, 271.  
 30) 4-Methylphenylamid d.  $\beta$ -Methylpentan- $\varepsilon$ -Carbonsäure. Sm. 75° (*J. pr.* [2] 74, 324 *C.* 1906 [2] 1822).  
 31) 6-Pseudobutyl-2,4-Dimethylphenylamid d. Essigsäure. Sm. 161° (*B.* 28, 2462). — \*II, 321.  
 32) 5-Pseudobutyl-2,6-Dimethylphenylamid d. Essigsäure. Sm. 81° (*C.* 1898 [2] 1232). — \*II, 320.  
 33) 1-Propyl-4-Isopropyl- $\beta$ -Phenylamid d. Essigsäure. Sm. 70—71° (*G.* 21 [1] 8). — II, 565.  
 34) 3-Propyl-2,4,6-Trimethylphenylamid d. Essigsäure. Sm. 161° (*B.* 28, 2462).
- C<sub>14</sub>H<sub>21</sub>ON<sub>3</sub>** C 68,0 — H 8,5 — O 6,5 — N 17,0 — M. G. 247.  
 1)  $\varepsilon$ -Semicarbazon- $\zeta$ -Phenyl- $\beta$ -Methylhexan. Sm. 133° (*C. r.* 133, 1218 *C.* 1902 [1] 299).  
 2)  $\alpha$ -Semicarbazon- $\alpha$ -[4-Äthylphenyl]pentan. Sm. 190,5° (*Bl.* [3] 35, 233 *C.* 1906 [1] 1613).  
 3)  $\alpha$ -Semicarbazon- $\alpha$ -[2,4-Dimethylphenyl]pentan. Sm. 188° (*Bl.* [3] 35, 232 *C.* 1906 [1] 1613).  
 4)  $\alpha$ -Semicarbazon- $\alpha$ -[2,5-Dimethylphenyl]pentan. Sm. 139° (*Bl.* [3] 35, 231 *C.* 1906 [1] 1613).  
 5) Semicarbazon d. Curcumin. Sm. 120—121° (*B.* 40, 4909 *C.* 1908 [1] 465; *B.* 42, 2519 *C.* 1909 [2] 529).  
 6)  $\beta$ -Phenylhydrazon- $\gamma$ -Oximido- $\beta$ -Methylheptan. Sm. 110° (*G.* 28 [2] 282; *J. pr.* [2] 58, 402). — \*IV, 509.  
 7)  $\zeta$ -Phenylhydrazon- $\varepsilon$ -Oximido- $\beta$ -Methylheptan. Sm. 131,5° (*B.* 22, 2123). — IV, 782.  
 8)  $\varepsilon$ -Phenylhydrazon- $\zeta$ -Oximido- $\beta$ -Methylheptan. Sm. 113—114° (*G.* 28 [2] 276; *J. pr.* [2] 58, 398). — \*IV, 509.  
 9) 3,3-Di[Äthylamido]-2-Keto-1-Äthyl-2,3-Dihydroindol (*B.* 40, 3599 *C.* 1907 [2] 1748).
- C<sub>14</sub>H<sub>21</sub>O<sub>2</sub>N** C 71,5 — H 8,9 — O 13,6 — N 6,0 — M. G. 235.  
 1) 2-Nitro-1-norm. Oktylbenzol. Fl. (*B.* 19, 2722). — II, 107.  
 2) 3-Nitro-1-norm. Oktylbenzol. Sm. 123—124° (*B.* 19, 2721). — II, 107.  
 3) 4-Nitro-1-norm. Oktylbenzol. Sm. 204° (*B.* 19, 2723). — II, 107.  
 4) Nitroderivat d. Kohlenw. C<sub>14</sub>H<sub>22</sub> (aus Fichtenteer) (*Bl.* [3] 11, 1151).  
 5) 3-Önanthylamido-4-Oxy-1-Methylbenzol. Sm. 103—104° (*A.* 369, 234 *C.* 1909 [2] 1995).  
 6) Diäthyläther d.  $\gamma$ -Benzylidenamido- $\alpha\alpha$ -Dioxypropan. Sd. 157°<sub>11</sub> (*B.* 34, 1922). — \*III, 28.  
 7) Äthyläther d. 2-Acetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 109° (*B.* 35, 2799 *C.* 1902 [2] 989).  
 8) Äthyläther d. 6-Acetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 136° (*D.R.P.* 67568; *B.* 35, 2799 *C.* 1902 [2] 989; *B.* 36, 2891 *C.* 1903 [2] 875). — \*II, 466.  
 9) 4-Oximido-1-Keto-2,5-Dipseudobutyl-1,4-Dihydrobenzol. Sm. 209° (*Bl.* [3] 31, 971 *C.* 1904 [2] 1113).  
 10) Methylhydroxyd d. 1-Benzoylmethylhexahydropyridin. Salze, siehe (*C.* 1900 [2] 582). — \*IV, 19.  
 11) Methylhydroxyd d. Methylnaphtalanmorpholin. Jodid, Pikrat (*A.* 307, 183). — \*II, 501.  
 12)  $\alpha$ -[Phenylamido]önanthensäure. Sm. 147,3° (*B.* 25, 2051). — II, 436.  
 13) 3-Önantholamidobenzol-1-Carbonsäure. Disulfid (*A.* 210, 125). — II, 1270.  
 14) 2-Methyl-2,3-Dihydrocamphenpyrrol-3-Carbonsäure. Cu (*A.* 313, 55). — \*IV, 113.



- $C_{14}H_{21}O_2N$  15) Jodallylat d. 1-Äthyl-1,2,3,4-Tetrahydrochinolin. Zers. bei 119 bis 120° (*B.* 35, 3909 *C.* 1903 [1] 36).
- 16) Äthylester d.  $\alpha$ -Benzylamidoisovaleriansäure. *Sd.* 274–276°<sub>768</sub> (*B.* 30, 3171). — \*II, 296.
- 17) Äthylester d.  $\alpha$ -Methylphenylamidoisovaleriansäure. *Sd.* 180 bis 190°<sub>58</sub> (*B.* 31, 3024).
- 18) Äthylester d.  $\alpha$ -[2-Methylphenyl]amidoisovaleriansäure. *Sm.* 30°; *Sd.* 282–284°<sub>768</sub> (*B.* 30, 2465). — \*II, 258.
- 19) Äthylester d.  $\alpha$ -[4-Methylphenyl]amidoisovaleriansäure. *Sd.* 295°<sub>758</sub> (*B.* 30, 2469). — \*II, 283.
- 20) Äthylester d.  $\alpha$ -Äthylphenylamidobuttersäure. *Sd.* 273–276°<sub>751</sub> (*B.* 30, 3179). — \*II, 228.
- 21) Äthylester d.  $\alpha$ -[2,4-Dimethylphenyl]amidobuttersäure. *Sd.* 285 bis 290°<sub>753</sub> (*B.* 30, 2476). — \*II, 313.
- 22) Äthylester d.  $\alpha$ -[2,4-Dimethylphenyl]amidoisobuttersäure. *Sd.* 270 bis 275°<sub>787</sub> (*B.* 30, 2477).
- 23) Äthylester d. 1-Diäthylamidomethylbenzol-4-Carbonsäure. *Sd.* 277 bis 280°. *HCl*, (2*HCl*, *PtCl*<sub>4</sub>), (*HCl*, *AuCl*<sub>3</sub>) (*A.* 310, 205). — \*II, 830.
- 24) Amylester d.  $\beta$ -[4-Amidophenyl]propionsäure. *Fl.* *HCl* (*B.* 28, 1921). — \*II, 836.
- 25) 2-Methylphenylester d. Dipropylamidoameisensäure. *Sd.* 180°<sub>19</sub> (*Bl.* [3] 31, 20 *C.* 1904 [1] 508).
- 26) 4-Methylphenylester d. Dipropylamidoameisensäure. *Sd.* 185°<sub>18</sub> (*Bl.* [3] 31, 21 *C.* 1904 [1] 508).
- 27) Butyrat d. Pinenonoxim. *Sm.* 74° (*C.* 1900 [1] 1022).
- 28) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylbutan. *HCl* (*C. r.* 138, 767 *C.* 1904 [1] 1196; *C.* 1905 [1] 1029; *D.R.P.* 169746 *C.* 1906 [1] 1585).
- 29) Benzoat d.  $\beta$ -Methylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. *Fl.* *HCl* (*D.R.P.* 181287 *C.* 1907 [1] 1650).
- 30) Benzoat d.  $\gamma$ -Diäthylamido- $\alpha$ -Oxypropan. *Sd.* 97°<sub>23</sub>. *HCl*, Pikrat (*D.R.P.* 190688 *C.* 1907 [2] 2005; *Bl.* [4] 3, 376 *C.* 1908 [1] 1677).
- 31) Benzoat d.  $\alpha$ -Diäthylamido- $\beta$ -Oxypropan. *Fl.* *HCl* (*D.R.P.* 187209 *C.* 1907 [2] 1465).
- 32) 4-Methylphenylamid d.  $\alpha$ -Oxyhexan- $\alpha$ -Carbonsäure. *Sm.* 103° (*Bl.* [4] 1, 313 *C.* 1907 [1] 1782).
- $C_{14}H_{21}O_2N_3$  *C* 63,9 — *H* 8,0 — *O* 12,1 — *N* 16,0 — *M. G.* 263.
- 1) Äthyläther d.  $\alpha$ -Semicarbazon- $\alpha$ -[4-Oxyphenyl]pentan. *Sm.* 192° (*Bl.* [3] 35, 234 *C.* 1906 [1] 1613).
- 2) 4-Methylhydroxyd d. 4-Dimethylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Pikrat (*C.* 1901 [1] 400). — \*IV, 758.
- $C_{14}H_{21}O_2Cl_3$  1) l-Bornylester d. Trichlorobuttersäure. *Sd.* 195°<sub>19</sub> (*C. r.* 134, 609 *C.* 1902 [1] 872).
- $C_{14}H_{21}O_3N$  *C* 66,9 — *H* 8,4 — *O* 19,1 — *N* 5,6 — *M. G.* 251.
- 1) Diäthyläther d.  $\beta$ -[3-Methoxylbenzyliden]amido- $\alpha\alpha$ -Dioxyäthan. *Sd.* 222°<sub>50</sub> (*A.* 286, 7; *D.R.P.* 85566). — III, 79; \*III, 58.
- 2) Diäthyläther d.  $\beta$ -[4-Methoxylbenzyliden]amido- $\alpha\alpha$ -Dioxyäthan (p-Methoxybenzalamidoacetal). *Sd.* 190°<sub>12</sub>. Oxalat (*B.* 27, 3097). — III, 84.
- 3) Diäthyläther d.  $\gamma$ -Benzoylamido- $\alpha\alpha$ -Dioxypropan. *Fl.* (*B.* 34, 1921).
- 4)  $\alpha$ -[Methyl- $\beta$ -Oxy- $\beta$ -Methylbutyl]amidophenylessigsäure. *Ba* (*Bl.* [4] 3, 1143 *C.* 1909 [1] 193).
- 5)  $\eta$ -Oxyheptylamidoameisenphenyläthersäure.  $\eta$ -Phenoxyheptylamin-salz (*B.* 39, 4115 *C.* 1907 [1] 278).
- 6) Äthylcamphorformenaminocarbonsäure. Äthylaminsalz (*Am.* 39, 282 *C.* 1908 [1] 1182).
- 7) Äthylester d. 4-Isoamylamido-3-Oxybenzol-1-Carbonsäure. *Sm.* 108–109° (*A.* 311, 75). — \*II, 905.
- 8) Äthylester d. 3-Isoamylamido-4-Oxybenzol-1-Carbonsäure. *Sm.* 69 bis 71° (*A.* 311, 77). — \*II, 913.
- 9) Äthylester d. i-N-Methyltetrahydrochinoliniumessigsäure. d-Bromcamphersulfonat (*B.* 40, 4456 *C.* 1908 [1] 47).
- 10) 2-Methoxyphenylester d. Dipropylamidoameisensäure. *Sd.* 196°<sub>18</sub> (*Bl.* [3] 31, 21 *C.* 1904 [1] 508).

- C<sub>14</sub>H<sub>21</sub>O<sub>3</sub>N** 11) 4-Diäthylamidoacetat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Fl. HCl, (2HCl, PtCl<sub>4</sub>), HJ (C. 1900 [1] 271; Ar. 240, 639 C. 1903 [1] 24). — \*II, 579.
- 12) α-Benzoat d. γ-Diäthylamido-αβ-Dioxypropan. Fl. Pikrat (B. 15, 1152). — II, 1141.
- 13) Verbindung (Oxim aus Digitogensäure). Sm. 175°. Mg, Ba + 6H<sub>2</sub>O (B. 27 [2] 881). — III, 581.
- C<sub>14</sub>H<sub>21</sub>O<sub>3</sub>N<sub>2</sub>** 1) Verbindung (aus Nikotin u. Essigsäureanhydrid). (Existenz fraglich). Sd. 330° u. Zers. (HCl, PtCl<sub>4</sub>) (B. [3] 11, 109; B. 26, 2135).
- C<sub>14</sub>H<sub>21</sub>O<sub>3</sub>N<sub>3</sub>** C 60,2 — H 7,5 — O 17,2 — N 15,1 — M. G. 279.
- 1) α-[β-Phenylhydrazido]-α-Diäthylamidoäthan-α-Ketocarbonsäure. (4 + 3HCl, AuCl<sub>3</sub>) (B. 36, 1455 C. 1903 [1] 1361). — \*IV, 477.
- C<sub>14</sub>H<sub>21</sub>O<sub>3</sub>Br** 1) 5-Brom-2,4,6-Triketo-1,1,3,3-Tetraäthylhexahydrobenzol. Sm. 85 bis 88° (M. 9, 889; 10, 736). — II, 1025.
- 2) 5-Brom-2,4-Diketo-6-Oxy-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Sm. 115–118°. Na, K (M. 9, 889; 10, 736). — II, 1025.
- 3) 3-Methyläther-α,4-Diäthyläther d. β-Brom-α-Oxy-α-[3,4-Dioxyphenyl]propan. Fl. Zers. bei 225–230° (B. 29, 678). — \*II, 697.
- C 62,9 — H 7,9 — O 24,0 — N 5,2 — M. G. 267.
- C<sub>14</sub>H<sub>21</sub>O<sub>4</sub>N** 1) Diäthyläther d. β-[4-Methoxybenzoyl]amido-αα-Dioxyäthan (Anisylamidoacetal). Sm. 60–61° (B. 27, 3099). — II, 1529.
- 2) Methylparakonyltropein. Fl. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ (Soc. 89, 361 C. 1906 [1] 1617).
- 3) Äthylester d. Phenylamidodioxyessigdiäthyläthersäure. Sm. 69 bis 70,5°; Sd. 172–174°<sub>12</sub> (Soc. 91, 968 C. 1907 [2] 447).
- 4) Äthylester d. Camphersäureimidoessigsäure. Sm. 86° (J. 1887, 1606). — I, 1393.
- 5) Diäthylester d. 2,4,6-Trimethyl-2,3-Dihydropyridin-3,5-Dicarbonsäure (D. d. Dihydrocollidindicarbonsäure). Sm. 131°; Sd. oberhalb 315°; Zers. bei 340–350° (B. 14, 1637; 24, 1666; 31, 738, 1036; 33, 3807; A. 215, 8; 225, 123; 226, 314; C. 1897 [1] 903, 927; 1899 [2] 440; A. 332, 19 C. 1904 [1] 1565). — IV, 94; \*IV, 79.
- 6) Diacetat d. Oxybishydrocarvoxim. Sm. 107° (A. 291, 348). — III, 483.
- 7) Saures Succinat d. Campheroxim. Sd. 246° u. Zers. (Am. 21, 473). — \*III, 366.
- C<sub>14</sub>H<sub>21</sub>O<sub>4</sub>N<sub>3</sub>** C 57,0 — H 7,1 — O 21,7 — N 14,2 — M. G. 295.
- 1) 2,4-Dinitro-1-Diisobutylamidobenzol. Sm. 112° (C. 1906 [2] 1314).
- 2) 4-Nitrobenzoat d. αγ-Di[Dimethylamido]-β-Oxypropan. Fl. HCl (D.R.P. 179627 C. 1907 [1] 1365).
- C<sub>14</sub>H<sub>21</sub>O<sub>4</sub>Cl** 1) Diäthylester d. 4-Chlor-1,1,3-Trimethyl-2,3-Dihydro-R-Penten-2,3-Dicarbonsäure. Sd. 192–194°<sub>35</sub> (Soc. 89, 784 C. 1906 [2] 239).
- C<sub>14</sub>H<sub>21</sub>O<sub>5</sub>N** C 59,4 — H 7,4 — O 28,3 — N 4,9 — M. G. 283.
- 1) 2,5-Dimethyläther-3-Propyläther d. 4-Nitro-2,3,5-Trioxy-1-Propylbenzol. Sm. 68° (B. 36, 1720 C. 1903 [2] 114).
- 2) Dimethylester d. Keto-β-Santorsäureoxim. Sm. 120–121° (G. 29 [2] 245; C. 1896 [2] 1115). — \*II, 1116.
- 3) Diäthylester d. 1-Oximido-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 175° (A. 281, 107). — II, 1930.
- 4) Diäthylester d. 1-[β-Oxyäthyl]-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 45° (C. 1901 [1] 72). — \*IV, 77.
- C 54,0 — H 6,8 — O 25,7 — N 13,5 — M. G. 311.
- C<sub>14</sub>H<sub>21</sub>O<sub>5</sub>N<sub>3</sub>** 1) Semicarbazon (d. Säure C<sub>13</sub>H<sub>18</sub>O<sub>5</sub> vom Sm. 77°). Sm. 218° u. Zers. (A. 309, 367). — \*I, 390.
- 2) Diäthylester d. 4-Semicarbazon-6-Methyl-1,2,3,4-Tetrahydrobenzol-1,3-Dicarbonsäure. Sm. 162–164° (A. 360, 298 C. 1908 [2] 247).
- 3) Diäthylester d. 1-[α-Methylureido]-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 151° (B. 38, 2372 C. 1905 [2] 459).
- C<sub>14</sub>H<sub>21</sub>O<sub>5</sub>Cl<sub>3</sub>** 1) 1,2,2,4-Tetraäthyläther d. 3,5,6-Trichlor-1,1,2,2,4-Pentaoxy-1,2-Dihydrobenzol. Sm. 140° u. Zers. (B. 27, 553).
- C<sub>14</sub>H<sub>21</sub>O<sub>6</sub>N** C 56,2 — H 7,0 — O 32,1 — N 4,7 — M. G. 299.
- 1) Galaktose-4-Phenetidid. Sm. 165° (C. 1898 [2] 695). — \*II, 412.
- 2) Glykose-4-Phenetidid + H<sub>2</sub>O. Sm. 110–120° u. Zers. (160°) (C. 1898 [2] 695; Soc. 95, 1550 C. 1909 [2] 1990). — \*II, 412.

- $C_{14}H_{21}O_6N$  3) Triäthylester d.  $\beta$ -Cyanbutan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 219,5 bis 221,5°<sub>90</sub> (A. ch. [6] 27, 283; Soc. 81, 32 C. 1902 [1] 409). — I, 1226.
- 4) Triäthylester d.  $\alpha$ -Cyan- $\beta$ -Methylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 190°<sub>15</sub> (B. 25 [2] 579; A. ch. [7] 1, 542). — I, 1226; \*I, 688.
- $C_{14}H_{21}N_3J_2$  1) Di[Jodmethylat] d. 1-Methyl-5-[ $\beta$ -Dimethylamidophenyl]pyrazol. Sm. 211° (B. 35, 41 C. 1902 [1] 425). — \*IV, 813.
- $C_{14}H_{21}N_3S$  1)  $\alpha$ -Imido- $\alpha$ -[ $\beta$ -Phenylthioureido]heptan. Sm. 164° (B. 28, 476). — \*II, 197.
- 2)  $\alpha$ -[3-Methylhexahydrophenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 137—138° (C. 1900 [1] 653; J. pr. [2] 64, 120; C. 1908 [1] 1178). — \*II, 201.
- $C_{14}H_{21}N_3S_2$  1) Dimethyldiäthylphenyldithiobiuret. Sm. 113,5—114° (B. 26, 1687; B. 37, 4324 C. 1905 [1] 165). — II, 400.
- 2)  $\alpha$ -Dimethyldiäthylphenylpseudodithiobiuret. Sm. 66,5—67° (B. 37, 4324 C. 1905 [1] 165).
- 3)  $\beta$ -Dimethyldiäthylphenylpseudodithiobiuret. Sm. 42,8—43° (B. 37, 4324 C. 1905 [1] 165).
- $C_{14}H_{21}N_4J$  1) Jodäthylat d. Phenylhydrazin. Sm. 27° (C. 1899 [1] 843). — \*IV, 422.
- $C_{14}H_{22}ON_2$  C 71,8 — H 9,4 — O 6,8 — N 12,0 — M. G. 234.
- 1) 4-Isobutylnitrosamido-1-Isobutylbenzol (A. 211, 240). — II, 557.
- 2) s-Phenylheptylharnstoff. Sm. 63° (C. r. 140, 1692 C. 1905 [2] 392).
- 3)  $\zeta$ -Phenylhydrazon- $\beta$ -Oxy- $\beta$ -Methylheptan. Sd. 226°<sub>25</sub> (Bl. [3] 17, 186). — IV, 769.
- 4) Amid d.  $\alpha$ -Phenylamidoönanthsäure. Sm. 105,3° (B. 25, 2051). — II, 436.
- 5) 2-Amido-4-Methylphenylamid d.  $\beta$ -Methylpentan- $\epsilon$ -Carbonsäure. Sm. 130° (J. pr. [2] 74, 325 C. 1906 [2] 1823).
- 6)  $\beta$ -Phenylhydrazid d. Caprylsäure. Sm. 102—104° (B. 34, 183). — \*IV, 426.
- $C_{14}H_{22}OS$  1) 5-Acetyl-2-Oktylthiophen. Sd. 350—355° (B. 19, 646). — III, 766.
- $C_{14}H_{22}O_2N_2$  C 67,2 — H 8,8 — O 12,8 — N 11,2 — M. G. 250.
- 1) Äthyläther d. 6-Amidoacetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 104—105° (D. R. P. 71159). — \*II, 466.
- 2) Diacetylbornylendiamin. Sm. 246° (D. R. P. 160103 C. 1905 [2] 178).
- 3) isom. Diacetylbornylendiamin. Sm. 253° (D. R. P. 160103 C. 1905 [2] 178).
- 4) 3,6-Di[Äthylamido]-2-Methyl-5-Isopropyl-1,4-Benzochinon. Sm. 116° (A. 361, 397 Ann. C. 1908 [2] 591).
- 5) Diacetyldipiperidein. Sd. 219,5—220,5° (B. 22, 1330). — IV, 532.
- 6) Benzoat d.  $\alpha\gamma$ -Di[Dimethylamido]- $\beta$ -Oxypropan. (2HCl, PtCl<sub>4</sub>) (B. 17, 510). — II, 1140.
- 7) 4-Amidobenzoat d.  $\alpha$ -Diäthylamido- $\beta$ -Oxypropan. Fl. (D. R. P. 179627 C. 1907 [1] 1364).
- 8) 4-Methylamidobenzoat d.  $\beta$ -Diäthylamido- $\alpha$ -Oxyäthan. Fl. HCl (D. R. P. 180291 C. 1907 [1] 1365).
- 9) Phenylamidoformiat d.  $\gamma$ -Diäthylamido- $\alpha$ -Oxypropan. Sm. noch nicht bei 250° (Bl. [4] 3, 377 C. 1908 [1] 1677).
- 10) Methylamid d. Methylcamphoformenamincarbonsäure. Sm. 130° (C. 1901 [2] 545).
- $C_{14}H_{22}O_2N_4$  C 60,4 — H 7,9 — O 11,5 — N 20,1 — M. G. 278.
- 1) Verbindung (aus  $\beta$ -Oximidobutan u. Diazobenzol). Sm. 95° (B. 39, 880 C. 1906 [1] 1243).
- 2) Verbindung (aus Acetonoxim u. 2,4-Dimethyldiazobenzol). Sm. 87° (B. 39, 878 C. 1906 [1] 1242).
- 3) Verbindung (aus Acetonoxim u. 2,5-Dimethyldiazobenzol). Sm. 99° (B. 39, 877 C. 1906 [1] 1242).
- $C_{14}H_{22}O_2N_6$  C 54,8 — H 7,2 — O 10,5 — N 27,4 — M. G. 306.
- 1) Dipiperidid d. 1,2-Dihydro-1,2,4,5-Tetrazin-3,6-Dicarbonsäure. Sm. 266° (B. 42, 3281 C. 1909 [2] 1573).
- $C_{14}H_{22}O_3Br_2$  1) Dibrommyristolsäure (A. 202, 178). — I, 534.
- $C_{14}H_{22}O_3S_4$  1) 2,3,5,6-Tetraäthyläther d. 2,3,5,6-Tetramerkapto-1,4-Dioxybenzol. Sm. 58—59° (Am. 19, 293). — \*II, 634.



- $C_{14}H_{22}O_3N_2$  C 63,2 — H 8,3 — O 18,0 — N 10,5 — M. G. 266.  
 1) 4-Amidobenzoat d.  $\gamma$ -Diäthylamido- $\alpha\beta$ -Dioxypropan. Fl. (D.R.P. 179627 C. 1907 [1] 1365).
- $C_{14}H_{22}O_3N_4$  C 57,1 — H 7,5 — O 16,3 — N 19,1 — M. G. 294.  
 1)  $\alpha$ -[ $\beta\beta$ -Diäthylhydrazid] d.  $\alpha$ -Phenylhydrazin- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Äthylester. Sm. 195—196° (C. 1901 [1] 936). — \*IV, 434.  
 2) Verbindung (aus Acetonoxim u. 4-Äthoxyldiazobenzol). Sm. 125—127° (B. 39, 878 C. 1906 [1] 1242).
- $C_{14}H_{22}O_3S$  1)  $\alpha$ -Oxyheptyl-4-Methylphenylsulfon (Am. 31, 166 C. 1904 [1] 875).  
 2) Oktylbenzolsulfonsäure. Ba +  $H_2O$ , Pb + 3  $H_2O$ , Ag +  $H_2O$  (B. 19, 642). — II, 160.  
 3) 2-Isoamyl-1,3,5-Trimethylbenzol-4-Sulfonsäure. Fl. (B. 37, 1720 C. 1904 [1] 1489).  
 4) tert. Dibutylbenzolsulfonsäure. Ba + 7  $H_2O$  (B. 27, 1608). — \*II, 83.  
 5) 1,2,3,4-Tetraäthylbenzol-5-Sulfonsäure. Na + 5  $H_2O$ , Ba + 6  $H_2O$ , Cd + 7  $H_2O$ , Cu + 8  $H_2O$  (B. 16, 1746; 21, 2818). — II, 160.  
 6) 1,2,4,5-Tetraäthylbenzol-3-Sulfonsäure. Na + 4  $H_2O$ , Ba + 9  $H_2O$  (B. 21, 2820). — II, 160.  
 7) Sulfonsäure d. Kohlenw.  $C_{14}H_{22}$  (aus Fichtenteer). Ba (Bl. [3] 11, 1152). — \*II, 23.
- $C_{14}H_{22}O_4N_2$  C 59,6 — H 7,8 — O 22,7 — N 9,9 — M. G. 282.  
 1) Phenylhydrazon d. Dimethylrhamnose. Sm. 159—160° (Soc. 89, 1201 C. 1906 [2] 1045).  
 2) Äthylphenylhydrazon d. Rhamnose. Sm. 123° (R. 15, 226). — \*IV, 518.  
 3) Äthylester d. Camphorylnitrosamidoessigsäure. Sm. 105° (B. 35, 3662 C. 1902 [2] 1464).
- $C_{14}H_{22}O_4N_6$  C 49,7 — H 6,5 — O 18,9 — N 24,9 — M. G. 338.  
 1) 2,4,2',4'-Tetraketo-5,5,5',5'-Tetramethyl-3,3'-Diäthyl-oktohydro-1,1'-Azoimidazol. Sm. 234° u. Zers. (C. 1904 [2] 1029).
- $C_{14}H_{22}O_4Br_2$  1) Diisoamylester d. Dibrommaleinsäure. Sd. 320° (B. 38, 2588 C. 1905 [2] 758).
- $C_{14}H_{22}O_5S_2$  1) 1,3-Di[Butylsulfon]benzol. Fl. (J. pr. [2] 68, 321 C. 1903 [2] 1170).  
 $C_{14}H_{22}O_5N_2$  C 56,4 — H 7,4 — O 26,8 — N 9,4 — M. G. 298.  
 1) Nitrosat d. Isobutylidencampher. Sm. 178° u. Zers. (C. r. 142, 1311 C. 1906 [2] 239).  
 2) Äthylphenylhydrazon d. Galaktose. Sm. 169° (R. 15, 226). — \*IV, 521.  
 3) Äthylphenylhydrazon d. d-Glykose. Sm. 116—118°. +  $\frac{1}{2}CH_4O$ , +  $C_7H_6O$  (M. 27, 78 C. 1906 [1] 1239).  
 4) Äthylphenylhydrazon d. Mannose. Sm. 159° (R. 15, 226). — \*IV, 523.  
 5) Äthylester d. 6-Keto-2,4-Dioxy-5-Cyan-2-Methyl-5-Äthylhexahydropyridin-4-Äthyläther-3-Carbonsäure. Sm. 198° (G. 33 [2] 167 C. 1903 [2] 1283).
- $C_{14}H_{22}O_5Hg_2$  1) Verbindung (aus Camphen). Sm. 188—189° (B. 36, 3576 C. 1903 [2] 1362; G. 36 [1] 309 C. 1906 [2] 126).
- $C_{14}H_{22}O_6N_2$  C 53,5 — H 7,0 — O 30,6 — N 8,9 — M. G. 314.  
 1) Methylphenylhydrazon d.  $\alpha$ -Glykoheptose. Sm. 150° (H. 35, 569 C. 1902 [2] 635). — \*IV, 523.  
 2) Diäthylester d. Fumarylalalanin. Sm. 203—205° (B. 37, 4596 C. 1905 [1] 352).
- $C_{14}H_{22}O_6N_4$  C 49,1 — H 6,4 — O 28,1 — N 16,4 — M. G. 342.  
 1) Diäthylester d.  $\beta\beta'$ -Oxalyldi[Hydrazonbuttersäure]. Sm. 133,5° (B. 40, 712 C. 1907 [1] 945).
- $C_{14}H_{22}O_6Cl_2$  1) Diäthyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinondiäthylhemiacetal. Sm. 140—143°. Na<sub>2</sub> (Am. 17, 604). — III, 351.
- $C_{14}H_{22}O_7N_2$  C 50,9 — H 6,7 — O 33,9 — N 8,5 — M. G. 330.  
 1) Phenylhydrazon d.  $\alpha$ -Galaoktose. Sm. 200—205° (205—210° corr.) (A. 288, 151). — IV, 794.  
 2) Phenylhydrazon d.  $\alpha$ -Glykooktose. Sm. 190° u. Zers. (A. 270, 97). — IV, 792.  
 3) Phenylhydrazon d. d-Mannoktose. Sm. 212° u. Zers. (B. 23, 2235). — IV, 794.

- $C_{14}H_{22}O_7N_2$  4) Phenylhydrazid d. Rhamnoheptonsäure. Sm. bei 215° u. Zers. (*B.* 23, 3107). — IV, 730.
- 5) Verbindung (aus Rhamnodiazin) (*B.* 22, 3248). — I, 290.
- $C_{14}H_{22}O_9N_2$  1) Phenylhydrazid d.  $\alpha$ -Galaoktonsäure. Sm. bei 230° (235° corr.) u. Zers. (*A.* 288, 149). — IV, 732.
- 2) Phenylhydrazid d. d-Mannooktonsäure. Sm. 243° u. Zers. (*B.* 23, 2233). — IV, 732.
- $C_{14}H_{22}O_8S_2$  1) Tetraäthylester d. Dimethyldisulfid- $\alpha\alpha'\alpha'$ -Tetracarbonsäure. Sm. 131° (*B.* 36, 3725 *C.* 1903 [2] 1416).
- $C_{14}H_{22}O_9N_2$  1) Diacetyldipentosamin. Ba (*C.* 1906 [2] 806).
- $C_{14}H_{22}O_{11}Hg_4$  1) Verbindung (aus Aceton u. Mercuriacetat. Sm. 157° (*B.* 36, 3703 *C.* 1903 [2] 1239).
- $C_{14}H_{22}NJ$  1) d-Methylallylbutylphenylammoniumjodid. Sm. 80° (*Soc.* 93, 1228 *C.* 1908 [2] 779).
- 2) i-Methylallylbutylphenylammoniumjodid. Sm. 80–81° (*Soc.* 93, 1227 *C.* 1908 [2] 779).
- 3) l-Methylallylisobutylphenylammoniumjodid. Sm. 143° (*Soc.* 89, 303 *C.* 1903 [1] 1543).
- 4) i-Methylallylisobutylphenylammoniumjodid. Sm. 143° (*C.* 1906 [1] 1152; *Soc.* 89, 302 *C.* 1906 [1] 1543).
- 5) Jodmethylat d. Methylbenzylhexahydropyridin (*B.* 15, 424). — IV, 9.
- 6) Jodmethylat d. 1,3,3-Trimethyl-2-Äthyl-2,3-Dihydroindol. Subl. bei 240° (*G.* 28 [1] 195). — \*IV, 150.
- $C_{14}H_{22}N_2J_2$  1) Di[Jodäthylat] d. 1-Phenyl-5-Methyl-4,5-Dihydropyrazol. Zers. bei 230° (*M.* 21, 1117). — \*IV, 307.
- $C_{14}H_{22}N_2S$  1)  $\delta$ -[ $\beta$ -Phenylthioureido]heptan. Sm. 75° (*C.* 1900 [1] 653; *J. pr.* [2] 64, 116). — \*II, 195.
- 2)  $\beta$ -[ $\beta$ -Phenylthioureido]- $\beta$ -Dimethylpentan. Sm. 111–112° (*C.* 1909 [2] 587).
- $C_{14}H_{23}ON$  C 76,0 — H 10,4 — O 7,2 — N 6,3 — M. G. 221.
- 1) d-Methylallylbutylphenylammoniumhydroxyd. Jodid, d-Bromcamphersulfonat (*Soc.* 93, 1228 *C.* 1908 [2] 779).
- 2) l-Methylallylisobutylphenylammoniumhydroxyd. d-Camphersulfonat (*Soc.* 83, 303 *C.* 1906 [1] 1543).
- 3) i-Methylallylisobutylphenylammoniumhydroxyd. d-Camphersulfonat (*C.* 1906 [1] 1152; *Soc.* 89, 302 *C.* 1906 [1] 1543).
- 4)  $\epsilon$ -Oxy- $\epsilon$ -[4-Dimethylamidophenyl]- $\beta$ -Methylpentan. Sm. 48° (*B.* 40, 4365 *C.* 1908 [1] 34).
- 5)  $\beta$ -Methylbenzylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Sd. 169–171°<sub>18</sub>. (2HCl, PtCl<sub>4</sub>) (*M.* 28, 519 *C.* 1907 [2] 1229).
- 6) Phenyläther d.  $\alpha$ -Oxy- $\delta$ -Amidomethylheptan ( $\epsilon$ -Phenoxy- $\beta$ -Propylamin). (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 28, 1202). — \*II, 356.
- 7) Bicyklo-Methylhexen-Methylhexanon. Sm. 152° (*B.* 29, 1596, 2966; 32, 3338 Anm.). — \*I, 557.
- 8) Oxim d. Keton  $C_{14}H_{22}O$ . Sm. 155° (*B.* 41, 569 *C.* 1908 [1] 1176).
- 9) Base (aus Patschouliöl). HCl, (2HCl, PtCl<sub>4</sub>) (*C.* 1905 [1] 1470).
- $C_{14}H_{23}ON_3$  C 67,5 — H 9,2 — O 6,4 — N 16,9 — M. G. 249.
- 1) 6-[ $\gamma$ -Semicarbazon- $\beta$ -Methylpropenyl]-1,1,5-Trimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 174–175° (*C. r.* 144, 1443 *C.* 1907 [2] 907).
- 2) 4-Semicarbazon- $\beta$ -Diallyl-1-Methylhexahydrobenzol. Sm. 141–143° (*C. r.* 140, 129 *C.* 1905 [1] 605).
- 3) Semicarbazon d. Allylcampher. Sm. 180° (*C. r.* 136, 792 *C.* 1903 [1] 1086).
- 4) Semicarbazon d. Camphenilidenaceton. Sm. 178–179° (*D. R. P.* 138211 *C.* 1903 [1] 269).
- 5) Semicarbazon d. Citriodorylidenaceton. Sm. 134–135° (*J. pr.* [2] 57, 80).
- 6) Semicarbazon d. Allo-Lemonylidenaceton. Sm. 142–143° (*J. pr.* [2] 58, 89).
- 7) Semicarbazon d. Allylthujon. Sm. 130–131° (*C. r.* 140, 1628 *C.* 1905 [2] 326).

- C<sub>14</sub>H<sub>23</sub>ON<sub>3</sub>** 8) Semicarbazon d. Iron. Fl. (B. 28, 1755). — III, 117.  
 9) Semicarbazon d.  $\alpha$ -Jonon.  $\alpha$ -Modif. Sm. 107—108°;  $\beta$ -Modif. Sm. 137 bis 138°. + NaHSO<sub>3</sub> (B. 28, 1754; 31, 876, 1738; C. 1904 [1] 280). — III, 117; \*III, 89.  
 10) Semicarbazon d. isom.  $\alpha$ -Jonon. Sm. 152° (SEHLER, Dissert. Heidelberg 1897).  
 11) Semicarbazon d.  $\beta$ -Jonon. Sm. 148—149°. + NaHSO<sub>3</sub>, + NH<sub>2</sub>O (B. 31, 871, 1737; J. pr. [2] 57, 495; C. 1904 [1] 281). — \*III, 89.  
 12) Semicarbazon d. isom.  $\beta$ -Jonon. Sm. 205° u. Zers. (SEHLER, Dissert. Heidelberg 1897).  
 13) Semicarbazon d. Pseudojonon. Sm. 142° (143—144°) (B. 31, 843, 1737; 33, 882; J. pr. [2] 57, 494). — \*III, 88.
- C<sub>14</sub>H<sub>23</sub>OC1** 1) Hydrochlorid d. Keton C<sub>14</sub>H<sub>22</sub>O. Sm. 90° (B. 29, 1595, 2966). — \*I, 528.
- C<sub>14</sub>H<sub>23</sub>OBr** 1) Hydrobromid d. Keton C<sub>14</sub>H<sub>22</sub>O. Sm. 90—91° (B. 29, 1595). — \*I, 528.
- C<sub>14</sub>H<sub>23</sub>O<sub>2</sub>N** C 70,9 — H 9,7 — O 13,5 — N 5,9 — M. G. 237.  
 1) 4-Methyläther d.  $\gamma$ -Diäthylamido- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]propan. Sd. 308—310°<sub>755</sub> (C. r. 145, 876 C. 1908 [1] 130).  
 2) Diäthyläther d.  $\gamma$ -Benzylamido- $\alpha\alpha$ -Dioxypropan. Sd. 156°<sub>14</sub> (B. 34, 1922).  
 3) 2-Methoxyphenyläther d.  $\epsilon$ -Dimethylamido- $\alpha$ -Oxypentan. HCl (D. R. P. 184968 C. 1907 [2] 861).  
 4) Oxyäthylcamphenmorpholin. Sd. 240°<sub>240</sub>. HJ, Pikrat (A. 307, 191). — \*III, 360.  
 5) Propylderivat d. Cyancampher. Fl. (B. 22 [2] 576). — III, 497.  
 C 63,4 — H 8,7 — O 12,1 — N 15,8 — M. G. 265.
- C<sub>14</sub>H<sub>23</sub>O<sub>2</sub>N<sub>3</sub>** 1) p-Nitro-4-Diäthylamido-6-Äthylamido-1,3-Dimethylbenzol? (2HCl, PtCl<sub>4</sub>), HJ (A. 113, 164). — IV, 642.  
 2) Isopropylidencamphorylpseudosemicarbazon. Sm. 217° u. Zers. (Soc. 87, 733 C. 1905 [2] 242).  
 3) 4-Amidobenzoat d.  $\alpha\gamma$ -Di[Dimethylamido]- $\beta$ -Oxypropan. Sm. 109° (D. R. P. 179627 C. 1907 [1] 1365).  
 C 57,3 — H 7,8 — O 10,9 — N 23,9 — M. G. 293.
- C<sub>14</sub>H<sub>23</sub>O<sub>2</sub>N<sub>5</sub>** 1) 8-Dipropylamido-2,6-Diketo-1,3,7-Trimethylpurin (Dipropylamido-kaffein). Sm. 95° (B. 31, 1140). — \*III, 706.
- C<sub>14</sub>H<sub>23</sub>O<sub>2</sub>Br** 1) l-Bornylester d.  $\alpha$ -Brombuttersäure. Sd. 168°<sub>19</sub> (C. r. 134, 609 C. 1902 [1] 872). — \*III, 339.  
 2) l-Bornylester d.  $\alpha$ -Bromisobuttersäure. Sd. 150°<sub>19</sub> (C. r. 134, 609 C. 1902 [1] 872). — \*III, 339.
- C<sub>14</sub>H<sub>23</sub>O<sub>2</sub>P** 1) Diäthyl-4-Methylphenylmethylphosphorketobetain. Sm. 75°. Salze, siehe (A. 315, 91). — \*IV, 1177.
- C<sub>14</sub>H<sub>23</sub>O<sub>2</sub>B** 1) Diisobutylester d. Phenylborsäure. Sd. 180—187°<sub>30—35</sub> (B. 42, 3092 C. 1909 [2] 1210).
- C<sub>14</sub>H<sub>23</sub>O<sub>3</sub>N** C 66,4 — H 9,1 — O 19,0 — N 5,5 — M. G. 253.  
 1) Diäthyläther d.  $\beta$ -[4-Methoxybenzyl]amido- $\alpha\alpha$ -Dioxyäthan (p-Methoxybenzylamidoacetal). Sd. 187°<sub>12</sub> (B. 27, 3098). — \*II, 437.  
 2) Oximidoisobutylloxycampher. Sm. 95° (C. r. 142, 1311 C. 1906 [2] 239).  
 3) 2,4-Diketo-5-Methyl-3-Menthyltetrahydrooxazol. Sm. 77,5° (C. 1908 [2] 2007).  
 4) Äthylester d. 1-Oximido-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-4-Carbonsäure. Sm. 101—103° (A. 288, 335). — \*I, 268.  
 5) Äthylester d. Camphorylamidoessigsäure. Fl. HCl (B. 35, 3661 C. 1902 [2] 1463).
- C<sub>14</sub>H<sub>23</sub>O<sub>3</sub>Cl<sub>3</sub>** 1) Chloralalkoholatcampher. Fl. (J. 1878, 645). — III, 487.
- C<sub>14</sub>H<sub>23</sub>O<sub>4</sub>N** C 62,4 — H 8,5 — O 23,8 — N 5,2 — M. G. 269.  
 1) Oxim (aus d. Glykol C<sub>14</sub>H<sub>23</sub>O<sub>3</sub>). Sm. 188,5° (B. 42, 1064 C. 1909 [1] 1656; A. 369, 55 C. 1909 [2] 2000).  
 2) Dimethylamidocamphoformolcarbonsäure. Dimethylaminsalz (Am. 34, 248 C. 1905 [2] 1491).  
 3) Campheroxalsäureäthylester + Ammoniak (C. 1901 [2] 545).  
 4) Diäthylester d.  $\alpha$ -Cyanheptan- $\alpha\gamma$ -Dicarbonsäure. Sd. 192°<sub>20</sub> (Bl. [3] 33, 781 C. 1905 [2] 542).



- C<sub>14</sub>H<sub>23</sub>O<sub>4</sub>N** 5) Diäthylester d.  $\zeta$ -Cyan- $\beta$ -Methylhexan- $\gamma\zeta$ -Dicarbonsäure. Sd. 188 bis 190°<sub>10</sub> (Bl. [3] 33, 906 C. 1905 [2] 756).  
 6) Diäthylester d.  $\delta$ -Cyan- $\beta$ -Methylhexan- $\delta s$ -Dicarbonsäure. Sd. 186 bis 188°<sub>35</sub> (Soc. 77, 1303).  
 7) Diäthylester d.  $\zeta$ -Cyan- $\beta$ -Methylhexan- $\varepsilon\zeta$ -Dicarbonsäure. Sd. 196°<sub>35</sub> (C. 1899 [2] 254). — \*I, 687.  
 8) Diäthylester d.  $\beta$ -Cyan- $\gamma\gamma$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sd. 174—176°<sub>30</sub> (Soc. 77, 940).  
 9) Diäthylester d.  $\gamma$ -Cyan- $\beta$ -Isopropylbutan- $\alpha\gamma$ -Dicarbonsäure. Sd. 180 bis 183°<sub>19</sub> (Soc. 77, 944).  
 10) Isovalerianat d. d-Ecgonin. Sm. 216°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 24, 11). — III, 866.
- C<sub>14</sub>H<sub>23</sub>O<sub>4</sub>Cl** 1) l-Diamylester d. Chlorfumarsäure. Sd. 187°<sub>14</sub> (Ph. Ch. 20, 380, 576). — \*I, 322.  
 2) l-Diamylester d. Chlormaleinsäure. Sd. 185°<sub>25</sub> (Ph. Ch. 20, 380). — \*I, 324.
- C<sub>14</sub>H<sub>23</sub>O<sub>4</sub>Br** 1) Diäthylester d. 4-Methylhexahydrophenylbrommalonsäure. Sd. 182—185°<sub>20</sub> (Soc. 95, 1367 C. 1909 [2] 1054).  
 2) l-Diamylester d. Bromfumarsäure. Sd. 185—187°<sub>15</sub> (Ph. Ch. 20, 380). — \*I, 323.  
 3) l-Diamylester d. Brommaleinsäure. Sd. 175—177°<sub>13</sub> (Ph. Ch. 20, 381). — \*I, 324.
- C<sub>14</sub>H<sub>23</sub>O<sub>5</sub>N** C 58,9 — H 8,1 — O 28,1 — N 4,9 — M. G. 285.  
 1) Diäthylester d.  $\beta$ -Amido- $\zeta$ -Keto- $\delta$ -Methyl- $\beta$ -Hepten- $\gamma s$ -Dicarbonsäure. Sm. 140° (B. 33, 3808).  
 2) Diäthylester d.  $\beta$ -Amido- $\gamma$ -Acetyl- $\delta$ -Methyl- $\beta$ -Penten- $\varepsilon s$ -Dicarbonsäure. Sm. 75° (B. 36, 2190 C. 1903 [2] 569).
- C<sub>14</sub>H<sub>23</sub>O<sub>5</sub>N<sub>3</sub>** C 53,7 — H 7,3 — O 25,6 — N 13,4 — M. G. 313.  
 1) Diäthylester d. 2-Semicarbazon-1-Methylhexahydrobenzol-1,3-Dicarbonsäure. Sm. 239° (A. 350, 214 C. 1907 [1] 249).
- C<sub>14</sub>H<sub>23</sub>O<sub>10</sub>N** C 46,0 — H 6,3 — O 43,8 — N 3,8 — M. G. 365.  
 1) Tetraäthylester d. Imidodimalonsäure. Sm. 103—105° (Am. 35, 357 C. 1906 [1] 1488).
- C<sub>14</sub>H<sub>23</sub>NBr<sub>2</sub>** 1) Bromäthylat d. 2-Brommethyl-1-Diäthylamidomethylbenzol (B. 31, 593). — \*II, 309.
- C<sub>14</sub>H<sub>23</sub>N<sub>3</sub>S** 1)  $\alpha$ -Dipropylmethylamido- $\beta$ -Phenylthioharnstoff. Sm. 122° (C. 1900 [1] 653; J. pr. [2] 64, 117). — \*II, 201.  
 2) Thiosemicarbazon d. Iron. Sm. 181° (C. 1904 [1] 281).  
 3) Thiosemicarbazon d.  $\alpha$ -Jonon. Sm. 121° (C. 1904 [1] 281).  
 4) Thiosemicarbazon d.  $\beta$ -Jonon. Sm. 158° (C. 1904 [1] 281).
- C<sub>14</sub>H<sub>23</sub>N<sub>3</sub>S** 1) Methyläther d. Thiodipiperidinammelin. Sm. 106—107°. (2HCl, PtCl<sub>4</sub>) (B. 18, 2779). — IV, 14.
- C<sub>14</sub>H<sub>24</sub>ON<sub>2</sub>** C 71,2 — H 10,2 — O 6,8 — N 11,8 — M. G. 236.  
 1) Base (aus Cuskoblättern). Sd. 215°<sub>50</sub>. 2HCl, (2HCl, 2AuCl<sub>3</sub>), 2HBr, 2HJ, Pikrat (B. 22, 678; 24, 409). — III, 878.  
 2) Base (aus Suberonisooxim). Sm. 81—82°. (HCl, AuCl<sub>3</sub>) (A. 324, 307 C. 1902 [2] 1507).  
 3) Camphersäureäthylimid-Äthylimidin. Sd. 285—286°. HCl, (2HCl, PtCl<sub>4</sub>), HJ (B. 13, 520; 14, 162; A. 214, 245). — I, 1392.  
 4) Piperidid d. 2,2,5,5-Tetramethyl-2,5-Dihydropyrrol-3-Carbonsäure. Sm. 74; Sd. 170°<sub>19</sub> (B. 33, 923). — \*IV, 64.
- C<sub>14</sub>H<sub>24</sub>O<sub>2</sub>N<sub>2</sub>** C 66,7 — H 9,5 — O 12,7 — N 11,1 — M. G. 252.  
 1) Piperidid d. Äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 70° (R. 26, 230 C. 1907 [2] 1247).
- C<sub>14</sub>H<sub>24</sub>O<sub>2</sub>Br<sub>4</sub>** 1) Tetrabrommyristinsäure (A. 202, 177). — I, 488.
- C<sub>14</sub>H<sub>24</sub>O<sub>3</sub>N<sub>2</sub>** C 62,8 — H 8,9 — O 17,9 — N 10,4 — M. G. 268.  
 1) 2,4,6-Triketo-5,5-Diisocamylhexahydro-1,3-Diazin. Sm. 172° (D.R.P. 146496 C. 1903 [2] 1484; A. 335, 347 C. 1904 [2] 1381).  
 2) Nitrosocarpain. Sm. 144—145°. — III, 804; \*III, 623.  
 3) Dipiperidid d.  $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 157,5° (Soc. 89, 1867 C. 1907 [1] 711).
- C<sub>14</sub>H<sub>24</sub>O<sub>3</sub>Si** 1) Triäthyläther d. 2,4-Dimethylphenylsiliciumtrihydroxyd. Sd. 268 bis 271° (B. 41, 2950 C. 1908 [2] 1347).

- $C_{14}H_{24}O_4N_2$  C 59,2 — H 8,4 — O 22,5 — N 9,9 — M. G. 284.  
 1) Diäthylester d. Äthylendi[ $\beta$ -Amidopropen- $\alpha$ -Carbonsäure]. Sm. 126 bis 127° (B. 20, 274). — I, 1207; \*I, 664.  
 2) Diäthylester d.  $\beta\eta$ -Diamido- $\beta\zeta$ -Oktadien- $\gamma\zeta$ -Dicarbonsäure? (D. d. Diamidodiäthylidenadipinsäure). Sm. 173–174° (Soc. 57, 218). — I, 821.  
 3) Azin d. Methylacetessigsäureäthylester. Fl. (B. 37, 2831 C. 1904 [2] 642).  
 4) Piperidid d. d-Weinsäure. Sm. 189–190° (Soc. 83, 1348 C. 1904 [1] 83).  
 5) Verbindung (aus Campheroxalsäure u. Äthylendiamin). Sm. 220° (Am. 39, 283 C. 1908 [1] 1182).
- $C_{14}H_{24}O_4Br_2$  1) Diäthylester d. Dibromsebacinsäure. Fl. (B. 20, 2886).
- $C_{14}H_{24}O_4S_4$  1) Duplodimethylacetylacetontetraoxytetrasulfid. Zers. bei 350° (B. 39, 3609 C. 1907 [1] 21).
- $C_{14}H_{24}O_6N_2$  C 53,2 — H 7,6 — O 30,4 — N 8,8 — M. G. 316.  
 1) Diäthylester d.  $\gamma\zeta$ -Dioximidooktan- $\alpha\beta$ -Dicarbonsäure. Sm. 129 bis 130° (A. 294, 175). — \*I, 419.
- $C_{14}H_{24}O_7N_6$  C 43,3 — H 6,2 — O 28,9 — N 21,6 — M. G. 388.  
 1) l- $\alpha$ -Amidopropionyldi[Amidoacetyl]-l- $\alpha$ -Amidopropionylamidoacetylamidoessigsäure. Zers. bei 207° (B. 39, 2925 C. 1906 [2] 1401; B. 40, 3715 C. 1907 [2] 1692).
- $C_{14}H_{24}O_8P_2$  1) Tetraäthylester d. 1,3-Dioxybenzoldiphosphinsäure. Fl. (B. 27, 2567). — II, 918.  
 2) Tetraäthylester d. 1,4-Dioxybenzoldiphosphinsäure. Fl. (B. 27, 2568). — II, 941.
- $C_{14}H_{24}O_{10}N_2$  C 44,2 — H 6,3 — O 42,1 — N 7,4 — M. G. 380.  
 1) Tetraäthylester d. Hydrazidobistartronsäure. Sm. 57–58° (C. 1909 [1] 1469).
- $C_{14}H_{24}O_{15}S$  1) Stärkeschwefelsäure (A. 55, 13). — I, 1087.
- $C_{14}H_{24}NCl$  1) Methyläthylisoamylphenylammoniumchlorid. 2 + PtCl<sub>4</sub> (A. 79, 13). — II, 336.
- $C_{14}H_{24}NJ$  1) Methyläthylisoamylphenylammoniumjodid (A. 79, 13). — II, 336.  
 2) Trimethyl- $\beta$ -Isamphenylammoniumjodid (B. 7, 529). — II, 563.  
 3) Jodmethylat d.  $\gamma$ -[4-Dimethylamidophenyl]pentan. Sm. 168–169° (B. 38, 522 C. 1905 [1] 737).
- $C_{14}H_{24}N_2Cl_2$  1) Dichloräthylat d. Nikotin. + 3HgCl<sub>2</sub>, + PtCl<sub>4</sub>, + 2AuCl<sub>3</sub> (A. 87, 3). — IV, 857.
- $C_{14}H_{24}N_2J_2$  1) Dijodäthylat d. Nikotin (A. 87, 4). — IV, 856.  
 2) l, 6-Bisjodmethylat d. 6-Dimethylamido-l-Methyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 171° (B. 21, 865). — IV, 853.
- $C_{14}H_{24}JP$  1) Triäthyl-4-Äthylphenylphosphoniumjodid (A. 293, 325). — IV, 1675.  
 2) Triäthyl-2, 4-Dimethylphenylphosphoniumjodid. Sm. 136° (B. 15, 2016). — IV, 1676.  
 3) Methyläthyl-2, 4, 5-Trimethylphenylphosphoniumjodid. Sm. 160° (A. 294, 34). — IV, 1679.  
 4) Methyläthyl-2, 4, 6-Trimethylphenylphosphoniumjodid. Sm. 125° u. Zers. (A. 294, 47). — IV, 1680.
- $C_{14}H_{25}ON$  C 75,3 — H 11,2 — O 7,2 — N 6,3 — M. G. 223.  
 1) Methyläthylisoamylphenylammoniumhydroxyd. (2HCl, PtCl<sub>4</sub>), HJ (A. 79, 13). — II, 336.  
 2) Methylhydroxyd d.  $\gamma$ -[4-Dimethylamidophenyl]pentan. Sm. 93 bis 94°. Jodid (B. 38, 521, 522 C. 1905 [1] 737; B. 38, 1088 C. 1905 [1] 1013).  
 3) d-Acetyläthylbornylamin. Sd. 285–290°<sub>785</sub> (Soc. 75, 946). — \*IV, 59.  
 4) l-Butyrylfenchylamin. Sm. 77,5° (A. 276, 319). — IV, 58.  
 5)  $\alpha$ -Verbindung (aus Propylbenzylketon u. Benzylidenanilin). Sm. 136° (Soc. 81, 960 C. 1902 [2] 198, 702).
- $C_{14}H_{25}ON_3$  C 66,9 — H 10,0 — O 6,4 — N 16,7 — M. G. 251.  
 1) Semicarbazon d. Propylthujon. Sm. 164–166° (C. r. 140, 1628 C. 1905 [2] 326).
- $C_{14}H_{25}O_3N$  C 70,3 — H 10,5 — O 13,4 — N 5,8 — M. G. 239.  
 1) Carpain. Sm. 121°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub> + 5H<sub>2</sub>O), HBr, HJ, HNO<sub>3</sub> + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 3H<sub>2</sub>O (C. 1897 [1] 985; 1897 [2] 554). — III, 804; \*III, 623.  
 2) Allylester d. l-Menthylamidoameisensäure. Sm. 40° (Soc. 89, 96 C. 1906 [1] 1019).

- C<sub>14</sub>H<sub>25</sub>O<sub>2</sub>N** 3) l-Menthylester d.  $\beta$ -Amidocrotonsäure. Sm. 88—89° (C. 1902 [2] 208; Soc. 81, 1505 C. 1903 [1] 138). — \*III, 334.
- C<sub>14</sub>H<sub>25</sub>O<sub>2</sub>N<sub>3</sub>** C 62,9 — H 9,4 — O 12,0 — N 15,7 — M. G. 267.
- 1) Semicarbazon d. Pseudojononhydrat. Sm. 144° (D.R.P. 143724 C. 1903 [2] 474).
- 2) Semicarbazon d. isom. Pseudojononhydrat. Sm. 130° (D.R.P. 164366 C. 1905 [2] 1748).
- 3) Semicarbazon d. isom. Pseudojononhydrat. Sm. 228° u. Zers. (D.R.P. 172653 C. 1906 [2] 723).
- C<sub>14</sub>H<sub>25</sub>O<sub>2</sub>Br** 1) Säure (aus Myristinsäure). Ba (B. 25, 486).
- C<sub>14</sub>H<sub>25</sub>O<sub>3</sub>N** C 65,9 — H 9,8 — O 18,8 — N 5,5 — M. G. 255.
- 1)  $\alpha$ -Di[ $\beta$ -Oxyäthyl]amidocampher. Fl. Pikrat (A. 307, 191). — \*III, 360.
- 2) Diäthylmonamid d. Camphersäure. Sm. 169—170° (C. 1908 [2] 1435).
- 3) sec. Butylmonamid d. Camphersäure. Sm. 206—208° (C. 1908 [2] 1435).
- C<sub>14</sub>H<sub>25</sub>O<sub>3</sub>N<sub>3</sub>** C 59,4 — H 8,8 — O 17,0 — N 14,8 — M. G. 283.
- 1) Semicarbazon d. Acetylcampholsäuremethylester. Sm. 251° (C. r. 144, 299 C. 1907 [1] 1126).
- 2) Äthylester d. 3-Semicarbazon-4-Isopropyl-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 144—145° (A. 342, 327 C. 1905 [2] 1792).
- 3) Äthylester d. 4-Semicarbazon-3-Isopropyl-1-Methylhexahydrobenzol-3-Carbonsäure. Sm. 130° (A. 348, 95 C. 1906 [2] 782).
- 4) r-Rhodinolester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 112° (C. r. 138, 1701 C. 1904 [2] 440).
- C<sub>14</sub>H<sub>25</sub>O<sub>4</sub>N** C 62,0 — H 9,2 — O 23,6 — N 5,2 — M. G. 271.
- 1) Cinneoldiäthylaminsäure. Sm. 162—163° (A. 271, 22). — I, 1398.
- 2) Methylester d. 4-Acetoxy-1,2,2,6,6-Pentamethylhexahydropyridin-4-Carbonsäure. Sm. 64° (D.R.P. 92589). — \*IV, 42.
- 3) Diäthylester d. 4[oder 5]-Dimethylamido-R-Pentamethylen-1-Carbonsäure-2-Methylcarbonsäure (Diäthylester d. Dimethyleincholoiponsäure). Sd. 167—168°<sub>16</sub>. (2HCl, PtCl<sub>4</sub>) (M. 21, 891). — \*III, 635.
- 4) Diäthylester d.  $\alpha$ -[1-Piperidyl]propan- $\alpha\beta$ -Dicarbonsäure. Sd. 163 bis 164°<sub>10</sub>. HCl (Soc. 73, 725). — \*IV, 17.
- 5) Dipropylester d. i-Tropinsäure. Fl. (B. 28, 3291). — III, 794.
- C<sub>14</sub>H<sub>25</sub>O<sub>4</sub>Cl** 1) l-Diamylester d. d-Chlorbernsteinsäure. Sd. 187°<sub>22</sub> (C. 1898 [2] 917). — \*I, 285.
- 2) l-Diamylester d. i-Chlorbernsteinsäure. Sd. 187—188°<sub>22</sub> (C. 1898 [2] 917; Ph. Ch. 20, 576). — \*I, 285.
- 3) i-Diamylester d. d-Chlorbernsteinsäure. Sd. 190°<sub>25</sub> (C. 1898 [2] 917). — \*I, 285.
- C<sub>14</sub>H<sub>25</sub>O<sub>4</sub>Br** 1) Diäthylester d.  $\zeta$ -Brom- $\beta$ -Methylheptan- $\epsilon\zeta$ -Dicarbonsäure. Sd. 155°<sub>20</sub> (C. 1900 [2] 370).
- 2) Diäthylester d.  $\gamma$ -[ $\alpha$ -Bromisopropyl]pentan- $\alpha\epsilon$ -Dicarbonsäure. Fl. (Soc. 91, 1742 C. 1907 [2] 1975).
- C<sub>14</sub>H<sub>25</sub>N<sub>3</sub>Br** 1) Brombutylat d. s-Butylphenylhydrazin. Sm. 148° (Bl. [3] 33, 329 C. 1905 [1] 1145).
- C<sub>14</sub>H<sub>25</sub>N<sub>3</sub>J** 1) Jodbutylat d. s-Butylphenylhydrazin. Sm. 95° (Bl. [3] 33, 327 C. 1905 [1] 1145).
- C<sub>14</sub>H<sub>26</sub>ON<sub>2</sub>** C 70,6 — H 10,9 — O 6,7 — N 11,8 — M. G. 238.
- 1)  $\alpha$ -Di[3-Methylhexahydrophenyl]nitrosamin. Sm. 83—84° (A. 346, 264 C. 1906 [2] 339).
- 2)  $\beta$ -Di[3-Methylhexahydrophenyl]nitrosamin. Sm. 62—70° (A. 346, 264 C. 1906 [2] 340).
- 3) Nitrolpiperidid d. Propylidenhexahydrobenzol. Sm. 123° (A. 360, 57 C. 1908 [1] 2161).
- 4) Nitrolpiperidid d. 5-Propyl-1,2,3,4-Tetrahydrobenzol. Sm. 126 bis 128° (A. 360, 58 C. 1908 [1] 2161).
- 5) Nitrolpiperid d. 1-Methyl-3-Äthylidenhexahydrobenzol. Sm. 101° (A. 360, 52 C. 1908 [1] 2161).
- 6) Nitrolpiperidid d. 1-Methyl-4-Äthylidenhexahydrobenzol. Sm. 127—134° (A. 360, 53 C. 1908 [1] 2161).
- 7)  $\alpha$ -Cyklogeraniolennitrolpiperidid. Sm. 136—138° (C. 1902 [1] 1295; A. 324, 103 C. 1902 [2] 1200). — \*IV, 19.
- 8) Pulegennitrolpiperidid. Sm. 106—107° (C. 1902 [1] 1295; A. 327, 132 C. 1903 [1] 1412). — \*IV, 19.



- C<sub>14</sub>H<sub>26</sub>ON<sub>2</sub>** 9) Nitrolpiperidid d. Kohlenw. C<sub>9</sub>H<sub>16</sub> (aus Fenchylamin). Sm. 158 bis 159° (A. 369, 85 C. 1909 [2] 2003).
- 10) Terpinennitroldiäthylamin. Sm. 117—118° (A. 241, 319). — III, 532.
- 11) Allylamid d. l-Menthylamidoameisensäure. Sm. 115° (Soc. 91, 304 C. 1907 [1] 1331).
- C<sub>14</sub>H<sub>26</sub>OBr<sub>2</sub>** 1) Dibromderivat d. Diönanthylenaldehyd (B. 16, 212). — I, 962.
- C<sub>14</sub>H<sub>26</sub>OS** 1) Di[3-Methylhexahydrophenyl]sulfoxyd. Fl. (B. 40, 2223 C. 1907 [2] 306).
- C<sub>14</sub>H<sub>26</sub>O<sub>2</sub>S** 1) Di[3-Methylhexahydrophenyl]sulfon. Sm. 153° (B. 40, 2223 C. 1907 [2] 306).
- C<sub>14</sub>H<sub>26</sub>O<sub>3</sub>N<sub>2</sub>** C 62,2 — H 9,6 — O 17,8 — N 10,4 — M. G. 270.
- 1) α-[β-Menthylureido]propionsäure. Sm. 160° (C. 1908 [2] 2007).
- 2) Methylester d. αα-Dipiperidyl-α-Oxyessigmethyläthersäure. Sd. 166°<sub>20</sub> (B. 28, 62; A. 306, 15; Soc. 85, 987 C. 1904 [2] 830). — \*IV, 12. C 58,7 — H 9,1 — O 22,4 — N 9,8 — M. G. 286.
- C<sub>14</sub>H<sub>26</sub>O<sub>4</sub>N<sub>2</sub>** 1) Oxychrysanthemin. HCl, (2HCl, AuCl<sub>3</sub>) (G. 21 [1] 523). — III, 862.
- C<sub>14</sub>H<sub>26</sub>O<sub>4</sub>S<sub>2</sub>** 1) Diäthylester d. Diisobutylidisulfid-αα'-Dicarbonsäure. Sd. 173°<sub>11</sub> (Soc. 95, 1054 C. 1909 [2] 1046).
- C<sub>14</sub>H<sub>26</sub>O<sub>10</sub>N<sub>2</sub>** C 44,0 — H 6,7 — O 42,0 — N 7,3 — M. G. 382.
- 1) Acetyldichitosamin (M. 23, 131 C. 1902 [1] 1092).
- 2) Acetyldiglykosamin (C. 1908 [1] 624).
- 3) polym. Acetyldiglykosamin (Chitin) (C. 1908 [1] 623).
- 4) Chitosan (B. 27, 3329; 28, 82; M. 23, 123; H. 20, 498; 22, 301, 305; Ar. 267, 289 C. 1909 [2] 1136). — III, 576; \*II, 434.
- C<sub>14</sub>H<sub>26</sub>NJ** 1) Jodallylat d. d-1-Allyl-2-Propylhexahydropyridin. Sm. 183° (B. 38, 598 C. 1905 [1] 751).
- C<sub>14</sub>H<sub>26</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Bischlormethylat d. 1,2-Di[Dimethylamidomethyl]benzol. + HgCl<sub>2</sub>, + PtCl<sub>4</sub> + ½ H<sub>2</sub>O (B. 31, 593). — \*IV, 411.
- 2) Bischlormethylat d. 4-Dimethylamido-1-Diäthylamidobenzol. + PtCl<sub>4</sub>, + 2AuCl<sub>3</sub> (M. 4, 788). — IV, 583.
- C<sub>14</sub>H<sub>26</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Bisbrommethylat d. 1,2-Di[Dimethylamidomethyl]benzol. Sm. 207 bis 208° (B. 31, 593). — \*IV, 411.
- C<sub>14</sub>H<sub>26</sub>N<sub>2</sub>J<sub>2</sub>** 1) Bisjodmethylat d. 4-Dimethylamido-1-Diäthylamidobenzol. Sm. 218°. + CdJ<sub>2</sub> (M. 4, 788). — IV, 583.
- C<sub>14</sub>H<sub>26</sub>N<sub>2</sub>S** 1) s-Allyl-4-Isopropylbenzylthioharnstoff. Sm. 47° (B. 22, 932). — II, 561.
- 2) s-Allyl-d-Menthylthioharnstoff. Sm. 110° (A. 276, 311). — IV, 43.
- C<sub>14</sub>H<sub>26</sub>N<sub>4</sub>S<sub>2</sub>** 1) Verbindung (aus Formaldehyd, Piperidin u. Rubeanwasserstoffsäure). Sm. 143° (C. 1899 [2] 1025). — \*IV, 18.
- C<sub>14</sub>H<sub>27</sub>ON** C 74,7 — H 12,0 — O 7,1 — N 6,2 — M. G. 225.
- 1) Nitril d. α-Oxytridekan-α-Carbonsäure. Sm. 44,5° (Soc. 87, 1904 C. 1906 [1] 653).
- 2) d-Menthylamid d. Buttersäure. Sm. 105—106° (A. 276, 310). — IV, 43.
- 3) l-Menthylamid d. Buttersäure. Sm. 80° (A. 276, 304). — IV, 42.
- C<sub>14</sub>H<sub>27</sub>OCl** 1) Chlorid d. Myristinsäure. Sm. —1°; Sd. 168°<sub>18</sub> (B. 17, 1379). — I, 460.
- C<sub>14</sub>H<sub>27</sub>O<sub>2</sub>N** C 69,7 — H 11,2 — O 13,3 — N 5,8 — M. G. 241.
- 1) Äthyldi[2-Oxyhexahydrophenyl]amin. Sm. 114°; Sd. 352°. HCl (C. 1905 [2] 1338).
- 2) Äthylester d. β-Diäthylamido-α-Hepten-α-Carbonsäure. Sd. 170 bis 178°<sub>26</sub> (C. r. 143, 597 C. 1907 [1] 25).
- 3) Äthylester d. 5-Dimethylamido-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. Sd. 115—116° (A. 366, 183 C. 1909 [2] 614).
- 4) Äthylester d. trans-1-Diäthylamidomethylhexahydrobenzol-2-Carbonsäure. Sd. 165°<sub>26</sub> (A. 300, 167). — \*II, 706.
- 5) Äthylester d. cis-1-Diäthylamidomethylhexahydrobenzol-4-Carbonsäure. Sd. 200° (i. V.) (A. 310, 214). — \*II, 707.
- 6) Äthylester d. 3-Isoamylamidoheptahydrobenzol-1-Carbonsäure. Sd. 153—155°<sub>11</sub> (A. 319, 336 C. 1902 [1] 351).
- 7) Propylester d. l-Menthylamidoameisensäure. Sm. 57° (Soc. 85, 690 C. 1904 [2] 332; Soc. 89, 97 C. 1906 [1] 1019).
- 8) Isopropylester d. l-Menthylamidoameisensäure. Sm. 70° (Soc. 89, 96 C. 1906 [1] 1019).

- $C_{14}H_{27}O_2N_3$  C 62,4 — H 10,0 — O 11,9 — N 15,6 — M. G. 269.
- $C_{14}H_{27}O_2N_5$  1)  $\beta$ -Nitro- $\alpha\gamma$ -Dipiperidyl- $\beta$ -Methylpropan. Sm. 98—99° (*Bl.* [3] 15, 1226).  
C 56,5 — H 9,1 — O 10,8 — N 23,6 — M. G. 297.
- $C_{14}H_{27}O_2Cl$  1)  $\beta$ -Chloräthylester d. Laurinsäure. Sm. 24°; Sd. 100° (*B.* 36, 4341  
C. 1904 [1] 433).
- $C_{14}H_{27}O_2Br$  1)  $\alpha$ -Brommyristinsäure. Sm. 41,5—42,5° (31°) (*B.* 22, 1746; 25, 486;  
*Soc.* 87, 1902 C. 1906 [1] 653). — I, 488.  
2) Äthylester d.  $\alpha$ -Bromundekan- $\alpha$ -Carbonsäure. Sd. 172—174°<sub>10</sub> (*B.*  
24, 2224). — I, 488.  
3)  $\beta$ -Bromäthylester d. Laurinsäure. Sm. 36°; Sd. 124° (*B.* 36, 4341  
C. 1904 [1] 433).
- $C_{14}H_{27}O_3N$  C 65,4 — H 10,5 — O 18,7 — N 5,4 — M. G. 257.
- $C_{14}H_{27}O_3N_3$  1) Laurylamidoessigsäure (Laurylglycin). Sm. 117,5°. Na (C. 1909  
[2] 269).
- $C_{14}H_{27}O_3N_3$  C 58,9 — H 9,5 — O 16,8 — N 14,7 — M. G. 285.
- 1)  $\beta$ -Nitro- $\alpha\gamma$ -Di[1-Piperidyl]- $\beta$ -Oxymethylpropan. Sm. 78—79° (*B.* 38,  
2032 C. 1905 [2] 299).  
2) isom.  $\beta$ -Nitro- $\alpha\gamma$ -Di[1-Piperidyl]- $\beta$ -Oxymethylpropan. Sm. 101 bis  
102° (*C.* 1899 [1] 1154; *B.* 38, 2029 C. 1905 [2] 299). — \*IV, 14.  
3)  $\beta\zeta$ -Dimethyloktylester d.  $\alpha$ -Semicarbazonpropionsäure. Sm. 124°  
(*C. r.* 138, 985 C. 1904 [1] 1398).  
4) Caprylat d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 104—105° (*C. r.* 138,  
1275 C. 1904 [2] 93).
- $C_{14}H_{27}O_4N$  C 61,5 — H 9,9 — O 23,4 — N 5,1 — M. G. 273.
- 1) Propylester d.  $\beta$ -Dimethylamido- $\alpha$ -Isovaleroxyisobuttersäure. Sd.  
145°<sub>16</sub>. HBr (Quietol) (D.R.P. 198306 C. 1908 [1] 1957; D.R.P. 202167  
C. 1908 [2] 1220; C. 1908 [2] 400, 433; *Bl.* [4] 5, 241 C. 1909 [1] 1320).
- $C_{14}H_{27}O_4N_3$  C 55,8 — H 9,0 — O 21,3 — N 13,9 — M. G. 301.
- 1) l- $\alpha$ -[l- $\alpha$ -Amidoisocapronylamidoacetyl]amidoisocapronsäure (A.  
365, 177 C. 1909 [1] 1805).  
2) r- $\alpha$ -[ $\alpha$ -Amidoisocapronylamidoacetyl]amidoisocapronsäure. Sm.  
253° u. Zers. (*B.* 38, 2924 C. 1905 [2] 1330).
- $C_{14}H_{27}O_6P$  1) Diacetoxyl-diisoamylunterphosphorige Säure. Fl. (*A. ch.* [6] 23, 325).  
— I, 1505.
- $C_{14}H_{27}N_2J$  1) Jodmethylat d. Des-N-Dimethyltetrahydrodesoxycytisin. Sm. 240  
bis 241° (*B.* 39, 824 C. 1906 [1] 1173).
- $C_{14}H_{28}ON_2$  C 70,0 — H 11,7 — O 6,6 — N 11,7 — M. G. 240.
- 1) Isobutyl-l-Menthylnitrosamin. Sm. 52—53°; Sd. 160—161°<sub>20</sub> (*A.* 300,  
280). — \*IV, 36.  
2) Propylamid d. l-Menthylamidoameisensäure. Sm. 100° (*Soc.* 91,  
304 C. 1907 [1] 1331).
- $C_{14}H_{28}OS$  1) Diheptylenoxysulfid. Sd. 200—250° (*A. Spl.* 6, 35). — I, 956.  
2) Thiolmyristinsäure. Sm. 25°. Na (*C. r.* 136, 555 C. 1903 [1] 816).
- $C_{14}H_{28}O_2N_2$  C 65,6 — H 10,9 — O 12,5 — N 10,9 — M. G. 256.
- 1) sym. Hexylönanthylharnstoff. Sm. 97° (*B.* 15, 759). — I, 1304.  
2) Di[Methylhydroxyd] d. 4-Dimethylamido-l-Diäthylamidobenzol.  
Chlorid, Jodid, Pikrat (*M.* 4, 788). — IV, 583.  
3) Dipseudohexylamid d. Oxalsäure. Sm. 144° (*B.* 23, 194). — I, 1366.  
4) Di[ $\beta\beta$ -Dimethylbutylamid] d. Oxalsäure. Sm. 102° (*B.* 26, 2493). —  
\*I, 760.
- $C_{14}H_{28}O_2S$  1) Verbindung (aus d.  $\beta\beta$ -Diisoamylsulfon- $\alpha\alpha$ -Diäthylbuttersäureäthylester).  
Sd. 220—230° (*B.* 34, 2673).
- $C_{14}H_{28}O_2S_2$  1) Äthylester d.  $\beta\beta$ -Dimerkapto- $\alpha\alpha$ -Diäthylbutterdiäthyläthersäure.  
Fl. (*B.* 34, 2671).
- $C_{14}H_{28}O_3N_2$  C 61,8 — H 10,3 — O 17,6 — N 10,3 — M. G. 272.
- 1) Isopropylamid d. l-Menthylamidoameisensäure. Sm. 146° (*Soc.* 91,  
304 C. 1907 [1] 1331).  
2) Chrysanthemin. (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>) (*G.* 21, 517; 25 [1]  
255; C. 1895 [1] 1068). — III, 862.
- $C_{14}H_{28}O_4N_2$  C 58,3 — H 9,7 — O 22,2 — N 9,7 — M. G. 238.
- 1) Diäthylester d.  $\alpha\zeta$ -Diamidohexan- $\alpha\zeta$ -Dicarbonsäure. Sd. 240°<sub>10</sub>.  
2HCl, 2Pikrat (*H.* 45, 107 C. 1905 [2] 463).

- $C_{14}H_{28}O_4N_2$  2) Diäthylester d.  $\alpha$ -9-Oktomethylendiamidoameisensäure. Sm. 78 bis 80° (*J. pr.* [2] 62, 223).
- 3) Di[ $\alpha$ -Oxymethyl- $\gamma$ -Methylbutylamid] d. Oxalsäure. Sm. 99–100° (*C.* 1902 [1] 400).
- $C_{14}H_{28}O_5S_2$  1)  $\gamma$ -Diamylsulfon- $\beta$ -Ketobutan. Fl. (*B.* 35, 499 *C.* 1902 [1] 636).
- $C_{14}H_{28}O_6S_2$  1) Äthylester d.  $\beta$ -Di[Äthylsulfon]- $\alpha$ -Diäthylbuttersäure. Sm. 84 bis 86° (*B.* 34, 2671).
- $C_{14}H_{28}O_{12}N_2$  C 40,4 — H 6,7 — O 46,2 — N 6,7 — M. G. 416.
- 1) Di[ $\beta$  $\gamma$  $\delta$  $\epsilon$  $\zeta$ -Pentaoxyhexylamid] d. Oxalsäure (Oxamid d. Glucamin). Sm. 178° (*Bl.* [3] 25, 590; *C.* 1904 [1] 431).
- 2) isom. Di[ $\beta$  $\gamma$  $\delta$  $\epsilon$  $\zeta$ -Pentaoxyhexylamid] d. Oxalsäure (Oxamid d. Mannamin). Sm. 218–219° (*C. r.* 138, 505 *C.* 1904 [1] 872).
- $C_{14}H_{28}NJ$  1) Dimethyläthylbornylammoniumjodid. Sm. 270° u. Zers. (*Soc.* 75, 947). — \*IV, 59.
- $C_{14}H_{28}N_2Cl_2$  1) Diäthylendipiperidylumchlorid. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*B.* 4, 740; 34, 3557; *B.* 38, 3138 *C.* 1905 [2] 1357). — IV, 10.
- $C_{14}H_{28}N_2Br_2$  1) Diäthylendipiperidylumbromid (*B.* 4, 740). — IV, 10.
- $C_{14}H_{28}N_2J_2$  1) Diäthylendipiperidylumjodid. Sm. 295° (300°) (*B.* 32, 991; *B.* 40, 2936 *C.* 1907 [2] 472). — \*IV, 8.
- $C_{14}H_{28}N_2J_4$  1) Di[Dijodmethylat] d.  $\alpha$ - $\beta$ -Di[1-Piperidyl]äthan. Sm. 182° (*B.* 35, 3051 *C.* 1902 [2] 1127). — \*IV, 8.
- $C_{14}H_{28}N_2S_4$  1) Disulfid d. Dipropylamidodithioameisensäure (Tetrapropylthiuramdisulfid). Sm. 50° (*B.* 35, 820 *C.* 1902 [1] 712).
- $C_{14}H_{29}ON$  C 74,0 — H 12,8 — O 7,0 — N 6,2 — M. G. 227.
- 1)  $\alpha$ -Oximidotetradekan. Sm. 82° (*B.* 23, 2361; *Soc.* 87, 1900 *C.* 1906 [1] 653). — I, 970.
- 2)  $\gamma$ -Oximidotetradekan. Sm. 40° (*Bl.* [3] 29, 1210 *C.* 1904 [1] 355).
- 3) Amid d. Myristinsäure. Sm. 102° (104–105°; Sd. 217°<sub>12</sub> (135–136°) (*A.* 202, 174; *B.* 15, 1730; 18, 2016; 26, 2840; 29, 1324; *J. pr.* [2] 52, 60; *M.* 26, 95 *C.* 1905 [1] 505). — I, 1249; \*I, 705.
- 4) Amid d.  $\beta$ -Methyldekan- $\beta$ -Carbonsäure. Sm. 95–96° (*C. r.* 149, 7 *C.* 1909 [2] 600).
- $C_{14}H_{29}ON_3$  C 65,9 — H 11,4 — O 6,3 — N 16,4 — M. G. 255.
- 1)  $\alpha$ -Semicarbazontridekan. Sm. 106° (*Soc.* 87, 1904 *C.* 1906 [1] 653).
- 2)  $\beta$ -Semicarbazontridekan. Sm. 123° (*Bl.* [3] 29, 1130 *C.* 1904 [1] 258).
- 3)  $\beta$ -Semicarbazon- $\gamma$ -Methyldekan. Sm. 78–79° (*C. r.* 141, 768 *C.* 1906 [1] 22).
- $C_{14}H_{29}O_2N$  C 69,1 — H 11,9 — O 13,2 — N 5,8 — M. G. 243.
- 1) Amidomyristinsäure. Sm. 253° (*B.* 22, 1747). — I, 1205.
- 2) Amid d.  $\alpha$ -Oxytridekan- $\alpha$ -Carbonsäure. Sm. 150° (*Soc.* 87, 1904 *C.* 1906 [1] 653).
- $C_{14}H_{29}O_3N$  C 64,9 — H 11,2 — O 18,5 — N 5,4 — M. G. 259.
- 1) Nitrat d.  $\alpha$ -Oxytetradekan. Sd. 175–180°<sub>12</sub> (*C. r.* 136, 1563 *C.* 1903 [2] 338).
- $C_{14}H_{30}ON_2$  C 69,4 — H 12,4 — O 6,6 — N 11,6 — M. G. 242.
- 1)  $\alpha$ -Oximido- $\alpha$ -Amidotetradekan (Myristinamidoxim). Sm. 97° (*B.* 26, 2844). — \*I, 838.
- $C_{14}H_{30}ON_4$  C 62,3 — H 11,1 — O 5,9 — N 20,7 — M. G. 270.
- 1)  $\alpha$ -Diisoamylamido- $\beta$ -Semicarbazonpropan. Sm. 166° (*B.* 29, 873). — \*I, 826.
- $C_{14}H_{30}OS$  1) norm. Diheptylsulfoxyd. Sm. 70° (*J.* 1887, 1280; *Bl.* 49, 72). — I, 363.
- $C_{14}H_{30}O_2N_2$  C 65,1 — H 11,6 — O 12,4 — N 10,8 — M. G. 258.
- 1) Diäthylendipiperidylumhydroxyd. Salze, siehe diese (*B.* 38, 3138 *C.* 1905 [2] 1357).
- 2) Isovalerianat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Dimethylamidomethylbutan. Sd. 137°<sub>18</sub> (*D. R. P.* 173631 *C.* 1906 [2] 933).
- $C_{14}H_{30}O_2S$  1) norm. Diheptylsulfon. Sm. 80° (*J.* 1887, 1281). — I, 363.
- $C_{14}H_{30}O_4N_4$  C 52,7 — H 9,4 — O 20,1 — N 17,6 — M. G. 318.
- 1) Di[Diäthylamidomethylamid] d. Weinsäure. Fl. Dipikrat (*A.* 361, 143 *C.* 1908 [2] 398).
- $C_{14}H_{30}O_6N_4$  C 48,0 — H 8,6 — O 27,4 — N 16,0 — M. G. 350.
- 1) Di[ $\beta$ -Diäthoxyäthylhydrazid] d. Oxalsäure. Sm. 134° (*B.* 27, 183). — \*I, 835.



- $C_{14}H_{30}O_6S_3$  1)  $\beta\zeta\zeta$ -Triäthylsulfon- $\beta$ -Methylheptan (B. 37, 508 C. 1904 [1] 883).
- $C_{14}H_{30}O_5S_4$  1)  $\beta\beta\epsilon\epsilon$ -Tetra[Äthylsulfon]hexan. Sm. 200–201° (B. 33, 2992).
- $C_{14}H_{30}NJ$  1) Jodpropylat d. d-1,2-Dipropylhexahydropyridin. Sm. 219° (B. 38, 598 C. 1905 [1] 751).
- $C_{14}H_{30}N_3J_2$  1) Di[Jodmethylat] d.  $\alpha\beta$ -Di[1-Piperidyl]äthan (B. 32, 993). — \*IV, 8.
- $C_{14}H_{31}O_4N$  1) Tetraäthyläther d. Di[ $\gamma\gamma$ -Dioxypropyl]amin. Sd. 157°<sub>15</sub> (B. 38, 4161 C. 1906 [1] 447; B. 40, 4685 C. 1908 [1] 376).
- $C_{14}H_{31}O_4P$  1) Dioxydionanthylunterphosphorige Säure. Sm. bei 160° u. Zers.  $K + 4H_2O$ ,  $Ba + 3H_2O$ ,  $Pb + 3H_2O$  (A. ch. [6] 23, 312). — I, 1505.
- $C_{14}H_{31}O_5B$  1) Borverbindung d. Glycerinaldehyddiäthylacetal. K (B. 32, 3489).
- $C_{14}H_{32}O_2N_2$  1) Verbindung (aus 2,6-Dimethylhexahydropyridin u. Wasserstoffsuperoxyd). Sm. 69–70° (B. 34, 2431). — \*IV, 27.
- $C_{14}H_{32}O_4Si$  1) Kieselsäurediäthyl-diisoamylester. Sd. 245–250° (A. ch. [4] 9, 19). — I, 347.
- $C_{14}H_{32}O_5N_2$  C 45,2 — H 8,6 — O 38,7 — N 7,5 — M. G. 372.
- 1) Verbindung (aus Rhamnose). Sm. 80° (R. 14, 146). — \*I, 105.
- $C_{14}H_{31}N_4Cl_2$  1) Bischloräthylat d.  $\alpha\beta$ -Di[Diäthylamido]äthan. +  $PtCl_4$  (Ar. 245, 251 C. 1907 [2] 790).
- 2) Bischlorpropylat d.  $\alpha\beta$ -Di[Methyläthylamido]äthan. 2 +  $PtCl_4$  (C. 1898 [1] 727).
- $C_{14}H_{34}N_2Br_2$  1) Bisbromäthylat d.  $\alpha\beta$ -Di[Diäthylamido]äthan. Sm. 245–246° (Ar. 245, 250 C. 1907 [2] 790).
- $C_{14}H_{31}N_2J_2$  1) Bisjodäthylat d.  $\alpha\beta$ -Di[Diäthylamido]äthan (J. 1859, 387). — I, 1154.
- $C_{14}H_{34}Cl_2P_2$  1) Äthylenhexaäthylidiphosphoniumchlorid. 2 +  $PtCl_4$  (A. Spl. 1, 187). — I, 1506.
- 2) isom. Äthylenhexaäthylidiphosphoniumchlorid (A. Spl. 1, 210). — I, 1506.
- $C_{14}H_{34}Cl_2As_2$  1) Äthylenhexaäthylidiarsoniumchlorid. 2 +  $PtCl_4$  (A. Spl. 1, 316). — I, 1514.
- $C_{14}H_{34}Br_2P_2$  1) Äthylenhexaäthylidiphosphoniumbromid. +  $AgBr$  (J. 1860, 329; A. Spl. 1, 177). — I, 1506.
- $C_{14}H_{34}Br_2As_2$  1) Äthylenhexaäthylidiarsoniumbromid (A. Spl. 1, 316). — I, 1514.
- $C_{14}H_{34}J_2P_2$  1) Äthylenhexaäthylidiphosphoniumjodid. Sm. 231° (A. Spl. 1, 188). — I, 1506.
- 2) isom. Äthylenhexaäthylidiphosphoniumjodid (A. Spl. 1, 212). — I, 1506.
- $C_{14}H_{34}J_2As_2$  1) Äthylenhexaäthylidiarsoniumjodid (A. Spl. 1, 316). — I, 1513.
- $C_{14}H_{36}O_2N_2$  C 63,6 — H 13,6 — O 12,1 — N 10,6 — M. G. 264.
- 1) Bisäthylhydroxyd d.  $\alpha\beta$ -Di[Diäthylamido]äthan (Ar. 245, 251 C. 1907 [2] 790).
- $C_{14}H_{36}O_2P_2$  1) Äthylenhexaäthylidiphosphoniumhydroxyd. Salze, siehe diese (J. 1860, 329; A. Spl. 1, 182). — I, 1506.
- 2) isom. Äthylenhexaäthylidiphosphoniumhydroxyd (A. Spl. 1, 208). — I, 1506.
- $C_{14}H_{36}O_8P_2$  1) Verbindung (aus Phosphorsäuretriäthylester u. Phosphorigsäuretriäthylester u. Alkohol). Sd. 157,5° (A. 224, 275; 256, 275).

### $C_{14}$ -Gruppe mit vier Elementen.

- $C_{14}H_2O_2N_2Cl_3$  1) Oktochlor-1,5-Diamido-9,10-Anthrachinon. Sm. 100° (C. 1901 [2] 1137).
- $C_{14}H_2O_6N_2Br_4$  1) p-Tetrabrom-p-Dinitro-9,10-Anthrachinon. Sm. 105° (B. 14, 981). — III, 413.
- $C_{14}H_4O_2Cl_4Br_2$  1) Di[ $\alpha$ -Brom-3,5-Dichlorbenzyliden]chinon? Sm. noch nicht bei 280° (A. 338, 247 C. 1905 [1] 1150).
- $C_{14}H_4O_2Cl_5Br$  1)  $\alpha$ -Chlor- $\alpha'$ -Bromdi[3,5-Dichlorbenzyliden]chinon. Sm. 218–219° u. Zers. (A. 338, 252 C. 1905 [1] 1150).
- $C_{14}H_4O_6N_2Cl_2$  1) 4,8-Dichlor-1,5-Dinitro-9,10-Anthrachinon (D. R. P. 137782 C. 1903 [1] 108).
- 2) 4,5-Dichlor-1,8-Dinitro-9,10-Anthrachinon (D. R. P. 137782 C. 1903 [1] 108).

- $C_{14}H_4O_6N_2Br_2$  1) 4,8-Dibrom-1,5-Dinitro-9,10-Anthrachinon (D.R.P. 137782 C. 1903 [1] 108).  
 2) *p*-Dibrom-*p*-Dinitro-9,10-Anthrachinon. Sm. 239° (B. 14, 1337). — III, 412.
- $C_{14}H_4O_6N_4Br_4$  1) 2,4,6,8-Tetrabrom-1,5-Di[Nitramido]-9,10-Anthrachinon (B. 37, 4445 C. 1905 [1] 181).
- $C_{14}H_4O_8N_2Br_2$  1) 2,6-Dibrom-4,8-Dinitro-1,5-Dioxy-9,10-Anthrachinon (C. 1899 [1] 1232). — \*III, 305.
- $C_{14}H_4O_8N_6S$  1) Nitril d. 4,6,4',6'-Tetranitrodiphenylsulfid-2,2'-Dicarbonsäure. Sm. 238° (R. 20, 420 C. 1902 [1] 419).
- $C_{14}H_4O_8Cl_4S_2$  1) 1,2,3,4-Tetrachlor-9,10-Anthrachinon-*p*-Disulfonsäure. Ca, Ba (A. 238, 349). — III, 416.
- $C_{14}H_4O_{10}N_2Br_2$  1) *p*-Dibromdinitro-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 97287 C. 1898 [2] 689). — \*III, 313.
- $C_{14}H_4O_{10}N_6Br_2$  1) 2,6-Dibrom-4,8-Dinitro-1,5-Di[Nitramido]-9,10-Anthrachinon. Zers. bei 142–143°.  $(NH_4)_2$ ,  $Na_2$ ,  $K_2$  (B. 37, 4441 C. 1905 [1] 180).
- $C_{14}H_5O_2NCl_4$  1) Tetrachlor-*γ*-Pyrophtalon. Sm. oberhalb 260° (B. 38, 164 C. 1905 [1] 453).  
 2) Phenylimid d. 3,4,5,6-Tetrachlorbenzol-1,2-Dicarbonsäure. Sm. 268–269° (B. 32, 1994). — \*II, 1060.
- $C_{14}H_5O_2Cl_2Br$  1) 1,4-Dichlor-*p*-Brom-9,10-Anthrachinon. Sm. 233° (D.R.P. 214714 C. 1909 [2] 1603).
- $C_{14}H_5O_4NBr_2$  1) *p*-Dibrom-*p*-Nitro-9,10-Anthrachinon. Sm. 245° (B. 14, 980, 1334). — III, 412.
- $C_{14}H_5O_6N_2Br$  1) *p*-Brom-*p*-Dinitro-9,10-Anthrachinon. Sm. 213° (B. 14, 1333). — III, 412.
- $C_{14}H_5O_{11}N_4Br$  1) *p*-Brom-*p*-Tetranitrodiphenylketon-2-Carbonsäure. Sm. 178° (B. 39, 195 C. 1906 [1] 675).
- $C_{14}H_6ON_2Br_2$  1) Anhydrid d. 2,7-Dibrom-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 306° (B. 40, 4564 C. 1908 [1] 135).
- $C_{14}H_6O_2NBr_7$  1) Acetat d. 2,3,5,6,2',4',6'-Heptabrom-4-Oxydiphenylamin. Sm. 193° (Soc. 93, 1250 C. 1908 [2] 780).
- $C_{14}H_6O_2N_2Cl_4$  1) *p*-Tetrachlor-1,5-Diamido-9,10-Anthrachinon (C. 1901 [1] 1255; 1901 [2] 1137; D.R.P. 158951 C. 1905 [1] 842).  
 2) *p*-Tetrachlor-1,8-Diamido-9,10-Anthrachinon (D.R.P. 158951 C. 1905 [1] 842).
- $C_{14}H_6O_2N_2Br_4$  1) *p*-Tetrabrom-1,4-Diamido-9,10-Anthrachinon. Sm. noch nicht bei 300° (D.R.P. 137783 C. 1903 [1] 112).  
 2) 2,4,6,8-Tetrabrom-1,5-Diamido-9,10-Anthrachinon (D.R.P. 148109 C. 1904 [1] 230; B. 37, 4183 C. 1904 [2] 1741).  
 3) *p*-Tetrabrom-1,8-Diamido-9,10-Anthrachinon (D.R.P. 128845 C. 1902 [1] 506).
- $C_{14}H_6O_2N_2Br_6$  1) Glyoxim-N-2,4,6-Tribromphenyläther. Sm. 249,5° u. Zers. (B. 31, 563). — \*II, 244.
- $C_{14}H_6O_2Cl_4Br_2$  1)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 268° u. Zers. (A. 338, 246 C. 1905 [1] 1150).
- $C_{14}H_6O_2Cl_5Br$  1)  $\alpha$ -Chlor- $\beta$ -Brom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 258 bis 259° (A. 338, 253 C. 1905 [1] 1150).
- $C_{14}H_6O_2Cl_6Br_2$  1)  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 222–223° u. Zers. (A. 338, 250 C. 1905 [1] 1150).
- $C_{14}H_6O_2Br_8S$  1) Sulfid d. 2,3,5,6-Tetrabrom-4-Oxy-1-Merkaptomethylbenzol. Sm. 255° u. Zers. (A. 343, 118 C. 1906 [1] 134).
- $C_{14}H_6O_3NBr_8$  1) Phenylimid d. 3,5,6-Tribrom-4-Oxybenzol-1,2-Dicarbonsäure. Sm. 247–248°. Anilinsalz (A. 361, 244 C. 1908 [2] 412).
- $C_{14}H_6O_3Br_4S$  1) *p*-Tetrabromanthracen-2-Sulfonsäure.  $Na + 4H_2O$  (B. 28, 2260). — \*II, 122.
- $C_{14}H_6O_4NCl$  1) 4-Chlor-1-Nitro-9,10-Anthrachinon (D.R.P. 137782 C. 1903 [1] 108).  
 2) 5-Chlor-1-Nitro-9,10-Anthrachinon (D.R.P. 214150 C. 1909 [2] 1394).
- $C_{14}H_6O_4NBr$  1) 4-Brom-1-Nitro-9,10-Anthrachinon (D.R.P. 137782 C. 1903 [1] 108).  
 2) *p*-Brom-*p*-Nitro-9,10-Anthrachinon. Sm. 261° (B. 14, 980). — III, 412.
- $C_{14}H_6O_4N_2Br_2$  1) 2,4-Dibrom-5-Nitro-1-Amido-9,10-Anthrachinon (D.R.P. 151512 C. 1904 [1] 1677).
- $C_{14}H_6O_4N_2S_2$  1) Dinitrotolallyldisulfid (A. 167, 194). — III, 226.

- $C_{14}H_6O_5NBr$  1) 2-Brom-4-Nitro-1-Oxy-9,10-Anthrachinon (D.R.P. 127439 *C.* 1902 [1] 1032). — \*III, 300.
- $C_{14}H_6O_5N_2S$  1) 1,2-Anhydrid d. 1-Diazo-9,10-Anthrachinon-2-Sulfonsäure. Zers. bei 142° (*B.* 35, 668, 2597 *C.* 1902 [2] 595). — \*IV, 1129.
- 2) 1,6-Anhydrid d. 1-Diazo-9,10-Anthrachinon-6-Sulfonsäure (*B.* 17, 900; *B.* 40, 1050 *C.* 1907 [1] 1203).
- $C_{14}H_6O_5Cl_2S$  1) 1,4-Dichlor-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 216071 *C.* 1909 [2] 2103).
- $C_{14}H_8O_6N_2Cl_2$  1) Chlorid d. 4,4'-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 138° (*B.* 36, 3744 *C.* 1904 [1] 37).
- $C_{14}H_8O_6N_2Br_6$  1)  $\alpha\alpha$ -Di[2,5,6-Tribrom-3-Nitro-4-Oxyphenyl]äthan. Sm. 233° u. Zers. (*A.* 363, 260 *C.* 1909 [1] 175).
- $C_{14}H_8O_6N_4Br_2$  1) 2,6-Dibrom-4,8-Dinitro-1,5-Diamido-9,10-Anthrachinon. Sm. oberhalb 360° (D.R.P. 148109 *C.* 1904 [1] 230; *B.* 37, 4683 *C.* 1905 [1] 370; *B.* 37, 4443 *C.* 1905 [1] 181).
- $C_{14}H_8O_{10}N_6Br_2$  1)  $s$ -Di[4-Brom-*p*-Dinitrophenylamid] d. Oxalsäure. Sm. 285—287° (*Am.* 9, 362). — II, 410.
- $C_{14}H_6O_{10}Br_2S_2$  1) 4, 8-Dibrom-1, 5-Dioxy-9,10-Anthrachinon-2, 6-Disulfonsäure (D.R.P. 197082 *C.* 1908 [1] 1592).
- 2) 4, 5-Dibrom-1, 8-Dioxy-9,10-Anthrachinon-2,7-Disulfonsäure (D.R.P. 197082 *C.* 1908 [1] 1592).
- $C_{14}H_8O_{11}N_2S$  1) 4,8-Diamido-1,5-Dioxy-9,10-Anthrachinon-*p*-Sulfonsäure (D.R.P. 152013 *C.* 1904 [2] 378).
- $C_{14}H_6O_{12}Cl_2S_2$  1) 4, 8-Dichlor-1, 3, 5, 7-Tetraoxy-9,10-Anthrachinon-2, 6-Disulfonsäure (D.R.P. 99078 *C.* 1898 [2] 1152). — \*III, 313.
- $C_{14}H_8O_{14}N_2S_2$  1) 4, 8-Dinitro-1, 5-Dioxy-9,10-Anthrachinon-2, 6-Disulfonsäure (D.R.P. 96364 *C.* 1898 [1] 1255; D.R.P. 125579 *C.* 1901 [2] 1189). — \*III, 306.
- 2) 4,5-Dinitro-1,8-Dioxy-9,10-Anthrachinon-*p*-Disulfonsäure (D.R.P. 100136, 101805, 115858, 119228, 119229). — \*III, 308.
- 3) *p*-Dinitro-2,6-Dioxy-9,10-Anthrachinon-*p*-Disulfonsäure.  $K_2$ ,  $K_4$  (*C.* 1899 [1] 464). — \*III, 309.
- 4) *p*-Dinitro-2,7-Dioxy-9,10-Anthrachinon-*p*-Disulfonsäure (D.R.P. 99612 *C.* 1899 [1] 400). — \*III, 309.
- $C_{14}H_6O_{16}N_2S_2$  1) 4, 8-Dinitro-1, 3, 5, 7-Tetraoxy-9,10-Anthrachinon-2, 6-Disulfonsäure.  $Na_2 + H_2O$  (D.R.P. 70806; D.R.P. 125579 *C.* 1901 [2] 1189). — \*III, 313.
- $C_{14}H_7ONBr_2$  1) 2,7-Dibrom-9-Imido-10-Keto-9,10-Dihydrophenanthren. Sm. 231 bis 232° u. Zers. (*B.* 37, 3570 *C.* 1904 [2] 1403).
- $C_{14}H_7ONS_2$  1) Indophtenin (*B.* 37, 3350 *C.* 1904 [2] 1058).
- $C_{14}H_7ON_3Cl$  1) Chloreumaropenazin. Sm. 149—150° (*B.* 35, 4335 *C.* 1903 [1] 293). — \*IV, 685.
- $C_{14}H_7O_2NCl_2$  1) Phenylimid d. 3,5-Dichlorbenzol-1,2-Dicarbonsäure. Sm. 150 bis 150,5° (*Soc.* 81, 1537 *C.* 1903 [1] 140).
- 2) Phenylimid d. 3,6-Dichlorbenzol-1,2-Dicarbonsäure. Sm. 191° (*B.* 32, 1994; 33, 2019, 2024). — \*II, 1059.
- $C_{14}H_7O_2NBr_2$  1) 2,4-Dibrom-1-Amido-9,10-Anthrachinon. Sm. 221° (*C.* 1904 [2] 340).
- 2) *p*-Dibrom-1-Amido-9,10-Anthrachinon (D.R.P. 128845 *C.* 1902 [1] 506).
- 3) 1,3-Dibrom-2-Amido-9,10-Anthrachinon. Sm. 239—240° (D.R.P. 158474 *C.* 1905 [1] 844; *B.* 40, 1701 *C.* 1907 [1] 1799).
- 4) *p*-Dibrom-*p*-Amido-9,10-Anthrachinon. Sm. 169—170° (*B.* 14, 1334). — III, 414.
- 5) 2,7-Dibrom-9-Oximido-10-Keto-9,10-Dihydrophenanthren. Sm. 229—230° u. Zers. (*B.* 37, 3570 *C.* 1904 [2] 1403).
- $C_{14}H_7O_2N_2Cl$  1) 9,10-Anthrachinon-2-Diazoniumchlorid (*B.* 37, 62 *C.* 1904 [1] 520).
- 2) Laktone d. 5-Chlor-3-Oxy-2-Phenylindazol-2'-Carbonsäure. Sm. 241° (*C. r.* 142, 1154 *C.* 1906 [2] 128; *C. r.* 143, 910 *C.* 1907 [1] 470; *Bl.* [4] 1, 232 *C.* 1907 [1] 1575).
- 3) isom. Laktone d. 5-Chlor-3-Oxy-2-Phenylindazol-2'-Carbonsäure. Sm. 241° (*Bl.* [4] 1, 232 *C.* 1907 [1] 1575).
- $C_{14}H_7O_2N_2Br_3$  1) 9,10-Anthrachinon-2-Diazoniumtribromid (*B.* 37, 62 *C.* 1904 [1] 520).
- 2) 5,6,8-Tribrom-7-Oxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzodiazin. Sm. 224—225° (*A.* 361, 238 *C.* 1908 [2] 411).



- $C_{14}H_7O_2N_5Cl_8$  1)  $\alpha\alpha$ -Di[2,4,6-Trichlorphenylazo]- $\alpha$ -Nitroäthan. Sm. 97,5° u. Zers. (B. 36, 3834 C. 1904 [1] 19).
- $C_{14}H_7O_2N_5Br_6$  1)  $\alpha\alpha$ -Di[2,4,6-Tribromphenylazo]- $\alpha$ -Nitroäthan. Sm. 98° u. Zers. (B. 36, 3835 C. 1904 [1] 19).
- $C_{14}H_7O_2Cl_4Br$  1)  $\alpha$ -Brom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 185° (A. 338, 256 C. 1905 [1] 1151).
- $C_{14}H_7O_3NCl_2$  1) 9,9-Dichlor-3[oder 6]-Nitro-10-Keto-9,10-Dihydrophenanthren. Sm. 191—193° (B. 41, 3692 C. 1908 [2] 1870).  
2) isom. 9,9-Dichlor-3[oder 6]-Nitro-10-Keto-9,10-Dihydrophenanthren. Sm. 143—145° (B. 41, 3692 C. 1908 [2] 1870).
- $C_{14}H_7O_3NBr_2$  1) 3,5-Dibrom-4-Oxyphenylimid d. Benzol-1,2-Dicarbonensäure (M. 21, 264). — \*II, 1056.
- $C_{14}H_7O_3N_2Br_3$  1) 1,2-Lakton d. 3,5,6-Tribrom-4-Oxy-1-Phenylhydrazonoxymethylbenzol-2-Carbonsäure. Sm. 265—266° u. Zers. (A. 365, 246 C. 1908 [2] 412).
- $C_{14}H_7O_4N_2Cl_6$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[p-Chlor-p-Nitrophenyl]äthan. Sm. 143° (B. 7, 1181). — II, 232.
- $C_{14}H_7O_4N_2Br$  1) 2-Brom-5-Nitro-1-Amido-9,10-Anthrachinon. Sm. 240—245° (D. R. P. 160169 C. 1905 [1] 1448).
- $C_{14}H_7O_4ClS$  1) Chlorid d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 193° (B. 13, 692; 28, 2259; 33, 3527). — III, 415; \*III, 299.
- $C_{14}H_7O_5ClS$  1) 5-Chlor-9,10-Anthrachinon-1-Sulfonsäure (D. R. P. 205913 C. 1909 [1] 703).  
2) 8-Chlor-9,10-Anthrachinon-1-Sulfonsäure (D. R. P. 205913 C. 1909 [1] 703).  
3) p-Chlor-9,10-Anthrachinon-1-Sulfonsäure (D. R. P. 216071 C. 1909 [2] 2103).  
4) 7-Chlor-9,10-Anthrachinon-2-Sulfonsäure (D. R. P. 205913 C. 1909 [1] 703).
- $C_{14}H_7O_5BrS$  1) 5-Brom-9,10-Anthrachinon-1-Sulfonsäure (D. R. P. 205913 C. 1909 [1] 703).  
2) p-Brom-9,10-Anthrachinon-1-Sulfonsäure (D. R. P. 216071 C. 1909 [2] 2103).  
3) 2-Brom-9,10-Phenanthrenchinon-p-Sulfonsäure (B. 37, 3564 C. 1904 [2] 1402).
- $C_{14}H_7O_6NS$  1) 1-Nitroso-9,10-Anthrachinon-2-Sulfonsäure. Na (B. 35, 668 C. 1902 [1] 726). — \*III, 299.
- $C_{14}H_7O_7NS$  1) 1-Nitro-9,10-Anthrachinon-5-Sulfonsäure. K (B. 37, 71 C. 1904 [1] 666; D. R. P. 164293 C. 1905 [2] 1699).  
2) 1-Nitro-9,10-Anthrachinon-6-Sulfonsäure. Sm. 255° u. Zers.  $NH_4 + \frac{1}{2}H_2O$ ,  $Na + H_2O$ ,  $K$ ,  $Ca + H_2O$ ,  $Ba$  (B. 15, 1515; D. R. P. 145188 C. 1903 [2] 1037). — III, 417.  
3) 1-Nitro-9,10-Anthrachinon-7-Sulfonsäure. Sm. 250° u. Zers.  $Ba + \frac{1}{2}H_2O$ ,  $Pb + 2H_2O$  (B. 15, 1516; D. R. P. 145188 C. 1903 [2] 1038). — III, 417.  
4) 1-Nitro-9,10-Anthrachinon-8-Sulfonsäure (B. 37, 71 C. 1904 [1] 666; D. R. P. 163842 C. 1905 [2] 1699).
- $C_{14}H_7O_8NS$  1) 4-Nitro-1-Oxy-9,10-Anthrachinon-2-Sulfonsäure (D. R. P. 127438 C. 1902 [1] 339). — \*III, 301.
- $C_{14}H_7O_8BrS_2$  1) 2-Brom-9,10-Phenanthrenchinon-p-Disulfonsäure (B. 37, 3565 C. 1904 [2] 1402).
- $C_{14}H_7O_{10}NS_2$  1) p-Nitro-9,10-Anthrachinon-p-Disulfonsäure. Sm. 181—182° (B. 16, 908). — III, 417.
- $C_{14}H_7O_{10}N_4Cl_3$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2,6-Dinitro-4-Dioxyphenyl]äthan. Sm. 252°.  $Na_2 + 3\frac{1}{2}H_2O$ ,  $K_2 + H_2O$ ,  $Ca + 5H_2O$ ,  $Ba + 5H_2O$  (J. pr. [2] 39, 501; [2] 47, 65). — II, 995.
- $C_{14}H_7O_{13}NS_2$  1) 4[oder 8]-Nitro-1,5,8[oder 1,4,5]-Trioxy-9,10-Anthrachinon-p-Disulfonsäure (C. 1901 [2] 1189).
- $C_{14}H_7O_{13}N_7S$  1)  $\alpha$ -O-Methyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 158° (Soc. 81, 438 C. 1902 [1] 861, 989).  
2)  $\beta$ -O-Methyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 169° (Soc. 81, 438 C. 1902 [1] 863, 989).

- $C_{14}H_7O_{15}NS_2$  1) 4-[oder 8]-Nitro-1,3,5,7,8-[oder 1,3,4,5,7]-Pentaoxy-9,10-Anthra-  
chinon-2,6-Disulfonsäure (C. 1901 [2] 1189).
- $C_{14}H_8ONBr$  1) 2[oder 7]-Brom-10-Imido-9-Keto-9,10-Dihydrophenanthren. Sm.  
169° u. Zers. (B. 37, 3561 C. 1904 [2] 1401).
- $C_{14}H_8ON_2Cl_2$  1) Azoxyderivat d.  $\alpha\beta$ -Di[2-Chlor-4-Nitrophenyl]äthen. Zers. ober-  
halb 300° (B. 25, 83). — IV, 1342.  
2) 3,5-Di[2-Chlorphenyl]-1,2,4-Oxdiazol (o-Dichlordibenzenzylazoxim).  
Sm. 93° (B. 32, 1982). — \*II, 764.  
3) 3,5-Di[3-Chlorphenyl]-1,2,4-Oxdiazol. Sm. 115° (J. pr. [2] 73, 255  
C. 1906 [1] 1243).  
4) 3,4-Di[2-Chlorphenyl]-1,2,5-Oxdiazol. Sm. 107° (B. 32, 1985). —  
\*III, 223.  
5) 2,5-Di[3-Chlorphenyl]-1,3,4-Oxdiazol. Sm. 144°. + AgNO<sub>3</sub> (J. pr.  
[2] 69, 382 C. 1904 [2] 535).
- $C_{14}H_8ON_2Br_2$  1) 2,5-Di[2-Bromphenyl]-1,3,4-Oxdiazol. Sm. 108°; Sd. 240—250°<sub>13</sub>  
(J. pr. [2] 69, 476 C. 1904 [2] 536).  
2) 2,5-Di[3-Bromphenyl]-1,3,4-Oxdiazol. Sm. 179° (J. pr. [2] 69, 478  
C. 1904 [2] 536).  
3) 2,5-Di[4-Bromphenyl]-1,3,4-Oxdiazol. Sm. 249° (J. pr. [2] 69, 480  
C. 1904 [2] 536).
- $C_{14}H_8ON_3Br_3$  1) 2,3,7-Tribrom-9-Semicarbazonfluoren. Sm. noch nicht bei 350°  
(B. 38, 3768 C. 1906 [1] 44).
- $C_{14}H_8O_2NCl$  1) 4-Chlor-1-Amido-9,10-Anthrachinon. Sm. 179—180° (D. R. P.  
199758 C. 1908 [2] 461).  
2) 1-Chlor-2-Amido-9,10-Anthrachinon. Sm. 234—236° (D. R. P.  
199758 C. 1908 [2] 462).  
3) 3-Chlor-2-Amido-9,10-Anthrachinon. Sm. 280—283° (D. R. P.  
148110 C. 1904 [1] 329).  
4) p-Chlor-2-Amido-9,10-Anthrachinon (D. R. P. 138134 C. 1903  
[1] 209).  
5) p-Chlor-2-Amido-9,10-Anthrachinon (D. R. P. 158951 C. 1905 [1] 842).  
6) Monoxim d. 2-Chlor-9,10-Phenanthrenchinon. Sm. 140—141° (B.  
39, 3894 C. 1907 [1] 166).  
7) Phenylimid d. 4-Chlorbenzol-1,2-Dicarbonsäure. Sm. 174° (B.  
32, 1993). — \*II, 1058.  
8) 4-Chlorphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 194—195°  
(B. 11, 2260). — II, 1804.
- $C_{14}H_8O_2NBr$  1) 9-Brom-10-Nitrophenanthren. Sm. 195—196° (206—207°) (B. 11,  
1218; B. 37, 3573 C. 1904 [2] 1403). — II, 269.  
2) 2-Brom-1-Amido-9,10-Anthrachinon. Sm. 180—181° (D. R. P.  
160169 C. 1905 [1] 1447).  
3) 3-Brom-2-Amido-9,10-Anthrachinon. Sm. 267—270° (D. R. P.  
148110 C. 1904 [1] 329).  
4) p-Brom-2-Amido-9,10-Anthrachinon (D. R. P. 138134 C. 1903 [1] 209).  
5) 2[oder 7]-Brom-9-Oximido-10-Keto-9,10-Dihydrophenanthren.  
Sm. 163—164° (B. 37, 3560 C. 1904 [2] 1401).  
6) 3[oder 6]-Brom-9-Oximido-10-Keto-9,10-Dihydrophenanthren.  
Sm. 198° (B. 37, 3572 C. 1904 [2] 1403).  
7) Brompyrophtalon. Sm. 153° (157°) (B. 36, 1661 C. 1903 [2] 40;  
B. 39, 2449 C. 1906 [2] 787). — \*IV, 244.  
8) 4-Bromphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 203—204°  
(B. 11, 2261). — II, 1804.
- $C_{14}H_8O_4NBr_3$  1) 4,6,7-Tribrom-5-Oxy-3-Keto-2-Phenyl-1,3-Dihydroisindol. Sm.  
220° (A. 350, 262 C. 1907 [1] 811).
- $C_{14}H_8O_2NJ$  1) 4-Jodphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 227—228° (B.  
11, 2261). — II, 1804.
- $C_{14}H_8O_2N_2Cl_2$  1) 4,8-Dichlor-1,5-Diamido-9,10-Anthrachinon (D. R. P. 199758 C.  
1908 [2] 461).  
2) p-Dichlor-2,6-Diamido-9,10-Anthrachinon (D. R. P. 158951 C. 1905  
[1] 842).  
3) 4,5-Di[2-Chlorphenyl]-1,2,3,6-Dioxdiazin (o-Dichlorbenzildioxim-  
hyperoxyd). Sm. 131° (B. 32, 1982). — \*III, 223.  
4) Chlorid d. Azobenzol-4,4'-Dicarbonsäure. Sm. 144,5—145° (J. r.  
23, 93). — IV, 1459.

- $C_{14}H_8O_2N_2Cl_4$  1) Di[2,4-Dichlorphenylamid] d. Oxalsäure. Sm. 276° (255°) (*Am.* 8, 349; *Soc.* 89, 160 *C.* 1906 [1] 1338). — II, 410.  
2) Di[4-Chlorphenylchloramid] d. Oxalsäure. Sm. 169° (*Soc.* 89, 157 *C.* 1906 [1] 1337).
- $C_{14}H_8O_2N_2Br_2$  1) 2,6-Dibrom-1,5-Diamido-9,10-Anthrachinon. Sm. 274° (D.R.P. 128573 *C.* 1902 [1] 550; *B.* 37, 4181 *C.* 1904 [2] 1741; *B.* 37, 4682 *C.* 1905 [1] 370). — \*III, 298.  
2) isom. *p*-Dibrom-1,5-Diamido-9,10-Anthrachinon. Sm. 330° (D.R.P. 128573 *C.* 1902 [1] 550).  
3) 2,7-Dibrom-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 290° u. Zers. (*B.* 40, 4563 *C.* 1908 [1] 135).  
4) bim. 4-Bromphenylisocyanat. Sm. 199° (*B.* 13, 229). — II, 376.
- $C_{14}H_8O_2N_2J_4$  1) Di[3,5-Dijod-2-Oxybenzyliden]hydrazin. Zers. bei 200° (*J. pr.* [2] 57, 205; [2] 59, 119). — \*III, 55.
- $C_{14}H_8O_2N_2S_2$  1) Verbindung (aus 1-Merkaptobenzoxazol). Sm. 110° (*B.* 16, 1825; 20, 179; *J. pr.* [2] 42, 443). — II, 710.
- $C_{14}H_8O_2N_3Cl_3$  1) Acetat d. 4,6,7-Trichlor-5-Oxy-1-Phenyl-1,2,3-Benztriazol. Sm. 128° (*A.* 313, 273). — \*IV, 791.
- $C_{14}H_8O_2Cl_2S_2$  1) Chlorid d. Diphenyldisulfid-2,2'-Dicarbonsäure. Sm. 153–154° (*B.* 31, 1670; *Am.* 21, 210). — \*II, 901.  
2) Chlorid d. Anthracen-1,5-Disulfonsäure. Sm. 249° (*B.* 42, 1417 *C.* 1909 [1] 1711).  
3) Chlorid d. Anthracen-1,8-Disulfonsäure. Sm. 225° (*B.* 42, 1417 *C.* 1909 [1] 1711).
- $C_{14}H_8O_2Cl_2Br_2$  1)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 248° u. Zers. (*A.* 325, 53 *C.* 1903 [1] 462; *A.* 338, 256 *C.* 1905 [1] 1151).
- $C_{14}H_8O_3NBr$  1) 10-Brom-10-Nitro-9-Keto-9,10-Dihydroanthracen. Zers. bei 116° (*A.* 330, 181 *C.* 1904 [1] 891).
- $C_{14}H_8O_3NBr_3$  1) 3,5,6-Tribrom-4-Oxy-1-Phenylimidomethylbenzol-2-Carbonsäure. Zers. oberhalb 200°. Anilinsalz (*A.* 361, 237 *C.* 1908 [2] 411).
- $C_{14}H_8O_3N_2Cl_2$  1) Chlorid d. Azoxybenzol-3,3'-Dicarbonsäure. Sm. 120–121,5° (*J. r.* 23, 93). — IV, 1344.
- $C_{14}H_8O_3N_5Cl$  1) Verbindung (aus 1,5-Bisdiazo-9,10-Anthrachinon) (*B.* 35, 3926 *C.* 1903 [1] 88).
- $C_{14}H_8O_4NCl$  1) Acetat d. 5-Chlor-4-Oxy-3-Ketophenoxazin. Sm. bei 200° (*B.* 26, 2376). — III, 349.  
2) Chlorid d. 5-Nitrodiphenylketon-2-Carbonsäure. Zers. bei 127 bis 129° (*M.* 26, 974 *C.* 1905 [2] 1492).  
3) Chlorid d. 3'-Nitrodiphenylketon-4-Carbonsäure. Sm. 94° (*A.* 286, 317). — II, 1705.  
4) Chlorid d. 4'-Nitrodiphenylketon-4-Carbonsäure. Sm. 124° (*A.* 286, 331). — II, 1706.
- $C_{14}H_8O_4NBr$  1) *p*-Brom-3-Amido-1,2-Dioxy-9,10-Anthrachinon (Brom- $\beta$ -Amidoalizarin). Sm. 287° (D.R.P. 126603 *C.* 1902 [1] 83). — \*III, 303.
- $C_{14}H_8O_4NBr_3$  1) 1-Phenylamid d. 3,5,6-Tribrom-4-Oxybenzol-1,2-Dicarbonsäure. Sm. 110–120° (*A.* 361, 245 *C.* 1908 [2] 412).
- $C_{14}H_8O_4N_2Cl_2$  1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Nitrophenyl]äthen. Sm. 72° (*A.* 271, 2). — II, 250.  
2) *cis*- $\alpha\beta$ -Di[2-Chlor-4-Nitrophenyl]äthen. Sm. 172–173° (*Soc.* 85, 1437 *C.* 1904 [2] 1740).  
3) *trans*- $\alpha\beta$ -Di[2-Chlor-4-Nitrophenyl]äthen. Sm. 302° (*B.* 25, 79; *Soc.* 85, 1437 *C.* 1904 [2] 1740). — II, 249.
- $C_{14}H_8O_4N_2Br_2$  1) 4,4'-Dibromazobenzol-2,2'-Dicarbonsäure +  $\frac{1}{2}H_2O$  (*A.* 143, 243). — IV, 1458.
- $C_{14}H_8O_4N_3J_2$  1) *p*-Dijodazobenzol-3,3'-Dicarbonsäure (*B.* 8, 386). — IV, 1459.
- $C_{14}H_8O_4N_3S_2$  1) *p*-Dinitrophenylbithiänyl. Sm. 273° (*Bl.* [3] 5, 278). — III, 769.
- $C_{14}H_8O_4N_3Cl$  1) Acetat d. 6-Chlor-5-Oxy-4,7-Diketo-1-Phenyl-4,7-Dihydro-1,2,3-Benztriazol. Sm. 135–136° (*A.* 313, 281). — \*IV, 793.
- $C_{14}H_8O_4N_4Cl_2$  1) Di[ $\alpha$ -Chlor-4-Nitrobenzyliden]hydrazin. Sm. 187° (*J. pr.* [2] 74, 21 *C.* 1906 [2] 792).
- $C_{14}H_8O_4Br_2S_2$  1) *p*-Dibromdiphenyldisulfid-3,3'-Dicarbonsäure. Sm. 242–243° (254–256°). Ba, Zn, Pb (*Z.* 1870, 295; 1871, 69). — II, 1522.
- $C_{14}H_8O_5NCl$  1) 4'-Chlor-3'-Nitrodiphenylketon-2-Carbonsäure. Sm. 202–204° (D.R.P. 148110 *C.* 1904 [1] 329).



- $C_{14}H_9O_5NBr$  1) 7-Brom-2-Nitro-9-Oxyfluoren-9-Carbonsäure. Sm. 230° u. Zers. (B. 38, 3755 C. 1906 [1] 42).
- $C_{14}H_9O_5N_2Cl_2$  1) Diacetat d. 5,5'-Dichlor-6,6'-Dioxy-3,3'-Bipyridyl-2,2'-Oxyd (Soc. 75, 518). — \*I, 790.
- $C_{14}H_9O_5N_3Cl$  1) 7-Chlor-1,9-Dinitro-5-Keto-2-Methyl-5,10-Dihydroakridin. Sm. 250° (B. 39, 1937 C. 1906 [2] 114).
- $C_{14}H_9O_6N_2Br_4$  1)  $\alpha\alpha$ -Di[2,5-Dibrom-3-Nitro-4-Oxyphenyl]äthan. Sm. 145° u. Zers. (A. 363, 258 C. 1909 [1] 175).
- $C_{14}H_9O_6N_2S$  1) 1-Oxy-9,10-Anthrachinon-4-Diazosulfonsäure. K (D.R.P. 163447 C. 1905 [2] 1303).
- $C_{14}H_9O_6N_2S_2$  1) Di[4-Nitrobenzoyl]disulfid. Sm. 182—183° (B. 32, 3536). — \*II, 797.
- $C_{14}H_9O_6N_3Cl_3$  1) Acetat d. 2,3,5[oder 2,3,6]-Trichlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 153° (B. 36, 3269 C. 1903 [2] 1126).
- $C_{14}H_9O_6N_4Br_2$  1) s-Di[4-Brom-2-Nitrophenylamid] d. Oxalsäure. Sm. 285—288° (Am. 9, 361). — II, 410.
- $C_{14}H_9O_6Cl_2S_2$  1) Dichloranthracendisulfonsäure. Na<sub>2</sub>, Ca, Ba, Sr (A. 158, 320; B. 3, 637). — II, 265.
- $C_{14}H_9O_6Br_2S_2$  1) Dibromanthracendisulfonsäure. Ba (A. 158, 322). — II, 266.
- $C_{14}H_9O_8N_4Cl_2$  1) Acetat d. 3,5-Dichlor-2,2',4'-Trinitro-4-Oxydiphenylamin. Sm. 177,5° (B. 37, 1730 C. 1904 [1] 1521).
- 2) Acetat d. 3,5-Dichlor-2',4',6'-Trinitro-4-Oxydiphenylamin. Sm. 259° (B. 37, 1730 C. 1904 [1] 1521).
- $C_{14}H_9O_9ClP$  1) Verbindung (aus  $\alpha$ -Digallussäure) (A. 170, 58). — II, 1925.
- $C_{14}H_9O_{10}ClP$  1) Verbindung (aus  $\alpha$ -Digallussäure) (A. 170, 57). — II, 1924.
- $C_{14}H_9N_2Cl_2Br_2$  1) Di[ $\alpha$ -Chlor-4-Brombenzyliden]hydrazin. Sm. 145° (J. pr. [2] 74, 1 C. 1906 [2] 789).
- $C_{14}H_9N_2Cl_2S$  1) 2,5-Di[3-Chlorphenyl]-1,3,4-Thiodiazol. Sm. 151° (J. pr. [2] 69, 383 C. 1904 [2] 536).
- $C_{14}H_9N_2Br_2S$  1) 2,5-Di[2-Bromphenyl]-1,3,4-Thiodiazol. Sm. 117° (J. pr. [2] 69, 477 C. 1904 [2] 536).
- 2) 2,5-Di[3-Bromphenyl]-1,3,4-Thiodiazol. Sm. 175° (J. pr. [2] 69, 478 C. 1904 [2] 536).
- 3) 2,5-Di[4-Bromphenyl]-1,3,4-Thiodiazol. Sm. 237° (J. pr. [2] 69, 480 C. 1904 [2] 536).
- $C_{14}H_9ONCl_2$  1) 2,4-Dichlor-2-Phenyl-1,3-Benzoxazin. + POCl<sub>3</sub> (Soc. 95, 916 C. 1909 [2] 371).
- 2) p-Dichlor-9-Acetylcarbazol. Sm. 185—186° (G. 26 [2] 241). — IV, 392.
- $C_{14}H_9ONBr_2$  1) p-Dibrom-9-Acetylcarbazol. Sm. 189—190° (G. 25 [2] 397). — IV, 392.
- $C_{14}H_9ONS$  1) 4-Benzoylphenylsenföhl. Sm. 122° (A. 311, 150). — \*III, 148.
- 2) 1-Phenylimido-2-Keto-2,3-Dihydrobenzthiofuran. Sm. 150—151° (B. 41, 234 C. 1908 [1] 1062).
- $C_{14}H_9ON_2Cl$  1) 3-[2-Chlorphenyl]-5-Phenyl-1,2,4-Oxdiazol (2-Chlorbenzenylazoxim). Sm. 165° (B. 32, 1980). — \*II, 764.
- 2) 4[oder 6]-Chlor-1-Nitroso-2-Phenylindol. Sm. 228—229° (B. 25, 2877). — IV, 413.
- 3) 3-[p-Chlorphenyl]imido-2-Keto-2,3-Dihydroindol (Chlorphenylimesatin) (J. 1855, 541). — II, 1608.
- 4) 2-Chlor-3-Phenylamido-1-Keto-4-Pyrinden. Sm. 162—163° (A. 290, 343, 374). — IV, 246.
- 5) 2-Chlor-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 131,5°; Sd. 245°<sub>15</sub> (B. 30, 1691; Am. 21, 151). — \*IV, 598.
- 6) 4-Keto-3-[4-Chlorphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 177°. HCl, (2 HCl, PtCl<sub>4</sub>) (J. pr. [2] 48, 547). — IV, 872.
- $C_{14}H_9ON_2Br$  1) 3-[p-Bromphenyl]imido-2-Keto-2,3-Dihydroindol (Bromphenylimesatin) (J. 1855, 541). — II, 1608.
- 2) 4-Keto-3-[4-Bromphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 174° (J. pr. [2] 48, 553). — IV, 872.
- $C_{14}H_9ON_3Br_2$  1) 2,7-Dibrom-9-Semicarbazonfluoren. Zers. bei 240° (B. 38, 3754 C. 1906 [1] 42).
- $C_{14}H_9ON_3S$  1) Benzoat d. 4-Merkapto-1,2,3-Benztriazin. Sm. 163° (B. 42, 3720 C. 1909 [2] 1807).

- $C_{14}H_9O_2NCl_2$  1) **2,4-Dichlorphenylformylamid d. Benzolcarbonsäure.** Sm. 77° (*Am.* 18, 386). — \*II, 734.
- $C_{14}H_9O_2NBr_2$  1) **9,10-Dibrom-9-Nitro-9,10-Dihydrophenanthren.** Sm. 81–82° (*B.* 37, 3576 *C.* 1904 [2] 1404).
- $C_{14}H_9O_2NBr_4$  1) **Pyrophtalontetrabromid** (*B.* 39, 2449 *C.* 1906 [2] 787).
- $C_{14}H_9O_2NS$  1) **4-Amido-1-Merkapto-9,10-Anthrachinon** (D.R.P. 206536 *C.* 1909 [1] 1060).
- $C_{14}H_9O_2NS_2$  1) **2-Thiocarbonyl-4-Keto-5-[2-Oxy-1-Naphtyliden]tetrahydrothiazol.** Zers. bei 210° (*C.* 1906 [1] 1438).  
2) **2-Thiocarbonyl-4-Keto-3-Phenyl-5-[2-Furyliden]tetrahydrothiazol.** Sm. 183° (*M.* 26, 1201 *C.* 1905 [2] 1675).
- $C_{14}H_9O_2N_2Cl$  1) **6 oder 7-Chlor-3-Oxy-2-[2-Oxyphenyl]-1,4-Benzdiazin.** Sm. 286 bis 287° (*B.* 35, 4334 *C.* 1903 [1] 293). — \*IV, 685.
- $C_{14}H_9O_2N_2Cl_3$  1) **2-Trichlor-s-Di[Phenylamid] d. Oxalsäure** (*Am.* 8, 349). — II, 410.
- $C_{14}H_9O_2N_2Br$  1) **2,4-Diketo-3-[2-Bromphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.** Sm. 295–298° (*B.* 38, 1213 *C.* 1905 [1] 1262).
- $C_{14}H_9O_2N_2Br_3$  1) **Acetat d. 3,5,4'-Tribrom-4-Oxyazobenzol.** Sm. 167° (*Soc.* 77, 812). — \*IV, 1036.  
2) **Acetat d. 2',4',6'-Tribrom-4-Oxyazobenzol.** Sm. 105° (*Soc.* 77, 814). — \*IV, 1035.
- $C_{14}H_9O_2ClS$  1) **Chlorid d. Anthracen-2-Sulfonsäure.** Sm. 122° (*B.* 28, 2258). — \*II, 122.  
2) **Chlorid d. Phenanthren-3-Sulfonsäure.** Sm. 108,5° (114°) (*A.* 321, 267 *C.* 1902 [2] 57; *A.* 369, 113 *C.* 1909 [2] 1809).  
3) **Chlorid d. Phenanthren-9-Sulfonsäure.** Sm. 125,5° (*A.* 321, 271 *C.* 1902 [2] 57).
- $C_{14}H_9O_2BrS$  1) **Bromid d. Phenanthren-3-Sulfonsäure.** Sm. 140° (*A.* 369, 114 *C.* 1909 [2] 1809).
- $C_{14}H_9O_3NCl_2$  1) **4-Chloracetat d. 4-Chlorbenzhydroxamsäure.** Sm. 165° (*R.* 18, 397). — \*II, 765.
- $C_{14}H_9O_3N_3Cl$  1) **3-Chlor-6-Nitro-9-Acetylcarbazol.** Sm. 205–206° (*G.* 26 [1] 291). — IV, 392.  
2) **5-Chlor-3-Oxy-2-Phenylindazol-2'-Carbonsäure.** Sm. 252–253° u. Zers. (*Bl.* [4] 1, 231 *C.* 1907 [1] 1575).
- $C_{14}H_9O_3N_2Br$  1) **9-Acetyl-2-Bromnitrocarbazol.** Sm. 236–237° (*G.* 22 [2] 575). — IV, 392.
- $C_{14}H_9O_3N_3S$  1) **2-Oxy-1-[4-Nitrophenyl]azobenzthiofuran** (*M.* 30, 353 *C.* 1909 [2] 282).
- $C_{14}H_9O_3N_4Br$  1) **7-Brom-9-Semicarbazol-2-Nitrofluoren.** Sm. noch nicht bei 350° (*B.* 38, 3756 *C.* 1906 [1] 43).
- $C_{14}H_9O_3BrS$  1) **Bromphenanthrensulfonsäure.** K, Ba, Ag (*B.* 13, 1179). — II, 269.
- $C_{14}H_9O_4NS$  1) **Amid d. 9,10-Anthrachinon-2-Sulfonsäure.** Sm. 261° (*B.* 13, 692). — III, 415.  
2) **Benzoylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure.** Sm. 165° (*B.* 30, 1267). — \*II, 802.
- $C_{14}H_9O_4NS_2$  1) **Benzolsulfonat d. 1-Oximido-2-Keto-1,2-Dihydrobenzthiofuran.** Sm. 231° (*B.* 41, 239 *C.* 1908 [1] 1063).
- $C_{14}H_9O_4N_3Cl_2$  1) **4,4'-Dichlordiazoamidobenzol-3,3'-Dicarbonsäure** (*A.* 135, 114). — IV, 1577.
- $C_{14}H_9O_5NS$  1) **1-Amido-9,10-Anthrachinon-5-Sulfonsäure** (*B.* 37, 71 *C.* 1904 [1] 666; D.R.P. 181722 *C.* 1907 [1] 1652).  
2) **1-Amido-9,10-Anthrachinon-6-Sulfonsäure + H<sub>2</sub>O.** Zers. oberhalb 360°. Na + 1½ H<sub>2</sub>O, Ca + 5 H<sub>2</sub>O, Ba + 3½ H<sub>2</sub>O, Pb + 2½ H<sub>2</sub>O, Cu + 7½ H<sub>2</sub>O (*B.* 15, 1519; D.R.P. 145188 *C.* 1903 [2] 1038; *B.* 35, 2598 *C.* 1902 [2] 595). — III, 417; \*III, 299.  
3) **1-Amido-9,10-Anthrachinon-7-Sulfonsäure + H<sub>2</sub>O.** Sm. oberhalb 360° u. Zers. Ba (*B.* 15, 1520; D.R.P. 105634 *C.* 1900 [1] 381; D.R.P. 145188 *C.* 1903 [2] 1038; *B.* 37, 69 Anm. *C.* 1904 [1] 666). — III, 417; \*III, 299.  
4) **1-Amido-9,10-Anthrachinon-8-Sulfonsäure** (*B.* 37, 71 *C.* 1904 [1] 666; D.R.P. 181722 *C.* 1907 [1] 1652).  
5) **2-Amido-9,10-Anthrachinon-6-Sulfonsäure** (D.R.P. 135561 *C.* 1902 [2] 1232).

- $C_{14}H_9O_5NS$  6) 2-Amido-9,10-Anthrachinon-7-Sulfonsäure +  $H_2O$ . Ba +  $2H_2O$  (A. 351, 158 C. 1907 [1] 1127).
- 7)  $\beta$ -Sulfofphenylimid d. Benzol-1,2-Dicarbonsäure (Phtalimidosulfanilsäure).  $NH_4$ , Na, Ba (A. 248, 153). — II, 1804.
- $C_{14}H_9O_5N_3S_2$  1) Di[2-Cyanphenylsulfon]hydroxylamin? (Soc. 89, 356 C. 1906 [1] 1609).
- $C_{14}H_9O_5N_4Cl$  1) 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Chlorphenyl]benzimidazol. Sm.  $240^\circ$  (Soc. 93, 1675 C. 1908 [2] 1922).
- 2) 4,7-Dinitro-6-Oxy-2-Methyl-1-[3-Chlorphenyl]benzimidazol. Sm.  $170-171^\circ$  (Soc. 93, 1675 C. 1908 [2] 1922).
- 3) 4,7-Dinitro-6-Oxy-2-Methyl-1-[4-Chlorphenyl]benzimidazol. Sm.  $246^\circ$  u. Zers. (Soc. 93, 1676 C. 1908 [2] 1922).
- $C_{14}H_9O_5N_4Br$  1) 4,7-Dinitro-6-Oxy-1-[2-Bromphenyl]-2-Methylbenzimidazol. Sm.  $184^\circ$  (Soc. 95, 1040 C. 1909 [2] 518).
- 2) 4,7-Dinitro-6-Oxy-1-[3-Bromphenyl]-2-Methylbenzimidazol. Sm.  $211^\circ$  u. Zers. (Soc. 95, 1040 C. 1909 [2] 518).
- 3) 4,7-Dinitro-6-Oxy-1-[4-Bromphenyl]-2-Methylbenzimidazol. Sm.  $248^\circ$  u. Zers. (Soc. 95, 1040 C. 1909 [2] 518).
- $C_{14}H_9O_6NS$  1) 2-Amido-1-Oxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (J. pr. [2] 18, 183). — III, 420.
- 2) 4-Amido-1-Oxy-9,10-Anthrachinon-3-Sulfonsäure. Na, K (D.R.P. 101919; B. 35, 668 C. 1902 [1] 725; B. 35, 2600 C. 1902 [2] 595). — \*III, 301.
- 3) 4-Amido-1-Oxy-9,10-Anthrachinon-7-Sulfonsäure (D.R.P. 101919; D.R.P. 155440 C. 1904 [2] 1356).
- 4) 1-Amido-2-Oxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (J. pr. [2] 18, 182). — III, 420.
- 5) isom. 2-Amidooxy-9,10-Anthrachinonsulfonsäure (D.R.P. 105634 C. 1900 [1] 381). — \*III, 301.
- 6) isom.  $\beta$ -Amido- $\beta$ -Oxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure.  $NH_4$  +  $2\frac{1}{2}H_2O$  (B. 12, 1419). — III, 420.
- 7) 1-Hydroxylamido-9,10-Anthrachinon-2-Sulfonsäure. Na (B. 35, 667 C. 1902 [1] 725). — \*III, 299.
- $C_{14}H_9O_6N_2Cl_3$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Nitro-4-Oxyphenyl]äthan. Sm.  $159^\circ$  u. Zers.  $Na_2$  +  $8H_2O$ ,  $K_2$ ,  $Ca$  +  $3\frac{1}{2}H_2O$  (J. pr. [2] 39, 500; [2] 47, 61). — II, 995.
- $C_{14}H_9O_6N_3Cl_2$  1) Acetylderivat d. 3,5-Dichlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm.  $207-208^\circ$  (B. 36, 3264 C. 1903 [2] 1126).
- $C_{14}H_9O_6N_3S$  1) Acetyldinitrodiphenylaminsulfoxyd (A. 230, 122). — II, 808.
- 2) 1-Hydroxylamidooxo-9,10-Anthrachinon-2-Sulfonsäure. Na (B. 35, 2600 C. 1902 [2] 595). — \*IV, 1141.
- $C_{14}H_9O_7NS$  1) 4-Amido-1,2-Dioxy-9,10-Anthrachinon-3-Sulfonsäure. Ba (J. pr. [2] 74, 291 C. 1907 [1] 111).
- 2)  $\beta$ -Amido- $\beta$ -Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (B. 15, 1524; 16, 57, 905; 17, 902). — III, 431.
- 3) Amidodioxy-9,10-Anthrachinonsulfonsäure (aus 1,2,4-Trioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure) (D.R.P. 158150 C. 1905 [1] 575).
- $C_{14}H_9O_7N_4Cl$  1)  $\beta$ -Trinitro-4-Methylphenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm.  $239^\circ$  (B. 13, 467). — II, 1217.
- $C_{14}H_9O_7ClS_2$  1) 9-Chlor-10-Oxyphenanthren- $\beta$ -Disulfonsäure +  $10H_2O$  (B. 41, 4224 C. 1909 [1] 182).
- $C_{14}H_9O_8N_4Cl$  1) Acetat d. 5-Chlor-2,2',4'-Trinitro-4-Oxydiphenylamin. Sm.  $177,5$  bis  $178^\circ$  (B. 37, 1728 C. 1904 [1] 1520).
- 2) Acetat d. 5-Chlor-3,2',4'-Trinitro-4-Oxydiphenylamin. Sm.  $188,5^\circ$  (B. 37, 1729 C. 1904 [1] 1521).
- 3) Acetat d. 3-Chlor-2',4',6'-Trinitro-4-Oxydiphenylamin. Sm.  $173^\circ$  (B. 37, 1728 C. 1904 [1] 1520).
- 4) Acetat d. 2-Chlor-2',4', $\beta$ -Trinitro-4-Oxydiphenylamin. Sm.  $134,5^\circ$  (B. 37, 1729 C. 1904 [1] 1521).
- $C_{14}H_9O_9Cl_3P$  1) Verbindung (aus  $\alpha$ -Digallussäure) (A. 170, 58). — II, 1925.
- $C_{14}H_{10}ONCl$  1) 9-Chlor-3[oder 6]-Nitro-10-Oxyphenanthren. HCl (B. 41, 3693 C. 1908 [2] 1870).
- 2) isom. 9-Chlor-3[oder 6]-Nitro-10-Oxyphenanthren. HCl (B. 41, 3693 C. 1908 [2] 1870).



- $C_{14}H_{10}ONCl$  3)  $\alpha$ -Chlor- $\alpha$ -Benzoylimidophenylmethan (Benzoxylbenzimidchlorid). Sm. 84° (A. 296, 280). — \*II, 735.
- 4) 4-Chlor-2-Phenyl-1,3-Benzoxazin. +  $POCl_3$  (Soc. 95, 919 C. 1909 [2] 371).
- $C_{14}H_{10}ONCl_3$  5) 3-Chlor-9-Acetylcarbazol. Sm. 124—125° (G. 26 [2] 239). — IV, 392.
- 1) Methyl-2,4,6-Trichlorphenylamid d. Benzolcarbonsäure. Sm. 96 bis 97° (D.R.P. 180208 C. 1907 [1] 1474).
- 2) 3,5,6-Trichlor-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 213° (A. 187, 279). — II, 1165.
- $C_{14}H_{10}ONBr$  1)  $\beta$ -Brom-2-Keto-3-Phenyl-2,3-Dihydroindol. Sm. 191° (M. 18, 548). — \*IV, 251.
- 2)  $\beta$ -Brom-1-Acetylcarbazol. Sm. 128° (B. 15, 1759; G. 12, 276).
- $C_{14}H_{10}ON_2Cl_2$  1) 2,2-Dichlor-4-Keto-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 140° (Am. 21, 152). — \*IV, 539.
- $C_{14}H_{10}ON_2Cl_4$  1) 4,4'-Di[Dichlormethyl]azoxybenzol. Sm. 115—116° (Am. 28, 44 C. 1902 [2] 701). — \*IV, 998.
- $C_{14}H_{10}ON_2S$  1) Carbonyl-s-Diphenylthioharnstoff. Sm. 84° (87°) (B. 14, 1486; 25, 1461). — II, 397.
- 2) 1-Benzoylamidobenzthiazol. Sm. 186° (A. 212, 330; B. 36, 3136 C. 1903 [2] 1071). — IV, 682.
- 3) 2-Phenylhydrazon-1-Keto-1,2-Dihydrobenzthiofuran. Sm. 165 bis 166° (B. 41, 236 C. 1908 [1] 1063).
- 4) 2-Oxy-1-Phenylazobenzthiofuran. Sm. 191—192° (M. 30, 353 C. 1909 [2] 282).
- 5) 2-Thiocarbonyl-4-Keto-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 304—306° (B. 30, 1688; Am. 21, 146; Bl. [3] 31, 882 C. 1904 [2] 672; B. 38, 131 C. 1905 [1] 459; B. 39, 1733 C. 1906 [2] 58). — IV, 897; \*IV, 599.
- 6) Isobenzoylphenylthiocarbizin. Sm. 110° (B. 21, 2469). — IV, 682.
- 7) Rhodanid d. Diphenylamidoameisensäure. Sm. 138° (Am. 38, 458 C. 1907 [2] 1973).
- 8) Isorhodanid d. Diphenylamidoameisensäure (Soc. 75, 394). — \*II, 188.
- 9) Phenylamid d. Benzthiazol-1-Carbonsäure. Sm. 160° (B. 37, 3729 C. 1904 [2] 1450).
- $C_{14}H_{10}ON_2S_2$  1) 3-Thiocarbonyl-5-Keto-2,4-Diphenyltetrahydro-1,2,4-Thiodiazol? (Phenylsenföloxyd). Sm. 118°. HCl, HBr (B. 20, 787; A. 285, 196; 331, 278; B. 42, 3802 C. 1909 [2] 1857). — II, 389; \*II, 193.
- $C_{14}H_{10}ON_3Cl$  1)  $\beta$ -Chlor-3-Phenylhydrazon-2-Oxypseudoindol (Phenylhydrazon d. m-Chlorisatin). Sm. 271—272° (B. 28, 544). — IV, 695.
- 2) 6[oder 7]-Chlor-3-Oxy-2-[2-Amidophenyl]-1,4-Benzdiazin. Sm. 264° (B. 35, 4332 C. 1903 [1] 292). — \*IV, 846.
- 3) isom. 6[oder 7]-Chlor-3-Oxy-2-[2-Amidophenyl]-1,4-Benzdiazin. Sm. 239—240° (B. 35, 4333 C. 1903 [1] 292). — \*IV, 846.
- $C_{14}H_{10}ON_3Br$  1) 2-Brom-9-Semicarbazonfluoren. Sm. 235° (B. 38, 3752 C. 1906 [1] 42).
- 2)  $\beta$ -Brom-3-Phenylhydrazon-2-Oxypseudoindol (Phenylhydrazon d. Bromisatin). Sm. 271—272° (B. 28, 545). — IV, 695.
- 3) 3-Oxy-2-[3-Brom-2-Amidophenyl]-1,4-Benzdiazin. Sm. 249—250° (B. 35, 4333 C. 1903 [1] 292). — \*IV, 846.
- $C_{14}H_{10}ON_4S$  1) 4-Benzoylamidodiazobenzolrhodanid (Soc. 91, 1315 C. 1907 [2] 1075).
- 2) 5-Phenylazo-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Oxdi-azol. Sm. 170° u. Zers. (B. 23, 2834). — IV, 687.
- 3) 5-Phenylnitrosamido-2-Phenyl-1,2,4-Thiodiazol. Sm. 119° u. Zers. (B. 24, 396). — IV, 847.
- 4) 5-Phenylazo-2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 140° (B. 23, 2826). — IV, 687.
- 5) 3-Nitroso-2-Phenylimido-5-Phenyl-2,3-Dihydro-1,3,4-Triazol (B. 29, 2917). — IV, 1159.
- $C_{14}H_{10}O_2NCl$  1) Methylenäther d. 4-Chlorphenyl-3,4-Dioxybenzylidenamin. Sm. 78°. HCl (C. 1908 [1] 1540).
- 2) 10-Chlor-9-Nitro-9,10-Dihydroanthracen. Sm. 163° (B. 34, 221).
- 3) 4-Chlor-2-[2-Oxy-4-Methylphenyl]benzpsedooxazol. Sm. 210° (B. 39, 1936 C. 1906 [2] 114; B. 42, 1715 C. 1909 [2] 210).

- $C_{14}H_{20}O_2NCl$  10 4) Chlorid d. 3-[4-Methylbenzoyl]pyridin-2-Carbonsäure (*M.* 22, 116). — \*IV, 119.
- 5) Chlorimid d. Benzolcarbonsäure. Sm. 89° (86°) (*C.* 1902 [2] 359; *Am.* 30, 420 *C.* 1904 [1] 241; *C.* 1904 [1] 803).
- 6) Methyläther d. Verb.  $C_{13}H_9O_2NCl$ . Sm. 144° (*Bl.* [3] 31, 532 *C.* 1904 [1] 1598).
- 7) Verbindung (aus  $\alpha$ -Pikolin u. Phtalylechlorid). Fl. HCl (*B.* 36, 1658 *C.* 1903 [2] 40). — \*IV, 243.
- $C_{14}H_{10}O_2NBr$  1) Methylenäther d. 4-Bromphenyl-3,4-Dioxybenzylidenamin. Sm. 109° (*C.* 1908 [1] 1541).
- $C_{14}H_{10}O_2NBr_3$  1) 1,3,6-Tribrom-2-Naphtylimid d. Essigsäure. Sm. 159° (*J. pr.* [2] 43, 56). — II, 616.
- $C_{14}H_{10}O_2N_2Cl_2$  1) anti- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[2-Chlorphenyl]äthan (o-Dichlorbenzylantidioxim). Sm. 270° (*B.* 32, 1984). — \*III, 223.
- 2) syn- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[2-Chlorphenyl]äthan (o-Dichlorbenzylsyn-dioxim). Sm. 226° (*B.* 32, 1982). — \*III, 223.
- 3) Glyoxim-N-4-Chlorphenyläther. Sm. 239–240° (*B.* 33, 952). — \*II, 244.
- 4) Di[2-Chlor-4-Oxybenzyliden]hydrazin. Sm. 255° u. Zers. (*A.* 357, 335 *C.* 1908 [1] 354).
- 5) s-Di[3-Chlorbenzoyl]hydrazin. Sm. 264° (*J. pr.* [2] 64, 329).
- 6) Di[4-Chlorphenylamid] d. Oxalsäure. Sm. 288° (*Soc.* 89, 158 *C.* 1906 [1] 1337).
- $C_{14}H_{10}O_2N_2Br_2$  1) Glyoxim-N-4-Bromphenyläther. Sm. 278° (230°) (*B.* 30, 2463, 2876; 33, 952). — \*II, 244.
- 2) Di[2-Brom-4-Oxybenzyliden]hydrazin. Sm. 260° (*A.* 357, 335 *C.* 1908 [1] 354).
- 3)  $\alpha\beta$ -Di[2-Brombenzoyl]hydrazin. Sm. 245° (*J. pr.* [2] 69, 475 *C.* 1904 [2] 536).
- 4)  $\alpha\beta$ -Di[3-Brombenzoyl]hydrazin. Sm. 265° (*J. pr.* [2] 58, 194; *J. pr.* [2] 69, 477 *C.* 1904 [2] 536). — \*II, 810.
- 5)  $\alpha\beta$ -Di[4-Brombenzoyl]hydrazin. Sm. 300° u. Zers. (*B.* 35, 3241 *C.* 1902 [2] 1045; *J. pr.* [2] 69, 479 *C.* 1904 [2] 536).
- 6) Acetat d. 3,5-Dibrom-4-Oxyazobenzol. Sm. 143° (*Soc.* 77, 715). — \*IV, 1035.
- 7) s-Di[4-Bromphenylamid] d. Oxalsäure. Sm. oberhalb 300° (*Am.* 8, 351). — II, 410.
- $C_{14}H_{10}O_2N_2J_2$  1) s-Di[4-Jodphenylamid] d. Oxalsäure (*Am.* 8, 352). — II, 410.
- $C_{14}H_{10}O_2N_2S$  1) 3[oder 5]-Thiänyl-1-Phenylpyrazol-5[oder 3]-Carbonsäure. Sm. 195°. Ag (*G.* 21 [2] 273). — IV, 893.
- $C_{14}H_{10}O_2N_2S_2$  1)  $\alpha\beta$ -Di[4-Thionylamidophenyl]äthen. Sm. 201–202° (*A.* 274, 265). — IV, 994.
- 2) 3-Phenylamido-2-Thiocarbonyl-4-Keto-5-[2-Furyliden]tetrahydrothiazol. Sm. 168° (*M.* 27, 1217 *C.* 1907 [1] 971).
- $C_{14}H_{10}O_2N_3Cl$  1) 5-Nitro-2-[ $\beta$ -Phenyläthenyl]diazobenzolchlorid. Zers. bei 107° (*B.* 39, 905 *C.* 1906 [1] 1168).
- 2) 3-Nitro-4-[ $\beta$ -Phenyläthenyl]diazobenzolchlorid. Zers. bei 120° (*B.* 39, 902 *C.* 1906 [1] 1167).
- $C_{14}H_{10}O_2N_4Br_2$  1) 2,6-Dibrom-1,4,5,8-Tetraamido-9,10-Anthrachinon. Sm. noch nicht bei 360° (*D.R.P.* 148109 *C.* 1904 [1] 230; *B.* 37, 4683 *C.* 1905 [1] 370).
- $C_{14}H_{10}O_2N_4Br_4$  1) Di[2,6-Dibromphenylamid] d. Hydrazin- $\alpha\beta$ -Dicarbonsäure. Sm. 215–218° (*J. pr.* [2] 58, 225). — \*II, 191.
- $C_{14}H_{10}O_2Cl_7Sb$  1) Dimethyläther d. Di[3,5-Dichlor-4-Oxyphenyl]antimontrichlorid. Sm. 184° (*B.* 30, 2839). — IV, 1695.
- $C_{14}H_{10}O_2Br_4S$  1) Dimethyläther d. Di[p-Dibrom-4-Oxyphenyl]sulfid. Sm. 132° (*B.* 27, 2541). — \*II, 575.
- 2) Di[4-Dibrommethylphenyl]sulfon. Sm. 137° (*Bl.* [3] 11, 504). — II, 825.
- $C_{14}H_{10}O_2ClJ$  1) Aldehyd d. Diphenyljodoniumchlorid-4,4'-Dicarbonsäure. Sm. 180°. 2 + PtCl<sub>4</sub> (*B.* 38, 3446 *C.* 1905 [2] 1585).
- $C_{14}H_{10}O_2BrJ$  1) Aldehyd d. Diphenyljodoniumbromid-4,4'-Dicarbonsäure. Sm. 151° (*B.* 38, 3447 *C.* 1905 [2] 1585).

- $C_{14}H_{10}O_3NCl$  1) *p*-Chlor-3'-Nitro-4-Methyldiphenylketon. Sm. 96° (A. 286, 309). — III, 214.  
 2) 4'-Chlor-3'-Amidodiphenylketon-2-Carbonsäure. Sm. 175—176° (D.R.P. 148110 C. 1904 [1] 329).  
 3) 4-Chlorbiphenyl-4'-Oxaminsäure.  $NH_4$  (B. 39, 4181 C. 1907 [1] 473).  
 4) Äthylester d. 3-Chlor-1-Ketoinden-2-Cyanmethylcarbonsäure? Sm. 118° (B. 32, 916). — \*II, 1141.  
 5) Benzoat d. *p*-Chlor-4-Oximido-1-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 185—193° (Am. 22, 407). — \*III, 266.  
 6) Benzoat d. 4-Chlorbenzhydroxamsäure. Sm. 158° (R. 18, 398). — \*II, 765.  
 7) 3-Chlorbenzoat d. Benzhydroxamsäure. Sm. 156° (B. 32, 1658). — \*II, 764.  
 8) 4-Chlorbenzoat d. Benzhydroxamsäure. Sm. 137° (R. 18, 396). — \*II, 765.
- $C_{14}H_{10}O_3NBr$  1) *p*-Brom-3'-Nitro-4-Methyldiphenylketon. Sm. 116° (A. 286, 309). — III, 214.  
 2) 4-Brombiphenyl-4'-Oxaminsäure. Zers. bei 240°.  $NH_4$  (B. 39, 4182 C. 1907 [1] 474).  
 3) Äthylester d. 3-Brom-1-Ketoinden-2-Cyanmethylcarbonsäure? Sm. 134—135° (B. 32, 917). — \*II, 1141.  
 4) Benzoat d. *p*-Brom-4-Oximido-1-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 174° (184°) (Am. 20, 773; 22, 405). — \*III, 267.
- $C_{14}H_{10}O_3NJ$  1) 4-Jodbiphenyl-4'-Oxaminsäure. Zers. bei 280°.  $NH_4$  (B. 39, 4182 C. 1907 [1] 474).
- $C_{14}H_{10}O_8N_2Br_2$  1) Acetat d. 3,2'-Dibrom-4-Nitrosodiphenylhydroxylamin. Sm. 144 bis 145° (B. 31, 1519). — \*II, 245.
- $C_{14}H_{10}O_3N_2Br_4$  1) Dimethyläther d. 3,5,3',5'-Tetrabrom-4,4'-Dioxyazoxybenzol. Sm. 214° (B. 35, 1131 C. 1902 [1] 915; Am. 30, 61 C. 1903 [2] 354). — \*IV, 1001.  
 2) trans- $\beta\beta\gamma\gamma$ -Tetrabrom- $\alpha$ -Keto- $\gamma$ -[2-Nitrophenyl]- $\alpha$ -[2-Pyridyl]-propan. Sm. 120° (B. 35, 4066 C. 1903 [1] 92).
- $C_{14}H_{10}O_3N_2S$  1) Verbindung (aus d. Nitril d. Benzolcarbonsäure u.  $SO_3$ ). Sm. 157 bis 158° u. Zers. (B. 25, 461). — II, 1212.
- $C_{14}H_{10}O_3N_3S_2$  1) 4-Sulfophenylamid d. Benzthiazol-1-Thiocarbonsäure. Na (B. 37, 3728 C. 1904 [2] 1450).
- $C_{14}H_{10}O_3N_2Hg_2$  1) Verbindung (aus Benzolazophenoldimerkuriacetat). Sm. noch nicht bei 300° (Soc. 93, 848 C. 1908 [1] 2149).
- $C_{14}H_{10}O_3N_3Cl$  1) 3-Nitrobenzylidenhydrazid d. 3-Chlorbenzol-1-Carbonsäure (J. pr. [2] 64, 328). — \*III, 31.
- $C_{14}H_{10}O_3N_4S$  1) 5-Phenylamido-2-Keto-3-[3-Nitrophenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 223° (B. 32, 1085). — \*IV, 447.
- $C_{14}H_{10}O_3Br_4S$  1) Dimethyläther d. Di[*p*-Dibrom-4-Oxyphenyl]sulfoxyd. Sm. 155° (B. 27, 2542). — \*II, 576.
- $C_{14}H_{10}O_4NCl$  1) Methyläther d. 6'-Chlor-3-Nitro-4-Oxydiphenylketon. Sm. 105° (B. 39, 307 C. 1906 [1] 683).  
 2) Phenylester d. 4-Chlorformoxylphenylamidoameisensäure. Sm. 143—144° (J. pr. [2] 67, 340 C. 1903 [1] 1339).
- $C_{14}H_{10}O_4NBr$  1) 4-Benzoat d. *p*-Brom-4-Oximido-2-Oxy-1-Keto-1,4-Dihydrobenzol-2-Methyläther. Sm. 178° u. Zers. (Am. 22, 488). — \*III, 262.
- $C_{14}H_{10}O_4N_2Cl_2$  1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[*p*-Nitrophenyl]äthan. Sm. 177—178° (A. 279, 325). — \*II, 112.  
 2)  $\beta\beta$ -Dichlor- $\alpha\beta$ -Dinitro- $\alpha\alpha$ -Diphenyläthan. Fl. (B. 35, 1531 C. 1902 [1] 1202).  
 3) Di[5-Chlor-2,4-Dioxybenzyliden]hydrazin. Sm. oberhalb 300° (A. 357, 340 C. 1908 [1] 355).
- $C_{14}H_{10}O_4N_2Br_2$  1)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[2-Nitrophenyl]äthan. Sm. 226° u. Zers. (B. 21, 2075). — II, 234.  
 2)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Nitrophenyl]äthan. Sm. oberhalb 300° u. Zers. (J. pr. [2] 34, 344). — II, 235.  
 3)  $\alpha\beta$ -Di[4-Brom-2-Nitrophenyl]äthan. Sm. 204—205° (A. 137, 270). — II, 234.  
 4)  $\alpha\beta$ -Dibrom-2,4-Dinitro- $\alpha\beta$ -Diphenyläthan. Sm. 185—186° u. Zers. (B. 34, 2843).



- $C_{14}H_{10}O_4N_2Br_4$  1) Dibromapophyllin +  $4H_2O$ . Sm.  $229^\circ$  u. Zers.  $HCl$ ,  $2HCl$ ,  $(2HCl, PtCl_4 + H_2O)$ ,  $HBr$ ,  $2HBr$ ,  $H_2SO_4$  (B. 15, 1251; A. 210, 94). — III, 921.
- $C_{14}H_{10}O_4N_2S$  1) Dinitrothiophen + Naphtalin. Sm.  $50^\circ$  (B. 18, 1778). — II, 183.
- $C_{14}H_{10}O_4N_2S_2$  1) 4-Sulfophenylamid d. Benzthiazol-1-Carbonsäure. Na (B. 37, 3730 C. 1904 [2] 1450).
- $C_{14}H_{10}O_4N_3Cl$  1) 4-Amidobiphenyl-4'-Diazochlorid-4,4'-Dicarbonsäure (B. 40, 3003 Anm. C. 1907 [2] 701).
- $C_{14}H_{10}O_4N_3Br$  1) Acetat d. 5-Brom-3-Nitro-4-Oxyazobenzol. Sm.  $137^\circ$  (Soc. 89, 185 C. 1906 [1] 1339).
- $C_{14}H_{10}O_4N_4S$  1) Verbindung (aus Sticksulfid u. 3-Nitrobenzaldehyd). Sm.  $180^\circ$  (Soc. 87, 1833 C. 1906 [1] 554).
- $C_{14}H_{10}O_4JAs$  1) Diphenyljodarsin-4,4'-Dicarbonsäure. Sm. oberhalb  $280^\circ$  (A. 208, 24). — IV, 1693.
- $C_{14}H_{10}O_4SHg_2$  1) Diphenylquecksilbersulfid-2,2'-Dicarbonsäure.  $Na_2$ ,  $K_2$  (C. 1901 [2] 108; G. 32 [2] 292 C. 1902 [2] 1454). — IV, 1218.
- $C_{14}H_{10}O_5NBr$  1) 2-Benzoat d. 5-Brom-3-Nitro-1,2-Dioxybenzol-1-Methyläther. Sm.  $103-104^\circ$  (Soc. 73, 689). — II, 719.
- 2) 1-Benzoat d. 6-Brom-4-Nitro-1,2-Dioxybenzol-2-Methyläther. Sm.  $117-118^\circ$  (Soc. 73, 690). — II, 560.
- $C_{14}H_{10}O_5N_2Cl_2$  1) Di[ $\alpha$ -Chlor-2-Nitrobenzyl]äther (B. 40, 4939 C. 1908 [1] 468; B. 42, 2584 C. 1909 [2] 520).
- 2) Di[ $\alpha$ -Chlor-3-Nitrobenzyl]äther. Sm.  $144^\circ$  (B. 42, 2585 C. 1909 [2] 520).
- 3) Di[ $\alpha$ -Chlor-4-Nitrobenzyl]äther. Sm.  $170^\circ$  (B. 42, 2587 C. 1909 [2] 520).
- $C_{14}H_{10}O_5N_2Br_2$  1) Di[ $\alpha$ -Brom-2-Nitrobenzyl]äther. Zers. bei  $137-147^\circ$  (B. 42, 2585 C. 1909 [2] 520).
- 2) Di[ $\alpha$ -Brom-4-Nitrobenzyl]äther. Sm.  $175^\circ$  (B. 42, 2588 C. 1909 [2] 520).
- $C_{14}H_{10}O_5N_2S$  1) p-Diamido-9,10-Anthrachinon-p-Sulfonsäure. Ba, Pb (J. pr. [2] 19, 215). — III, 417.
- 2) 3-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzdiazin-p-Sulfonsäure. Sm. noch nicht bei  $300^\circ$ . Na, Ba (B. 34, 1111, 2296). — IV, 685.
- 3) 4-Nitrobenzylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm.  $175,5-176^\circ$  (B. 29, 1049). — II, 802.
- $C_{14}H_{10}O_5N_3Cl$  1) p-Dinitro-4-Methylphenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm.  $228^\circ$  (B. 13, 466). — II, 1217.
- $C_{14}H_{10}O_6N_2Br_2$  1)  $\alpha$ -Di[5-Brom-3-Nitro-4-Oxyphenyl]äthan. Sm.  $172^\circ$  (A. 363, 256 C. 1909 [1] 175).
- 2) Dimethylester d. 3,3'-Dibrom-2,2'-Diketo-1,2,1',2'-Tetrahydro-1,1'-Bipyridyl-5,5'-Dicarbonsäure. Sm.  $344^\circ$  (B. 37, 3840 C. 1904 [2] 1616).
- $C_{14}H_{10}O_6N_2S$  1) 1-Oxy-9,10-Anthrachinon-4-[Hydrazin- $\beta$ -Sulfonsäure] (D. R. P. 163447 C. 1905 [2] 1302).
- $C_{14}H_{10}O_6N_2S_2$  1) 4,8-Diimido-1,5-Diketo-1,4,5,8-Tetrahydro-9,10-Anthrachinon-2,6-Disulfonsäure (D. R. P. 113724 C. 1900 [2] 831). — III, 307.
- 2) 4,4'-Azo- $\alpha\beta$ -Diphenyläthen-2,2'-Disulfonsäure.  $Na_2$ , Ba (C. 1903 [1] 1414; Z. El. Ch. 9, 416; B. 26, 2233; 28, 2281; D. R. P. 96929 C. 1898 [2] 320). — IV, 1031.
- $C_{14}H_{10}O_6N_3Cl$  1) Acetat d. 2-Chlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm.  $170^\circ$  (B. 36, 3266 C. 1903 [2] 1126).
- 2) Acetat d. 3-Chlor-2',4'-Dinitro-4-Oxydiphenylamin. Sm.  $156^\circ$  (B. 36, 3267 C. 1903 [2] 1126).
- $C_{14}H_{10}O_6N_3Br$  1) Acetat d. 2-Brom-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 165 bis  $166^\circ$  (B. 36, 3269 C. 1903 [2] 1126).
- $C_{14}H_{10}O_6N_4S_2$  1) 4,4'-Bidiazo-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure +  $H_2O$ . Zers. bei  $86^\circ$  (A. 270, 362; J. pr. [2] 66, 565). — IV, 1543; IV, 1121.
- $C_{14}H_{10}O_7N_2S$  1) 2,4-Dinitro- $\alpha\beta$ -Diphenyläthen-p-Sulfonsäure. Sm.  $70^\circ$ ; Zers. bei  $112-120^\circ$ . Na (B. 35, 4146 C. 1903 [1] 165).
- 2) 4,8-Diamido-1,5-Dioxy-9,10-Anthrachinon-2-Sulfonsäure (C. 1900 [1] 1178; 1900 [2] 546; 1901 [1] 487, 807; D. R. P. 190476 C. 1907 [2] 2010). — III, 306.

- $C_{14}H_{10}O_7N_2S$  3) 4,5-Diamido-1,8-Dioxy-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 117893 C. 1901 [1] 550; D.R.P. 119228 C. 1901 [1] 807; D.R.P. 190476 C. 1907 [2] 2010). — \*III, 308.
- $C_{14}H_{10}O_7N_2S_2$  1) 4,4'-Azoxy- $\alpha\beta$ -Diphenyläthen-2,2'-Disulfonsäure (Azoxystilben-disulfonsäure) (B. 19, 3234; 28, 424, 2282; C. 1903 [1] 1414).
- $C_{14}H_{10}O_8N_2S_2$  1)  $\alpha\beta$ -Di[4-Nitrosophenyl]äthen-2,2'-Disulfonsäure. Na<sub>2</sub>, Ba (B. 26, 2233; 28, 423, 2281). — II, 249; \*II, 118.
- 2) 1,5-Diamido-9,10-Anthrachinon-*p*-Disulfonsäure (D.R.P. 126393 C. 1902 [1] 85).
- 3) *p*-Diamido-9,10-Anthrachinon-*p*-Disulfonsäure (J. pr. [2] 19, 215). — III, 417.
- 4) Aldehyd d. Azobenzol-4,4'-Dicarbonsäure-3,3'-Disulfonsäure. K<sub>2</sub> (Soc. 89, 1609 C. 1907 [1] 258).
- $C_{14}H_{10}O_8N_4S$  1) Di[4,6-Dinitro-2-Methylphenyl]sulfid. Sm. 210° (R. 20, 429 C. 1902 [1] 418).
- 2) 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol-1<sup>4</sup>-Sulfonsäure. Zers. oberhalb 260° (Soc. 95, 1047 C. 1909 [2] 519).
- $C_{14}H_{10}O_8N_4S_2$  1) Di[4,6-Dinitro-3-Methylphenyl]disulfid. Sm. 265° u. Zers. (B. 42, 748 C. 1909 [1] 995).
- $C_{14}H_{10}O_9N_2S_2$  1) 1-Oxy-9,10-Anthrachinon-4-[Hydrazin- $\alpha\beta$ -Disulfonsäure]. K<sub>2</sub> (D.R.P. 163447 C. 1905 [2] 1302).
- $C_{14}H_{10}O_9N_4S$  1) 4,7-Dinitro-6-Oxy-1-[2-Oxyphenyl]-2-Methylbenzimidazol-*p*-Sulfonsäure. Zers. oberhalb 300° (Soc. 95, 1044 C. 1909 [2] 519).
- $C_{14}H_{10}O_{10}N_2S_2$  1)  $\alpha\beta$ -Di[4-Nitrophenyl]äthen-2,2'-Disulfonsäure. Na<sub>2</sub>, K<sub>2</sub> (B. 26, 2234; 30, 3100; 31, 355, 1078; C. 1900 [1] 1086; Soc. 85, 1427 C. 1904 [2] 1739). — II, 249; \*II, 118.
- 2) 2,4-Dinitro- $\alpha\beta$ -Diphenyläthen-*p*-Disulfonsäure. Sm. 83—85° (125°). Ba + 4H<sub>2</sub>O, Benzidinsalz (B. 35, 4147 C. 1903 [1] 165).
- 3) 4,8-Diamido-1,5-Dioxy-9,10-Anthrachinon-2,6-Disulfonsäure (C. 1898 [1] 1255; 1900 [1] 78, 1178, 1181; 1901 [1] 923; D.R.P. 195139 C. 1908 [1] 1229). — \*III, 307.
- 4) 4,5-Diamido-1,8-Dioxy-9,10-Anthrachinon-2,7-Disulfonsäure (C. 1899 [1] 654; 1900 [1] 78, 1181; D.R.P. 115858 C. 1901 [1] 923). — \*III, 308.
- 5) *p*-Diamido-2,6-Dioxy-9,10-Anthrachinon-*p*-Disulfonsäure. K<sub>2</sub> (D.R.P. 99611 C. 1899 [1] 399). — \*III, 309.
- 6) *p*-Diamido-2,7-Dioxy-9,10-Anthrachinon-*p*-Disulfonsäure. K<sub>2</sub> (D.R.P. 99612). — \*III, 309.
- $C_{14}H_{10}O_{10}N_4S$  1) Dimethyläther d. 4,6,4',6'-Tetranitro-2,2'-Dioxydiphenylsulfid. Sm. 270° (R. 23, 114 C. 1904 [2] 205).
- 2) Dimethyläther d. 4,6,4',6'-Tetranitro-3,3'-Dioxydiphenylsulfid. Sm. 204° (R. 23, 122 C. 1904 [2] 206).
- $C_{14}H_{10}O_{10}N_4S_2$  1) Dimethyläther d. 4,6,4',6'-Tetranitro-3,3'-Dioxydiphenyldisulfid. Sm. 236° u. Zers. (R. 23, 123 C. 1904 [2] 206).
- $C_{14}H_{10}O_{12}N_2S_2$  1) 4,8-Diamido-1,3,5,7-Tetraoxy-9,10-Anthrachinon-2,6-Disulfonsäure (D.R.P. 73684; D.R.P. 115002 C. 1900 [2] 1094; D.R.P. 119756 C. 1901 [1] 1027; C. 1903 [2] 1130). — \*III, 313.
- 2) 4,5-Diamido-1,3,6,8-Tetraoxy-9,10-Anthrachinon-2,7-Disulfonsäure (C. 1901 [1] 1027).
- 3) 4,8-Dihydroxylamido-1,5-Dioxy-9,10-Anthrachinon-2,6-Disulfonsäure (D.R.P. 100137 C. 1899 [1] 655). — \*III, 307.
- 4) 4,5-Dihydroxylamido-1,8-Dioxy-9,10-Anthrachinon-2,7-Disulfonsäure (D.R.P. 100137 C. 1899 [1] 655; D.R.P. 119229 C. 1901 [1] 867). — \*III, 308.
- $C_{14}H_{10}N_3Cl_2S_2$  1) Phenylsenföchlorid. Sm. 150—160° u. Zers. (B. 20, 786). — II, 389.
- $C_{14}H_{10}N_2Cl_4Br_3$  1)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Brom- $\alpha$ -Di[4-Bromphenylamido]äthan. Sm. 203° (C. 1908 [1] 935).
- $C_{14}H_{10}N_2Br_2S_2$  1) Phenylsenfölbromid. Sm. 190° u. Zers. (B. 20, 789). — II, 389.
- $C_{14}H_{10}N_2Br_2S_3$  1) Verbindung (aus Phenylsenfö u. Brom) (B. 9, 1263). — II, 389.
- $C_{14}H_{10}N_2J_2S_2$  1) Jodid d. 2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol-2,5-Sulfid. Sm. 145° (J. pr. [2] 67, 221 C. 1903 [1] 1261).
- $C_{14}H_{10}N_2S_2Pb$  1) Rhodanid d. Bleidiphenylldirhodanid (B. 20, 3334). — IV, 1715.
- $C_{14}H_{10}N_3BrS$  1) 5-[4-Bromphenyl]amido-2-Phenyl-1,2,4-Thiodiazol (B. 24, 395). — IV, 847.

- C<sub>14</sub>H<sub>11</sub>ONCl<sub>2</sub>** 1) N-2-Chlorbenzyl-syn-2-Chlorbenzaldoxim. Sm. 98—99° (A. 269, 396). — III, 45.  
2) N-4-Chlorbenzyl-4-Chlorbenzaldoxim. Sm. 141° (A. 298, 195). — \*III, 36.  
3) 4-Chlorbenzyläther d. 4-Chlorbenzaldoxim. Sm. 114° (B. 33, 1984). — \*III, 36.
- C<sub>14</sub>H<sub>11</sub>ONBr<sub>2</sub>** 1) 3-Methylphenyl-3,5-Dibrom-4-Oxybenzylidenamin. Sm. 155,5 bis 157° (B. 41, 1056 C. 1908 [1] 1775).  
2) 4-Methylphenyl-3,5-Dibrom-4-Oxybenzylidenamin. Sm. 157° (187°). + C<sub>2</sub>H<sub>6</sub>O (B. 28, 3235; B. 41, 1055 C. 1908 [1] 1775). — III, 85.  
3) 4-Brombenzyläther d. 4-Brombenzaldoxim. Sm. 130° (B. 33, 1984). — \*III, 36.
- C<sub>14</sub>H<sub>11</sub>ONBr<sub>4</sub>** 1) 3,4,5,6-Tetrabrom-2-Oxydibenzylamin. Sm. 170—171° (A. 344, 150 C. 1906 [1] 1157).  
2) 2,3,5,6-Tetrabrom-4-Oxydibenzylamin. Sm. 163° (A. 344, 166 C. 1906 [1] 1158).  
3) 3,5,6-Tribrom-2-Oxy-4-Brommethyl-1-Phenylamidomethylbenzol. Erweichen bei 138—140° (B. 35, 148 C. 1902 [1] 468).
- C<sub>14</sub>H<sub>11</sub>ONJ<sub>2</sub>** 1) 4-[3,5-Dijod-2-Oxybenzyliden]amido-1-Methylbenzol. Sm. 147,5° (J. pr. [2] 57, 205; [2] 59, 121). — \*III, 52.  
2) 4-[3,5-Dijod-4-Oxybenzyliden]amido-1-Methylbenzol. Sm. 189° u. Zers. (190°) (B. 29, 2305; J. pr. [2] 57, 205; [2] 59, 128). — \*III, 61.  
3) Di[4-Jodphenyl]amid d. Essigsäure. Sm. 138° (D.R.P. 81928). — \*II, 175.
- C<sub>14</sub>H<sub>11</sub>ONS** 1) N-Acetylthiodiphenylamin. Sm. 197—197,5° (A. 230, 95). — II, 806.  
2) Methyläther d. 1-[4-Oxyphenyl]benzthiazol. Sm. 134—135° (J. pr. [2] 59, 578; B. 25, 3529). — II, 1541.  
3) 3-Keto-2-Phenyl-3,4-Dihydro-1,4-Benzthiazin. Sm. 204° (B. 30, 2396). — \*IV, 252.  
4) Gem. Imid d. Benzolcarbonsäure u. Benzolthiocarbonsäure. Sm. 117° (C. 1905 [2] 407).  
5) Verbindung (aus Dehydrothio-4-Amido-1-Methylbenzol). Sm. 255 bis 256° (B. 22, 334). — II, 822.
- C<sub>14</sub>H<sub>11</sub>ONS<sub>2</sub>** 1) Gem. Anhydrid d. Benzolcarbonsäure u. Phenylamidodithioameisensäure (N-Phenyl-S-Benzoyldithiourethan). Sm. 64° (B. 36, 3527 C. 1903 [2] 1326).
- C<sub>14</sub>H<sub>11</sub>ON<sub>2</sub>Cl** 1) 5-Chlor-3-Oxy-7-Methyl-2-Phenylindazol. Sm. 212—213° (Bl. [4] 1, 231 C. 1907 [1] 1574).  
2) 3-[3-Chlorphenyl]amido-1,4-Benzoxazin. Sm. 112—114°. HCl (Am. 20, 566). — \*II, 392.  
3) 3-[2-Chlorphenyl]-2-Keto-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 207° (J. pr. [2] 52, 377). — IV, 632.  
4) Chlorid d. α-Phenyl-β-Benzylidenhydrazin-α-Carbonsäure. Sm. 101—102° (B. 36, 1358 C. 1903 [1] 1339). — \*IV, 482.  
5) Benzylidenhydrazid d. 3-Chlorbenzol-1-Carbonsäure. Sm. 118° (J. pr. [2] 64, 328). — \*III, 31.
- C<sub>14</sub>H<sub>11</sub>ON<sub>2</sub>Cl<sub>3</sub>** 1) p-Dibrom-5-Nitro-4'-Amido-2-Methyldiphenylmethan. Sm. 150° (B. 26, 1854). — III, 335.  
2) 2,3,5[oder 2,3,6]-Trichlor-4-[4-Dimethylamidophenyl]imido-1-Keto-1,4-Dihydrobenzol (J. pr. [2] 23, 438; [2] 24, 435). — III, 335.
- C<sub>14</sub>H<sub>11</sub>ON<sub>2</sub>Br** 1) 4-Brombenzolz-4-Methylbenzoyl. Sm. 98° (G. 39 [1] 602 C. 1909 [2] 805).  
2) 3-[4-Bromphenyl]-2-Keto-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 226° (J. pr. [2] 52, 392). — IV, 632.  
3) Benzylidenhydrazid d. 3-Brombenzol-1-Carbonsäure. Sm. 105° (J. pr. [2] 58, 192). — \*III, 31.  
4) Benzylidenhydrazid d. 4-Brombenzol-1-Carbonsäure. Sm. 235° (J. pr. [2] 58, 200). — \*III, 31.
- C<sub>14</sub>H<sub>11</sub>ON<sub>2</sub>Br<sub>3</sub>** 1) Äthyläther d. 3,5,4'-Tribrom-4-Oxyazobenzol. Sm. 125° (Soc. 77, 813). — \*IV, 1036.
- C<sub>14</sub>H<sub>11</sub>ON<sub>3</sub>Cl<sub>2</sub>** 1) α-Nitroso-α-[2-Chlorbenzyl]-β-[2-Chlorbenzyliden]hydrazin. Sm. 100—101° u. Zers. (B. 34, 851). — \*IV, 542.  
2) 2,3-Dichlor-4-Acetylamidoazobenzol. Sm. 165° (C. 1902 [2] 938). — \*IV, 1012.



- $C_{14}H_{11}ON_2S$  1) Acetylthionin (*B.* 12, 2071). — II, 809.  
 2) 3-Merkapto-5-Keto-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 135° (*B.* 34, 310). — \*IV, 748.  
 3) 5-Merkapto-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Oxyd. Sm. 219—221°. Ag (*B.* 25, 3110; 34, 2328; 35, 974 *C.* 1902 [1] 880). — IV, 686; \*IV, 447.  
 4) 5-Phenylimido-3-Keto-2-Phenyltetrahydro-1,2,4-Thiodiazol. Sm. 162° (*B.* 39, 863 *C.* 1906 [1] 1413).  
 5) 5-Phenylamido-2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 188° (*B.* 21, 2466; 25, 3109; 32, 1084). — IV, 686.  
 6) 1-Oximido-2-Phenylhydrazon-1,2-Dihydrobenzthiofuran. Sm. 154° (*D. R. P.* 213458 *C.* 1909 [2] 1393).  
 7) Anhydrid d. 2-[ $\gamma$ -Phenylthiosemicarbazido]benzol-1-Carbonsäure. Sm. 238° (*Am.* 37, 368 *C.* 1907 [2] 323).
- $C_{14}H_{11}ON_2S$  1) Nitrosoderivat d. 3,5-Diimido-2,4-Diphenyltetrahydro-1,2,4-Thiodiazol. Zers. bei 179° (*B.* 22, 1179). — IV, 1236.
- $C_{14}H_{11}O_2NCl_2$  1)  $\alpha\alpha$ -Dichlor-3'-Nitro-4-Methyldiphenylmethan. Fl. (*A.* 286, 308).
- $C_{14}H_{11}O_2NCl_4$  1) 2,3,5,6-Tetrachlor-1,4-Benzochinon + Dimethylamidobenzol. Sm. 105° (*B.* 37, 179 *C.* 1904 [1] 653; *Am.* 34, 449 *C.* 1906 [1] 30).
- $C_{14}H_{11}O_2NBr_2$  1) Methyläther d. 2,6-Dibrom-4-Benzoylamido-1-Oxybenzol. Sm. 180° (*Soc.* 81, 1480 *C.* 1903 [1] 23, 144).  
 2) Methylenäther d.  $\alpha\beta$ -Dibrom- $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[2-Pyridyl]-äthan (*B.* 30, 1580). — IV, 379.  
 3) Phenylamidoformiat d. 5-Brom-2-Oxy-1-Brommethylbenzol. Sm. 170—171° (*B.* 39, 3181 *C.* 1906 [2] 1320).  
 4) 1,6-Dibrom-2-Naphtylimid d. Essigsäure. Sm. 180° (*J. pr.* [2] 43, 49). — II, 616.
- $C_{14}H_{11}O_2NBr_4$  1) Verbindung (aus Dimethylamidobenzol u. 3,4,5,6-Tetrabrom-1,2-Benzo-  
 chinon) (*Am.* 34, 448 *C.* 1906 [1] 30).  
 2) Verbindung (aus Dimethylamidobenzol u. 2,3,5,6-Tetrabrom-1,4-Benzo-  
 chinon). Sm. 65—68° (*Am.* 34, 451 *C.* 1906 [1] 30).
- $C_{14}H_{11}O_2NJ_2$  1) Jodid d. Benzolcarbonsäureimid. Sm. 118—120° (*B.* 23, 3040). — II, 1171.
- $C_{14}H_{11}O_2NS$  1) 2,4-Diketo-3-[1-Naphtyl]-3,4,5,6-Tetrahydro-1,3-Thiazin. Sm. 173°. — II, 608.  
 2) 2,4-Diketo-3-[2-Naphtyl]-3,4,5,6-Tetrahydro-1,3-Thiazin. Sm. 197°. — II, 618.  
 3) Phenylbenzoylamidothiolameisensäure. Sm. 97—99° (*C.* 1901 [2] 629).  
 4) Phenylester d. Benzoylamidothioameisensäure. Sm. 93° (*A. ch.* [5] 11, 337). — II, 1181; \*II, 743.  
 5) Amid d. Anthracen-2-Sulfonsäure. Sm. 261° (*B.* 28, 2299). — \*II, 122.  
 6) Amid d. Phenanthren-3-Sulfonsäure. Sm. 189,5—190° (*A.* 369, 114 *C.* 1909 [2] 1809).  
 7) Verbindung (aus Isatin u. Merkapto-*benzol*) (*B.* 18, 890). — II, 1602.
- $C_{14}H_{11}O_2NS_2$  1) Acetat d. Oxydithiodiphenylamin. Sm. 130—133° (*D. R. P.* 52827). — \*II, 481.
- $C_{14}H_{11}O_2N_2Cl$  1) 2-Methylphenyl-6-Chlor-3-Nitrobenzylidenamin. Sm. 125° (*M.* 25, 370 *C.* 1904 [2] 322).  
 2) 4-Methylphenyl-6-Chlor-3-Nitrobenzylidenamin. Sm. 133° (*M.* 25, 370 *C.* 1904 [2] 322).  
 3) s-Benzoyl-3-Chlorphenylharnstoff. Sm. bei 200° (*Am.* 24, 220).  
 4) s-Benzoyl-4-Chlorphenylharnstoff. Sm. 235—237° (*Am.* 30, 416 *C.* 1904 [1] 240).  
 5) 5-Chlor-2,4'-Di[Formylamido]biphenyl. Sm. 194° (*A.* 303, 319). — \*IV, 638.  
 6) 4-Chlor-4'-Formylamidodiphenylformylamin. Sm. 103° (*A.* 303, 316). — \*IV, 384.  
 7) 1[oder 4]-Chlor-2-Oxyäthylphenazon. Sm. 215—216° (*A.* 290, 305). — IV, 1004.  
 8) Chlormethylat d. ?-Nitro- $\beta$ -Naphtochinolin. Sm. 218° (*J. pr.* [2] 57, 65). — \*IV, 249.

- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>2</sub>Cl** 9) 4'-Chlor-4-Methylazobenzol-2'-Carbonsäure. Sm. 159—160° (*C. r.* 147, 982 *C. 1909* [1] 69).
- 10) Acetat d. 2-Chlor-4'-Oxyazobenzol. Sm. 100° (*B. 26*, 2977). — *IV*, 1408.
- 11) Acetat d. 3-Chlor-4'-Oxyazobenzol. Sm. 92° (*B. 26*, 2977). — *IV*, 1409.
- 12) Acetat d. 4-Chlor-4'-Oxyazobenzol. Sm. 160° (*B. 26*, 2978). — *IV*, 1409.
- 13) Benzoat d. 2-Chlor-1-Oximidoamidomethylbenzol. Sm. 162° (*B. 32*, 1980). — \**II*, 764.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) 5-Brom-2,4'-Di[Formylamido]biphenyl. Sm. 191° (*A. 303*, 328). — \**IV*, 638.
- 2)  $\alpha$ -Benzoyl- $\beta$ -[4-Bromphenyl]harnstoff. Sm. 230° (*C. 1906* [2] 1251).
- 3) Methylenäther d. Phenyl- $\beta$ -Brom-3,4-Dioxybenzylidenhydrazin. Sm. 136° (*B. 24*, 2593). — *IV*, 764.
- 4) 3-Brom-5-Benzoylazo-2-Oxy-1-Methylbenzol. Sm. 209° (*A. 340*, 106 *C. 1905* [2] 323).
- 5) Methyläther d. 4-Brombenzylazo-4-Oxybenzoyl. Sm. 72° (*G. 39* [1] 601 *C. 1909* [2] 805; *G. 39* [1] 666 *C. 1909* [2] 907).
- 6)  $\alpha$ -Phenylhydrazon-4-Bromphenylelessigsäure. Sm. 180,5° (*B. 28*, 259). — *IV*, 695.
- 7) Acetat d. 2-Brom-4'-Oxyazobenzol. Sm. 89° (*B. 31*, 2115). — *IV*, 1409.
- 8) Acetat d. 3-Brom-4'-Oxyazobenzol. Sm. 112° (*B. 28*, 802). — *IV*, 1409.
- 9) Acetat d. 4-Brom-4'-Oxyazobenzol. Sm. 158° (*B. 31*, 2116). — *IV*, 1410.
- 10) 2-Oxybenzylidenhydrazid d. 3-Brombenzol-1-Carbonsäure. Sm. 192° (*J. pr.* [2] 58, 193). — \**III*, 56.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>2</sub>J** 1) Jodmethylat d.  $\beta$ -Nitro- $\beta$ -Naphtochinolin + 2H<sub>2</sub>O. Sm. 210° u. Zers. (*J. pr.* [2] 57, 64). — \**IV*, 249.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1)  $\alpha$ -[4-Brombenzoyl]amido- $\beta$ -[4-Bromphenyl]harnstoff. Sm. 248° (*J. pr.* [2] 58, 203). — \**II*, 810.
- 2)  $\beta$ -[4-Bromphenyl]ureid d. 4-Bromphenylamidoameisensäure (Di-[4-Bromphenyl]biuret). Zers. bei 280° (*B. 13*, 230). — *II*, 383.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>2</sub>S** 1)  $\beta$ -Nitro-1-[4-Amidophenyl]-5-Methylbenzthiazol. Sm. 216—217° (*D. R. P.* 81711). — \**II*, 483.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>N<sub>4</sub>Cl** 1) 2-Chlorphenylat d. 1-Phenyl-1,2,3,5-Tetrazol-4-Carbonsäure. Sm. 256—257° u. Zers. (*B. 27*, 2925). — *IV*, 1240.
- C<sub>14</sub>H<sub>11</sub>O<sub>2</sub>ClHg** 1) Benzoat d. 6-Oxy-1-Methylphenylquecksilberchlorid. Sm. 241 bis 242° (*C. 1901* [1] 453; *B. 35*, 2859 *C. 1902* [2] 1038). — \**IV*, 1215.
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>NCl<sub>2</sub>** 1) Benzoat d.  $\beta$ -Dichlor-4-Oximido-1-Keto-3-Methyl- $\beta$ -Tetrahydrobenzol. Sm. 149° (*Am. 22*, 406). — \**III*, 265.
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>NBr<sub>2</sub>** 1) 2-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 175—178° (*A. 332*, 195 *C. 1904* [2] 210).
- 2) 3-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 167° (*A. 332*, 196 *C. 1904* [2] 210).
- 3) Benzoat d.  $\beta$ -Dibrom-4-Oximido-1-Keto-2-Methyl- $\beta$ -Tetrahydrobenzol. Sm. 165° u. Zers. (*Am. 20*, 773). — \**III*, 266.
- 4) Benzoat d.  $\beta$ -Dibrom-4-Oximido-1-Keto-3-Methyl- $\beta$ -Tetrahydrobenzol. Sm. 159° u. Zers. (*Am. 20*, 776). — \**III*, 265.
- C<sub>14</sub>H<sub>11</sub>O<sub>3</sub>NS** 1) Methylester d.  $\alpha$ -Naphtochinolin-5-Sulfonsäure. Sm. 127° (*J. pr.* [2] 57, 81). — \**IV*, 248.
- 2) Benzolsulfonat d.  $\alpha$ -Oxyphenylelessigsenitrit. Sm. 66° (*Soc. 95*, 1408 *C. 1909* [2] 1228).
- 3) Benzylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 118° (*B. 29*, 1048). — \**II*, 802.
- 4) 2-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 172—175° (*Am. 17*, 327). — \**II*, 801.
- 5) 3-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 147,5° (*Am. 17*, 326). — \**II*, 801.
- 6) 4-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 195,5° (*Am. 17*, 322). — \**II*, 802.

- $C_{14}H_{11}O_8NS_2$  1) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-3-Allyl-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 151° (*M.* 24, 511 *C.* 1903 [2] 837).
- $C_{14}H_{11}O_8N_2Cl$  1) 4-Chlorphenylamidomethyl-3-Nitrophenylketon. Sm. 197° (*B.* 30, 574). — \*III, 98.  
2) 4-Chlorphenylamidomethyl- $\beta$ -Nitrophenylketon. Sm. 181° (*B.* 30, 574). — \*III, 98.  
3) 4-Nitrobenzyläther d. Phenylchloroximidomethan. Sm. 92° (*B.* 25, 45). — II, 1197.  
4) Methylester d. 4'-Chlor-4-Oxyazobenzol-2-Carbonsäure. Sm. 155° (*C.* 1908 [1] 127).  
5) Methylester d. 2'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 109° (*Soc.* 69, 1259). — IV, 1468.  
6) Methylester d. 3'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 114° (*Soc.* 69, 1263). — IV, 1469.  
7) Methylester d. 4'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 152° (*Soc.* 69, 1264). — IV, 1469.  
8) 4-Chlorphenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 110° (*J. pr.* [2] 48, 543). — II, 523.  
9) 2-Nitro-4-Methylphenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 139° (*B.* 13, 466). — II, 1217.
- $C_{14}H_{11}O_8N_2Br$  1) 2-Brom-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 228° (*B.* 31, 1784). — IV, 1469.  
2) Methylester d. 3-Brom-1-Benzylidenamido-2-Keto-1,2-Dihydropyridin-5-Carbonsäure. Sm. 173° (*B.* 37, 3838 *C.* 1904 [2] 1615).  
3) 4-Bromphenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 105° (*J. pr.* [2] 48, 550). — II, 523.
- $C_{14}H_{11}O_8N_3S$  1)  $\alpha$ -[ $\beta$ -Nitrophenyl]- $\beta$ -Benzoylthioharnstoff. Sm. 230° u. Zers. (*A. ch.* [5] 11, 322). — II, 1172.  
2) Äthyläther d. 5-Phtalylamido-2-Merkapto-4-Keto-3,4-Dihydro-1,3-Diazin. Sm. 230—231° (*Am.* 32, 142 *C.* 1904 [2] 957).
- $C_{14}H_{11}O_8N_3S_2$  1) 5-Thiocarbonyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3-Sulfonsäure. *K* (*B.* 34, 310). — \*IV, 751.
- $C_{14}H_{11}O_4NCl_2$  1) Methylester d. 3,5-Dichlor-6-Oxy-4-Keto-1-Phenyl-1,4-Dihydropyridinmethylläther - 2 - Carbonsäure. Sm. 140° (*A.* 267, 32). — IV, 159.
- $C_{14}H_{11}O_4NBr_2$  1) 4-Benzooat d.  $\beta$ -Dibrom-4-Oximido-2-Oxy-1-Keto- $\beta$ -Tetrahydrobenzol-2-Methyläther. Sm. 153—154° (*Am.* 22, 488). — \*III, 262.
- $C_{14}H_{11}O_4NS$  1) 10-Oxy-3-Methyl- $\beta$ -Naphtochinolin-8-Sulfonsäure.  $Ca + 6\frac{1}{2}H_2O$ ,  $Ba + 6\frac{1}{2}H_2O$  (*D.R.P.* 93 695). — \*IV, 250.  
2) Methylester d. 2'-Nitrodiphenylsulfid-2-Carbonsäure. Sm. 92° (*B.* 42, 3060 *C.* 1909 [2] 1457).  
3) Methylester d. 3'-Nitrodiphenylsulfid-2-Carbonsäure. Sm. 112 bis 114° (*B.* 42, 3064 *C.* 1909 [2] 1458).  
4) Methylester d. 4'-Nitrodiphenylsulfid-2-Carbonsäure. Sm. 131,5° (*B.* 42, 3051 *C.* 1909 [2] 1456).
- $C_{14}H_{11}O_4N_2Cl$  1)  $\alpha$ -Chlor- $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan. Sm. 124—125° (*Soc.* 71, 223). — \*II, 113.
- $C_{14}H_{11}O_4N_2Br$  1) 2-Methylphenylamid d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 250° (*G.* 34 [1] 276 *C.* 1904 [1] 1499).  
2) 4-Methylphenylamid d. 3-Brom-5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 256° u. Zers. (*G.* 34 [1] 276 *C.* 1904 [1] 1499).
- $C_{14}H_{11}O_4N_3Cl_2$  1) Di[2-Chlor-4-Nitrobenzyl]amin. Sm. 120° (*B.* 25, 88). — II, 520.
- $C_{14}H_{11}O_4N_3Cl_4$  1) 2,4,5,6-Tetrachlor-1,3-Dinitrobenzol + Dimethylamidobenzol. Sm. 113° (*B.* 37, 178 *C.* 1904 [1] 653).
- $C_{14}H_{11}O_4N_3S$  1) 1-Phenylazo-3-Oxyindol-1'-Sulfonsäure. *K* (*B.* 26, 226). — IV, 1485.
- $C_{14}H_{11}O_4N_4Cl_3$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2-Nitrophenylamido]äthan. Sm. 171° (*C.* 1903 [1] 140).  
2)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Nitrophenylamido]äthan. Sm. 212° (*C.* 1903 [1] 140).  
3)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Nitrophenylamido]äthan. Sm. 218° (216°) (*A.* 302, 366; *C.* 1903 [1] 140; 1909 [2] 1419). — \*II, 235.
- $C_{14}H_{11}O_4Cl_3S$  1) 1-[2-Methylphenyl]ester d. Benzol-1-Carbonsäure-2-Sulfonsäurechlorid. Sm. 112° (*Am.* 30, 309 *C.* 1903 [2] 1122).



- $C_{14}H_{11}O_4Cl_4Sb$  1) Antimondi[3,5-Dichlor-4-Methoxyphenyl]säure. Sm. 228—229° u. Zers. +  $HgCl_2$  (B. 30, 2840). — IV, 1695.
- $C_{14}H_{11}O_6NS$  1) 1-Succinylamidonaphtalin-4-Sulfonsäure.  $K + H_2O$  (A. 248, 157). — II, 626.  
 2) 1-Methylamido-9,10-Anthrachinon-5-Sulfonsäure (D. R. P. 164 293 C. 1905 [2] 1700).  
 3) 1-Methylamido-9,10-Anthrachinon-8-Sulfonsäure (D. R. P. 164 293 C. 1905 [2] 1700).  
 4) Methylester d. 2'-Nitrodiphenylsulfoxyd-2-Carbonsäure. Sm. 147 bis 148° (B. 42, 3061 C. 1909 [2] 1457).  
 5) Methylester d. 3'-Nitrodiphenylsulfoxyd-2-Carbonsäure. Sm. 137 bis 138° (B. 42, 3064 C. 1909 [2] 1458).  
 6) Methylester d. 4'-Nitrodiphenylsulfoxyd-2-Carbonsäure. Sm. 143,5° (B. 42, 3052 C. 1909 [2] 1457).
- $C_{14}H_{11}O_6N_3Cl_2$  1) Äthyläther d. p-Dichlor-2',4'-Dinitro-2-Oxydiphenylamin. Sm. 185—186° (B. 36, 3269 C. 1903 [2] 1127).
- $C_{14}H_{11}O_6N_3Hg$  1) Benzolazo-o-Nitrophenolmerkuriacetat. Sm. noch nicht bei 300° (Soc. 93, 850 C. 1908 [1] 2149).
- $C_{14}H_{11}O_6NS$  1) 3'-Nitro-4-Methyldiphenylketon-p-Sulfonsäure + 3  $H_2O$ . Sm. 140° (215° wasserfrei). Ba + 3  $H_2O$  (A. 286, 309). — III, 215.  
 2) Methylester d. 2'-Nitrodiphenylsulfon-2-Carbonsäure. Sm. 127° (B. 42, 3061 C. 1909 [2] 1458).  
 3) Methylester d. 4'-Nitrodiphenylsulfon-2-Carbonsäure. Sm. 136° (B. 42, 3054 C. 1909 [2] 1457).
- $C_{14}H_{11}O_6N_2Br$  1) Acetat d. 5-Oxy-2,4,6-Triketo-5-Benzoylbrommethylhexahydro-1,3-Diazin. Sm. 194° u. Zers. (B. 42, 1296 C. 1909 [1] 1550).
- $C_{14}H_{11}O_6N_4Cl_3$  1) 2,4,6-Trichlor-1,3,5-Trinitrobenzol + Dimethylamidobenzol. Sm. 78° (B. 37, 178 C. 1904 [1] 653).
- $C_{14}H_{11}O_6N_4Br$  1)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -(p-Brom-6,p-Dinitro-2,4-Dioxyphenyl)äthyliden]-hydrazin. Sm. 236° (B. 41, 1624 C. 1908 [2] 69).
- $C_{14}H_{11}O_6N_4Br_3$  1) 2,4,6-Tribrom-1,3,5-Trinitrobenzol + Dimethylamidobenzol. Zers. bei 50° (B. 37, 178 C. 1904 [1] 653).
- $C_{14}H_{11}NClBr$  1) Chlormethylat d. 3-Brom- $\beta$ -Naphtochinolin + x  $H_2O$ . Sm. 237° (J. pr. [2] 57, 63). — \*IV, 249.
- $C_{14}H_{11}NBrJ$  1) Jodmethylat d. 3-Brom- $\beta$ -Naphtochinolin + 1½  $H_2O$ . Sm. 225° (J. pr. [2] 57, 62). — \*IV, 249.
- $C_{14}H_{11}N_2ClS$  1) 3-[2-Chlorphenyl]-2-Thiocarbonyl-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 200° (J. pr. [2] 52, 376). — IV, 634.  
 2) 3-[3-Chlorphenyl]-2-Thiocarbonyl-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 198—199° (J. pr. [2] 52, 379). — IV, 634.  
 3) 3-[4-Chlorphenyl]-2-Thiocarbonyl-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 228° (J. pr. [2] 52, 384). — IV, 634.
- $C_{14}H_{11}N_2Cl_3Br_1$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Bromphenylamido]äthan. Sm. 115—116° (C. 1909 [2] 1418).  
 2)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Bromphenylamido]äthan. Sm. 140° (C. 1908 [1] 935).
- $C_{14}H_{11}N_2Cl_3J_2$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Jodphenylamido]äthan. Sm. 123° (C. 1909 [2] 1419).
- $C_{14}H_{11}N_2BrS$  1) 3-[4-Bromphenyl]-2-Thiocarbonyl-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 234° (J. pr. [2] 52, 392). — IV, 634.
- $C_{14}H_{11}N_4BrS$  1) 3,5-Diimido-4-[4-Bromphenyl]-2-Phenyltetrahydro-1,2,4-Thio-diazol. Sm. 172° (B. 34, 3135). — \*IV, 902.
- $C_{14}H_{13}ONCl$  1) 4-Oxy-3-[4-Chlorphenyl]imidomethyl-1-Methylbenzol. Sm. 154,5° (B. 38, 3997 C. 1906 [1] 235).  
 2) Methyläther d.  $\alpha$ -Chlor- $\alpha$ -Phenylimido- $\alpha$ -[4-Oxyphenyl]methan. Sm. 70°; Sd. 220—230°<sub>17</sub> (Am. 30, 37 C. 1903 [2] 363).  
 3) 4'-Chlor-4-Acetylamidobiphenyl. Sm. 245° (B. 39, 4177 C. 1907 [1] 473).  
 4) Phenylamidomethyl-4-Chlorphenylketon. Sm. 187—188° (Bl. [3] 21, 66). — \*III, 98.  
 5) 4-Chlorphenylamidomethylphenylketon. Sm. 167° (B. 30, 574). — \*III, 97.  
 6) 4-Chlorphenylamidobenzoylmethan. Sm. 138°. HCl (B. 25, 2867). — III, 125.

- $C_{13}H_{12}ONCl$  7) 2-Benzoylamido-1-Chlormethylbenzol. Sm. 124—125° (*B.* 27, 3523). — \*II, 731.  
 8)  $\alpha$ -Chlor- $\beta$ -Oximido- $\alpha\beta$ -Diphenyläthan (Stilbennitrosylchlorid). Sm. 138—139° u: Zers. (*Soc.* 65, 327). — \*II, 113.  
 9) N-Benzyläther d. 2-Chlorbenzaldoxim. Sm. 86° (*A.* 298, 192; 314, 235). — \*III, 36.  
 10) N-Benzyläther d. 4-Chlorbenzaldoxim. Sm. 121° (*A.* 298, 197). — \*III, 36.  
 11) N-2-Chlorbenzyläther d. Benzaldoxim. Sm. 75—77° (*A.* 314, 236). — \*III, 35.  
 12) N-4-Chlorbenzyläther d. Benzaldoxim. Sm. 125—126° (*A.* 298, 196). — \*III, 35.  
 13) Aldehyd d. 2-Chlor-4-Benzylamidobenzol-1-Carbonsäure (*C.* 1900 [1] 238).  
 14) Amid d. Diphenylchloressigsäure. Sm. 115° (111—113°) (*B.* 22, 1539; *B.* 41, 3593 *C.* 1908 [2] 1686). — II, 1464.  
 15) Phenylamid d. Phenylchloressigsäure. Sm. 151,5—152° (*A.* 279, 124). — II, 1316.  
 16) Phenylamid d. 2-Chlorphenylelessigsäure. Sm. 138,5° (*J. pr.* [2] 62, 558). — \*II, 816.  
 17) Phenylamid d. 4-Chlorphenylelessigsäure. Sm. 164,5° (*J. pr.* [2] 62, 562). — \*II, 816.  
 18) 4-Methylphenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 131° (*B.* 13, 465). — II, 1217.  
 19) 4-Chlorphenylamid d. Phenylelessigsäure. Sm. 163—164° (*J. pr.* [2] 78, 483 *C.* 1909 [1] 280).  
 20) 2-Chlorbenzylamid d. Benzolcarbonsäure. Sm. 116—117° (*J. pr.* [2] 51, 282). — \*II, 731.  
 21) 3-Chlor-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 170 bis 171° (173°) (*M.* 22, 484; *B.* 37, 1019 *C.* 1904 [1] 1202).  
 22) 2-Chlor-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 137,5 bis 138,5° (*B.* 32, 220; *Soc.* 81, 1337 *C.* 1902 [2] 1179).  
 23) Diphenylamid d. Chloressigsäure. Sm. 118° (*Ar.* 241, 220 *C.* 1903 [2] 104).  
 24) 1-Naphtylamid d.  $\beta$ -Chlorpropen- $\alpha$ -Carbonsäure (1-N. d.  $\beta$ -Chlorcrotonsäure). Sm. 169—170° (*B.* 29, 1669). — \*II, 334.  
 25) 1-Naphtylamid d. isom.  $\beta$ -Chlorpropen- $\alpha$ -Carbonsäure (1-N. d.  $\beta$ -Chlorisocrotonsäure). Sm. 155° (*B.* 29, 1668). — \*II, 334.  
 26) Chlorid d. Phenylbenzylamidoameisensäure (*J. pr.* [2] 56, 13). — \*II, 294.
- $C_{14}H_{12}ONCl_2$  1)  $\gamma\gamma\gamma$ -Trichlor- $\beta$ -Oxy- $\alpha$ -[6-Phenyl-2-Pyridyl]propan +  $1\frac{1}{2}H_2O$ . Sm. 65°. (2HCl,  $PtCl_4$  +  $2H_2O$ ) (*B.* 35, 2785 *C.* 1902 [2] 993). — \*IV, 227.
- $C_{14}H_{12}ONBr$  1) 4'-Brom-4-Acetylamidobiphenyl. Sm. 247° (*A.* 209, 345; *B.* 39, 4178 *C.* 1907 [1] 473). — II, 633.  
 2) Phenylamidomethyl-4-Bromphenylketon. Sm. 119—120° (*Bl.* [3] 21, 66). — \*III, 98.  
 3) 3-Bromphenylamidomethylphenylketon. Sm. 137°. HCl (*B.* 30, 574). — \*III, 97.  
 4)  $\alpha$ -Oximido-2-Bromphenyl-4-Methylphenylmethan. Sm. 138—140° (*B.* 27, 1452). — III, 214.  
 5) N-4-Brombenzyl-syn-Benzaldoxim. Sm. 128° (*B.* 30, 1898). — \*III, 35.  
 6) 3,9-Dimethylphenoxazoniumbromid (*B.* 34, 1624; *A.* 322, 20 *C.* 1902 [2] 221).  
 7) 2-Brombenzylamid d. Benzolcarbonsäure. Sm. 134° (*J. pr.* [2] 51, 282). — \*II, 731.  
 8) 3-Brom-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 176 bis 177° (*Soc.* 85, 1627 *C.* 1905 [1] 438).  
 9) 2-Brom-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 148,5° (*B.* 24, 4170). — II, 1165.
- $C_{14}H_{12}ONBr_3$  1) 3,4,6-Tribrom-5-Oxy-2-Phenylamidomethyl-1-Methylbenzol. Sm. 120—125° (*A.* 302, 103). — \*II, 442.
- $C_{14}H_{12}ONJ$  1) Methyläther d. 3-Jod-4-Oxy-1-Phenylimidomethylbenzol. Sm. 107—108° (*J. pr.* [2] 57, 496; [2] 59, 146). — \*III, 61.

- C<sub>14</sub>H<sub>12</sub>ONJ** 2) 4'-Jod-4-Acetylamidobiphenyl. Sm. 250° (*B.* 39, 4179 *C.* 1907 [1] 473).  
 3) 2-Methylphenylamid d. 2-Jodbenzol-1-Carbonsäure. Sm. 165° (*B.* 26, 1745). — II, 1226.  
 4) 4-Methylphenylamid d. 2-Jodbenzol-1-Carbonsäure. Sm. 170° (*B.* 26, 1745). — II, 1226.  
 5) 2-Jodbenzylamid d. Benzolcarbonsäure. Sm. 154° (*J. pr.* [2] 51, 282). — \*II, 731.
- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) 3,3'-Dichlor-4-Amido-4'-Acetylamidobiphenyl. Sm. 104–105° (*J. C. CAIN*, Privatmitteilung).  
 2) 5,5'-Dichlor-2,2'-Dimethylazoxybenzol. Sm. 128° (*B.* 5, 919). — IV, 1339.  
 3) 3,3'-Dichlor-4,4'-Dimethylazoxybenzol. Sm. 119–120° (*B.* 32, 221).
- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) 2,6-Dibrom-4-[4-Dimethylamidophenyl]imido-1-Keto-1,4-Dihydrobenzol(Dimethylamidodibromdiphenazon) (*A.* 289, 95). — IV, 599.  
 2)  $\beta$ -Acetyl- $\alpha$ -Di[4-Bromphenyl]hydrazin. Sm. 214° (*B.* 25, 1555). — IV, 665.  
 3) 2-Dibrom-4,4'-Dimethylazoxybenzol. Sm. 138° (*B.* 6, 557). — IV, 1340.  
 4) Äthyläther d. 3,5-Dibrom-4-Oxyazobenzol. Sm. 71° (*Soc.* 77, 716). — IV, 1035.  
 5) 4-Bromphenylamid d. 4-Bromphenylamidoessigsäure. Subl. bei 145°; Sm. 161° (*B.* 13, 237). — II, 428.
- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>S** 1)  $\alpha$ -Phenyl- $\beta$ -Benzoylthioharnstoff. Sm. 148–149° (145–146°) (*A. ch.* [5] 11, 321; *C.* 1900 [2] 531; 1901 [2] 198). — II, 1172.  
 2) 4-Benzoylphenylthioharnstoff. Sm. 198° (*A.* 311, 151). — \*III, 148.  
 3) 2-Thiocarbonyl-5-Keto-4-Methyl-1-[1-Naphtyl]tetrahydroimidazol. Sm. 242° (*B.* 24, 3282). — II, 610.  
 4) 2-Imido-4-Keto-3-[1-Naphtyl]-3,4,5,6-Tetrahydro-1,3-Thiazin. Sm. 147°. HCl, HJ. — \*II, 335.  
 5) 2-Imido-4-Keto-3-[2-Naphtyl]-3,4,5,6-Tetrahydro-1,3-Thiazin. Sm. 164°. HCl. — \*II, 338.  
 6) 6-Methyläther d. 2-Merkapto-6-Oxy-1-Phenylbenzimidazol. Sm. 208° (*B.* 29, 2682). — \*II, 414.  
 7) 3-Acetylamidophenthiazin. Sm. 208° (*B.* 39, 919 *C.* 1906 [1] 1259).  
 8) Methylviolet. HCl (*A.* 230, 171; 251, 97; *B.* 22, 2067). — II, 810.  
 9) Dimethylthionolin (*C.* 1900 [2] 342). — \*II, 479.  
 10) Di[Phenylamid] d. Thiooxalsäure. Sm. 144–145° (*B.* 37, 3720 *C.* 1904 [2] 1450; *A.* 360, 106 *C.* 1908 [1] 2145).
- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>Se** 1) Di[Phenylamid] d. Selenoxalsäure. Sm. 139,5–140,5° (*A.* 360, 120 *C.* 1908 [1] 2146).
- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>Cl** 1)  $\alpha$ -Nitroso- $\alpha$ -[2-Chlorbenzyl]- $\beta$ -[2-Chlorbenzyliden]hydrazin. Sm. 85–86° u. Zers. (*B.* 34, 852). — \*IV, 541.  
 2) 4-Acetylchloramidoazobenzol. Sm. 113,5° (*Soc.* 81, 982 *C.* 1902 [2] 360). — \*IV, 1011.  
 3) 5-Chlor-2-[2,5-Dimethylphenyl]-2,1,3-Benzotriazol-1-Oxyd. Sm. 119° (*J. pr.* [2] 71, 407 *C.* 1905 [2] 41).  
 4) Verbindung (aus 3-Phenyl-1,2,7-Benzotriazol + Acetylchlorid). Sm. 183 bis 185° (*C.* 1907 [2] 456).
- C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>Cl<sub>3</sub>** 1) 4-Chloralalimidoazobenzol. Sm. 127° (*G.* 28 [1] 241). — IV, 1355.
- C<sub>14</sub>H<sub>12</sub>ON<sub>4</sub>S** 1) 5-Phenylhydrazido-2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 124° (*B.* 23, 2827). — IV, 687.  
 2) 4-Phenylamido-5-Thiocarbonyl-3-Oxy-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 184° (*B.* 34, 2330). — \*IV, 901.
- C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>NCl** 1) Methyläther d. 3-Chlor-2-Benzoylamido-1-Oxybenzol. Sm. 130° (*Soc.* 81, 996 *C.* 1902 [2] 697).  
 2) 5'-Chlor-2'-Amido-2-Oxy-4-Methyldiphenylketon. Sm. 115° (*B.* 39, 1937 *C.* 1906 [2] 114).  
 3) 2-Keto-5-Chlormethyl-3-[1-Naphtyl]tetrahydroxazol. Sm. 118° (*J. pr.* [2] 44, 21). — II, 608.  
 4) 2-Keto-5-Chlormethyl-3-[2-Naphtyl]tetrahydroxazol. Sm. 107° (*J. pr.* [2] 44, 20). — II, 617.  
 5) Phenylamido-4-Chlorphenylessigsäure. Sm. 202° u. Zers. (*J. pr.* [2] 65, 271 *C.* 1902 [1] 1214).



- $C_{14}H_{12}O_2NCl_3$  1) 2,3,5-Trichlor-1,4-Benzochinon + Dimethylamidobenzol. Sm. 65° (B. 37, 180 C. 1904 [1] 653; Am. 34, 450 C. 1906 [1] 30).
- $C_{14}H_{12}O_2NBr$  1) Methyläther d.  $\alpha$ -Oximido-2-Brom-4'-Oxydiphenylmethan (B. 27, 1455). — III, 195.  
 2) Benzyläther d. lab. 6-Brom-4-Oximido-1-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 80–81° (A. 303, 32). — \*III, 267.  
 3) Benzyläther d. stab. 6-Brom-4-Oximido-1-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 95–96° (A. 303, 32). — \*III, 267.  
 4) Phenylamidoformiat d. 3-Brom-4-Oxy-1-Methylbenzol. Sm. 135° (B. 36, 2875 Anm. C. 1903 [2] 834).  
 5) Phenylamid d. 5-Brom-2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 125° (M. 22, 953 C. 1902 [1] 194).  
 6) 1-Brom-2-Naphtylimid d. Essigsäure. Sm. 105° (J. pr. [2] 43, 48). — II, 616.  
 7) 3-Brom-2-Naphtylimid d. Essigsäure. Sm. 186,5° (Soc. 47, 509). — II, 616.
- $C_{14}H_{12}O_2NBr_3$  1) 3,5,6-Tribrom-4-Oxy-2-Phenylamidomethyl-1-Oxymethylbenzol. Sm. 171° u. Zers. (B. 32, 3027). — \*II, 684.  
 2) 3,5,6-Tribrom-2-[3-Methylphenyl]amido-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 202° (A. 341, 333 Anm. C. 1905 [2] 1424).  
 3) 3,5,6-Tribrom-2-[4-Methylphenyl]amido-1-Oxy-4-Keto-1-Methyl-1,4-Dihydrobenzol. Sm. 197° (A. 341, 333 Anm. C. 1905 [2] 1424).
- $C_{14}H_{12}O_2N_2Cl_2$  1)  $\alpha\alpha$ -Dichlor-4-Nitrophenyl-4-Methylphenylamidomethan. Sm. 119° (B. 25, 1083). — II, 1236.  
 2) Bisnitrosyl-2-Chlorbenzyl. Sm. 115,5–117° (A. 269, 398). — III, 45.
- $C_{14}H_{12}O_2N_2Br_2$  1) Bisnitrosyl-4-Brombenzyl. Sm. 137–138° (B. 30, 1898, 1970). — \*III, 36.  
 2)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -(3,5-Dibrom-2,4-Dioxyphenyl)äthyliden]hydrazin. Sm. 162° (B. 41, 1622 C. 1908 [2] 68).  
 3)  $\alpha$ -Formyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm. 164 bis 165° (B. 42, 272 C. 1909 [1] 646).  
 4) 2',6'-Dibrom-4,6-Dioxy-2,4'-Dimethylazobenzol. Sm. 179–180° (Soc. 93, 1020 C. 1908 [2] 410).  
 5)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Nitrophenyl]- $\beta$ -[4-Methyl-2-Pyridyl]äthan (B. 35, 2792 C. 1902 [2] 995). — \*IV, 227.
- $C_{14}H_{12}O_2N_2S$  1)  $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzoyl]thioharnstoff. Sm. 191–192° (A. ch. [5] 11, 324). — II, 1500.  
 2) Phenyloxybenzoylthioharnstoff? Sm. 190–191° (A. 169, 106; B. 3, 244). — II, 1263.  
 3) s-Diphenylthioharnstoff-2-Carbonsäure. Sm. 185–190° u. Zers. (Am. 21, 147). — \*II, 784.  
 4) s-Diphenylthioharnstoff-3-Carbonsäure. Sm. 260–262° u. Zers. (B. 17, 428). — II, 1263.  
 5) Phenylester d. Merkaptoameisenphenylamidoimidomethyläthersäure. HCl (Soc. 91, 920 C. 1907 [2] 227).  
 6) Phenylester d.  $\alpha$ -Phenylthioharnstoff- $\alpha$ -Carbonsäure. Sm. 144 bis 145° (Soc. 91, 920 C. 1907 [2] 227).  
 7) Phenylester d. s-Phenylthioharnstoff- $\beta$ -Carbonsäure. Sm. 148 bis 149° (Soc. 87, 343 C. 1905 [1] 1098, 1315; Soc. 89, 898 C. 1906 [2] 774).  
 8) 2-Methylphenylamid d. 4-Cyanbenzol-1-Sulfonsäure. Sm. 122 bis 123° (Am. 18, 163). — \*II, 805.  
 9) 3-Methylphenylamid d. 4-Cyanbenzol-1-Sulfonsäure. Sm. 128° (Am. 18, 165). — \*II, 805.  
 10) 4-Methylphenylamid d. 4-Cyanbenzol-1-Sulfonsäure. Sm. 151 bis 152° (Am. 18, 167). — \*II, 805.  
 11) 4-Methylphenylecyanamid d. Benzolsulfonsäure. Sm. 88° (B. 37, 2810 C. 1904 [2] 592).  
 12) Verbindung (aus 4-Methylbenzenylamidoxim). Sm. 89° (B. 24, 4167). — II, 1344.
- $C_{14}H_{12}O_2N_2S_2$  1) 4,4'-Dithionylamido-3,3'-Dimethylbiphenyl. Sm. 90° (A. 274, 264). — IV, 981.  
 2) Diamid d. Diphenyldisulfid-2,2'-Dicarbonsäure. Sm. 239° (D.R.P. 80713). — \*II, 901.

- $C_{14}H_{12}O_2N_2S_3$  1) Farbstoff (aus 4-Dimethylamido-4'-Oxydiphenylamin). Zn, +  $NaHSO_3$  +  $2H_2O$  (*J. pr.* [2] 69, 168 *C.* 1904 [1] 1268).
- $C_{14}H_{12}O_2N_3Cl$  1) 5'-Chlor-2'-Nitro-2,5-Dimethylazobenzol. Sm. 132° (*J. pr.* [2] 71, 408 *C.* 1905 [2] 41).
- $C_{14}H_{12}O_2N_3Br$  1)  $\alpha$ -[4-Brom-2-Nitrophenylhydrazon]- $\alpha$ -Phenyläthan. Sm. 148° (*B.* 22, 2817). — IV, 770.
- 2) Phenylamid d. 5-Brom-4-Oxy-3-Methylphenylazoameisensäure. Sm. 212–213° (*A.* 334, 192 *C.* 1904 [2] 835).
- $C_{14}H_{12}O_2N_3J$  1) Jodmethylat d. 5-Nitro-2-Phenylbenzimidazol. Sm. 245° u. Zers. (*J. pr.* [2] 74, 206 *C.* 1906 [2] 1436).
- $C_{14}H_{12}O_2N_4Cl_2$  1)  $\alpha\beta$ -Dinitroso- $\alpha\beta$ -Di[2-Chlorbenzyl]hydrazin. Sm. 50–51° (*B.* 34, 850). — \*IV, 540.
- 2) Dimethyläther d. 3,3'-Dioxy-4,4'-Tetrazobiphenylchlorid (*J. pr.* [2] 59, 222). — \*IV, 1125.
- $C_{14}H_{12}O_2N_4Br_2$  1) Di[4-Bromphenylhydrazid] d. Oxalsäure. Sm. 240° (*B.* 41, 3766 *C.* 1908 [2] 1858).
- $C_{14}H_{12}O_2N_4S$  1)  $\alpha$ -[3-Nitrobenzyliden]amido- $\beta$ -Phenylthioharnstoff. Sm. 193 bis 194° (211°) (*B.* 27, 617; *G.* 38 [1] 345 *C.* 1908 [1] 2030). — III, 40.
- 2)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Imido-3-Nitrobenzyl]thioharnstoff (Nitrobenzimidophenylthioharnstoff). Sm. 169–170° (*B.* 28, 484). — IV, 846.
- $C_{14}H_{12}O_2Cl_2S$  1) Di[4-Chlorbenzyl]sulfon. Sm. 167° (*A.* 165, 375). — II, 1057.
- 2) isom. Dichlordibenzylsulfon. Sm. 149° (*A.* 165, 375). — II, 1057.
- 3) isom. Dichlordibenzylsulfon. Sm. 185° (*A.* 165, 375). — II, 1057.
- $C_{14}H_{12}O_2Cl_2S_2$  1) Di[4-Chlorbenzyl]disulfon. Sm. 120° (*Am.* 2, 169). — II, 1057.
- $C_{14}H_{12}O_2Br_2S$  1) Di[4-Brombenzyl]sulfon. Sm. 189° (*Am.* 5, 267). — II, 1058.
- 2) Di[4-Brommethylphenyl]sulfon. Sm. 108° (*Bl.* [3] 9, 707). — II, 1055; \*II, 487.
- $C_{14}H_{12}O_3NCl$  1) 2-Chlorbenzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 104° (*D.R.P.* 142061 *C.* 1903 [2] 83).
- 2) 4-Chlorbenzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 103° (*D.R.P.* 142061 *C.* 1903 [2] 83).
- $C_{14}H_{12}O_3NBr$  1) Benzyläther d. 5-Brom-3-Nitro-2-Oxy-1-Methylbenzol. Fl. (*D.R.P.* 142899 *C.* 1903 [2] 83).
- 2) Acetat d. *p*-Brom-8-Acetylamido-1-Oxynaphtalin. Sm. 203° (*B.* 39, 3335 *C.* 1906 [2] 1616).
- 3) Äthylamid d. 3-Brom-1,4-Naphtochinon-2-Methylcarbonsäure. Sm. 131° (*B.* 32, 920; 33, 569). — \*II, 1088.
- $C_{14}H_{12}O_3N_2S$  1) 4-Nitro-4'-Acetylamidodiphenylsulfid. Sm. 193° (*B.* 29, 2363). — \*II, 476.
- 2) 3-[ $\beta$ -Phenylthioureido]-2-Oxybenzol-1-Carbonsäure. Zers. bei 263° (*J. pr.* [2] 61, 542). — \*II, 897.
- 3) Äthylester d. 2-Phenylimido-3-Cyan-4-Ketotetrahydrothiophen-3-Carbonsäure. Sm. 212° (*Soc.* 93, 628 *C.* 1908 [1] 1930; *Soc.* 95, 118 *C.* 1909 [1] 1340).
- 4) 4-Methoxyphenylecyanamid d. Benzolsulfonsäure. Sm. 90–91° (*B.* 37, 2811 *C.* 1904 [2] 593).
- $C_{14}H_{12}O_3N_2S_2$  1) Diacetylderivat d. 2-Thiocarbonyl-4-Keto-5-[2-Amidobenzyliden]tetrahydrothiazol. Sm. 189° (*M.* 8, 362). — III, 12.
- 2) Dehydrothio-4-Amido-1-Methylbenzol-*p*-Sulfonsäure +  $H_2O$ .  $NH_4 + H_2O$  (*B.* 22, 971; *D.R.P.* 92011). — II, 822; \*II, 484.
- $C_{14}H_{12}O_3N_2Hg$  1) 3-Acetat d. 4-Oxyazobenzol-3-Quecksilberhydroxyd. Sm. 197 bis 198° (*C.* 1901 [1] 452; *B.* 35, 2863 *C.* 1902 [2] 1039). — \*IV, 1214.
- $C_{14}H_{12}O_3N_3Cl$  1) 5'-Chlor-2'-Nitro-4-Acetylamidodiphenylamin. Sm. 221° (*B.* 34, 1103). — \*IV, 385.
- $C_{14}H_{12}O_3N_4S$  1) 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin-*p*-Sulfonsäure (*Soc.* 53, 852). — IV, 1234.
- 2) 4-Methylbenzolsulfonat d. 1-Oxy-5-Phenyl-1,2,3,4-Tetrazol. Sm. 91–92° (*Soc.* 95, 189 *C.* 1909 [1] 1316).
- $C_{14}H_{12}O_4NCl$  1) Monäthyläther d. 6-Chlor-*p*-Phenylamido-*p*-Dioxy-1,4-Benzochinon. Sm. 180° u. Zers. (*J. pr.* [2] 43, 266). — III, 354.
- $C_{14}H_{12}O_4N_2J_2$  1) Di[4-Nitro-2-Methylphenyl]jodoniumjodid. Sm. 99° (*Soc.* 73, 694).
- 2) Di[5-Nitro-2-Methylphenyl]jodoniumjodid. Zers. bei 113° (*B.* 41, 2079 *C.* 1908 [2] 301).

- $C_{14}H_{12}O_4N_2J_2$  3) Di[2-Nitro-4-Methylphenyl]jodoniumjodid. Zers. bei 51° (B. 39, 272 C. 1908 [1] 663).
- $C_{14}H_{12}O_4N_2S$  1) Di[2-Nitrobenzyl]sulfid. Sm. 125,5° (M. 10, 874, 876; B. 29, 162). — II, 1055; \*II, 641.  
 2) Di[3-Nitrobenzyl]sulfid. Sm. 109—110° (B. 30, 1072). — \*II, 643.  
 3) Di[4-Nitrobenzyl]sulfid. Sm. 159° (B. 28, 1338). — \*II, 644.  
 4)  $\alpha$ -Benzoyl- $\beta$ -Phenylsulfonharnstoff. Sm. 208° (B. 36, 3220 C. 1903 [2] 1056; B. 37, 695 C. 1904 [1] 1074).  
 5) 4-[4-Methylphenyl]sulfon-1-Keto-3,4-Dihydro-2,3,4-Benzoxdiazin. Sm. 186° u. Zers. (B. 30, 2558; 31, 638). — IV, 1553.  
 6) Methylester d.  $\alpha$ -Rhodan- $\gamma$ -Phtalylamidobuttersäure. Sm. 88 bis 89° (B. 41, 515 C. 1908 [1] 1163).  
 7) Äthylester d.  $\alpha$ -Rhodan- $\beta$ -[1,2-Phtalyl]amidopropionsäure. Sm. 83—85° (B. 41, 247 C. 1908 [1] 730).  
 8) Amid d. 2-Nitro- $\alpha\beta$ -Diphenyläthen-4-Sulfonsäure. Sm. 184° (B. 41, 2292 C. 1908 [2] 599).
- $C_{14}H_{12}O_4N_2S_2$  1) Di[2-Nitrobenzyl]disulfid. Sm. 112—113° (110—111°) (B. 25, 3029; 28, 1025; 29, 161; R. 20, 137; M. 10, 883; Soc. 93, 1405 C. 1908 [2] 1173; Soc. 95, 1490 C. 1909 [2] 1739). — II, 1057, 1059; \*II, 643.  
 2) Di[3-Nitrobenzyl]disulfid. Sm. 103—104° (B. 30, 1069; Soc. 93, 1404 C. 1908 [2] 1173). — \*II, 643.  
 3) Di[4-Nitrobenzyl]disulfid. Sm. 89° (126,5°) (B. 5, 698; Soc. 93, 1404 C. 1908 [2] 1173). — II, 1060.  
 4) Amid d. Anthracen-1,5-Disulfonsäure. Sm. oberhalb 330° (B. 42, 1418 C. 1909 [1] 1711).  
 5) Amid d. Anthracen-1,8-Disulfonsäure. Sm. 333° (B. 42, 1418 C. 1909 [1] 1711).  
 6) O-4-Sulfophenylamid d. Phenylthiooxaminsäure. Na<sub>2</sub> (B. 37, 3723 C. 1904 [2] 1450).
- $C_{14}H_{12}O_4N_2S_3$  1) Verbindung (aus 4'-Dimethylamido-4-Oxydiphenylamin). + NaHSO<sub>3</sub> + 2H<sub>2</sub>O (D.R.P. 135952 C. 1902 [2] 1234). — \*IV, 381.
- $C_{14}H_{12}O_4N_2As_2$  1) 3,3'-Dinitro-4,4'-Dimethylarsenobenzol. Zers. bei 165° (A. 320, 316 C. 1902 [1] 921). — \*IV, 1192.
- $C_{14}H_{12}O_4N_3J_3$  1) 2,4,6-Trijod-1,3-Dinitrobenzol + Dimethylamidobenzol. Sm. 160° (B. 37, 179 C. 1904 [1] 653).
- $C_{14}H_{12}O_4N_4S$  1) s-3-Nitrophenyl-2-Nitro-4-Methylphenylthioharnstoff. Sm. 188° (B. 16, 2335). — II, 498.
- $C_{14}H_{12}O_4Cl_2S_2$  1)  $\alpha\beta$ -Di[4-Chlorphenylsulfon]äthan. Sm. 255° (J. pr. [2] 66, 139 C. 1902 [2] 796).  
 2) Chlorid d. 3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Sm. 228 bis 229° (A. 270, 364). — II, 236.
- $C_{14}H_{12}O_4Br_2S$  1) Dimethyläther d. Di[p-Brom-4-Oxyphenyl]sulfon. Sm. 166° (A. 172, 48). — II, 840.  
 2) p-Dibrom- $\alpha$ -[1-Naphtyl]sulfonbuttersäure. Sm. 190° (J. pr. [2] 59, 340). — \*II, 509.  
 3) p-Dibrom- $\alpha$ -[2-Naphtyl]sulfonbuttersäure. Sm. 148° u. Zers. (J. pr. [2] 59, 341). — \*II, 530.  
 4) p-Dibrom- $\alpha$ -[1-Naphtyl]sulfonisobuttersäure. Sm. 187° (J. pr. [2] 59, 342). — \*II, 509.  
 5) p-Dibrom- $\alpha$ -[2-Naphtyl]sulfonisobuttersäure. Sm. 195° (J. pr. [2] 58, 343). — \*II, 530.
- $C_{14}H_{12}O_4Br_2S_2$  1)  $\alpha\beta$ -Di[4-Bromphenylsulfon]äthan. Sm. 261° (J. pr. [2] 66, 140 C. 1902 [2] 796).
- $C_{14}H_{12}O_5N_2S$  1) Di[2-Nitrobenzyl]sulfoxyd. Sm. 163° (M. 10, 882). — II, 1055.  
 2) Aldehyd d. 4-Oxy-3-Methylazobenzol-5-Carbonsäure-4'-Sulfonsäure. Na + 2H<sub>2</sub>O (B. 34, 2101). — \*IV, 1070.  
 3) Benzoylamid d. p-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 130°. K, Ca + 2H<sub>2</sub>O, Ba (Z. 1871, 422). — II, 1175.
- $C_{14}H_{12}O_5N_3J$  1) Äthyläther d. 3-Jod-2',4'-Dinitro-4-Oxydiphenylamin. Sm. 172° (B. 29, 2596).
- $C_{14}H_{12}O_5N_4S$  1) 4'-Nitro-2'-Thioureido-4-Oxydiphenylamin-3-Carbonsäure (D.R.P. 139679 C. 1903 [1] 748).  
 2) p-Tetraamido-9,10-Anthrachinon-p-Sulfonsäure (D.R.P. 126804, 127341 C. 1902 [1] 86).



- $C_{14}H_{12}O_5N_4S$  3) 1-Hydrazido-9,10-Anthrachinon-4-[Hydrazin- $\beta$ -Sulfonsäure] (D.R.P. 163447 C. 1905 [2] 1303).
- $C_{14}H_{12}O_6NBr$  1)  $\alpha$ -Brom- $\delta$ -[1,2-Phtalyl]amidobutan- $\alpha$ -Dicarbonsäure +  $2H_2O$ . Sm. bei  $100^\circ$  u. Zers. (B. 34, 461). — \*II, 1056.
- $C_{14}H_{12}O_6NAs$  1) 4-Phtalylamidophenylarsinsäure (D.R.P. 191548 C. 1908 [1] 780).
- $C_{14}H_{12}O_6N_2S$  1) Di[2-Nitrobenzyl]sulfon. Sm.  $200^\circ$  (M. 10, 882). — II, 1055.  
2) 3,5-Dinitro-2,4-Dimethyldiphenylsulfon. Sm.  $178^\circ$  (C. 1908 [2] 237).  
3) 4,4'-Diamidodiphenylsulfon-1,1'-Dicarbonsäure? Sm. oberhalb  $350^\circ$ . Ba, Pb,  $Ag_2$  (B. 10, 580). — II, 1308.  
4) Azobenzol-4-Sulfonsäure-4'-Oxyessigsäure. K, (Na, K), Ba (B. 34, 3937 C. 1902 [1] 117). — \*IV, 1037.  
5) 2-[4-Nitrobenzylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm.  $170^\circ$ . K, Ba (B. 29, 1049). — \*II, 800.
- $C_{14}H_{12}O_6N_2S_2$  1) 4,4'-Azoo- $\alpha\beta$ -Diphenyläthan-2,2'-Disulfonsäure (p-Azobibenzyldisulfonsäure).  $Na_2$  (Z. El. Ch. 9, 417). — \*IV, 1031.
- $C_{14}H_{12}O_6N_5Cl$  1) 4'-Chlor-4,6-Dinitro-5-Methylnitramido-2-Methyldiphenylamin. Sm.  $193^\circ$  (J. pr. [2] 67, 527 C. 1903 [2] 239). — \*IV, 1115.
- $C_{14}H_{12}O_6Cl_2S_2$  1) 4,4'-Dichlor-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba +  $3\frac{1}{2}H_2O$  (J. pr. [2] 66, 571 C. 1903 [1] 519).
- $C_{14}H_{12}O_7N_2S$  1) 4,8-Diamido-1,5,9,10-Tetraoxanthracen-6-Sulfonsäure (C. 1900 [1] 1178).  
2) 4,6-Dinitro-2-Methylphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm.  $108-109^\circ$  (B. 35, 1444 C. 1902 [1] 1201).  
3) 2,6-Dinitro-4-Methylphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm.  $152^\circ$  ( $153^\circ$ ) (D.R.P. 194951 C. 1908 [1] 1115; B. 41, 1877 C. 1908 [2] 155).
- $C_{14}H_{12}O_7N_4S$  1)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[3-Nitro-4-Methylbenzyliden]hydrazin- $\alpha$ -Sulfonsäure. Sm.  $200-202^\circ$  (B. 32, 1289). — \*IV, 488.
- $C_{14}H_{12}O_8N_2S$  1) Dimethyläther d. Di[3-Nitro-4-Oxyphenyl]sulfon. Sm.  $214-215^\circ$  ( $240^\circ$ ) (A. 172, 49; B. 40, 645 C. 1907 [1] 956). — II, 840.
- $C_{14}H_{12}O_8N_2S_2$  1)  $\alpha\beta$ -Di[3-Nitrophenylsulfon]äthan. Sm.  $226^\circ$  (A. 278, 246; 294, 244). — \*II, 473.  
2) Di[p-Nitro-4-Methylphenyl]disulfon. Sm.  $172-174^\circ$  (Soc. 93, 1527 C. 1908 [2] 1428).  
3) 4-Nitro-4-Amido-s-Diphenyläthan-2,2'-Disulfonsäure. Na (Bl. [3] 29, 348 C. 1903 [1] 1226).  
4) Di[4-Sulfophenylamid] d. Oxalsäure (Oxanilid-p-Disulfonsäure). Ba (A. 274, 16). — II, 570.
- $C_{14}H_{12}O_8N_4S_2$  1) 9,10-Anthrachinon-1,5-Di[Hydrazin- $\beta$ -Sulfonsäure].  $K_2$ ,  $Na_2$  (D.R.P. 163447 C. 1905 [2] 1302).
- $C_{14}H_{12}O_{10}N_2S_2$  1)  $\alpha\beta$ -Di[4-Nitrophenyl]äthan-2,2'-Disulfonsäure. Na,  $Na_2$ ,  $K_2$  (B. 28, 424; 30, 2618, 3099; 31, 354, 1078; C. 1898 [2] 952; Soc. 85, 1427 C. 1904 [2] 1739). — \*II, 114.
- $C_{14}H_{12}O_{10}N_2S_4$  1) 3,3'-Dinitro-4,4'-Dimethyldiphenyldisulfid-6,6'-Disulfonsäure.  $K_2$  +  $5H_2O$  (B. 40, 4421 C. 1908 [1] 27).
- $C_{14}H_{12}O_{10}N_4S_2$  1) 1,5-Dioxy-9,10-Anthrachinon-4,8-Di[Hydrazin- $\beta$ -Sulfonsäure].  $K_2$  (D.R.P. 163447 C. 1905 [2] 1303).
- $C_{14}H_{12}O_{16}N_4S_4$  1) 1,5-Dioxy-9,10-Anthrachinon-2,6-Disulfonsäure-5,8-Di[Hydrazin- $\beta$ -Sulfonsäure] (D.R.P. 163447 C. 1905 [2] 1303).
- $C_{14}H_{12}NClS$  1) 3,9-Dimethylphenthiazoniumchlorid +  $H_2O$  (B. 39, 915 C. 1906 [1] 1258).
- $C_{14}H_{12}N_2Br_2S$  1) Dibromid d. Dehydrothio-o-Toluidin. Sm.  $190^\circ$  (B. 22, 426). — II, 820.  
2) Dibromid d. Dehydrothio-p-Toluidin. Sm.  $184^\circ$  (J. pr. [2] 53, 548).
- $C_{14}H_{12}N_3Br_3S$  1)  $\alpha$ -[2,4,6-Tribromphenyl]amido- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm.  $201^\circ$  (B. 32, 1085). — \*IV, 443.
- $C_{14}H_{12}N_4Br_2S_3$  1)  $\alpha$ -Amido- $\alpha$ -[4-Bromphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 209 bis  $211^\circ$ .  $2HBr$  (B. 34, 3133).
- $C_{14}H_{13}ONCl_2$  1) Di[2-Chlorbenzyl]hydroxylamin. Sm.  $116-117^\circ$ .  $HCl$  (A. 269, 395). — II, 535.  
2) Di[4-Chlorbenzyl]hydroxylamin. Sm.  $121-122^\circ$  (A. 298, 195). — \*II, 306.

- C<sub>14</sub>H<sub>13</sub>ONBr<sub>2</sub>** 1) **3, 5-Dibrom-2-Oxydibenzylamin.** Sm. 129—130° (A. 344, 144 C. 1906 [1] 1157).  
 2) **3, 5-Dibrom-4-Oxydibenzylamin.** HCl (A. 344, 160 C. 1906 [1] 1157).  
 3) **Methylphenyl-3,5-Dibrom-2-Oxybenzylamin.** Sm. 67—68° (A. 332, 225 C. 1904 [2] 203).  
 4) **2-Methylphenyl-3,5-Dibrom-4-Oxybenzylamin.** Sm. 117,5—119° (B. 41, 1056 C. 1908 [1] 1775).  
 5) **Pyridinodibrompseudocumenol + 2H<sub>2</sub>O.** HBr + H<sub>2</sub>O (B. 28, 2912). — IV, 115.  
 6) **Verbindung + 2H<sub>2</sub>O** (aus d. Verb. C<sub>14</sub>H<sub>14</sub>ONBr<sub>3</sub>). Sm. 242—245° (A. 344, 244 C. 1906 [1] 1163).
- C<sub>14</sub>H<sub>13</sub>ONJ<sub>2</sub>** 1) **4-Acetylamidodiphenyljodoniumjodid.** Sm. 174°. + J<sub>2</sub> (B. 40, 4071 C. 1907 [2] 1834).
- C<sub>14</sub>H<sub>13</sub>ONS** 1) **2-Acetylamidodiphenylsulfid.** Sm. 86° (B. 39, 3598 C. 1907 [1] 30).  
 2) **4-Acetylamidodiphenylsulfid.** Sm. 146° (148°) (B. 29, 2365; B. 36, 115 C. 1903 [1] 454). — \*II, 476.  
 3) **S-Benzyläther d. Oximidomerkaptomethan.** Sm. 120—122° (C. 1909 [2] 1553).  
 4) **Phenylester d. Methylphenylamidothiolsäure.** Sm. 66 bis 66,5° (Bl. [4] 1, 737 C. 1907 [2] 1159).  
 5) **Phenylester d. Methylphenylamidothiolsäure.** Sm. 104° (Bl. [3] 35, 842 C. 1906 [2] 1761).  
 6) **Benzylester d. Phenylamidothiolsäure.** Sm. 96—97°. + 2AgNO<sub>3</sub> (Soc. 57, 296). — II, 1053.  
 7) **Amid d. 1-Oxymethylbenzolphenyläther-2-Thiocarbonsäure.** Sm. 84° (B. 25, 3019). — II, 1560.  
 8) **Phenylamid d. 4-Oxybenzylmethyläther-1-Thiocarbonsäure.** Sm. 153—154° (B. 25, 3528; J. pr. [2] 59, 578; Ph. Ch. 30, 533). — II, 1541; \*II, 914.
- C<sub>14</sub>H<sub>13</sub>ONS<sub>2</sub>** 1) **2-Thiocarbonyl-4-Keto-5-Cinnamyliden-3-Äthyltetrahydrothiazol.** Sm. 187° (M. 25, 177 C. 1904 [1] 895).
- C<sub>14</sub>H<sub>13</sub>ON<sub>2</sub>Cl** 1) **4-[2-Chlorbenzoyl]amido-3-Amido-1-Methylbenzol.** Sm. 153°. HCl, HNO<sub>3</sub> (B. 13, 467). — IV, 617.  
 2) **5-Chlor-2-Acetylamidodiphenylamin.** Sm. 150° (B. 23, 3424). — IV, 555.  
 3) **4-Chlor-4'-Acetylamidodiphenylamin.** Sm. 207° (A. 303, 316). — \*IV, 385.  
 4) **α-Oximido-α-[2-Methylphenyl]amido-2-Chlorphenylmethan.** Sm. 173° (B. 32, 1981). — \*II, 764.  
 5) **Methyläther d. Phenyl-2-Chlor-4-Oxybenzylidenhydrazin.** Sm. 103° (B. 24, 711). — IV, 761.  
 6) **2-Chlor-4,4'-Dimethylazoxybenzol.** Sm. 103—104° (B. 32, 220). — \*IV, 998.  
 7) **Methyläther d. 4'-Chlor-6-Oxy-3-Methylazobenzol.** Sm. 68° (Soc. 93, 846 C. 1908 [1] 2149).  
 8) **Äthyläther d. 3-Chlor-4'-Oxyazobenzol.** Sm. 51° (B. 30, 1629). — IV, 1409.  
 9) **Äthyläther d. 4-Chlor-4'-Oxyazobenzol.** Sm. 118° (B. 30, 1630). — IV, 1409.  
 10) **4-Chlor-1-Phenylamido-2-Methyl-1,2-Dihydrobenzisoxazol** (Chloroxazolid). Sm. 172° (C. 1898 [2] 158). — \*IV, 502.  
 11) **Amid d. Phenylamido-4-Chlorphenylessigsäure.** Sm. 145° (J. pr. [2] 65, 270 C. 1902 [1] 1214).  
 12) **Phenylhydrazid d. 2-Chlorphenylessigsäure.** Sm. 175° (J. pr. [2] 62, 559). — \*IV, 428.  
 13) **Phenylhydrazid d. 4-Chlorphenylessigsäure.** Sm. 166° (J. pr. [2] 62, 563). — \*IV, 428.
- C<sub>14</sub>H<sub>13</sub>ON<sub>2</sub>Cl<sub>3</sub>** 1) **2,3,6-Trichlor-4'-Dimethylamido-4-Oxydiphenylamin.** Sm. 138 bis 139°. HCl, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 24, 440). — II, 728.
- C<sub>14</sub>H<sub>13</sub>ON<sub>2</sub>Br** 1) **5-Brom-2-Oxy-3-Phenylhydrazonmethyl-1-Methylbenzol.** Sm. 137 bis 138° (B. 34, 2102). — \*IV, 495.  
 2) **2-Oxy-3-[4-Bromphenylhydrazon]methyl-1-Methylbenzol.** Sm. 108° (B. 35, 4105 C. 1903 [1] 149). — \*IV, 495.

- C<sub>14</sub>H<sub>13</sub>ON<sub>2</sub>Br** 3) 4-Oxy-3-[4-Bromphenylhydrazon]methyl-1-Methylbenzol. Sm. 181° u. Zers. (B. 35, 4105 C. 1903 [1] 149). — \*IV, 494.  
 4) α-[2-Oxybenzyliden]-β-[2-Brom-4-Methylphenyl]hydrazin. Sm. 109° (Soc. 73, 178). — IV, 810.  
 5) Methyläther d. 4-Bromphenyl-4-Oxybenzylidenhydrazin. Sm. 146 bis 147° (M. 26, 341 C. 1905 [1] 1144).  
 6) ?-Brom-2,2'-Dimethylazoxybenzol. Sm. 68,5° (B. 42, 1370 C. 1909 [1] 1702).  
 7) 2-Brom-4,4'-Dimethylazoxybenzol. Sm. 93° (B. 22, 1174; M. 10, 597). — IV, 1340.  
 8) 3-Brom-4,4'-Dimethylazoxybenzol. Sm. 88° (B. 22, 1175; M. 10, 599). — IV, 1340.  
 9) ?-Brom-4,4'-Dimethylazoxybenzol. Sm. 74° (B. 3, 552). — IV, 1340.  
 10) Äthyläther d. 2'-Brom-4-Oxyazobenzol. Sm. 39° (B. 36, 3864 C. 1904 [1] 91).  
 11) Äthyläther d. 3'-Brom-4-Oxyazobenzol. Sm. 68° (B. 36, 3868 C. 1904 [1] 92).  
 12) 4-Brom-1-Phenylamido-2-Methyl-1,2-Dihydrobenzisoxazol (Bromoxazolid). Sm. 167° (C. 1898 [2] 158). — \*II, 502.  
 13) 4-Bromphenylhydrazid d. 1-Methylbenzol-4-Carbonsäure. Sm. 202° u. Zers. (G. 39 [1] 602 C. 1909 [2] 805; G. 39 [2] 323 C. 1909 [2] 1802).
- C<sub>14</sub>H<sub>13</sub>ON<sub>2</sub>J** 1) Methyläther d. Phenyl-3-Jod-4-Oxybenzylidenhydrazin. Sm. 106,5 bis 107° (J. pr. [2] 57, 496; [2] 59, 144). — \*IV, 493.  
 2) 4'-Jodoso-2,3'-Dimethylazobenzol. Zers. bei 273° (J. pr. [2] 69, 323 C. 1904 [2] 35).  
 3) Jodmethylat d. 3-Keto-4-Methyl-3,4-Dihydro-4,7-Naphtisodiazin + 1½ H<sub>2</sub>O. Sm. 294—295° u. Zers. (B. 42, 2618 C. 1909 [2] 542).
- C<sub>14</sub>H<sub>13</sub>ON<sub>3</sub>J<sub>2</sub>** 1) 3-Semicarbazonomethyl-diphenyljodoniumjodid. Sm. 204° (B. 38, 1484 C. 1905 [1] 1386).  
 2) 4-Semicarbazonomethyl-diphenyljodoniumjodid. Sm. 212° (B. 38, 1484 C. 1905 [1] 1386).
- C<sub>14</sub>H<sub>13</sub>ON<sub>3</sub>S** 1) α-Formylamido-αβ-Diphenylthioharnstoff. Sm. 128—129° (B. 27, 1517). — IV, 681.  
 2) Diphenylamidoformylthioharnstoff. Sm. 183° (Soc. 75, 397; Am. 38, 461 C. 1907 [2] 1973). — \*II, 198.  
 3) α-[2-Oxybenzyliden]amido-β-Phenylthioharnstoff. Sm. 183° (B. 27, 616; B. 35, 3237 C. 1902 [2] 1044). — III, 76.  
 4) α-Benzoyl-β-Phenylamidothioharnstoff. Sm. noch nicht bei 220° (Soc. 55, 304). — IV, 681.  
 5) β-Benzoylamido-α-Phenylthioharnstoff. Sm. 162° (166—167°) (B. 29, 2916; B. 37, 2330 C. 1904 [2] 313). — \*II, 809.  
 6) α-Phenyl-β-[α-Oximidobenzyl]thioharnstoff. Sm. 172° (B. 18, 1060; 24, 394). — II, 1205.  
 7) 4'-Thionylamido-2,3'-Dimethylazobenzol. Sm. 89° (B. 28, 2195). — IV, 1377.  
 8) 4-Thionylamido-3,4'-Dimethylazobenzol. Sm. 86° (B. 28, 2196). — IV, 1378.  
 9) 6-Thionylamido-3,4'-Dimethylazobenzol. Sm. 95—105° (B. 28, 2200). — IV, 1378.  
 10) Diphenylamidoformiat d. Imidoamidomerkaptomethan. HCl, HNO<sub>3</sub>, Pikrat (Soc. 91, 142 C. 1907 [1] 1110).  
 11) Verbindung (aus 5-Amido-2-Methylamido 1-Methylbenzol-4-Thiosulfonsäure). Na (J. pr. [2] 73, 17 C. 1906 [1] 840).
- C<sub>14</sub>H<sub>13</sub>OCl<sub>2</sub>P** 1) Dichlorid d. 4-[β-Phenyläthyl]phenylphosphinsäure. Sm. 75° (A. 315, 50). — \*IV, 1184.
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>NCl<sub>2</sub>** 1) αβ-Dichlorpropylester d. 1-Naphtylamidoameisensäure. Sm. 93° (J. pr. [2] 44, 22). — II, 608.  
 2) αβ-Dichlorpropylester d. 2-Naphtylamidoameisensäure. Sm. 99° (J. pr. [2] 44, 22). — II, 617.  
 3) ββ-Dichlorisopropylester d. 1-Naphtylamidoameisensäure. Sm. 115° (J. pr. [2] 44, 20). — II, 608.  
 4) ββ-Dichlorisopropylester d. 2-Naphtylamidoameisensäure. Sm. 101° (J. pr. [2] 44, 20). — II, 617.



- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>NCI<sub>2</sub>** 5) Verbindung (aus Dimethylamidobenzol u. 2,5-Dichlor-1,4-Benzochinon) (*Am.* 34, 451 *C.* 1906 [1] 30).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>NBr<sub>2</sub>** 1) Äthylester d.  $\gamma\delta$ -Dibrom- $\alpha$ -Cyan- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 95° (100°) (*J. pr.* [2] 50, 12; *C.* 1905 [2] 623; *A.* 336, 330 *C.* 1905 [1] 88). — II, 1442.
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>NJ<sub>2</sub>** 1) 5-Nitro-2,2'-Dimethyldiphenyljodoniumjodid. Zers. bei 116° (*B.* 41, 2083 *C.* 1908 [2] 301).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>NS** 1) 2-Phenylacetylamidoacetylthiophen. Sm. 141,5° (*B.* 19, 2892). — III, 764.  
 2) 4-Amidobiphenyl-4'-Merkaptoessigsäure. Sm. oberhalb 200° (*B.* 13, 1411). — II, 895.  
 3) Nitril d.  $\alpha$ -[1-Naphtyl]sulfonisobuttersäure. Sm. 115° (*J. pr.* [2] 72, 330 *C.* 1905 [2] 1785).  
 4) Nitril d.  $\alpha$ -[2-Naphtyl]sulfonisobuttersäure. Sm. 115° (*J. pr.* [2] 72, 331 *C.* 1905 [2] 1785).  
 5) Acetat d. 1-Acetylamido-2-Merkaptonaphtalin. Sm. 173,5—175° (*B.* 20, 1901). — II, 888.
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>NS<sub>2</sub>** 1) Methyläther d. 2-Thiocarbonyl-4-Keto-3-Allyl-5-[4-Oxybenzyliden]tetrahydrothiazol. Sm. 114° (*M.* 24, 510 *C.* 1903 [2] 836).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) 3-Äthyläther d. 3,4'-Dioxybiphenyl-4-Diazoehlorid. 2 + PtCl<sub>4</sub> (*Soc.* 87, 8 *C.* 1905 [1] 743).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>3</sub>** 1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2,6-Diamido-4-Oxyphenyl]äthan. Zers. bei 95° (*J. pr.* [2] 39, 501). — II, 995.
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) 3-Methyläther d.  $\alpha$ -[4-Bromphenyl]- $\beta$ -[3,4-Dioxybenzyliden]-hydrazin (Vanillin-4-Bromphenylhydrazon). Sm. 145,5° (*C.* 1900 [2] 693; *A.* 324, 319 *C.* 1902 [2] 1505). — \*IV, 496.  
 2) 3-Äthyläther d. 3,4'-Dioxybiphenyl-4-Diazobromid (*Soc.* 87, 8 *C.* 1905 [1] 743).  
 3) 6-Brom-2',4'-Dioxy-2,4-Dimethylazobenzol. Sm. 133° (*Soc.* 93, 1019 *C.* 1908 [2] 409).  
 4) Phenylhydrazid d. Oxyessig-4-Bromphenyläthersäure. Sm. 174° (*C.* 1898 [1] 988). — \*IV, 451.  
 5) 4-Bromphenylhydrazid d. 4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 183° u. Zers. (*G.* 39 [1] 601 *C.* 1909 [2] 805; *G.* 39 [2] 323 *C.* 1909 [2] 1802).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>J** 1) 4'-Jodo-2,3'-Dimethylazobenzol. Sm. 180° (*J. pr.* [2] 69, 323 *C.* 1904 [2] 35).  
 2) 3-Äthyläther d. 3,4'-Dioxybiphenyl-4-Diazojodid (*Soc.* 87, 8 *C.* 1905 [1] 743).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) 4-[4-Nitrophenyl]hydrazon-1-Dichlormethyl-1-Methyl-1,4-Dihydrobenzol. Sm. 180° u. Zers. (*B.* 35, 4213 *C.* 1903 [1] 161). — \*IV, 501.
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>S** 1) s-Phenyl-2-Nitro-4-Methylphenylthioharnstoff. Sm. 143° (145°) (*B.* 16, 2336; *B.* 36, 1138 *C.* 1903 [1] 1220). — II, 498.  
 2) s-3-Nitrophenyl-4-Methylphenylthioharnstoff. Sm. 173° (*B.* 16, 2335). — II, 498.  
 3) 4-Methylphenylsulfon-p-Aziminotoluol. Zers. bei 156° (*B.* 39, 2872 *C.* 1906 [2] 1340).  
 4) 2,5-Anhydrid d. 5-Diazo-2-Phenylsulfonamido-1,4-Dimethylbenzol. Zers. bei 125—130° (*Soc.* 87, 927 *C.* 1905 [2] 320).  
 5) 3-[ $\beta$ -Phenylthioureido]amidobenzol-1-Carbonsäure. Sm. 204—205° u. Zers. (*A.* 236, 173). — II, 1288.  
 6) 2-[ $\gamma$ -Phenylthiosemicarbazido]benzol-1-Carbonsäure. K (*Am.* 37, 368 *C.* 1907 [2] 323).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>S<sub>2</sub>** 1) 2-Nitrobenzylester d.  $\beta$ -Phenylhydrazidodithioameisensäure. Sm. 142° (*B.* 34, 1123). — \*IV, 438.  
 2) 4-Nitrobenzylester d.  $\beta$ -Phenylhydrazidodithioameisensäure. Sm. 134° (*B.* 34, 1122). — \*IV, 438.  
 3) 4-Diazophenylamid d. 1,3-Dimethylbenzol-4-Sulfonsäure (*Soc.* 87, 1307 *C.* 1905 [2] 1334).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>4</sub>Cl** 1) Äthyl-3-Chlor-4'-Nitrodiazoamidobenzol. Sm. 106° (*Soc.* 53, 674). — IV, 1565.  
 2) Äthyl-4-Chlor-3'-Nitrodiazoamidobenzol. Sm. 129,5° (*Soc.* 53, 674). — IV, 1565.

- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>4</sub>Cl** 3) 3-Nitro-2'-Chlor-4'-Dimethylamidoazobenzol? Sm. 155—156° (B. 19, 1956). — IV, 1359.
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>N<sub>4</sub>Br** 1) Äthyl-4'-Brom-3-Nitrodiazoamidobenzol. Sm. 135—136° (Soc. 55, 428). — IV, 1566.  
 2) Äthyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 111° (Soc. 55, 428). — IV, 1566.  
 3) isom. Äthyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 96—117° (Soc. 55, 428; 57, 785). — IV, 1566.  
 4) Äthyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 139—140° (Soc. 55, 423). — IV, 1566.  
 5) isom. Äthyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 115—116° (Soc. 55, 423). — IV, 1566.  
 6) Äthyl-4'-Brom-4-Nitrodiazoamidobenzol. Sm. 124—125° (Soc. 55, 423). — IV, 1566.  
 7) Äthylester d. α-[4-Bromphenyl]hydrazon-βγ-Dicyanbuttersäure. Sm. 181—182° (B. 41, 3766 C. 1908 [2] 1858).
- C<sub>14</sub>H<sub>13</sub>O<sub>2</sub>ClS** 1) α-Chlorbenzyl-4-Methylphenylsulfon. Sm. 203° (J. pr. [2] 40, 519). — II, 1055.
- C<sub>14</sub>H<sub>13</sub>O<sub>3</sub>NS** 1) Methyl-4-Phenylsulfonamidophenylketon. Sm. 128° (Soc. 85, 390 C. 1904 [1] 1404).  
 2) 2-Acetylamidodiphenylsulfon. Sm. 132° (B. 34, 1153).  
 3) 4-Acetylamidodiphenylsulfon. Sm. 195° (B. 34, 1155).  
 4) p-Acetylamidodiphenylsulfon. Sm. 140° (J. 1885, 1590). — II, 814.  
 5) β-[1-Naphtylamidoformyl]merkaptopropionsäure. Sm. 151°. — II, 608.  
 6) β-[2-Naphtylamidoformyl]merkaptopropionsäure. — II, 618.  
 7) 1-Äthyl-ββ-Naphtindol-2-Sulfonsäure. Na, Ag (B. 25, 2546; 27, 3255). — IV, 389.  
 8) Phenylamid d. Phenylsulfonessigsäure. Sm. 142° (C. 1900 [2] 1269). — \*II, 471.  
 9) Acetylphenylamid d. Benzolsulfonsäure. Sm. 116,5° (Am. 19, 760). — \*II, 223.  
 10) Benzoylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 110—112°. K + 1/2 H<sub>2</sub>O, Ca, Ba, Ag (Z. 1870, 579). — II, 1175.  
 11) Benzoylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 147—150°. K, Ca + H<sub>2</sub>O, Ba, Ag, Ag + NH<sub>3</sub> (Z. 1870, 578). — II, 1175.
- C<sub>14</sub>H<sub>13</sub>O<sub>3</sub>NS<sub>2</sub>** 1) 5<sup>3</sup>-Methyläther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Allyltetrahydrothiazol. Sm. 146° (M. 25, 164 C. 1904 [1] 894).
- C<sub>14</sub>H<sub>13</sub>O<sub>3</sub>N<sub>2</sub>Cl** 1) α-Chlorid d. α-[1-Naphtyl]hydrazin-α-Carbonsäure-β-Carbonsäure-äthylester. Sm. 115° (B. 34, 2324). — \*IV, 612.  
 2) α-Chlorid d. α-[2-Naphtyl]hydrazin-α-Carbonsäure-β-Carbonsäure-äthylester. Sm. 139° (B. 34, 2325). — \*IV, 614.
- C<sub>14</sub>H<sub>13</sub>O<sub>3</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Verbindung (aus p-Trichlor-1-Oxybenzol u. 4-Nitroso-1-Dimethylamido-benzol). Sm. 120° (Bl. [3] 13, 1069).  
 2) Verbindung (aus 4-Nitroso-1-Dimethylamidobenzol u. 2,4,6-Trichlor-1,3-Dioxybenzol) (Am. 35, 250 C. 1906 [1] 1412).
- C<sub>14</sub>H<sub>13</sub>O<sub>3</sub>ClS** 1) Chlorid d. α-[1-Naphtyl]sulfonbuttersäure. Sm. 81—82° (J. pr. [2] 59, 348). — \*II, 509.  
 2) Chlorid d. α-[2-Naphtyl]sulfonbuttersäure. Sm. 77—78° (J. pr. [2] 59, 348). — \*II, 530.  
 3) Chlorid d. α-[1-Naphtyl]sulfonisobuttersäure. Sm. 75—76° (J. pr. [2] 59, 349). — \*II, 509.  
 4) Chlorid d. α-[2-Naphtyl]sulfonisobuttersäure. Sm. 76° (J. pr. [2] 59, 349). — \*II, 530.
- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>NS** 1) 4-Benzylidenamido-1-Oxybenzylmethyläther-2-Sulfonsäure. K + H<sub>2</sub>O (B. 42, 2108 C. 1909 [2] 349).  
 2) Acetyldiphenylaminsulfonsäure. Ba (Z. Ang. 1899, 1028). — \*II, 323.  
 3) 2-Benzoylamido-1-Methylbenzol-4-Sulfonsäure. Sm. 203° (B. 34, 2993).  
 4) 3'-Amido-4-Methyldiphenylketon-p-Sulfonsäure. Sm. oberhalb 300° u. Zers. Ba (A. 286, 314). — III, 215.  
 5) 2-[4-Methylphenylsulfon]amidobenzol-1-Carbonsäure. Sm. 227° (217°) (B. 35, 4274 C. 1903 [1] 332; B. 36, 663; A. 367, 110 C. 1909 [2] 698).

- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>NS**
- 6) Methylester d. 2-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 107° (A. 367, 107 C. 1909 [2] 698).
  - 7) 1-[2-Methylphenyl]ester d. Benzol-1-Carbonsäure-2-Sulfonsäureamid. Sm. 152° (Am. 30, 300 C. 1903 [2] 1122).
  - 8) Benzolsulfonat d. anti-Methylbenzhydroxamsäure. Sm. 72° (B. 29, 1156). — \*II, 751.
  - 9) 2-Benzylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Fl. Na, Ba (B. 29, 1048). — \*II, 800.
  - 10) 1-[2-Methylphenyl]amid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Fl. K, o-Toluidinsalz (Am. 20, 276). — \*II, 802.
  - 11) 1-[4-Methylphenyl]amid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Fl. K, K<sub>2</sub> + H<sub>2</sub>O, Ba, p-Toluidinsalz (Am. 20, 274). — \*II, 802.
  - 12) 2-[4-Methylphenyl]amid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 155° u. Zers. Ba + 3H<sub>2</sub>O (Am. 17, 323). — \*II, 800.
  - 13) 4-[2-Methylphenyl]amid d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 246–247° u. Zers. Ba + 1(5)H<sub>2</sub>O (Am. 18, 164). — \*II, 804.
  - 14) 4-[3-Methylphenyl]amid d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 241–242° u. Zers. Ba + 3(5)H<sub>2</sub>O (Am. 18, 166). — \*II, 804.
  - 15) 4-[4-Methylphenyl]amid d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 282–283° u. Zers. Ba + H<sub>2</sub>O (Am. 18, 168). — \*II, 804.
- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>S**
- 1) α-[p-Nitro-4-Methylphenyl]sulfonimido-α-Amido-α-Phenylmethan. Sm. 122–123° (B. 5, 142). — IV, 847.
  - 2) α-Phtalylimido-β-Pseudoäthylthioharnstoffakrylsäure. Sm. 130 bis 131° (Am. 32, 143 C. 1904 [2] 957).
  - 3) 1,8-Sultam d. 2,4-Di[Acetylamido]-1-Amidonaphtalin-8-Sulfonsäure. Sm. 290° (C. 1908 [1] 849).
- C<sub>14</sub>H<sub>13</sub>O<sub>4</sub>BrS**
- 1) Dimethyläther d. p-Brom-4,4'-Dioxydiphenylsulfon. Sm. 170° (B. 27, 2543). — \*II, 576.
- C<sub>14</sub>H<sub>13</sub>O<sub>5</sub>NS**
- 1) 4-Methylphenyl-[3-Nitro-α-Oxybenzyl]sulfon. Sm. 110° (Am. 31, 167 C. 1904 [1] 875).
  - 2) 4-Methylphenyl-[4-Nitro-α-Oxybenzyl]sulfon. Sm. 116° (Am. 31, 168 C. 1904 [1] 875).
  - 3) 2-Methyldiphenylamin-2'-Carbonsäure-4-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
  - 4) 4-Methyldiphenylamin-2'-Carbonsäure-3-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
  - 5) Methylester d. 3-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 197° (A. 325, 321 C. 1903 [1] 770).
  - 6) Äthylester d. 4-Nitrobiphenyl-4'-Sulfonsäure. Sm. 168–169° (B. 13, 1410). — II, 226.
  - 7) 2-Methylphenylester d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 68–69° (B. 35, 1444 C. 1902 [1] 1201).
  - 8) 3-Methylphenylester d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 63° (B. 35, 1444 C. 1902 [1] 1201).
  - 9) 4-Methylphenylester d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 95° (B. 35, 1444 C. 1902 [1] 1201).
  - 10) Diacetylderivat d. Naphtalin-1-Sulfonsäurehydroxylamid. Sm. 104° (G. 33 [2] 307 C. 1904 [1] 288).
- C<sub>14</sub>H<sub>13</sub>O<sub>5</sub>N<sub>2</sub>Br**
- 1) δ-Äthylester d. β-[4-Bromphenyl]azo-α-Oxy-αγ-Butadien-αδ-Dicarbonsäure + H<sub>2</sub>O. Sm. 122–123° u. Zers. (A. 338, 378 C. 1905 [1] 1223).
- C<sub>14</sub>H<sub>13</sub>O<sub>5</sub>N<sub>2</sub>J**
- 1) Di[2-Nitro-4-Methylphenyl]jodoniumhydroxyd (B. 39, 272 C. 1906 [1] 663).
- C<sub>14</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>S**
- 1) α-[2-Sulfophenylhydrazon]-α-[3-Nitrophenyl]äthan (Bl. [3] 21, 596). — \*IV, 502.
  - 2) 4-Nitroso-4'-Acetylamidodiphenylamin-2'[oder 3']-Sulfonsäure (D. R. P. 176046 C. 1906 [2] 1788).
  - 3) α-[2-Nitrophenyl]-β-[4-Methylbenzyliden]hydrazin-α'-Sulfonsäure. Sm. 195° (B. 32, 1287). — \*IV, 488.
  - 4) p-Nitro-4,4'-Dimethylazobenzol-3-Sulfonsäure. K + H<sub>2</sub>O, Ba + 4H<sub>2</sub>O (B. 21, 120). — IV, 1381.
  - 5) Azobenzol-4-Amidoessigsäure-4'-Sulfonsäure. HCl, Na, Ba (B. 35, 581 C. 1902 [1] 581). — \*IV, 1015.
- C<sub>14</sub>H<sub>13</sub>O<sub>5</sub>N<sub>6</sub>S**
- 1) Dinitrodimethylthionin. Salze, siehe (J. pr. [2] 76, 423 C. 1908 [1] 532).



- $C_{14}H_{13}O_6NBr_2$  1) Diacetat d. 2,6-Dibrom-4-Diacetylamido-1,3-Dioxybenzol. Sm. 123—125° (A. 333, 362 C. 1904 [2] 1116).
- $C_{14}H_{13}O_6NS$  1) 2-Naphtylsulfonimidodiessigsäure. Sm. 224—225°. Ba (H. 55, 175 C. 1908 [1] 1680).  
2) 5-Nitro-2-Methoxyphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 145° (B. 34, 2999; B. 39, 4232 C. 1907 [1] 242).
- $C_{14}H_{13}O_6NS_2$  1) 4-Nitro-2,4'-Dimethyldiphenyldisulfon. Sm. 154° (Am. 22, 224). — \*II, 487.
- $C_{14}H_{13}O_6N_2Br$  1) 5'-Äthyläther d. 5-Oxy-2,4,6-Triketo-5-[4-Oxybenzoyl]brom-methylhexahydro-1,3-Diazin. Zers. bei 201° (B. 42, 1294 C. 1909 [1] 1549).  
2)  $\alpha\beta$ -Diacetat d. p-Brom-3,4-Dioxy-1-[ $\alpha\beta$ -Dioximidopropyl]benzol-3,4-Methylenäther. Sm. 147° (G. 23 [2] 39). — II, 979.
- $C_{14}H_{13}O_6N_2P$  1) p-Dinitrodibenzylphosphinsäure. Sm. 210—212° (B. 22, 2147). — IV, 1664.  
2) Di[2 oder 3-Nitro-4-Methylphenyl]phosphinsäure. Sm. 194° (A. 315, 63). — \*IV, 1178.
- $C_{14}H_{13}O_6N_3S$  1) p-Dinitro-2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 174—175° (Bl. [3] 15, 1037).  
2) Phenylamid d. 2,4-Dinitro-1,3-Dimethylbenzol-6-Sulfonsäure. Sm. 154° (C. 1908 [2] 237).
- $C_{14}H_{13}O_6N_3S_2$  1) 4-Amido-4'-Diazo-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure (A. 270, 368). — IV, 1543.
- $C_{14}H_{13}O_6N_4Br$  1) 5-Brom-4-Amido-1,3-Dimethylbenzol + 1,3,5-Trinitrobenzol. Sm. 104—105° (Soc. 85, 238 C. 1904 [1] 1006).
- $C_{14}H_{13}O_7N_5S$  1) 4-Methylbenzolsulfonat d. 2,3-Dinitro-4-Methylamido-1-Oxybenzol. Sm. 168—169° (B. 42, 1526 C. 1909 [1] 1810).  
2) 2,3-Dinitro-4-Methoxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 165—167° (B. 42, 1526 C. 1909 [1] 1810).  
3) 2,6-Dinitro-4-Methoxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure (B. 42, 1525 C. 1909 [1] 1810).
- $C_{14}H_{13}O_8N_2P$  1) Äthylester d. Di[4-Nitrophenyl]phosphorsäure. Sm. 135° (A. 224, 164). — II, 683.
- $C_{14}H_{13}NClJ$  1) 4-Methylphenyl- $\alpha$ -Chlor- $\alpha$ -Jodbenzylamin. Zers. bei 130° (Soc. 85, 1696 C. 1905 [1] 443).
- $C_{14}H_{13}N_2ClS$  1) s-Phenyl-4-Chlor-3-Methylphenylthioharnstoff. Sm. 132,5—133° (B. 20, 201; B. 35, 3702 C. 1902 [2] 1448; B. 35, 3715 C. 1902 [2] 1449). — II, 479.
- $C_{14}H_{13}N_2Cl_2Br$  1) 4-[4-Bromphenyl]hydrazon-1-Dichlormethyl-1-Methyl-1,4-Dihydrobenzol. Sm. 96° (B. 35, 4213 C. 1903 [1] 161). — \*IV, 501.
- $C_{14}H_{13}N_2Cl_2J$  1) 2,3'-Dimethylazobenzol-4'-Jodidchlorid. Zers. bei 201° (J. pr. [2] 69, 323 C. 1904 [2] 35).
- $C_{14}H_{13}N_2BrS$  1) 5-Brom-2-[1-Naphtyl]amido-4,5-Dihydro-1,3-Thiazin. Pikrat (Soc. 69, 29). — \*II, 339.  
2) 5-Brom-2-[2-Naphtyl]amido-4,5-Dihydro-1,3-Thiazin. Sm. 190 bis 191° (Soc. 69, 28). — \*II, 335.
- $C_{14}H_{13}N_3BrJ$  1) Jodmethylat d. 5-Brom-1-Benzyl-1,2,3-Benzotriazol. Sm. 153 bis 154° (A. 249, 369). — IV, 1144.
- $C_{14}H_{14}ONCl$  1) 2-Chlorbenzyläther d. 3-Amido-4-Oxy-1-Methylbenzol. HCl (D.R.P. 142061 C. 1903 [2] 83).  
2) 4-Chlorbenzyläther d. 3-Amido-4-Oxy-1-Methylbenzol. HCl (D.R.P. 142061 C. 1903 [2] 83).  
3) Pyridoniumverbindung d.  $\alpha$ -Chloräthylphenylketon. 2 +  $PtCl_4$ , +  $AuCl_3$  (Ar. 247, 143 C. 1909 [1] 1705).
- $C_{14}H_{14}ONCl_3$  1) 6,8-Dimethyl-2-[ $\gamma\gamma\gamma$ -Trichlor- $\beta$ -Oxypropyl]chinolin. Sm. 108° (B. 20, 41). — IV, 380.
- $C_{14}H_{14}ONBr$  1) Benzyläther d. 5-Brom-3-Amido-2-Oxy-1-Methylbenzol. HCl (D.R.P. 142899 C. 1903 [2] 83).  
2) 2-Brom-3-Piperidyl-1-Keto-2,3-Dihydroinden. Sm. 117° (A. 247, 149). — IV, 23.  
3) Pyridoniumverbindung d.  $\alpha$ -Bromäthylphenylketon. Sm. 130 bis 131° (Ar. 247, 142 C. 1909 [1] 1705).  
4)  $\beta$ -Brompropylamid d. Naphtalin-1-Carbonsäure. Sm. 100° (B. 33, 2639). — \*II, 864.

- C<sub>14</sub>H<sub>14</sub>ONBr** 5)  $\beta$ -Brompropylamid d. Naphtalin-2-Carbonsäure (B. 33, 2639). — \*II, 866.
- 6) 1-Naphtylamid d.  $\alpha$ -Brombuttersäure. Sm. 151° (B. 25, 2925). — II, 607.
- 7) 1-Naphtylamid d.  $\alpha$ -Bromisobuttersäure. Sm. 116° (B. 25, 2929). — II, 607.
- 8) 2-Naphtylamid d.  $\alpha$ -Brombuttersäure. Sm. 134° (B. 25, 2926). — II, 617.
- 9) 2-Naphtylamid d.  $\alpha$ -Bromisobuttersäure. Sm. 135° (B. 25, 2930). — II, 617.
- C<sub>14</sub>H<sub>14</sub>ONBr<sub>3</sub>** 1) 3,6-Dibrom-5-Oxy-2,4-Dimethylbrombenzylat d. Pyridin. Zers. bei 237—238° (B. 35, 144 C. 1902 [1] 467; B. 35, 2306 Anm.). — \*IV, 90.
- 2) 3,6-Dibrom-4-Oxy-2,5-Dimethylbrombenzylat d. Pyridin (A. 344, 221 C. 1906 [1] 1162).
- 3) 2,6-Dibrom-4-Oxy-3,5-Dimethylbrombenzylat d. Pyridin (A. 344, 244 C. 1906 [1] 1163).
- C<sub>14</sub>H<sub>14</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) 3,5-Dichlor-4'-Dimethylamido-4-Oxydiphenylamin (D. R. P. 161665 C. 1905 [2] 368).
- C<sub>14</sub>H<sub>14</sub>ON<sub>2</sub>S** 1) 4-Thionylamido-1-Methylbenzylamidobenzol. Sm. 94° (B. 31, 2182). — \*IV, 384.
- 2) s-Phenyl-2-Oxymethylphenylthioharnstoff. Sm. 136° (B. 22, 1671). — II, 1062.
- 3) s-Phenyl-4-Oxymethylphenylthioharnstoff. Sm. 157—158° (J. pr. [2] 64, 264).
- 4)  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -Benzylthioharnstoff. Sm. 131—132° (J. pr. [2] 56, 88). — \*II, 304.
- 5) Methyläther d. s-Phenyl-2-Oxyphenylthioharnstoff. Sm. 127° (B. 21, 1868). — II, 711.
- 6) Methyläther d. s-Phenyl-4-Oxyphenylthioharnstoff. Sm. 180° (C. 1900 [2] 530; 1901 [2] 198).
- 7) Benzyläther d.  $\alpha$ -Oxy- $\beta$ -Phenylthioharnstoff. Sm. 115° (B. 24, 380). — II, 533.
- 8) 4-Methylphenyläther d. 4-Merkaptophenylharnstoff. Sm. 168° (J. pr. [2] 68, 269 C. 1903 [2] 993).
- 9) 2-Allylimido-4-Keto-3-Methyl-5-Benzylidentetrahydrothiazol. Sm. 78° (C. 1899 [2] 804). — \*II, 954.
- 10) Benzylester d.  $\beta$ -Phenylhydrazidothiolumeisensäure. Sm. 170° (J. pr. [2] 60, 242; Am. 24, 67). — \*IV, 437.
- 11) Verbindung (aus s-Diphenylthioharnstoff u. Formaldehyd). Sm. 132 bis 149° (C. 1905 [2] 1422).
- C<sub>14</sub>H<sub>14</sub>ON<sub>3</sub>Cl** 1) Äthyläther d. 4-[4-Oxyphenyl]amidodiazobenzolchlorid (B. 26, 693). — IV, 1527.
- C<sub>14</sub>H<sub>14</sub>ON<sub>3</sub>Br** 1) p-Brom-N-Oxy-2,4'-Dimethyldiazoamidobenzol. Sm. 120,5° (Soc. 95, 1119 C. 1909 [2] 595).
- 2) p-Brom-N-Oxy-3,4'-Dimethyldiazoamidobenzol. Sm. 155° (Soc. 95, 1120 C. 1909 [2] 595).
- 3) p-Brom-N-Oxy-4,4'-Dimethyldiazoamidobenzol. Sm. 102° (Soc. 95, 1120 C. 1909 [2] 595).
- C<sub>14</sub>H<sub>14</sub>ON<sub>4</sub>S** 1) Di[Phenylamid] d. Hydrazin- $\alpha$ -Carbonsäure- $\beta$ -Thiocarbonsäure. Sm. 212—213° (B. 39, 651 C. 1906 [1] 1027).
- C<sub>14</sub>H<sub>14</sub>OCIP** 1) Chlorid d. Di[4-Methylphenyl]phosphinsäure. Sd. oberhalb 360° (A. 315, 63).
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>NCl** 1) Methyläther d. 2-Oxy-1-Chloracetylamidomethylnaphtalin. Sm. 170° (A. 361, 163 C. 1908 [2] 399).
- 2) Benzoat d. Pyridin- $\beta$ -Oxychloräthylat. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Ar. 240, 79 C. 1902 [1] 478). — \*IV, 89.
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>NBr** 1) Äthyläther d. 6-Brom-1-Acetylamido-2-Oxynaphtalin. Sm. 246° (C. 1897 [1] 239).
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>NBr<sub>3</sub>** 1) p-Tribrom-7-Diäthylamido-4-Methyl-1,2-Benzpyron. Sm. 109° (B. 32, 3696). — \*II, 964.
- C<sub>14</sub>H<sub>14</sub>O<sub>2</sub>NJ** 1) 4-Acetylamidodiphenyljodoniumhydroxyd. Salze, siehe (B. 40, 4071 C. 1907 [2] 1834).
- 2) Jodmethylat d. 4-[ $\alpha\gamma$ -Diketobutyl]chinolin + H<sub>2</sub>O. Sm. 189—191° u. Zers. Na (M. 17, 405). — IV, 374.

- $C_{14}H_{14}O_2N_2Cl_2$  1) **s-Di[3-Chlor-4-Oxymethylphenyl]hydrazin**. Sm. 35° (B. 25, 79). — IV, 1507.
- $C_{14}H_{14}O_2N_2J_2$  1) **Jodid d. Benzolcarbonsäureamid**. Sm. 110—112° (B. 23, 3040). — II, 1159.
- $C_{14}H_{14}O_2N_2S$  1)  $\alpha$ -[4-Methylphenyl]sulfonimido- $\alpha$ -Amido- $\alpha$ -Phenylmethan. Sm. 114° (B. 5, 141). — IV, 847.  
 2) Äthylester d.  $\alpha$ -[1-Naphtyl]thioharnstoff- $\beta$ -Carbonsäure. Sm. 183 bis 183,5° (Soc. 69, 328). — \*II, 335.  
 3) Äthylester d.  $\alpha$ -[2-Naphtyl]thioharnstoff- $\beta$ -Carbonsäure. Sm. 155 bis 155,5° (Soc. 69, 329). — \*II, 338.  
 4) **Amid d. 2-Amido- $\alpha\beta$ -Diphenyläthen-4-Sulfonsäure**. Sm. 206—207° (B. 41, 2293 C. 1908 [2] 599).
- $C_{14}H_{14}O_2N_2S_2$  1)  $\alpha\beta$ -Di[Thionylphenylhydrazido]äthan. Sm. 121—123° (A. 270, 122). — IV, 662.  
 2) **2-Methyl-1-[4-Methylphenylthiosulfon]diazobenzol**. Sm. 79° u. Zers. (J. pr. [2] 62, 392). — \*IV, 1112.  
 3) **4-Methyl-1-[4-Methylphenylthiosulfon]diazobenzol**. Zers. bei 93° (J. pr. [2] 62, 389). — \*IV, 1112.
- $C_{14}H_{14}O_2N_3Cl$  1)  $\alpha$ -[5-Chlor-2-Nitrophenyl]- $\beta$ -[2,5-Dimethylphenyl]hydrazin. Sm. 144° (J. pr. [2] 71, 407 C. 1905 [2] 41).
- $C_{14}H_{14}O_2N_4S$  1) **s-Di[ $\beta$ -Methylnitrosamidophenyl]sulfid**. Sm. 133° (B. 23, 3022). — II, 804.  
 2)  $\beta$ -[2-Nitro-4-Methylphenyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 188° u. Zers. (Soc. 79, 1143). — \*IV, 534.
- $C_{14}H_{14}O_2N_4S_2$  1) **Disulfid d.  $\beta$ -Phenylhydrazidothiolameisensäure** (J. pr. [2] 60, 241). — \*IV, 436.
- $C_{14}H_{14}O_2ClP$  1) **Chlorid d. 4-Methylphenylphosphinsäuremono-4-Methylphenylester**. Sm. 60°; Sd. oberhalb 360° (A. 293, 264). — IV, 1669.
- $C_{14}H_{14}O_2ClAs$  1) **Dimethyläther d. Di[4-Oxyphenyl]chlorarsin**. Sm. 79—80° (B. 20, 50). — IV, 1688.
- $C_{14}H_{14}O_2Cl_2Se$  1) **Dimethyläther d. Di[ $\beta$ -Oxyphenyl]seleniddichlorid (Dichlorselenanisol)**. Sm. 159° (B. 28, 609). — \*II, 576.
- $C_{14}H_{14}O_2Cl_2Te$  1) **Dimethyläther d. Di[ $\beta$ -Oxyphenyl]telluriddichlorid**. Sm. 190°. 2 +  $PtCl_4$  (B. 30, 2829). — \*II, 577.
- $C_{14}H_{14}O_2Br_2Se$  1) **Dimethyläther d. Di[ $\beta$ -Oxyphenyl]seleniddibromid**. Sm. 124° (B. 28, 610). — \*II, 576.
- $C_{14}H_{14}O_2Br_2Te$  1) **Dimethyläther d. Di[ $\beta$ -Oxyphenyl]telluriddibromid**. Sm. 183,5° (B. 30, 2830). — \*II, 577.
- $C_{14}H_{14}O_2J_2Te$  1) **Dimethyläther d. Di[ $\beta$ -Oxyphenyl]telluriddijodid**. Sm. 170° (B. 30, 2831). — \*II, 577.
- $C_{14}H_{14}O_2S_3Te$  1) **Dimethyläther d. Ditellurodi[4-Oxyphenyl]trisulfid**. Sm. 61° (A. 315, 13).
- $C_{14}H_{14}O_3NCl$  1) **Chlorid d.  $s$ -[1,2-Phtalyl]amidopentan- $\alpha$ -Carbonsäure**. Sm. 60° (B. 41, 2016 C. 1908 [2] 306).
- $C_{14}H_{14}O_3NJ$  1) **5-Nitro-2,2'-Dimethyldiphenyljodoniumhydroxyd**. Salze, siehe (B. 41, 2082 C. 1908 [2] 301).
- $C_{14}H_{14}O_3N_2S$  1)  $\alpha$ -Phenyl- $\beta$ -[4-Methylbenzyliden]hydrazin- $\alpha^4$ -Sulfonsäure. Sm. 270—271° (B. 32, 1286). — \*IV, 488.  
 2) **Diacetylderivat d. 2-[2-Methylphenyl]imido-4-Ketotetrahydrothiazol**. Sm. 91—92° (Am. 28, 150 C. 1902 [2] 794).  
 3) **Diacetylderivat d. 2-[4-Methylphenyl]imido-4-Ketotetrahydrothiazol**. Sm. 163—164° (Am. 28, 152 C. 1902 [2] 794).  
 4) **2,2'-Dimethylazobenzol- $\beta$ -Sulfonsäure + 3H<sub>2</sub>O**. — IV, 1376.  
 5) **4,4'-Dimethylazobenzol-3-Sulfonsäure**. Na + 4½H<sub>2</sub>O, K + 5H<sub>2</sub>O, Ba + 11H<sub>2</sub>O, Pb (B. 3, 551; 21, 119). — IV, 1380.  
 6) **5-Methyl-2-Phenyl-2,3-Dihydrobenzimidazol-2<sup>s</sup>-Sulfonsäure**. Na (B. 24, 793). — IV, 620.  
 7)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Sulfophenyl]äthan (Acetophenonsulfonsäurephenylhydrazon). Phenylhydrazinsalz (B. 19, 2626). — IV, 771.  
 8) **Benzolsulfonat d.  $\beta$ -Oximido- $\beta$ -Amido- $\alpha$ -Phenyläthan**. Zers. bei 100° (B. 24, 4174; 26, 605). — II, 1315.  
 9) **Amid d. 2-[Methylphenylsulfon]amidobenzol-1-Carbonsäure**. Sm. 154° (J. pr. [2] 44, 427). — II, 1253.



- C<sub>14</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>S** 10) **Methylamid d. 2-Phenylsulfonamidobenzol-1-Carbonsäure.** Sm. 114° (*J. pr.* [2] 44, 425). — II, 1253.
- 11) **Phenylamid d. 1-Acetylamidobenzol-4-Sulfonsäure.** Sm. 214° (*J. pr.* [2] 77, 373 *C.* 1908 [1] 2150).
- 12) **2-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure.** Sm. 193° (*Am.* 11, 347). — II, 1296.
- 13) **4-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure.** Sm. 202° (*Am.* 11, 348). — II, 1296.
- C<sub>14</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>S<sub>2</sub>** 1) **Methyläther d. 2-Oxy-1-[4-Methylphenylthiosulfon]diazobenzol.** Sm. 82° u. Zers. (*J. pr.* [2] 62, 421). — \*IV, 1122.
- 2) **Methyläther d. 4-Oxy-1-[4-Methylphenylthiosulfon]diazobenzol.** Sm. 102–103° u. Zers. (*J. pr.* [2] 62, 419). — \*IV, 1122.
- 3) **Äthyläther d. 4-Oxy-1-Phenylthiosulfondiazobenzol.** Sm. 81 bis 82° u. Zers. (*J. pr.* [2] 62, 423). — \*IV, 1122.
- 4) **2-Thiocarbonyl-4-Keto-5-[4-Dimethylamidobenzyliden]tetrahydrothiazol-3-Methylcarbonsäure.** Sm. 235° u. Zers. (*M.* 29, 418 *C.* 1908 [2] 1040).
- C<sub>14</sub>H<sub>14</sub>O<sub>3</sub>N<sub>4</sub>S** 1) **s-Di[*p*-Methylnitrosamidophenyl]sulfoxyd.** Sm. 171° (*B.* 23, 3021). — II, 805.
- 2) **2,3'-Dimethylazobenzol-4-Diazosulfonsäure.** K, Ca, Ag (*Ar.* 244, 313 *C.* 1906 [2] 1600; *J. pr.* [2] 72, 515 *C.* 1906 [1] 343; *B.* 40, 211 *C.* 1907 [1] 804).
- 3) **2,3'-Dimethylazobenzol-4'-Diazosulfonsäure.** Na, K (*B.* 20, 1182; *B.* 40, 211 *C.* 1907 [1] 804). — IV, 1532.
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>NCl<sub>7</sub>** 1) **Diäthylesterd. *p*-Heptachlor-2,4,6-Trimethyl-2,3-Dihydropyridin-3,5-Dicarbonsäure.** Sm. 152° (*A.* 215, 19). — IV, 95.
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>NBr** 1)  **$\alpha$ -Brom- $\epsilon$ -Phthalylamidopentan- $\alpha$ -Carbonsäure.** Sm. 153–153,5° (*B.* 42, 558 *C.* 1909 [1] 861).
- 2) **Äthylester d.  $\alpha$ -Cyan- $\beta$ -[*p*-Brom-3,4-Dioxyphenyl]akryldimethyläthersäure.** Sm. 154° (*C.* 1905 [2] 623).
- C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>N<sub>2</sub>S** 1) **5-Nitro-2-Phenylsulfonamido-1,4-Dimethylbenzol.** Sm. 160–163° (*Soc.* 87, 926 *C.* 1905 [2] 320).
- 2) **4-[4-Dimethylamidophenyl]imido-1-Keto-1,4-Dihydrobenzol-2[oder 3]-Sulfonsäure** (*B.* 21, 888). — IV, 599.
- 3) **4,4'-Dimethylazoxybenzol-*p*-Sulfonsäure.** Ba (*B.* 22, 44). — IV, 1341.
- 4) **2-Oxy-3,5-Dimethylazobenzol-4'-Sulfonsäure** (*B.* 19, 148). — IV, 1424.
- 5) **4-Oxy-2,2'-Dimethylazobenzol-5'-Sulfonsäure.** Na, Ba (*B.* 17, 366). — IV, 1423.
- 6) **6-Oxy-3,4'-Dimethylazobenzol-2'-Sulfonsäure.** Na, Ba + 4H<sub>2</sub>O (*B.* 17, 358). — IV, 1423.
- 7) **2-Oxyazobenzoläthyläther-5-Sulfonsäure.** Na (*B.* 36, 2978 *C.* 1903 [2] 1031).
- 8) **Amid d. 1-Diacetylamidonaphtalin-5-Sulfonsäure.** Sm. 200° (*B.* 23, 1120). — II, 626.
- 9) **Benzylamid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure.** Sm. 94° (*Soc.* 87, 161 *C.* 1905 [1] 1011).
- 10) **4-Methylphenylamid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure.** Sm. 130–131° (*Z.* 1870, 324). — II, 504.
- 11) **4-Nitrophenylamid d. 1,3-Dimethylbenzol-4-Sulfonsäure.** Sm. 117 bis 119° +  $\frac{1}{2}$ C<sub>6</sub>H<sub>6</sub> (Sm. 91–93°) (*Soc.* 87, 1307 *C.* 1905 [2] 1334).
- 12) **4-Nitro-2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure.** Sm. 174° (172°) (*B.* 35, 1440 *C.* 1902 [1] 1200; D.R.P. 157859 *C.* 1905 [1] 416; *B.* 39, 2872 *C.* 1906 [2] 1339).
- 13) **2-Nitro-4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure.** Sm. 145–146° (98°) (*B.* 35, 1441 *C.* 1902 [1] 1200; D.R.P. 164130 *C.* 1905 [2] 1477).
- 14) **3-Nitro-4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure.** Sm. 164° (D.R.P. 135016 *C.* 1902 [2] 1166).
- 15) **5-Nitro-2,4-Dimethylphenylamid d. Benzolsulfonsäure.** Sm. 148,5° (*Soc.* 89, 1296 *C.* 1906 [2] 1121).
- 16) **6-Nitro-2,4-Dimethylphenylamid d. Benzolsulfonsäure.** Sm. 152 bis 153° (*Bl.* [3] 15, 1036). — II, 313.

- $C_{14}H_{11}O_4N_2S$  17) *p*-Nitro-2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 174 bis 175° (*Bl.* [3] 15, 1037). — \*II, 315.
- 18) Methyl-2-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 140—141° (*Soc.* 89, 1165 *C.* 1906 [2] 1056).
- 19) Methyl-3-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 128° (*Soc.* 89, 1165 *C.* 1906 [2] 1056).
- $C_{14}H_{11}O_4N_2S_2$  1) Dibenzolsulfondimethylendiimid. Sm. 132° (*B.* 26, 2149). — II, 116.
- $C_{14}H_{11}O_5NP$  1) Phosphat d. 4-Oxy-1-Methylbenzol-3-Carbonsäurephenylamid. Sm. 187—189° (*B.* 31, 2697). — \*II, 920.
- $C_{14}H_{11}O_5N_2S$  1) 2-Naphtylsulfonamidoacetylamidoessigsäure +  $H_2O$  ( $\beta$ -Naphtalin-sulfo-glycylglycin). Sm. 180—182° (wasserfrei). Cu (*B.* 35, 3786 *C.* 1902 [2] 1470; *B.* 36, 2105 *C.* 1903 [1] 1304; *B.* 36, 2596 *C.* 1903 [2] 618).
- 2) 5-Nitro-2-[2-Methylphenyl]amidophenylmethan- $\alpha$ -Sulfonsäure. Na (*D. R. P.* 150366 *C.* 1904 [1] 1308).
- 3) 5-Nitro-2-[4-Methylphenyl]amidophenylmethan- $\alpha$ -Sulfonsäure. Na (*D. R. P.* 150366 *C.* 1904 [1] 1308).
- 4) 2',4'-Dioxy-2,4-Dimethylazobenzol-6-Sulfonsäure (*B.* 35, 3766 *C.* 1902 [2] 1453). — \*IV, 1049.
- 5) 2,4-Dioxydimethylazobenzolsulfonsäure (*B.* 11, 2197). — IV, 1445.
- 6)  $\alpha$ -Amid d. 1- $\alpha$ -[2-Naphtylsulfon]amidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 192—193° (*B.* 41, 4442 *C.* 1909 [1] 441).
- 7) 4-Nitro-2-Methoxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 175° (*D. R. P.* 157859 *C.* 1905 [1] 416).
- 8) 2-Nitro-4-Methoxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 105° (*B.* 42, 1525 *C.* 1909 [1] 1810).
- 9) 2-Nitro-4-Äthoxyphenylamid d. Benzolsulfonsäure. Sm. 72° (*D. R. P.* 164130 *C.* 1905 [2] 1477).
- $C_{14}H_{11}O_5ClP$  1) Chlorid d. Di[2-Methoxyphenyl]phosphorsäure. *Sd.* 258°<sub>15</sub> (*C. r.* 146, 1152 *C.* 1908 [2] 239).
- $C_{14}H_{11}O_5NBr$  1) 2-Diacetylamid d. 6-Brom-3,4-Dioxybenzoldimethyläther-2-Carbonsäure-1-Carbonsäurealdehyd. Sm. 150° (*B.* 31, 929). — \*II, 1120.
- $C_{14}H_{11}O_6N_2S_2$  1)  $\alpha\beta$ -Di-4-Amidophenyläthen-2,2'-Disulfonsäure (*B.* 19, 3235; *Bl.* [3] 29, 349; *Z. El. Ch.* 9, 416). — IV, 994; \*IV, 667.
- 2) 2,2'-Dimethylazobenzol- $\alpha\alpha'$ -Disulfonsäure.  $Na_2$  (*A.* 355, 186 *C.* 1907 [2] 1406).
- 3) 4,4'-Dimethylazobenzol- $\alpha\alpha'$ -Disulfonsäure (4,4'-Äzobenzylidisulfonsäure).  $Na_2$ ,  $K_2$  +  $\frac{1}{2}H_2O$ ,  $Ba$  +  $1\frac{1}{2}H_2O$ ,  $Ag_2$  +  $H_2O$  (*A.* 221, 223; *A.* 355, 179 *C.* 1907 [2] 1406). — IV, 1386.
- 4) 2,2'-Dimethylazobenzol-4,4'-Disulfonsäure.  $K_2$ ,  $Ca$  +  $3H_2O$ ,  $Ba$  +  $H_2O$ ,  $Pb$  +  $H_2O$  (*A.* 221, 183). — IV, 1380.
- 5) 2,2'-Dimethylazobenzol-5,5'-Disulfonsäure +  $7\frac{1}{2}H_2O$ . Zers. bei 180°.  $K_2$  +  $2\frac{1}{2}H_2O$ ,  $Ca$  +  $5H_2O$ ,  $Ba$  +  $4H_2O$ ,  $Pb$  +  $4H_2O$  (*A.* 203, 74; 221, 181). — IV, 1380.
- 6) 4,4'-Dimethylazobenzol-2,2'-Disulfonsäure.  $Ba$  +  $3H_2O$  (*A.* 221, 182). — IV, 1380.
- 7) 4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Zers. bei 190°.  $K_2$  +  $3H_2O$ ,  $Ca$  +  $3H_2O$ ,  $Ba$  +  $H_2O$ ,  $Pb$  +  $2H_2O$  (*A.* 203, 80; 221, 182; *C.* 1903 [1] 1414). — IV, 1380; \*IV, 1021.
- $C_{14}H_{11}O_6N_2As_2$  1) 1,6-Dimethylphenazin-3,8-Diarsinsäure. Sm. noch nicht bei 300° (*Soc.* 93, 1901 *C.* 1909 [1] 163).
- $C_{14}H_{11}O_6N_4S$  1) 5-Nitro-2-Methylphenylhydrazid d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure. Sm. 140—142° u. Zers. (*B.* 20, 1241). — IV, 803.
- $C_{14}H_{11}O_7NCl$  1) Methylester d. 1-[ $\beta$ -Chlor- $\beta$ -Nitro- $\alpha$ -Acetoxyäthyl]benzol-2-Ketocarbonsäure. Sm. 115° (*A.* 278, 205). — II, 1782.
- $C_{14}H_{11}O_7NBr$  1) Diäthylester d.  $\beta$ -Brom- $\alpha$ -Keto- $\alpha$ -[2-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure (*D. d.* 2-Nitrobenzoylbrommalonsäure). Sm. 72° (*B.* 17, 2793). — II, 1961.
- $C_{14}H_{11}O_7N_2S_2$  1) 4,4'-Dimethylazoxybenzol-*p*-Disulfonsäure.  $Ag_2$  (*B.* 22, 44). — IV, 1341.
- $C_{14}H_{11}O_8N_4S_2$  1) 3,3'-Dimethoxyl-4,4'-Tetrazobiphenyl-*NN*-Disulfonsäure.  $Na_4$ ,  $K_2$  (*J. pr.* [2] 59, 223). — \*IV, 1125.
- $C_{14}H_{11}NJS$  1) Jodmethylat d. Thioameisensäurediphenylamid. Zers. bei 100° (*B.* 42, 1922 *C.* 1909 [2] 266).

- $C_{14}H_{14}N_3ClS$  1)  $\alpha$ -Amido- $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Chlorphenyl]thioharnstoff. Sm. 145° (*B.* 32, 1084; 34, 320). — \*IV, 534.  
2)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -[4-Chlorphenyl]thioharnstoff. Sm. 146,5° (*B.* 32, 1084). — \*IV, 534.  
3) uns-Dimethylthioninchlorid. 2 +  $PtCl_4$  (*B.* 33, 3294). — \*II, 478.
- $C_{14}H_{14}N_3BrS$  1)  $\alpha$ -Phenyl- $\beta$ -[2-Brom-4-Methylphenyl]amidothioharnstoff. Sm. 142° (*Soc.* 73, 177). — IV, 806.
- $C_{14}H_{14}N_3JS$  1) Dimethylthioninjodid (*B.* 39, 1808 *C.* 1906 [2] 58).
- $C_{14}H_{14}N_4Br_4S_2$  1) Disulfid d.  $\alpha$ -Brom- $\alpha$ -Amido- $\alpha$ -Phenylbromamido- $\alpha$ -Merkapto-methan. Sm. 208° u. Zers. (*B.* 34, 3131).
- $C_{14}H_{14}ClSP$  1) Chlorid d. Di[4-Methylphenyl]thiophosphinsäure. Sm. 96° (*A.* 315, 64). — \*IV, 1178.
- $C_{14}H_{15}ONBr_2$  1) 6-Brom-5-Oxy-2-Brommethyl-1,4-Dimethylbenzol + Pyridin. Sm. 221—223° u. Zers. (*B.* 36, 1890 *C.* 1903 [2] 291). — \*IV, 90.
- $C_{14}H_{15}ON_2Cl$  1) 3'-Chlor-4-Äthylamido-4-Oxydiphenylamin. Sm. 115° (*D. R. P.* 172079 *C.* 1906 [2] 649).
- $C_{14}H_{15}ON_2Br$  1) Äthyläther d. 3'-Brom-2-Amido-5-Oxydiphenylamin (*B.* 36, 3868 *C.* 1904 [1] 92).  
2) Äthyläther d. 3'-Brom-4'-Amido-4-Oxydiphenylamin. Sm. 54° (*B.* 36, 3865 *C.* 1904 [1] 91).  
3)  $\gamma$ -[4-Bromphenyl]hydrazon- $\alpha$ -[2-Furanyl]butan. Sm. 103—104° (*B.* 32, 1321). — \*IV, 517.
- $C_{14}H_{15}ON_2J$  1) Jodmethylat d. Harmin. Sm. 298° (*B.* 18, 402; 30, 2482). — III, 885.
- $C_{14}H_{15}ON_2P$  1) 2-Methylphenylimid-2-Methylphenylamid d. Phosphorsäure. Sm. 309° (*B.* 29, 726). — \*II, 250.  
2) 4-Methylphenylimid-4-Methylphenylamid d. Phosphorsäure. Sm. 226—228° (*Soc.* 83, 1048 *C.* 1903 [2] 663).  
3) polym. 4-Methylphenylimid-4-Methylphenylamid d. Phosphor-säure. Sm. 328° (*B.* 29, 725; *Soc.* 83, 1048 *C.* 1903 [2] 663). — \*II, 268.
- $C_{14}H_{15}ON_2S$  1) Methyläther d.  $\alpha$ -[2-Oxyphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 150—151° (*B.* 32, 1085). — \*IV, 548.  
2) uns-Dimethylthionin. 2 Chlorid +  $PtCl_4$ , Jodid, Bichromat (*B.* 33, 3294; *C.* 1900 [2] 342; 1905 [1] 104; *A.* 251, 91; *B.* 39, 1018 *C.* 1906 [1] 1359). — II, 809; \*II, 478.
- $C_{14}H_{15}OSAs$  1) Dibenzylthiolarinsäure. Sm. 197—199° (*A.* 233, 90). — IV, 1690.
- $C_{14}H_{15}O_2NBr_4$  1) Acetat d. 1-[2,4,5,6-Tetrabrom-3-Oxybenzyl]hexahydropyridin. Sm. 129—130° (*A.* 344, 155 *C.* 1906 [1] 1157).
- $C_{14}H_{15}O_2NS$  1) Dimethylamidodiphenylsulfon. Sm. 82° (*B.* 10, 1742; 12, 1275, 1792). — II, 814.  
2) Phenylamidomethyl-4-Methylphenylsulfon. Sm. 137° (*J. pr.* [2] 63, 171).  
3) Phenylamid d. 1,3-Dimethylbenzol-5-Sulfonsäure. Sm. 119° (*C.* 1901 [1] 385).  
4) Benzylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 116° (*Soc.* 87, 159 *C.* 1905 [1] 1011).  
5) 2-Methylphenylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 134° (*B.* 12, 1348). — II, 468.  
6) 2-Methylphenylamid d. 1-Methylbenzol-3-Sulfonsäure. Sm. 108° (*Am.* 19, 198). — \*II, 257.  
7) 2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 108° (110°) (*B.* 35, 1440 *C.* 1902 [1] 1200; *Soc.* 85, 1186 *C.* 1904 [2] 1115; *D. R. P.* 157859 *C.* 1905 [1] 416).  
8) 3-Methylphenylamid d. 1-Methylbenzol-3-Sulfonsäure. Sm. 103° (*B.* 12, 1349). — II, 479.  
9) 3-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 114° (*B.* 35, 1441 *C.* 1902 [1] 1200).  
10) 4-Methylphenylamid d. 1-Methylbenzol-3-Sulfonsäure. Sm. 106° (*Am.* 19, 198). — \*II, 282.  
11) 4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 117° (*Z.* 1870, 324; *B.* 12, 1348; *B.* 35, 1441 *C.* 1902 [1] 1200; *D. R. P.* 164130 *C.* 1905 [2] 1477). — II, 504.  
12) 4-Methylphenylamid d. Phenylmethan- $\alpha$ -Sulfonsäure. Sm. 113° (*B.* 39, 3314 *C.* 1906 [2] 1602).



- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>NS** 13) Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 94 bis 95° (*J. pr.* [2] 47, 371). — II, 425; \*II, 223.
- 14) Methylbenzylamid d. Benzolsulfonsäure. Sm. 93° (*A.* 265, 183; 273, 19). — II, 531.
- 15) Äthylphenylamid d. Benzolsulfonsäure. Fl. (*B.* 36, 2706 *C.* 1903 [2] 829).
- 16) 2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 128—129° (130—131°) (*Bl.* [3] 15, 1036; *C.* 1899 [2] 868; *Soc.* 85, 377 *C.* 1904 [1] 1412). — \*II, 313.
- 17) 2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 138—139° (*Bl.* [3] 15, 1037). — \*II, 315.
- 18) 3,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 118° (*B.* 38, 910 *C.* 1905 [1] 1003).
- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>NS<sub>2</sub>** 1) 2-Thiocarbonyl-4-Keto-5-[4-Oxy-2-Methyl-5-Isopropylbenzyliden]tetrahydrothiazol. Sm. 220—221° (*C.* 1906 [1] 1438).
- C<sub>14</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>3</sub>** 1) 2,5-Diketo-4-Methyl-1-[βγ-Dibrompropyl]-3-[p-Brom-3-Methylphenyl]tetrahydroimidazol. Sm. 89° (*Ar.* 243, 702 *C.* 1906 [1] 461).
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>NCl<sub>2</sub>** 1) Diäthyläther d. 3,4-Dichlor-2,2-Dioxy-5-Keto-1-Phenyl-2,5-Dihydropyrrol (Dichlormaleinanilidiäthyläther). Sm. 96—97° (*A.* 263, 161; *B.* 28, 57). — II, 416.
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>NS** 1) Dibenzylsulfaminsäure + H<sub>2</sub>O. Sm. 160—170° u. Zers. (*J. pr.* [2] 44, 515). — II, 532.
- 2) 1-Methylbenzylamidobenzol-3-Sulfonsäure + H<sub>2</sub>O. Na + 2H<sub>2</sub>O, Ba + 3H<sub>2</sub>O (*J. pr.* [2] 63, 418).
- 3) 1-Methylbenzylamidobenzol-p-Sulfonsäure. Na + 3H<sub>2</sub>O (*B.* 23, 558). — II, 532.
- 4) Methylphenylbenzylamin-4-Sulfonsäure. (CH<sub>3</sub>.C<sub>6</sub>H<sub>4</sub>.N.C<sub>7</sub>H<sub>5</sub>.SO<sub>3</sub>H), K, Ba + 2H<sub>2</sub>O (*J. pr.* [2] 76, 502 *C.* 1908 [1] 861).
- 5) 2-Amido-4-Methylphenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 78° (D.R.P. 201377 *C.* 1908 [2] 999).
- 6) 4-Methylamidophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 135° (*B.* 42, 1523 *C.* 1909 [1] 1809).
- 7) Phenylamid d. 4-Oxy-1-Methylbenzolzomethyläther-3-Sulfonsäure. Sm. 163° (*B.* 32, 1155). — \*II, 495.
- 8) Phenylamid d. 2-Oxybenzoläthyläther-1-Sulfonsäure. Sm. 158° (*B.* 32, 1154). — \*II, 490.
- 9) Phenylamid d. 3-Oxybenzoläthyläther-1-Sulfonsäure. Sm. 88° (*B.* 25, 1836). — II, 832.
- 10) Phenylamid d. 4-Oxybenzoläthyläther-1-Sulfonsäure. Sm. 84° (*B.* 25, 1838). — II, 832.
- 11) 5-Oxy-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 136 bis 143° (*Soc.* 89, 1297 *C.* 1906 [2] 1121).
- 12) 2-Methoxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 127° (D.R.P. 157859 *C.* 1905 [1] 416).
- 13) 4-Methoxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 114° (*B.* 42, 1523 *C.* 1909 [1] 1809).
- 14) 4-Äthoxyphenylamid d. Benzolsulfonsäure. Sm. 142° (136°) (*A.* 265, 184; D.R.P. 164130 *C.* 1905 [2] 1477). — II, 721.
- 15) Methyl-2-Methoxyphenylamid d. Benzolsulfonsäure. Sm. 60° (*B.* 32, 3518). — \*II, 393.
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>Br** 1) d-α-[α-Brompropionyl]amido-β-[3-Indolyl]propionsäure (d-α-Brompropionyl-d-Tryptophan). Sm. 72° (*B.* 40, 2745 *C.* 1907 [2] 464).
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>Br<sub>3</sub>** 1) Äthyläther d. 2,4-Diketo-3-[βγ-Dibrompropyl]-1-[p-Brom-4-Oxyphenyl]tetrahydroimidazol. Sm. 155—156° (*J. pr.* [2] 66, 254 *C.* 1902 [2] 1125).
- C<sub>14</sub>H<sub>15</sub>O<sub>3</sub>N<sub>3</sub>S** 1) 3-[α-Sulfophenylhydrazonpropyl]pyridin. Sm. 235° (*B.* 24, 2540). — IV, 799.
- 2) 1-[Methyl-4-Methylphenyl]amidodiazobenzol-4-Sulfonsäure. Na, Ag (*B.* 24, 2082). — IV, 1572.
- 3) 4-Äthylamidoazobenzol-2-Sulfonsäure. Zers. bei 165° (*J. pr.* [2] 63, 415).
- 4) 4-Äthylamidoazobenzol-4'-Sulfonsäure. Na (*B.* 20, 929). — IV, 1369.
- 5) 6-Methylamido-3-Methylazobenzol-4'-Sulfonsäure. Sm. 198—199° (*B.* 24, 2082). — IV, 1384.

- $C_{14}H_{15}O_3N_3S$  6) 4-Dimethylamidoazobenzol-4'-Sulfonsäure (Orange III; Helianthin; Tropäolin D) (B. 10, 528; 17, 1491; 20, 2996; B. 38, 3205 C. 1905 [2] 1333; B. 41, 1189 C. 1908 [1] 1885; B. 41, 1986 C. 1908 [2] 156; B. 41, 1989 C. 1908 [2] 156; B. 41, 2058 C. 1908 [2] 405). — IV, 1369.
- $C_{14}H_{15}O_3N_3S_2$  1) Dimethylindaminthiosulfonat (A. 251, 89). — II, 801.  
2)  $\alpha$ -Phenylidithiodi-C-Methylketuretcarbonsäureanhydrid. Sm. 168° (B. 32, 845). — \*II, 200.
- $C_{14}H_{15}O_4NBr_4$  1) Verbindung (aus Amidobenzol u. Xanthogallol) (A. 245, 341). — II, 1014.
- $C_{14}H_{15}O_4NS$  1) Äthylester d. 1-Acetylamidonaphtalin-4-Sulfonsäure. Sm. 148° (B. 39, 1565 C. 1906 [2] 36).  
2) Äthylester d. 2-Naphtylsulfonamidoessigsäure. Sm. 74° (B. 35, 3780 C. 1902 [2] 1469).  
3) Diäthylester d. Phenylrhodanmalonsäure. Fl. (C. 1902 [2] 578).  
4) Phenylamid d. 1,2-Dioxybenzoldimethyläther-4-Sulfonsäure +  $H_2O$ . Sm. 130,5—131,5° (G. 26 [2] 235). — \*II, 564.
- $C_{14}H_{15}O_4NS_2$  1) Imid d. 1-Methylbenzol-2-Sulfonsäure (C. 1901 [2] 1185).  
2) Imid d. 1-Methylbenzol-4-Sulfonsäure (C. 1901 [2] 1185).  
3) Äthylimid d. Benzolsulfonsäure. Sm. 81—82° (B. 38, 909 C. 1905 [1] 1003).
- $C_{14}H_{15}O_4N_2Cl$  1) bas. Chlorhydrid d. Pikolinsäurebetain +  $H_2O$ . Sm. 120° (M. 26, 547 C. 1905 [2] 259).
- $C_{14}H_{15}O_4N_2Br$  1) bas. Bromhydrid d. Pikolinsäurebetain +  $H_2O$ . Sm. 115° (M. 26, 548 C. 1905 [2] 259).
- $C_{14}H_{15}O_4N_2J$  1) bas. Jodhydrid d. Pikolinsäurebetain. Zers. bei 154—158°. Ba +  $4H_2O$  (M. 26, 540, 556 C. 1905 [2] 259).  
2) bas. Jodhydrid d. Isonikotinsäurebetain. Zers. bei 245—250° (M. 26, 553 C. 1905 [2] 260).  
3) bas. Jodhydrid d. 2-Methylpyridin-6-Carbonsäure +  $H_2O$ . Sm. 230° (M. 26, 559 C. 1905 [2] 260).  
4) Verbindung (aus Pyridinbetain u. Pyridylumjodessigsäure). Sm. 250 bis 252° u. Zers. (G. 30 [1] 511).
- $C_{14}H_{15}O_4N_3S$  1) 4-Amido-4'-Acetylamidodiphenylamin-2-Sulfonsäure (D. R. P. 184661 C. 1907 [2] 866).  
2) 4'-Amido-4-Acetylamidodiphenylamin-2-Sulfonsäure (D. R. P. 184661 C. 1907 [2] 866).
- $C_{14}H_{15}O_4N_4Br$  1) Methylester d. 2-[4-Bromphenyl]amido-1,2,3,6-Oxtriazin-5-[Isobutryryl- $\alpha$ -Carbonsäure]. Sm. 159° (Soc. 83, 1252 C. 1903 [2] 1422).
- $C_{14}H_{15}O_5NS$  1) 4-Methoxybenzaldehyd-4-Oxyphenylthionaminsäure. Sm. 188° (A. 274, 245). — III, 82.
- $C_{14}H_{15}O_5NS_2$  1) Di[4-Methylphenylsulfon]hydroxylamin. Sm. 125° u. Zers. (J. pr. [2] 63, 173).
- $C_{14}H_{15}O_5N_2Br$  1) Diäthylester d.  $\beta$ -[4-Bromphenyl]azo- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure (D. d. p-Brombenzolzooxalessigsäure). Sm. 93—94° (A. 338, 390 C. 1905 [1] 1223).  
2) Diacetat d.  $\beta$ -Brom-4-Oxy-1-[ $\alpha\beta$ -Dioximidopropyl]benzol-4-Methyläther. Sm. 101—102° (G. 23 [2] 189). — II, 853.  
3) isom. Diacetat d.  $\beta$ -Brom-4-Oxy-1-[ $\alpha\beta$ -Dioximidopropyl]benzol-4-Methyläther. Sm. 130—131° (G. 23 [2] 189). — II, 853.
- $C_{14}H_{15}O_6NS$  1) Benzaldehyd-3-Amidobenzolcarbonsäuredisulfat (A. 210, 124). — III, 13.
- $C_{14}H_{15}O_6NS_2$  1) 4-Amido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba +  $5H_2O$  (A. 270, 369). — II, 636.  
2) Dibenzylamindisulfonsäure? Ba (A. 144, 317). — II, 582.
- $C_{14}H_{15}O_6N_2Cl$  1) Diacetat d. 2-Chlor-3,6-Di[Acetylamido]-1,4-Dioxybenzol. Sm. 255° (J. pr. [2] 40, 490). — II, 948.
- $C_{14}H_{15}O_6N_3S_2$  1) 2,2'-Dimethyldiazoamidobenzol-5,5'-Disulfonsäure (Bl. [3] 31, 644 C. 1904 [2] 96).  
2) 6-Amido-3,4'-Dimethylazobenzol- $\beta$ -Disulfonsäure. Ba +  $4H_2O$  (B. 17, 80). — IV, 1381.
- $C_{14}H_{15}O_7NS_2$  1) 4'-Amido-4-Oxy-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba +  $4\frac{1}{2}H_2O$  (A. 270, 370). — II, 898.  
2) Verbindung (aus 2-Oxybenzoldimethyläther-1-Sulfonsäure). Sm. 183 bis 184° (B. 32, 1143). — \*II, 490.



- C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>SP** 1) 2-Methylphenylamid-2-Methylphenylimid d. Thiophosphorsäure (Sulfophosphazo-o-Toluol-o-Toluid). Sm. 258° (B. 28, 1244). — \*II, 251.  
2) 4-Methylphenylamid-4-Methylphenylimid d. Thiophosphorsäure (Sulfophosphazo-p-Toluol-p-Toluid). Sm. 182° (B. 28, 1245). — \*II, 269.
- C<sub>14</sub>H<sub>16</sub>ONCl** 1) Pyridylumchlorid (aus Pyridin u. d. Methyläther d.  $\alpha$ -Chlor- $\alpha$ -[2-Oxyphenyl]äthan). Sm. 119—121° (B. 36, 3590 C. 1903 [2] 1365).
- C<sub>14</sub>H<sub>16</sub>ONBr** 1) 5-Brom-6-Phenylamid-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 159—160° (A. 322, 252 C. 1902 [2] 270).
- C<sub>14</sub>H<sub>16</sub>ONJ** 1) Jodmethylat d. N-Methyl- $\beta$ -Naphtomorpholin. Sm. 163—164° u. Zers. (C. 1903 [1] 1419; Soc. 83, 763 C. 1903 [2] 448).
- C<sub>14</sub>H<sub>16</sub>ON<sub>2</sub>S** 1) Di[4-Methylamidophenyl]sulfoxyd. Sm. 154° (B. 23, 3020). — II, 805.  
2) Äthyläther d. 2-Merkapto-4-Keto-5-Methyl-1-Benzyl-1,4-Dihydro-1,3-Diazin. Sm. 121—122° (Am. 40, 456 C. 1909 [1] 87).  
3) Äthyläther d. 2-Merkapto-4-Keto-5-Methyl-3-Benzyl-3,4-Dihydro-1,3-Diazin. Sm. 70° (Am. 40, 455 C. 1909 [1] 87).  
4) Äthyläther d. 2-Merkapto-4-Keto-6-Methyl-3-Benzyl-3,4-Dihydro-1,3-Diazin. Sm. 227—228°<sub>22</sub> (Am. 42, 108 C. 1909 [2] 1050).  
5) Äthyläther d. 2-Merkapto-4-Keto-6-Methyl-5-Benzyl-3,4-Dihydro-1,3-Diazin. Sm. 166° (Am. 42, 114 C. 1909 [2] 1050).
- C<sub>14</sub>H<sub>16</sub>ON<sub>2</sub>S<sub>2</sub>** 1) 2-Thiocarbonyl-4-Keto-3-Äthyl-5-[4-Dimethylamidobenzyliden]-tetrahydrothiazol. Sm. 155° (M. 26, 1204 C. 1905 [2] 1675).  
2) 3-Thiocarbonyl-4-Keto-5-[4-Diäthylamidobenzyliden]tetrahydroisothiazol. Sm. 182° (B. 39, 2170 C. 1906 [2] 234).
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>NCl** 1) Diäthyläther d. 3-Chlor-2,4-Dioxy-6-Methylchinolin. Sm. 70,5 bis 71,5° (B. 18, 2982). — IV, 320.  
2) 1-Acetyl- $\beta$ -Chloracetyl-6-Methyltetrahydrochinolin. Sm. 132° (B. 42, 3199 C. 1909 [2] 1254).  
3) Chlormethylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. 158° u. Zers. 2 + PtCl<sub>4</sub> (A. 282, 110; B. 19, 38). — IV, 352.  
4) Chloräthylat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. 150° u. Zers. 2 + PtCl<sub>4</sub> (A. 282, 122). — IV, 352.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>NBr** 1) 1-Acetyl- $\beta$ -Bromacetyl-6-Methyltetrahydrochinolin. Sm. 128° (B. 42, 3199 C. 1909 [2] 1254).  
2) Bromäthylat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. 154° (A. 282, 123). — IV, 352.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>NJ** 1) Jodäthylat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. 210° u. Zers. (A. 282, 121). — IV, 352.  
2) Jodmethylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. 208° u. Zers. (B. 19, 37; A. 282, 109). — IV, 352.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>NP** 1)  $\beta$ -Methylbenzylamidophenylphosphinsäure. Sm. 96°. Na + 2H<sub>2</sub>O (A. 260, 35). — IV, 1650.  
2) 4-Methylphenylimonamid d. 4-Methylphenylphosphinsäure. Sm. 208° (A. 293, 269). — IV, 1669.
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) 2,5-Diketo-4-Methyl-1-[ $\beta\gamma$ -Dibrompropyl]-3-[2-Methylphenyl]-tetrahydroimidazol. Sm. 104° (Ar. 243, 696 C. 1906 [1] 461).  
2) 2,5-Diketo-4-Methyl-1-[ $\beta\gamma$ -Dibrompropyl]-3-[3-Methylphenyl]-tetrahydroimidazol. Sm. 85° (Ar. 243, 702 C. 1906 [1] 461).  
3) 2,5-Diketo-4-Methyl-1-[ $\beta\gamma$ -Dibrompropyl]-3-[4-Methylphenyl]-tetrahydroimidazol. Sm. 101° (Ar. 243, 708 C. 1906 [1] 461).
- C<sub>14</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>S** 1) 5-Amido-2-Phenylsulfonamido-1,4-Dimethylbenzol. Sm. 144 bis 146° (Soc. 87, 927 C. 1905 [2] 320).  
2)  $\alpha$ -Phenylsulfon- $\beta$ -Äthyl- $\beta$ -Phenylhydrazin. Sm. 96° (B. 32, 1804). — \*IV, 474.  
3) Di[2,6-Dimethyl-4-Pyridyl]sulfon. Sm. 114°. (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub>, Pikrat, 2 Pikrat (B. 33, 1564). — \*IV, 103.  
4) Phenylamid d.  $\beta$ -Phenylamidoäthan- $\alpha$ -Sulfonsäure. Sm. 74°. HCl (B. 18, 870; Am. 19, 747). — II, 427; \*II, 225.  
5) 4-Amidophenylamid d. 1,3-Dimethylbenzol-4-Sulfonsäure. Sm. 156—157° (Soc. 87, 1307 C. 1905 [2] 1334).  
6) 4-Amido-2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 150° (B. 39, 2872 C. 1906 [2] 1339).  
7) 3-Amido-4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 160° (D.R.P. 135016 C. 1902 [2] 1165). — \*IV, 401.



- $C_{14}H_{16}O_2N_2S$  8) 5-Amido-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 167° (*Soc.* 87, 1296 *C.* 1906 [2] 1121).
- 9) 6-Amido-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 140—141° (*Bl.* [3] 15, 1037).
- 10) Methyl-2-Amidobenzylamid d. Benzolsulfonsäure. Sm. 108—110° (*Soc.* 89, 1166 *C.* 1906 [2] 1056).
- 11) Methyl-3-Amidobenzylamid d. Benzolsulfonsäure. Sm. 128—129° (*Soc.* 89, 1166 *C.* 1906 [2] 1056).
- 12) 2-Methylphenylhydrazid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 140—142° u. Zers. (*B.* 20, 1241). — IV, 803.
- 13) 4-Methylphenylhydrazid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 140° (*B.* 20, 1241).
- $C_{14}H_{16}O_2N_2S_2$  1) Dimethyläther d. 3,3'-Diamido-4,4'-Dioxydiphenyldisulfid. 2HCl (*J. pr.* [2] 74, 100 *C.* 1906 [2] 1316).
- $C_{14}H_{16}O_2N_3Cl$  1) 6-[4-Chlorphenyl]imido-2,4-Diketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 276—277° (*D.R.P.* 172979 *C.* 1906 [2] 984).
- $C_{14}H_{16}O_3NCl$  1) Äthylester d. 2,4-Dimethylphenylamidomukochlorsäure. Sm. 114° (*B.* 34, 519).
- $C_{14}H_{16}O_3NBr$  1)  $\beta\delta$ -Laktond.  $\delta$ -Brom- $\beta$ -Oxypentan- $\beta\delta$ -Dicarbonsäure- $\beta$ -[4-Methylphenyl]amid. Sm. 172° (*A.* 292, 232). — \*II, 280.
- $C_{14}H_{16}O_3NP$  1) Amid d. Di[4-Methylphenyl]phosphorsäure. Sm. 146° (*B.* 30, 2375). — \*II, 433.
- 2) Phenylmonamid d. Phosphorsäureäthylphenylester. Sm. 143° (120°) (*Bl.* [3] 21, 495; *A.* 326, 226 *C.* 1903 [1] 866). — \*II, 358.
- $C_{14}H_{16}O_3N_2Br_2$  1) Äthyläther d. 2,4-Diketo-3- $[\beta\gamma$ -Dibrompropyl]-1-[4-Oxyphenyl]-tetrahydroimidazol. Sm. 129—130° (*J. pr.* [2] 68, 252 *C.* 1902 [2] 1124).
- $C_{14}H_{16}O_3N_2S$  1) 4-Amido-4'-Sulfomethylamidodiphenylmethan. Sm. 168° (*D.R.P.* 148760 *C.* 1904 [1] 555).
- 2) Amid d. *r*- $\alpha$ -[2-Naphtylsulfon]amidobuttersäure. Sm. 215° (*B.* 41, 4435 *C.* 1909 [1] 440).
- 3) Phenylhydrazid d. 2-Oxybenzoläthyläther-1-Sulfonsäure. Sm. 132—133° (*B.* 32, 1154). — \*IV, 474.
- $C_{14}H_{16}O_3N_2S_2$  1) 2[oder 3]- $[\alpha$ -Phenylhydrazonisobutyl]thiophen-*p*-Sulfonsäure. Phenylhydrazinsalz (*B.* 19, 2627). — III, 765.
- $C_{14}H_{16}O_3N_3As$  1) 2-Methylamidazo-benzol-4'-Arsinsäure.  $Na + 5\frac{1}{2}H_2O$ ,  $Na_2 + 6H_2O$  (*Soc.* 93, 1898 *C.* 1909 [1] 163).
- $C_{14}H_{16}O_3N_4S$  1) Diäthyläther d. 4-[3-Nitrophenyl]amido-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 125°. HCl (*Am.* 36, 159 *C.* 1906 [2] 1066).
- 2) 2,3'-Dimethylazobenzol-4-Hydrazinsulfonsäure.  $NH_4$ , K, Na, Ba, Anilinsalz, *p*-Toluidinsalz, *p*-Xylidinsalz (*J. pr.* [2] 68, 301 *C.* 1903 [2] 1142; *J. pr.* [2] 72, 511 *C.* 1906 [1] 343; *B.* 40, 210 *C.* 1907 [1] 803; *Ar.* 244, 302 *C.* 1906 [2] 1314; *Ar.* 244, 312 *C.* 1906 [2] 1315; *J. pr.* [2] 78, 438 *C.* 1909 [1] 357; *J. pr.* [2] 78, 450 *C.* 1909 [1] 358).
- 3) 2,3'-Dimethylazobenzol-4'-Hydrazinsulfonsäure (*B.* 40, 211 *C.* 1907 [1] 804).
- $C_{14}H_{16}O_4N_2S$  1) Dimethyläther d. Di[3-Amido-4-Oxyphenyl]sulfon. 2HJ (*A.* 172, 50). — II, 841.
- 2) 4-Dimethylamido-4'-Oxydiphenylamin-*p*-Sulfonsäure (*D.R.P.* 129325 *C.* 1902 [1] 690).
- 3) isom. 4-Dimethylamido-4'-Oxydiphenylamin-*p*-Sulfonsäure (*D.R.P.* 132221 *C.* 1902 [2] 81).
- 4) 4,4'-Diamido-3-Oxybiphenyläthyläther-6-Sulfonsäure. HCl +  $2H_2O$  (*B.* 20, 3175; *D.R.P.* 44209). — II, 894; \*II, 537.
- $C_{14}H_{16}O_4N_2S_2$  1)  $\alpha\beta$ -Di[3-Amidophenylsulfon]äthan. Sm. 245°. HCl (*A.* 294, 245). — \*II, 474.
- 2)  $\alpha\beta$ -Di[Phenylsulfonamido]äthan (Äthylenamid d. Benzolsulfonsäure). Sm. 168° (*A.* 287, 221; *B.* 28, 3074). — \*II, 71.
- 3) Amid d. 3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Zers. bei 360° (*A.* 270, 364). — II, 236.
- $C_{14}H_{16}O_4N_3Cl$  1) 2,4,6-Triketo-5-Oxy-5-[2-Chlor-4-Diäthylamidophenyl]hexahydro-1,3-Diazin (2-Chlor-4-Diäthylamidophenylalloxan). Zers. bei 250—251° (*C.* 1900 [2] 790). — \*II, 221.

- $C_{14}H_{16}O_4N_4S_2$  1) Amid d. 2,2'-Dimethylazobenzol-4,4'-Disulfonsäure. Sm. oberhalb 250° (A. 221, 185). — IV, 1380.  
 2)  $\alpha$ -D. 2,2'-Dimethylazobenzol-5,5'-Disulfonsäure. Sm. 300° (319°).  $K_2$  (A. 203, 76; 270, 373). — IV, 1380.  
 3) Amid d. 4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Sm. 270° (A. 203, 82; 221, 210). — IV, 1381.
- $C_{14}H_{16}O_5N_2S$  1)  $\alpha$ -[4-Methoxyl- $\alpha$ -Oxybenzyl]- $\beta$ -[4-Sulfophenyl]hydrazin. Sm. 155—165° u. Zers.  $Na + 3H_2O$  (B. 35, 2006 C. 1902 [2] 196). — \*III, 493.
- $C_{14}H_{16}O_5N_2S_2$  1) Verbindung (aus Chloracetessigsäureäthylester). Sm. 142° (B. 20, 3132). — I, 1229.
- $C_{14}H_{16}O_5N_3Cl$  1) Methylester d.  $\delta$ -Oximido- $\epsilon$ -[4-Chlorphenyl]hydroxylhydrazon- $\gamma$ -Keto- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. Sm. 140°. HCl (Soc. 83, 1246 C. 1903 [2] 1421).
- $C_{14}H_{16}O_6NBr$  1) Diäthylester d.  $\alpha$ -Brom- $\alpha$ -[2-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 68° (Soc. 49, 363). — II, 1849.  
 2) Diäthylester d.  $\alpha$ -Brom- $\alpha$ -[3-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 88° (Soc. 49, 360). — II, 1849.  
 3) Diäthylester d.  $\alpha$ -Brom- $\alpha$ -[4-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 89° (Soc. 49, 362). — II, 1850.
- $C_{14}H_{16}O_6N_2S_2$  1)  $\alpha\beta$ -Di[4-Amidophenyl]äthan-2,2'-Disulfonsäure (B. 28, 424; 30, 2620, 3099; 31, 354, 1078; Bl. [3] 29, 349; C. 1898 [2] 952). — IV, 978; \*IV, 651.  
 2) 4,4'-Diamido-2,2'-Dimethylbiphenyl-5,5'-Disulfonsäure.  $Ba + 4H_2O$  (A. 270, 364). — IV, 980.  
 3) 4,4'-Diamido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure +  $1\frac{1}{2}H_2O$ .  $K + 3H_2O$ ,  $K_2$ ,  $Ca + 3\frac{1}{2}H_2O$ ,  $Ba + 5H_2O$ ,  $Pb + 2\frac{1}{2}H_2O$  (A. 203, 76; 270, 361; B. 19, 3234; J. pr. [2] 66, 560 C. 1903 [1] 518). — IV, 982; \*IV, 655.  
 4) 4,4'-Diamido-3,3'-Dimethylbiphenyl- $\beta$ -Disulfonsäure.  $Na_2 + 5H_2O$ ,  $Ca + 5H_2O$ ,  $Ba + 3H_2O$  (B. 22, 2474). — IV, 982.  
 5) 4,4'-Biphenylendi[Amidomethansulfonsäure].  $Na_2$  (B. 39, 2805 C. 1905 [2] 1490).
- $C_{14}H_{16}O_6N_2S_4$  1) 3,3'-Diamido-4,4'-Dimethyldiphenyldisulfid-6,6'-Disulfonsäure (B. 40, 4422 C. 1908 [1] 27).
- $C_{14}H_{16}O_6N_4S_2$  1)  $\alpha\beta$ -Di[4-Hydrazidophenyl]äthen-2,2'-Disulfonsäure (D. R. P. 46321). — \*IV, 951.
- $C_{14}H_{16}O_7N_2S_2$  1) Thiocyanacetessigsäureäthylesteroxid. Sm. 160—165° (A. 250, 293). — IV, 541.
- $C_{14}H_{16}O_8N_2S_2$  1) 4,4'-Diamido-3,3'-Dioxybiphenyl-3,3'-Dimethyläther-6,6'-Disulfonsäure (D. R. P. 172106 C. 1906 [2] 479).
- $C_{14}H_{16}NJS$  1) Methyl-4-Amidophenyl-4-Methylphenylsulfonjodid. Sm. 80° (J. pr. [2] 68, 278 C. 1903 [2] 994).
- $C_{14}H_{16}NSP$  1) Amid d. Di[4-Methylphenyl]thiophosphinsäure. Sm. 139° (A. 315, 67). — \*IV, 1178.
- $C_{14}H_{16}N_2Cl_2Hg_2$  1) Chlorid d. Quecksilberammoniumbase  $C_{14}H_{16}O_2N_2Hg_2$ . Sm. 170° (G. 28 [2] 112). — IV, 1711.
- $C_{14}H_{16}N_2Cl_2Si$  1) Di[2-Methylphenylamid] d. Dichlorkieselsäure (Soc. 51, 44). — II, 460.
- $C_{14}H_{16}N_3JS$  1) Jodmethylat d. anti- $\beta$ -Phenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 164° (B. 25, 3108). — IV, 679.  
 2) Jodmethylat d. syn- $\beta$ -Phenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 245° (B. 25, 3109). — IV, 679.
- $C_{14}H_{17}ONBr_3$  1) Piperidid d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 189° u. Zers. (C. 1899 [1] 730; A. 320, 92). — \*IV, 13.
- $C_{14}H_{17}ON_2Cl$  1) Verbindung (aus 4,4'-Di[Methylamido]biphenyl) (B. 37, 3774 C. 1904 [2] 1548).
- $C_{14}H_{17}ON_2J$  1) Jodmethylat d. Harmalin. Sm. 260° (B. 18, 405; 30, 2484). — III, 885.
- $C_{14}H_{17}ON_3S$  1) Diäthyläther d. 4-Phenylamido-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 60° (Am. 36, 157 C. 1906 [2] 1065).
- $C_{14}H_{17}ON_3S_2$  1) 2-Thiocarbonyl-4-Keto-5-[2,4-Di(Dimethylamido)benzyliden]-tetrahydro-1,3-Thiazol. Sm. 208° (B. 41, 103 C. 1908 [1] 521).

- $C_{14}H_{17}ON_4P$  1) Verbindung (aus 3,4-Diamido-1-Methylbenzol). Sm. bei  $200^\circ$  (B. 27, 2178). — IV, 613.
- $C_{14}H_{17}O_2NBr_2$  1) Acetat d. 1-[3,5-Dibrom-2-Oxybenzyl]hexahydropyridin. Sm.  $86-87^\circ$ . HCl, HBr (A. 332, 218 C. 1904 [2] 202).
- $C_{14}H_{17}O_2NS$  1) 1-Naphtylamid d. Butan- $\alpha$ -Sulfonsäure. Sm.  $60,5^\circ$  (C. 1906 [1] 1529).  
2) 1-Naphtylamid d.  $\beta$ -Methylpropan- $\alpha$ -Sulfonsäure. Sm.  $107^\circ$  (C. 1906 [1] 1530).
- $C_{14}H_{17}O_2NS_2$  1) Gem. Anhydrid d. 4-Oxybenzylmethyläther-1-Carbonsäure u. Hexahydropyridin-1-Dithiocarbonsäure (N-Piperidyl-S-p-Anisoyldithiourethan). Sm.  $62-65^\circ$  (B. 36, 3524 C. 1903 [2] 1326).
- $C_{14}H_{17}O_2N_2Cl$  1) Äthylester d.  $\gamma$ -Cyan- $\gamma$ -[4-Chlorphenyl]amidobutan- $\alpha$ -Carbonsäure? Sm.  $40-42^\circ$  (B. 40, 4045 C. 1907 [2] 1837).
- $C_{14}H_{17}O_2N_2Br$  1) 2,5-Diketo-4-Methyl-1-[ $\beta$  oder  $\gamma$ -Brompropyl]-3-[2-Methylphenyl]-tetrahydroimidazol. Fl. (Ar. 243, 696 C. 1906 [1] 461).  
2) 2,5-Diketo-4-Methyl-1-[ $\beta$  oder  $\gamma$ -Brompropyl]-3-[3-Methylphenyl]-tetrahydroimidazol. Sm.  $92^\circ$  (Ar. 243, 701 C. 1906 [1] 461).  
3) 2,5-Diketo-4-Methyl-1-[ $\beta$  oder  $\gamma$ -Brompropyl]-3-[4-Methylphenyl]-tetrahydroimidazol. Sm.  $85^\circ$  (Ar. 243, 707 C. 1906 [1] 461).  
4) Äthylester d.  $\gamma$ -Cyan- $\gamma$ -[4-Bromphenyl]amidobutan- $\alpha$ -Carbonsäure. Sm.  $49-51^\circ$  (B. 40, 4047 C. 1907 [2] 1837).
- $C_{14}H_{17}O_2N_2J$  1) Jodmethylat d. 5-Amido-2-Methylchinolin-3-Carbonsäureäthylester. Sm.  $198-200^\circ$  u. Zers. (J. pr. [2] 56, 387). — IV, 947.  
2) Jodmethylat d. 8-Amido-2-Methylchinolin-3-Carbonsäureäthylester. Zers. bei  $170^\circ$  (J. pr. [2] 56, 381). — IV, 947.
- $C_{14}H_{17}O_2N_2P$  1) Di[Phenylamid] d. Phosphorsäuremonoäthylester. Sm.  $114^\circ$  (A. 326, 246 C. 1903 [1] 868).  
2) Di[2-Methylphenylamid] d. Phosphorsäure. Sm.  $120^\circ$  ( $95^\circ$ ). Ba, Cu (B. 26, 567; 27, 2579). — II, 460; \*II, 250.  
3) Di[4-Methylphenylamid] d. Phosphorsäure. Sm.  $170^\circ$  ( $195^\circ$ ). Ba, Cu (B. 26, 571; 27, 2577; 33, 2107; Soc. 83, 1369 C. 1902 [2] 1197). — II, 490; \*II, 268.
- $C_{14}H_{17}O_2N_2As$  1) Di[4-Amido-3-Methylphenyl]arsinsäure. Sm.  $247-249^\circ$  u. Zers. ( $243^\circ$ ). Na +  $7\frac{1}{2}H_2O$  (Soc. 93, 1181 C. 1908 [2] 782; B. 41, 2371 C. 1908 [2] 783).
- $C_{14}H_{17}O_2N_3Br_2$  1) Nitril d. 3,5-Dibrom-2,6-Diketo-4-Methyl-4-Hexylhexahydropyridin-3,5-Dicarbonsäure. Sm.  $135^\circ$  (C. 1899 [2] 439). — \*I, 776.
- $C_{14}H_{17}O_2N_3S$  1) p-Diamido-2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm.  $180-181^\circ$  (Bl. [3] 15, 1037).
- $C_{14}H_{17}O_2N_3S_2$  1) Äthylester d.  $\alpha$ -Phenyldithiodi-C-Methylketuretcarbonsäure. Sm.  $219-220^\circ$  (B. 32, 844). — \*II, 200.
- $C_{14}H_{17}O_3NS$  1) 1-Diäthylamidonaphtalin-5-Sulfonsäure +  $H_2O$  (B. 35, 982 C. 1902 [1] 877).  
2) 1-Diäthylamidonaphtalin-p-Sulfonsäure. Ba (Soc. 41, 184). — II, 629.  
3) 3,6,8-Trimethyl-2-Äthylechinolin-p-Sulfonsäure (B. 23, 2272). — IV, 343.
- $C_{14}H_{17}O_3NS_2$  1) Benzoylamidothioformiat d.  $\alpha$ -Merkaptoisobuttersäureäthylester. Sm.  $113-114^\circ$  (C. 1902 [2] 578).
- $C_{14}H_{17}O_3N_2Br$  1) Äthyläther d. 2,4-Diketo-3-[ $\beta$  oder  $\gamma$ -Brompropyl]-1-[4-Oxyphenyl]tetrahydroimidazol. Sm.  $167-168^\circ$  (J. pr. [2] 66, 250 C. 1902 [2] 1124).  
2) Isobutyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm.  $70^\circ$  (J. pr. [2] 45, 187). — IV, 266.
- $C_{14}H_{17}O_3N_2J$  1) Jodmethylat d. Cyanhydrocotarnin. Sm.  $204-205^\circ$  u. Zers. (B. 33, 387). — \*III, 680.
- $C_{14}H_{17}O_4NBr_4$  1) Diäthylester d. p-Tetrabrom-2,4,6-Trimethyl-2,3-Dihydropyridin-3,5-Dicarbonsäure. Sm.  $102^\circ$  (A. 215, 17). — IV, 95.
- $C_{14}H_{17}O_4NS$  1) Phenylsulfat d. Dimethylphenylammoniumhydroxyd (Am. 32, 459 C. 1905 [1] 15).  
2) S-Phenylamid d. Methanthiocarbonsäuredicarbonsäurediäthylester. Sm.  $59,5-60^\circ$ . Na (J. pr. [2] 35, 450; Soc. 93, 623 C. 1908 [1] 1929). — II, 422.



- C<sub>14</sub>H<sub>17</sub>O<sub>4</sub>N<sub>2</sub>Br** 1) Verbindung (aus d. Verb. C<sub>14</sub>H<sub>19</sub>O<sub>5</sub>N<sub>2</sub>Br). Sm. 153—154°. Ca + 2H<sub>2</sub>O. (*G.* 26 [1] 56; 29 [2] 552). — IV, 715; \*IV, 467.
- C<sub>14</sub>H<sub>17</sub>O<sub>4</sub>N<sub>5</sub>S<sub>2</sub>** 1) Diäthylester d. 2-Azido-4-Methylthiazol-5-Carbonsäure. Sm. 224—225° (*A.* 259, 290). — IV, 541.  
2) Amid d. 2,2'-Dimethyldiazoamidobenzol-5,5'-Disulfonsäure (*A.* 221, 211). — IV, 1568.
- C<sub>14</sub>H<sub>17</sub>O<sub>5</sub>N<sub>2</sub>Cl** 1) d- $\alpha$ -[ $\alpha$ -Chloracetylamidopropionyl]amido-l- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 108° (*B.* 41, 2848 *C.* 1908 [2] 1734).
- C<sub>14</sub>H<sub>17</sub>O<sub>5</sub>N<sub>2</sub>Br** 1) l- $\alpha$ -[d- $\alpha$ -Brompropionylamidoacetyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure (d-Brompropionylglycyl-l-Tyrosin). Sm. 155° (*B.* 40, 3706 *C.* 1907 [2] 1691).
- C<sub>14</sub>H<sub>17</sub>O<sub>5</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) Äthyläther d. 4-Nitro-1-Oxy-p-Di[Chloracetylamidomethyl]benzol. Sm. 184° (*A.* 343, 288 *C.* 1906 [1] 927).
- C<sub>14</sub>H<sub>17</sub>O<sub>6</sub>N<sub>3</sub>S<sub>2</sub>** 1) 4-Hydrazido-4'-Amido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba + 6H<sub>2</sub>O (*A.* 270, 370). — IV, 1169.
- C<sub>14</sub>H<sub>17</sub>N<sub>3</sub>JS** 1) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Allyl-äther. Sm. 125° (*A.* 331, 203 *C.* 1904 [1] 1218).  
2) 2-Jodallylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Methyl-äther. Sm. 142° (*A.* 331, 214 *C.* 1904 [1] 1219).
- C<sub>14</sub>H<sub>18</sub>ONJ** 1) Jodäthylat d. 6-Oxy-2-Methylchinolin-6-Äthyläther (D. R. P. 167770 *C.* 1906 [1] 1128).
- C<sub>14</sub>H<sub>18</sub>ON<sub>2</sub>S** 1) Amid d. 5-Keto-2-Methyl-1-[2,3-Dimethylphenyl]tetrahydropyrrrol-2-Thiocarbonsäure. Sm. 217° (*B.* 38, 1228 *C.* 1905 [1] 1258).  
2) Amid d. 5-Keto-2-Methyl-1-[3,4-Dimethylphenyl]tetrahydropyrrrol-2-Thiocarbonsäure. Sm. 220° (*B.* 38, 1227 *C.* 1905 [1] 1258).
- C<sub>14</sub>H<sub>18</sub>ON<sub>3</sub>P** 1) Dimethylmonamid-Di[Phenylamid] d. Phosphorsäure. Sm. 196° (*A.* 326, 180 *C.* 1903 [1] 819).  
2) Äthylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 147° (*A.* 326, 173 *C.* 1903 [1] 819).
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>NBr** 1)  $\alpha$ -Bromäthyl-5-Acetylamido-2,3,6-Trimethylphenylketon. Sm. 146° (*B.* 33, 2653). — \*III, 125.
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Verbindung (aus Di[Chlormethoxymethyl]äther u. Pyridin). + PtCl<sub>4</sub>, + 2AuCl<sub>3</sub> (*A.* 334, 38 *C.* 1904 [2] 948).
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Isobutyläther d.  $\alpha$ -Acetyl- $\beta$ -[ $\alpha$ -Oxybenzyliden]thioharnstoff (Acetylthiocarbamidimidoisobutylbenzoat). Sm. 125—126° (*C.* 1900 [2] 531). — \*II, 761.  
2) Laktone d.  $\delta$ -[ $\beta$ -Phenylthioureido]- $\beta$ -Oxy- $\beta$ -Methylpentan- $\delta$ -Carbonsäure. Sm. 195—198° (*M.* 29, 513 *C.* 1908 [2] 1037).  
3) S-Phenylamid d.  $\beta$ -Methylamidopropen- $\alpha$ -Carbonsäureäthylester- $\alpha$ -Thiocarbonsäure. Sm. 107—108° (*A.* 344, 27 *C.* 1906 [1] 1008).  
4) S-Benzylamid d.  $\beta$ -Amidopropen- $\alpha$ -Carbonsäureäthylester- $\alpha$ -Thiocarbonsäure. Sm. 115—116° (*A.* 344, 25 *C.* 1906 [1] 1007).  
5) S-4-Methylphenylamid d.  $\beta$ -Amidopropen- $\alpha$ -Carbonsäureäthylester- $\alpha$ -Thiocarbonsäure. Sm. 125—130° (*A.* 344, 21 *C.* 1906 [1] 1007).
- C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>Hg<sub>2</sub>** 1) Diquecksilbermethylanilin. Salze, siehe (*G.* 22 [2] 32; 24 [2] 461). — IV, 1706.  
2) Quecksilberdi[6-Amido-3-Methylphenyl]quecksilberdiammoniumhydroxyd. Sm. 212—213°. Chlorid, Diacetat (*G.* 28 [2] 111). — IV, 1711.
- C<sub>14</sub>H<sub>18</sub>O<sub>3</sub>NCl** 1) Acetat d. 3-Chlor-5-Acetylamido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 175° (*A.* 310, 109). — \*II, 460.
- C<sub>14</sub>H<sub>18</sub>O<sub>3</sub>NBr** 1) 6,7-Methylenäther-8-Methyläther d. 5-Brom-6,7,8-Trioxy-2-Methyl-1-Äthyl-1,2,3,4-Tetrahydroisochinolin (Bromäthylhydrocotarnin). Sm. 104°. HBr (*B.* 39, 2225 *C.* 1906 [2] 440).  
2)  $\alpha$ -Bromisocapronylphenylamidoessigsäure + H<sub>2</sub>O. Sm. 66° (*A.* 369, 256 *C.* 1909 [2] 2138).  
3) Acetat d. 3-Brom-5-Acetylamido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 157—158° (*A.* 310, 111). — \*II, 461.
- C<sub>14</sub>H<sub>18</sub>O<sub>3</sub>NJ** 1) Jodäthylat d. Cotarnin (*Soc.* 29, 169). — III, 916.
- C<sub>14</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub>J<sub>2</sub>** 1) Bisjodäthylat d. l-Acetyl-2,3-Diketo-1,2,3,4-Tetrahydro-1,4-Benzodiazin. Sm. 115° (*G.* 31 [1] 25). — \*IV, 600.
- C<sub>14</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub>S** 1) Phenylamidosulfat d. Dimethylphenylammoniumhydroxyd (*Am.* 32, 459 *C.* 1905 [1] 15).

- $C_{14}H_{18}O_4NBr$  1) Äthylester d. d- $\alpha$ -[ $\alpha$ -Brompropionyl]amido-1- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 129—130° (B. 41, 2842 C. 1908 [2] 1733).
- $C_{14}H_{18}O_4NJ$  1) Äthylester d.  $\alpha$ -[ $\alpha$ -Jodpropionyl]amido-1- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 126° (B. 41, 2856 C. 1908 [2] 1735).
- $C_{14}H_{18}O_4N_2S$  1) Benzylthionhydroxylaminsaures Benzylhydroxylamin. Sm. 84 bis 85° u. Zers. (B. 26, 2156). — II, 532.
- $C_{14}H_{18}O_4N_4S_2$  1) Diamidd. 4,4'-Diamido-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Sm. 304,5°.  $2HCl + 2H_2O$ ,  $H_2SO_4$ ,  $Ba + 4H_2O$  (A. 270, 373; B. 22, 2373). — IV, 982.
- 2) Amid d. s-Di[2-Methylphenyl]hydrazin-5,5'-Disulfonsäure. Sm. 221—222° (A. 270, 371). — IV, 1502.
- $C_{14}H_{18}O_5N_2S_2$  1) Verbindung (aus Anilin u. Hydrosulfit N. F.).  $Na_2 + 2H_2O$  (B. 39, 2822 C. 1906 [2] 1492).
- 2) Verbindung (aus 1-Methylbenzol-4-Sulfinsäure). Sm. 180,5° u. Zers. (J. pr. [2] 56, 223).
- $C_{14}H_{18}O_5N_4Cl_3$  1) Verbindung (aus Chloralacetamid). Sm. 120° (J. 1879, 552). — I, 1244.
- $C_{14}H_{18}O_6N_4S_2$  1) 4,4'-Dihydrazido-3,3'-Dimethylbiphenyl-5,5'-Disulfonsäure.  $Ba + 5H_2O$  (A. 270, 367). — IV, 1277.
- $C_{14}H_{18}O_8N_4S_2$  1) 3,3'-Dimethoxyl-4,4'-Dihydrazidobiphenyl-NN'-Disulfonsäure.  $K_2$  (J. pr. [2] 59, 224). — \*IV, 946.
- $C_{14}H_{18}N_3SP$  1) Dimethylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 209—210° (A. 326, 210 C. 1903 [1] 822).
- 2) Äthylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 106° (A. 326, 203 C. 1903 [1] 821).
- $C_{14}H_{19}ONBr_2$  1) 1-[3,6-Dibrom-5-Oxy-2,4-Dimethylbenzyl]hexahydropyridin. Sm. 68—69° (A. 344, 198 C. 1906 [1] 1160).
- 2) 1-[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]hexahydropyridin. Sm. 91°.  $HBr$ ,  $HJ$  (B. 28, 2907; 29, 1128; A. 344, 218 C. 1906 [1] 1162). — IV, 20.
- 3) 1-[3,5-Dibrom-4-Oxy-2,6-Dimethylbenzyl]hexahydropyridin. Sm. 110° (A. 344, 190 C. 1906 [1] 1160).
- 4) 1-[4,6-Dibrom-2-Oxy-3,5-Dimethylbenzyl]hexahydropyridin. Sm. 91—92° (A. 344, 254 C. 1906 [1] 1164).
- 5) 1-[2,6-Dibrom-4-Oxy-3,5-Dimethylbenzyl]hexahydropyridin. Sm. 134° (A. 302, 83; A. 344, 241 C. 1906 [1] 1163). — \*IV, 15.
- $C_{14}H_{19}ONJ_4$  1) Verbindung (aus Cineol u. 2,3,4,5-Tetrajodpyrrol). Sm. 112° u. Zers. (Ar. 235, 178). — \*III, 340.
- $C_{14}H_{19}ONS$  1) Phenylamid d. 4-Oxynaphtalinäthyläther-1-Thiocarbonsäure. Sm. 199—200° (B. 25, 3530). — II, 1689.
- $C_{14}H_{19}ONS_2$  1) Dipropyläther d. Benzoylimidodimerkaptomethan. Sd. 238 bis 239°<sub>20</sub> (Am. 26, 195).
- $C_{14}H_{19}ON_3Br_2$  1) 3,5-Dibrom-3,3-Di[Äthylamido]-2-Keto-1-Äthyl-2,3-Dihydroindol (B. 40, 3600 C. 1907 [2] 1748).
- $C_{14}H_{19}O_2NBr_2$  1) N-Acetylamyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 150° (A. 332, 187 C. 1904 [2] 210).
- $C_{14}H_{19}O_2NS$  1) O-Methyläther-S-Isoamyläther d. Benzoylimidomerkaptooxy-methan. Fl. (Am. 24, 216). — \*II, 743.
- $C_{14}H_{19}O_3NS$  1) Äthyläther d. Merkaptohydrocotarnin. Sm. 55° (B. 35, 1752 C. 1902 [2] 68). — \*III, 681.
- 2) Nitril d.  $\gamma$ -[4-Äthoxylphenyl]sulfonpentan- $\gamma$ -Carbonsäure. Sm. 81° (J. pr. [2] 72, 333 C. 1905 [2] 1785).
- $C_{14}H_{19}O_3N_2Cl$  1) Cotarnmethinmethylchloridnitril (A. 254, 338). — III, 917.
- $C_{14}H_{19}O_3N_2J$  1) Jodmethylat d. 3,4,5-Trioxy-2-Cyan-1-[ $\beta$ -Dimethylamidoäthyl]benzol-4,5-Methylenäther-3-Methyläther. Zers. bei 225—226° (B. 42, 1100 C. 1909 [1] 1718).
- $C_{14}H_{19}O_4NBr_4$  1) Diäthylesterdibromid d.  $\beta$ -Dibrom-2,4,6-Trimethyl-2,3-Dihydropyridin-3,5-Dicarbonsäure. Sm. 88° (B. 14, 1638; A. 215, 14). — IV, 95.
- $C_{14}H_{19}O_4N_2Cl$  1) 1-Äthyläther d. 4-[ $\alpha$ -Oxypropionyl]amido-1-Oxy- $\beta$ -Chloracetylamidomethylbenzol. Sm. 116° (A. 343, 303 C. 1906 [1] 928).
- $C_{14}H_{19}O_4N_2J$  1) Jodmethylat d. Hydrocotarnincarbonsäureamid. Sm. 235° (B. 35, 1747 C. 1902 [2] 68). — \*III, 680.

- C<sub>14</sub>H<sub>19</sub>O<sub>6</sub>NS** 1) Amylester d. Phenylsulfonacetylamidoameisensäure. Sm. 73,5° (C. 1899 [2] 285). — \*II, 471.  
2) Isobutylester d. 4-Methylphenylsulfonacetylamidoameisensäure. Sm. 89° (C. 1899 [2] 285). — \*II, 486.
- C<sub>14</sub>H<sub>19</sub>O<sub>5</sub>N<sub>2</sub>Br** 1) Verbindung (aus 4-Bromphenylhydrazin u.  $\alpha$ -Keto- $\beta\beta$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure). Sm. 146–147° u. Zers. (G. 26 [1] 55; 29 [2] 579). — IV, 715; \*IV, 466.
- C<sub>14</sub>H<sub>19</sub>O<sub>6</sub>NS** 1) 3-Amid d. Benzol-1,2-Dicarbonsäure-3-Sulfonsäure-1,2-Dipropyl-ester. Sm. 68° (Am. 13, 199). — II, 1824.
- C<sub>14</sub>H<sub>19</sub>N<sub>2</sub>JS** 1) Jodmethylat d. 3-Merkapto-5-Methyl-4-Äthyl-1-Phenylpyrazol. Sm. 108° (A. 350, 329 C. 1907 [1] 738).  
2) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Iso-propyläther + H<sub>2</sub>O. Sm. 170–172° (wasserfrei) (A. 331, 202 C. 1904 [1] 1218).  
3) Jodmethylat d. 3-Merkapto-5-Methyl-1-Phenylpyrazol-3-Iso-propyläther + 2H<sub>2</sub>O. Sm. 99° (A. 338, 295 C. 1905 [1] 1161).  
4) 2-Jodmethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Äthyläther. Sm. 125° (A. 331, 219 C. 1904 [1] 1219).  
5) 2-Jodisopropylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Methyläther + H<sub>2</sub>O. Sm. 187° (wasserfrei) (A. 331, 227 C. 1904 [1] 1220).
- C<sub>14</sub>H<sub>20</sub>ONCl** 1) Nitrosochlorid d.  $\alpha$ -[2,4,6-Trimethylphenyl]- $\gamma$ -Methyl- $\alpha$ -Buten. Sm. 185° u. Zers. (B. 37, 930 C. 1904 [1] 1209).  
2)  $\eta$ -Chlor- $\alpha$ -Benzoylamidoheptan. Sm. 63° (59°) (B. 38, 2347 C. 1905 [2] 494; B. 39, 4115 C. 1907 [1] 278).  
3) Chlormethylat d. 1-Benzoylmethylhexahydropyridin. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (C. 1900 [2] 583). — \*IV, 19.  
4) Verbindung (aus  $\alpha$ -Chlor- $\beta$ -Keto- $\alpha$ -Phenyläthen u. Triäthylamin). Sm. 51° (B. 42, 1273 C. 1909 [1] 1540).
- C<sub>14</sub>H<sub>20</sub>ONBr** 1)  $\eta$ -Brom- $\alpha$ -Benzoylamidoheptan. Sm. 69° (B. 39, 4116 C. 1907 [1] 278).  
2) 1-[3-Brom-4-Oxy-2,5-Dimethylbenzyl]hexahydropyridin. Sm. 81 bis 82° (A. 302, 122; A. 344, 201 C. 1906 [1] 1161). — \*IV, 15.  
3) 1-[5-Brom-6-Oxy-3,4-Dimethylbenzyl]hexahydropyridin. Sm. 87 bis 88° (A. 344, 196 C. 1906 [1] 1160).
- C<sub>14</sub>H<sub>20</sub>ONJ** 1) Jodmethylat d. 1-Benzoylmethylhexahydropyridin. Sm. 185° (C. 1900 [2] 582). — \*IV, 19.  
2) Jodmethylat d. Methylnaphtalanmorpholin (A. 307, 183). — \*II, 501.
- C<sub>14</sub>H<sub>20</sub>ON<sub>2</sub>S** 1) Äthyläther d. Benzoylimidoäthylamidomerkaptomethan (Benzoyl-diäthylthioläthylpseudothioharnstoff). Sm. 70° (Am. 26, 413).  
2)  $\eta$ -[ $\beta$ -Phenylthioureido]- $\beta$ -Ketoheptan. Sm. 99,5° (B. 42, 1257 C. 1909 [1] 1695).  
3)  $\beta$ -[ $\beta$ -2-Methylphenylthioureido]- $\delta$ -Keto- $\beta$ -Methylpentan (Diaceton-Tolythioharnstoff). Sm. 168° (B. 32, 3176). — \*II, 254.  
4) s-Caproyl-2-Methylphenylthioharnstoff. Sm. 97–98° (Soc. 85, 810 C. 1904 [2] 201, 519).  
5) s-Caproyl-4-Methylphenylthioharnstoff. Sm. 90–91° (Soc. 85, 810 C. 1904 [2] 201, 520).
- C<sub>14</sub>H<sub>20</sub>ON<sub>3</sub>J** 1) Jodmethylat d. 4-Dimethylamido-3-Keto-2,5-Dimethyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 126° (A. 350, 311 C. 1907 [1] 736).  
2) Jodmethylat d. 4-Dimethylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Zers. bei 220° (A. 293, 67). — IV, 1109.  
3) Jodmethylat d. 4-Dimethylamido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 197° (A. 352, 211 C. 1907 [1] 1051).
- C<sub>14</sub>H<sub>20</sub>ON<sub>5</sub>P** 1) Dimethylmonamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 194–195° (A. 326, 181 C. 1903 [1] 819). — \*IV, 423.  
2) Äthylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 153° (A. 326, 173 C. 1903 [1] 819). — \*IV, 423.
- C<sub>14</sub>H<sub>20</sub>O<sub>2</sub>NCl** 1) Äthyläther d. 6-Chloracetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 154° (D.R.P. 71159). — \*II, 466.
- C<sub>14</sub>H<sub>20</sub>O<sub>2</sub>NBr** 1) Äthyläther d. 6-Bromacetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 145° (D.R.P. 71159). — \*II, 466.



- $C_{14}H_{20}O_2NJ$  1) Jodmethylat d. **1,2,3,4-Tetrahydro-1-Chinolylessigsäureäthylester**. Zers. bei 118—119° (B. 32, 527; A. 318, 110; B. 35, 768 C. 1902 [1] 719). — \*IV, 143.
- 2) Jodmethylat d. **1,2,3,4-Tetrahydro-2-Isochinolylessigsäureäthylester**. Sm. 156—157° (B. 34, 3988 C. 1902 [1] 210; B. 35, 1077 C. 1902 [1] 938). — \*IV, 145.
- $C_{14}H_{20}O_2N_2S$  1) **S-2-Methylphenylamid d. Amidothioameisensäure-N-Carbonsäureamylester**. Sm. 96—97° (Soc. 79, 914).
- $C_{14}H_{20}O_2N_2S_2$  1) **4-Nitrobenzylester d. Dipropylamidodithioameisensäure**. Sm. 60° (C. r. 134, 715 C. 1902 [1] 977).
- $C_{14}H_{20}O_3NCl$  1) Chlormethylat d. **Methylanhalonin**. 2 +  $PtCl_4$  (B. 31, 1199). — \*III, 602.
- 2) Chlormethylat d. **Methylanhalonidin**. 2 +  $PtCl_4$  (B. 34, 3015). — \*III, 602.
- 3) Chloräthylat d. **Hydrocotarnin**. 2 +  $PtCl_4$  (Soc. 29, 165). — III, 908.
- $C_{14}H_{20}O_3NJ$  1) Jodmethylat d. **2-Dimethylamidomethyl-3,4,5-Trioxy-1-Äthenylbenzol-4,5-Methylenäther-3-Methyläther** (J. d. N-Methyldeshydrocotarnin). Sm. 193° (B. 42, 1097 C. 1909 [1] 1717).
- 2) Jodmethylat d. **Methylanhalonin**. Sm. 210° (B. 31, 1198). — \*III, 602.
- 3) Jodmethylat d. **Methylanhalonidin** +  $H_2O$ . Sm. 199° (B. 34, 3014). — \*III, 602.
- 4) Jodmethylat d.  $\alpha$ -**Methylhydrocotarnin**. Sm. 228—229° (B. 36, 4258 C. 1904 [1] 382).
- 5) Jodäthylat d. **Hydrocotarnin** (Soc. 29, 165). — III, 908.
- $C_{14}H_{20}O_4NCl$  1) Cotarnmethinmethylechlorid +  $3H_2O$ . 2 +  $PtCl_4$  (A. 249, 158). — III, 916.
- 2) Chlormethylat d. **Methoxyhydrocotarnin**. 2 +  $PtCl_4$  (A. 254, 364). — III, 916.
- $C_{14}H_{20}O_4NJ$  1) Cotarnmethinmethyljodid. Sm. 222° (A. 249, 157; B. 33, 389). — III, 916; \*III, 679.
- 2) Jodmethylat d. **Methoxyhydrocotarnin**. Sm. 173° u. Zers. (A. 254, 360). — III, 916.
- $C_{14}H_{20}O_4N_2S$  1) **Ammoniumbase** +  $2H_2O$  (aus d. Jodmethylat d. **Hydrocotarninthiocarbonsäureamid**). Sm. 141—142° (wasserfrei) (B. 35, 1751 C. 1902 [2] 68). — \*III, 681.
- $C_{14}H_{20}O_4Br_2Mg$  1) **Verbindung** (aus Piperonal, Äthylenbromid u. Magnesium). Sm. 210° u. Zers. (B. 38, 3264 C. 1905 [2] 1524).
- $C_{14}H_{20}O_6N_2S_2$  1) Diäthylester d. **Benzol-1,3-Di[Sulfonamidoessigsäure]**. Sm. 110° (B. 37, 4103 C. 1904 [2] 1727).
- $C_{14}H_{20}N_2Cl_2S$  1) **Bischlormethylat d. 5-Thiocarbonyl-3,4,4-Trimethyl-1-Phenyl-4,5-Dihydropyrazol**. +  $PtCl_4$  (B. 40, 3703 C. 1907 [2] 1629).
- $C_{14}H_{20}N_2J_2S$  1) **Bisjodmethylat d. 5-Thiocarbonyl-3,4,4-Trimethyl-1-Phenyl-4,5-Dihydropyrazol**. Sm. 210—215° (B. 40, 3703 C. 1907 [2] 1629).
- $C_{14}H_{21}ONS$  1) **O-Äthyläther-S-Isoamyläther d. Phenylimidomerkaptooxymethan** (Am. 24, 437). — \*II, 192.
- $C_{14}H_{21}ON_2Cl$  1) Chlormethylat d. **Dimethyleytisin**. ( $HCl$ ,  $PtCl_4$  +  $2\frac{1}{2}H_2O$ ). — III, 879.
- $C_{14}H_{21}ON_2J$  1) Jodmethylat d. **Dimethyleytisin**. — III, 879.
- $C_{14}H_{21}O_2NS$  1) **1-Phenylsulfon-2-Methyl-5-Äthylhexahydropyridin**. Fl. (B. 34, 2429). — \*IV, 31.
- 2) isom. **1-Phenylsulfon-2-Methyl-5-Äthylhexahydropyridin**. Sm. 66° (B. 34, 2429). — \*IV, 32.
- 3) **Phenylsulfonderivat d. Base  $C_8H_{17}N$** . Sm. 76—78° (B. 38, 2805 C. 1905 [2] 1258).
- 4) **Allylisobutylamid d. 1-Methylbenzol-4-Sulfonsäure**. Fl. (B. 42, 3941 C. 1909 [2] 1812).
- $C_{14}H_{21}O_2NS_2$  1) **Amid d.  $\delta$ -Phenylsulfonheptan- $\delta$ -Thiocarbonsäure** (J. pr. [2] 72, 339 C. 1905 [2] 1786).
- $C_{14}H_{21}O_3N_2Br$  1) **Diacetylderivat d. Verb.  $C_{10}H_{17}O_2N_2Br$** . Sm. 139° (Soc. 79, 656).
- $C_{14}H_{21}O_4N_3S$  1) Diäthylester d. **1-[ $\beta$ -Phenylthioureido]-2,5-Dimethylpyrrol-3,4-Dicarbonsäure**. Sm. 193—194° (B. 40, 4758 C. 1908 [1] 261).

- $C_{14}H_{21}O_5NS_2$  1)  $\beta\beta$ -Di[Äthylsulfon]- $\alpha$ -Benzoylamidopropan. Sm. 98—100° (B. 32, 2754). — \*II, 750.
- $C_{14}H_{21}O_{14}NS$  1) Glykothionsäure. Ba + 2H<sub>2</sub>O (C. 1909 [1] 1018).
- $C_{14}H_{21}NBrJ$  1) d-Methylallylbutyl-4-Bromphenylammoniumjodid. Sm. 105—106° (Soc. 93, 1231 C. 1908 [2] 779).
- 2) i-Methylallylbutyl-4-Bromphenylammoniumjodid. Sm. 105—106° (Soc. 93, 1229 C. 1908 [2] 779).
- 3) d-Methylallylisobutyl-4-Bromphenylammoniumjodid. Sm. 133 bis 134° (Soc. 93, 303 C. 1908 [1] 1618).
- 4) r-Methylallylisobutyl-4-Bromphenylammoniumjodid. Sm. 135 bis 136° (Soc. 93, 302 C. 1908 [1] 1618).
- $C_{14}H_{22}ONCl$  1) Chloräthylat d. 6-Oxy-1-Äthyl-1,2,3,4-Tetrahydrochinolin-6-Methyläther. 2 + PtCl<sub>4</sub> (M. 6, 781). — IV, 198.
- $C_{14}H_{22}ONBr$  1) d-Methylallylbutyl-4-Bromphenylammoniumhydroxyd. Jodid, d-Tartrat (Soc. 93, 1230 C. 1908 [2] 779).
- 2) l-Methylallylbutyl-4-Bromphenylammoniumhydroxyd. d-Camphersulfonat (Soc. 93, 1232 C. 1908 [2] 779).
- 3) d-Methylallylisobutyl-4-Bromphenylammoniumhydroxyd. Jodid, d-Bromcamphersulfonat (Soc. 93, 303 C. 1908 [1] 1618).
- 4) r-Methylallylisobutyl-4-Bromphenylammoniumhydroxyd. Jodid, d-Bromcamphersulfonat (Soc. 93, 303 C. 1908 [1] 1618).
- $C_{14}H_{22}ONJ$  1) Jodmethylat d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[1-Piperidyl]äthan. Sm. 136 bis 137° (A. 365, 380 C. 1909 [1] 1820).
- 2) Jodäthylat d. 6-Oxy-1-Äthyl-1,2,3,4-Tetrahydrochinolin-6-Methyläther. Sm. 131—133° u. Zers. (M. 6, 781). — IV, 198.
- $C_{14}H_{22}ON_2S$  1)  $\delta$ -[ $\beta$ -Phenylthioureido]- $\beta$ -Oxy- $\beta\delta$ -Dimethylpentan. Sm. 115—117° (M. 28, 1053 C. 1907 [2] 2034).
- 2) Isoamyläther d.  $\alpha$ -Oxymethyl- $\beta$ -Methyl- $\beta$ -Phenylthioharnstoff. Sm. 87° (Am. 41, 344 C. 1909 [1] 1548).
- 3) Isoamyläther d.  $\alpha$ -Oxymethyl- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. 119° (Am. 41, 344 C. 1909 [1] 1548).
- $C_{14}H_{22}OCIP$  1) Diäthyl- $\beta$ -Ketopropyl-4-Methylphenylphosphoniumchlorid. 2 + PtCl<sub>4</sub> (A. 315, 91). — \*IV, 1177.
- $C_{14}H_{22}O_2NCl$  1) Chlormethylat d. Acetylmethylephedrin. 2 + PtCl<sub>4</sub> (Ar. 240, 492 C. 1902 [2] 1327).
- $C_{14}H_{22}O_2N_2S$  1) Diäthyläther d.  $\alpha$ -[ $\gamma\gamma$ -Dioxypropyl]- $\beta$ -Phenylthioharnstoff. Sm. 85° (B. 34, 1919).
- 2) Diäthyläther d.  $\alpha$ -[ $\beta\beta$ -Dioxyäthyl]- $\beta$ -[4-Methylphenyl]thioharnstoff (s-Acetyl-p-Tolylthioharnstoff). Sm. 54—56°. Pikrat (B. 25, 2363). — II, 511.
- $C_{14}H_{22}O_2ClAs$  1) Äthylester d. Diäthylphenylchlorarsoniumessigsäure. 2 + PtCl<sub>4</sub> (A. 320, 298 C. 1902 [1] 920). — \*IV, 1188.
- $C_{14}H_{22}O_2Br_2Mg$  1) Verbindung (aus d. Aldehyd d. 1-Methylbenzol-4-Carbonsäure, Äthylenbromid u. Magnesium). Sm. 117° (B. 38, 3263 C. 1905 [2] 1523).
- $C_{14}H_{22}O_3NCl$  1) Chlormethylat d. Pellotin. Sm. 226° (B. 27, 2979; 29, 216). — III, 778.
- 2) Verbindung (aus Chloressigsäure). Fl. 2 + PtCl<sub>4</sub> (J. pr. [2] 29, 296). — II, 713.
- $C_{14}H_{22}O_3NJ$  1) Jodmethylat d. Pellotin + 2H<sub>2</sub>O. Sm. 198° (wasserfrei) (B. 27, 2978; 29, 218 Anm.). — III, 778.
- $C_{14}H_{22}O_4N_2S_3$  1)  $\alpha$ -[ $\beta\beta$ -Diäthylsulfonpropyl]- $\beta$ -Phenylthioharnstoff. Sm. 173—174° (B. 32, 2753). — \*II, 194.
- $C_{14}H_{22}O_4N_6S_2$  1) Diäthylester d. 1,4-Di[Thiosemicarbazol]hexahydrobenzol-2,5-Dicarbonsäure. Sm. noch nicht bei 275° (B. 35, 2605 C. 1902 [2] 572).
- $C_{14}H_{23}O_2NS$  1) Amid d. 1,2,3,4-Tetraäthylbenzol-5-Sulfonsäure. Sm. 107° (104 bis 105°) (B. 16, 1746; 21, 2818). — II, 160.
- 2) Amid d. 1,2,4,5-Tetraäthylbenzol-3-Sulfonsäure. Sm. 122° (B. 21, 2821). — II, 160.
- 3) Diisobutylamid d. Benzolsulfonsäure. Sm. 55,5—56° (C. 1898 [2] 888; B. 36, 2706 C. 1903 [2] 829). — \*II, 70.
- 4) Propylisobutylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 59 bis 60° (B. 32, 3509). — \*II, 77.
- $C_{14}H_{23}O_2N_2J$  1) Jodpropylat d. Pilocarpin (B. 35, 2455). — \*III, 684.

- $C_{14}H_{23}O_3NS$  1) **Methylamid d.  $\delta$ -Oxy- $\delta$ -Phenylheptan- $\delta^2$ -Sulfonsäure.** Sm. 122 bis 123° u. Zers. (B. 37, 3267 C. 1904 [2] 1031).
- $C_{14}H_{23}O_8N_4Br$  1)  **$\alpha$ -Bromisocapronyltri[Amidoacetyl]amidoessigsäure.** Sm. 218° u. Zers. (B. 39, 458 C. 1906 [1] 1001).
- $C_{14}H_{24}ONJ$  1) **Jodmethylat d.  $\delta$ -Oxy- $\delta$ -[4-Dimethylamidophenyl]- $\beta$ -Methylbutan.** Sd. 148—149°<sub>15</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 40, 4364 C. 1908 [1] 34).
- $C_{14}H_{24}O_2N_2Cl_2$  1) **Nitrosochlorid d. Methylenhexahydrobenzol** (A. 347, 336 C. 1906 [2] 601).
- $C_{14}H_{24}O_4N_3S$  1) **Semicarbazon d. Dihydro- $\alpha$ -Jononsulfonsäure.** Sm. 203° u. Zers. Na (C. 1904 [1] 280).
- $C_{14}H_{24}O_5NCl$  1) **Diäthylester d.  $\gamma$ -Chlor- $\delta$ -Oximido- $\gamma$ -Äthylhexan- $\zeta\zeta$ -Dicarbon-säure.** Sm. 94—96° (J. pr. [2] 61, 126; C. 1899 [2] 177). — \*I, 313.
- $C_{14}H_{24}O_5NBr$  1) **Diäthylester d.  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amidoäthan- $\alpha\beta$ -Dicarbon-säure.** Sm. 61—62° (B. 37, 4592 C. 1905 [1] 352).
- $C_{14}H_{24}O_5N_3Cl$  1) **Äthylester d. Chloracetyl-l-Asparaginyll-Leucin.** Sm. 166—167° (corr.) (B. 40, 2055 C. 1907 [2] 41).
- $C_{14}H_{24}O_5N_3Br$  1) **Äthylester d.  $\alpha$ -Bromisocapronylamidoacetylamidoacetylamido-essigsäure.** Sm. 184,5° (B. 38, 610 C. 1905 [1] 810).
- $C_{14}H_{24}O_6N_2S$  1) **Thiodiglykolyldiisobutylurethan.** Sm. 127° (C. 1899 [2] 286). — \*I, 714.
- $C_{14}H_{25}ON_8Cl$  1) **Verbindung (aus Hexamethylentetramin).** HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (J. pr. [2] 46, 3). — I, 1169.
- $C_{14}H_{25}O_4N_2Br$  1) **1- $\alpha$ -[d- $\alpha$ -Bromisocapronylamidoacetyl]amidoisocapronsäure.** Sm. 100—101° (A. 365, 174 C. 1909 [1] 1805).
- $C_{14}H_{25}NJP$  1) **Triäthyl-4-Dimethylamidophenylphosphoniumjodid.** Sm. 180° (A. 260, 26). — IV, 1656.
- $C_{14}H_{26}O_4NCl$  1) **Chlormethylat d. d-1-Methylhexahydropyridin-3-Carbonsäure-4-Methylcarbonsäurediäthylester** (Chlormethylat d. d-Methylcincho-loiponsäurediäthylester). 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (M. 17, 390). — III, 843.
- 2) **isom. Chlormethylat d. d-Methylcinchoiponsäurediäthylester.** 2 + PtCl<sub>4</sub> (M. 17, 392). — III, 843.
- $C_{14}H_{26}O_4NBr$  1) **Äthylester d.  $\beta$ -Dimethylamido- $\alpha$ -[ $\beta$ -Bromcapronoxyl]isobutter-säure.** HCl (Bl. [4] 5, 240 C. 1909 [1] 1319).
- $C_{14}H_{26}O_4NJ$  1) **Jodmethylat d. d-1-Methylhexahydropyridin-3-Carbonsäure-4-Methylcarbonsäurediäthylester** (J. d. d-Methylcinchoiponsäure-diäthylester). Sm. 176 (174°) (M. 17, 388; 21, 889; B. 31, 2356). — III, 843; \*III, 635.
- 2) **isom. Jodmethylat d. d-Methylcinchoiponsäurediäthylester.** Sm. 120° (M. 17, 392). — III, 843.
- $C_{14}H_{27}O_2ClS$  1) **1-Menthylester d. Dimethylthetinchlorid.** 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Soc. 87, 456 C. 1905 [1] 1217, 1587).
- $C_{14}H_{27}O_2BrS$  1) **1-Menthylester d. Dimethylthetinbromid.** Zers. bei 87—90° (Soc. 87, 455 C. 1905 [1] 1217, 1587).
- $C_{14}H_{27}O_5NS_2$  1) **Piperidid d.  $\gamma\gamma$ -Di[Äthylsulfon]valeriansäure.** Sm. 171° (B. 32, 2811). — \*IV, 12.
- $C_{14}H_{28}ONJ$  1) **Jodmethylat d.  $\beta$ -7-Dimethylamido-5-Oxy-1,3-Dimethylbicyklo-[1,3,3]-Nonan.** Zers. bei 220—223° (A. 360, 288 C. 1908 [2] 246).
- $C_{14}H_{28}O_5N_2S$  1) **Diäthylester d.  $\delta$ -Sulfondi[amidovaleriansäure].** Sm. 69° (B. 27, 2016). — \*I, 661.
- $C_{14}H_{30}ONJ$  1) **Jodmethylat d.  $\alpha$ -Diisoamylamido- $\beta$ -Ketopropan.** Sm. oberhalb 290° (B. 29, 872). — \*I, 693.
- $C_{14}H_{30}O_3N_2S$  1) **Myristinamidoximschweifigesäure** (B. 26, 2845). — \*I, 838.
- $C_{14}H_{30}O_4N_2S_2$  1)  **$\beta\beta$ -Di[Amylsulfon]propylthioharnstoff.** Sm. 148—149° (B. 32, 2760). — \*I, 743.
- $C_{14}H_{30}O_5N_2S_2$  1)  **$\beta\beta$ -Di[Amylsulfon]propylharnstoff.** Sm. 215—216° (B. 32, 2760). — \*I, 731.
- $C_{14}H_{30}N_3SP$  1) **Diäthylmonamid-1,1-Dipiperidid d. Thiophosphorsäure.** Sm. 126° (A. 326, 212 C. 1903 [1] 822).
- 2) **Isobutylmonamid-1,1-Dipiperidid d. Thiophosphorsäure.** Sm. 106° (A. 326, 205 C. 1903 [1] 821). — \*IV, 10.
- $C_{14}H_{31}O_2N_5S_2$  1) **Äthylsenföl + Aldehydammoniak.** Sm. 118—119° (B. 9, 573).
- $C_{14}H_{31}O_4JS$  1) **Tetraäthyläther d. Äthylidi[ $\beta\beta$ -Dioxyäthyl]sulfinjodid.** + HgJ<sub>2</sub> (Soc. 95, 1001 C. 1909 [2] 536).



- $C_{14}H_{32}O_8N_2Cl_2$  1) Verbindung (aus  $\alpha$ -Oxyisobuttersäure u. Trimethyl- $\beta$ -Oxyäthylammoniumhydroxyd). +  $PtCl_4 + 2H_2O$  (B. 27 [2] 739). — \*I, 646.
- $C_{14}H_{33}ON_2P$  1) Äthyläther d. Di[Dipropylamido]oxyphosphin. Sd. 143—147°<sub>29</sub> (A. 326, 164 C. 1903 [1] 761).
- $C_{14}H_{33}O_2N_2P$  1) Di[Dipropylamid] d. Phosphorsäuremonoäthylester. Sd. 164 bis 166°<sub>20</sub> (A. 326, 165 C. 1903 [1] 762).
- $C_{14}H_{34}Cl_2PAs$  1) Äthylenhexaäthylphospharsoniumchlorid. +  $PtCl_4$  (A. Spl. 1, 306). — I, 1514.
- $C_{14}H_{34}Br_2PAs$  1) Äthylenhexaäthylphospharsoniumbromid (A. Spl. 1, 306). — I, 1514.
- $C_{14}H_{36}O_2PAs$  1) Äthylenhexaäthylphospharsoniumhydroxyd (A. Spl. 1, 306). — I, 1514.
- $C_{14}H_{37}O_{11}NSi_4$  1) Amid d. Tetrakieselsäureheptaäthylester (A. ch. [5] 7, 472). — I, 346.

### $C_{14}$ -Gruppe mit fünf Elementen.

- $C_{14}H_5O_2ClBr_4S$  1) Chlorid d.  $\beta$ -Tetrabromanthracen-2-Sulfonsäure. Sm. 125° (B. 28, 2260). — \*II, 122.
- $C_{14}H_5O_{11}N_2BrS$  1)  $\beta$ -Bromdinitro-1,5-Dioxy-9,10-Anthrachinon- $\beta$ -Sulfonsäure (D.R.P. 114200 C. 1900 [2] 930). — \*III, 306.
- 2) Bromdinitro-1,8-Dioxy-9,10-Anthrachinonsulfonsäure (D.R.P. 114200 C. 1900 [2] 930). — \*III, 308.
- $C_{14}H_6ONBrS_2$  1) Bromindophtenin (B. 37, 3351 C. 1904 [2] 1058).
- $C_{14}H_6O_2NCl_2Br$  1) Phenylimid d. 3,5-Dichlor-4-Brombenzol-1,2-Dicarbonsäure. Sm. 200—200,5° (Soc. 85, 277 C. 1904 [1] 1009).
- $C_{14}H_6O_6NCIS$  1) Chlorid d. 1-Nitro-9,10-Anthrachinon-6-Sulfonsäure. Sm. 194° (B. 15, 1516). — III, 417.
- $C_{14}H_7O_4NCl_2S$  1) Dichloramid d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 177° (C. 1904 [2] 435).
- $C_{14}H_7O_4N_2Cl_3Br_2$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[ $\beta$ -Brom- $\beta$ -Nitrophenyl]äthan. Sm. 168—170° (B. 7, 1181). — II, 232.
- $C_{14}H_7O_5NBr_2S$  1)  $\beta$ -Dibrom-1-Amido-9,10-Anthrachinon- $\beta$ -Sulfonsäure (D.R.P. 128845 C. 1902 [1] 506).
- $C_{14}H_8ON_2Br_4S$  1) Tetrabrommethylenviolet (B. 37, 2621 C. 1904 [2] 484; B. 37, 3032 C. 1904 [2] 1012).
- $C_{14}H_8O_5NCIS$  1)  $\beta$ -Chlor-1-Amido-9,10-Anthrachinon-2-Sulfonsäure (C. 1900 [2] 1143).
- 2) isom. Chloramidoanthrachinonsulfonsäure (C. 1900 [2] 1143).
- $C_{14}H_8O_5NBrS$  1)  $\beta$ -Brom-1-Amido-9,10-Anthrachinon-2-Sulfonsäure (C. 1900 [2] 1143).
- 2) isom. Bromamidoanthrachinonsulfonsäure (C. 1900 [2] 1143).
- $C_{14}H_8O_8N_2Cl_2S_2$  1)  $\beta$ -Dichlor-1,5-Diamido-9,10-Anthrachinon- $\beta$ -Disulfonsäure (D.R.P. 126676 C. 1902 [1] 86).
- $C_{14}H_8O_8N_2Br_2S_2$  1)  $\beta$ -Dibrom-1,5-Diamido-9,10-Anthrachinon- $\beta$ -Disulfonsäure (D.R.P. 126676 C. 1902 [1] 86).
- $C_{14}H_9ONClBr$  1) 3-Chlor-6-Brom-9-Acetylcarbazon. Sm. 178—179° (G. 25 [2] 361). — IV, 392.
- $C_{14}H_9ON_2Cl_2S$  1) 3-Merkapto-5-Keto-1,4-Di[4-Chlorphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 249° (B. 32, 1084). — \*IV, 447.
- 2) 2-Keto-5-[4-Chlorphenyl]amido-3-[4-Chlorphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 155° (B. 32, 1084). — \*IV, 447.
- $C_{14}H_9O_4N_4Cl_3Br_2$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Brom-2-Nitrophenylamido]äthan. Sm. 190—191° (C. 1909 [2] 1419).
- 2)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Brom-3-Nitrophenylamido]äthan. Sm. 147 bis 148° (C. 1909 [2] 1419).
- $C_{14}H_9O_5N_2CIS$  1) 6[oder 7]-Chlor-3-Oxy-2-[2-Oxyphenyl]-1,4-Benzdiazin- $\beta$ -Sulfonsäure. Na + 3H<sub>2</sub>O, Ba (B. 35, 4335 C. 1903 [1] 293). — \*IV, 685.
- $C_{14}H_9O_5N_2BrS$  1)  $\beta$ -Brom-4,5-Diamido-1,8-Dioxy-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 114200 C. 1900 [2] 930). — \*III, 308.
- 2) Bromdiamido-1,5-Dioxy-9,10-Anthrachinonsulfonsäure (D.R.P. 114200 C. 1900 [2] 930). — \*III, 307.

- $C_{14}H_{10}ON_2Cl_2S$  1) Di[4-Chlorphenylamid] d. Thiooxalsäure. Sm. 157—158° (A. 360, 112 C. 1908 [1] 2145).
- $C_{14}H_{10}ON_2Cl_2Se$  1) Di[4-Chlorphenylamid] d. Selenoxalsäure. Sm. 166° (A. 360, 124 C. 1908 [1] 2146).
- $C_{14}H_{10}ON_3ClS$  1) 3-Merkapto-5-Keto-4-Phenyl-1-[4-Chlorphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 204—205° (B. 32, 1084). — \*IV, 447.  
2) 5-Phenylamido-2-Keto-3-[2-Chlorphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 171° (B. 32, 1085). — \*IV, 447.  
3) 5-Phenylamido-2-Keto-3-[3-Chlorphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 185—186° (B. 32, 1085). — \*IV, 447.  
4) 5-Phenylamido-2-Keto-3-[4-Chlorphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 217° (B. 32, 1084). — \*IV, 447.
- $C_{14}H_{10}ON_3BrS$  1) 3-Merkapto-5-Keto-4-Phenyl-1-[4-Bromphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 255° (B. 32, 1084). — \*IV, 447.  
2) 5-Phenylamido-2-Keto-3-[4-Bromphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 216° (B. 32, 1084). — \*IV, 447.
- $C_{14}H_{10}O_6NClS$  1) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäure[2-Methylphenyl]-ester-2-Sulfonsäure. Sm. 150° (Am. 30, 379 C. 1904 [1] 275).  
2) 2-Chlorid d. 4-Nitrobenzol-1-Carbonsäure[4-Methylphenyl]-ester-2-Sulfonsäure. Sm. 152° (Am. 30, 380 C. 1904 [1] 275).
- $C_{14}H_{10}O_6N_2Br_4S_2$  1) 4,6,4',6'-Tetrabrom-2,2'-Dimethylazobenzol-5,5'-Disulfonsäure.  $K_2 + 2H_2O$ ,  $Ca + 8H_2O$ ,  $Ba + 9H_2O$ ,  $Pb + 9H_2O$  (A. 221, 188). — IV, 1381.
- $C_{14}H_{10}O_8N_2Cl_2S_4$  1) Chlorid d. 3,3'-Dinitro-4,4'-Dimethyldiphenyldisulfid-6,6-Disulfonsäure. Sm. 208° (B. 40, 4422 C. 1908 [1] 27).
- $C_{14}H_{11}ON_2ClS$  1) s-Benzoyl-3-Chlorphenylthioharnstoff. Sm. 125° (Am. 24, 220).  
2) 3-Acetylamidophenthiazoniumchlorid (B. 39, 919 C. 1906 [1] 1259).
- $C_{14}H_{11}ON_2BrS$  1) 2-Phenylimido-4-Keto-5-Methyltetrahydrothiazol. Sm. 238 bis 239° (Soc. 93, 20 C. 1908 [1] 1542).  
2) 3-Acetylamidophenthiazoniumbromid (B. 39, 920 C. 1906 [1] 1259).
- $C_{14}H_{11}O_2NCl_3P$  1) Diphenylchloracetylamid d. Phosphorsäuredichlorid. Sm. 122 bis 123° (B. 41, 3593 C. 1908 [2] 1686).
- $C_{14}H_{11}O_4N_2ClS$  1) Verbindung (aus d. Benzoylamid d. ?-Nitro-1-Methylbenzol-4-Sulfonsäure). Sm. 125° (B. 5, 141). — II, 1175.
- $C_{14}H_{12}ONClS$  1) Phenylamid d. 3-Chlor-4-Oxybenzolzomethyläther-1-Thiocarbon-säure. Sm. 205° (J. pr. [2] 59, 583). — \*II, 915.  
2) 4-Chlorphenylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbon-säure. Sm. 182° (J. pr. [2] 59, 588). — \*II, 914.
- $C_{14}H_{12}ONBrS$  1) Phenylamid d. 3-Brom-4-Oxybenzolzomethyläther-1-Thiocarbon-säure. Sm. 204° (J. pr. [2] 59, 583). — \*II, 915.  
2) 3-Bromphenylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbon-säure. Sm. 150—151° (J. pr. [2] 59, 590). — \*II, 914.
- $C_{14}H_{12}ONJS$  1) Phenylamid d. 3-Jod-4-Oxybenzolzomethyläther-1-Thiocarbon-säure. Sm. 206,5° (J. pr. [2] 59, 584). — \*II, 915.
- $C_{14}H_{12}O_2NClS$  1) Verbindung (aus d. Benzoylamid d. 1-Methylbenzol-4-Sulfonsäure). Sm. 100° (B. 5, 140). — II, 1175.
- $C_{14}H_{12}O_3NClS$  1) Methyl-4-Phenylsulfonchloramidophenylketon. Sm. 91° (Soc. 85, 390 C. 1904 [1] 1404).  
2) Chlorid d. 2-[4-Methylphenylsulfon]amidobenzol-1-Carbon-säure. Sm. 128—129° (A. 367, 111 C. 1909 [2] 698).
- $C_{14}H_{12}O_4N_2ClJ$  1) Di[5-Nitro-2-Methylphenyl]jodoniumchlorid. Sm. 140°.  $2 + PtCl_4$  (B. 41, 2079 C. 1908 [2] 301).
- $C_{14}H_{12}O_4N_2Cl_2S_2$  1) Chlorid d. 2,2'-Dimethylazobenzol-4,4'-Disulfonsäure. Sm. 218° (A. 221, 184). — IV, 1380.  
2) Chlorid d. 2,2'-Dimethylazobenzol-5,5'-Disulfonsäure. Sm. 220°.  $+ 2C_6H_6$  (A. 203, 76). — IV, 1380.  
3) Chlorid d. 4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Sm. 194° (A. 203, 81). — IV, 1380.  
4) Chlorid d. 4,4'-Dimethylazobenzol- $\alpha\alpha'$ -Disulfonsäure. Sm. 149° (A. 221, 225). — IV, 1386.
- $C_{14}H_{12}O_4N_2BrJ$  1) Di[5-Nitro-2-Methylphenyl]jodoniumbromid. Zers. bei 145° (B. 41, 2079 C. 1908 [2] 301).

- $C_{14}H_{12}O_4N_4Br_4S_2$  1) Amid d. 4,6,4',6'-Tetrabrom-2,2'-Dimethylazobenzol-5,5'-Disulfonsäure. Sm. 218° (A. 221, 191). — IV, 1381.
- $C_{14}H_{12}O_4N_5BrS$  1) Dinitrodime-thylthioninbromid +  $2H_2O$  (J. pr. [2] 76, 425 C. 1908 [1] 532).
- $C_{14}H_{12}O_6N_2Br_2S_2$  1) p-Dibrom-4,4'-Dimethylazobenzol-3,3'-Disulfonsäure.  $K_2 + 4H_2O$ ,  $Ca + 4\frac{1}{2}H_2O$ ,  $Ba + 5H_2O$ ,  $Pb + 5H_2O$  (A. 221, 186). — IV, 1381.
- $C_{14}H_{12}O_8N_4Cl_2S_2$  1)  $\alpha\beta$ -Di[3-Nitrophenylsulfonchloramido]äthan. Sm. 198° (Soc. 87, 387 C. 1905 [1] 1587).
- $C_{14}H_{13}ONClIJ$  1) 4-Acetylamidodiphenyljodoniumchlorid. Sm. 190°.  $2 + HgCl_2$ ,  $2 + PtCl_4$  (B. 40, 4071 C. 1907 [2] 1833).
- $C_{14}H_{13}ONBrJ$  1) 4-Acetylamidodiphenyljodoniumbromid. Sm. 183° (B. 40, 4071 C. 1907 [2] 1834).
- $C_{14}H_{13}ON_2Br_4P$  1) 2-Brom-4-Methylphenylimid-2-Brom-4-Methylphenylamid d. Phosphorsäure (B. 29, 725). — \*II, 269.
- $C_{14}H_{13}O_2NClIJ$  1) 5-Nitro-2,2'-Dimethyldiphenyljodoniumchlorid. Sm. 170°.  $2 + HgCl_2$ ,  $2 + PtCl_4$  (B. 41, 2082 C. 1908 [2] 301).
- $C_{14}H_{13}O_2NClIP$  1) Verbindung (siehe  $C_{14}H_{13}O_3NClIP + H_2O$ ) (B. 14, 2374). — II, 368.
- $C_{14}H_{13}O_2NBrJ$  1) 5-Nitro-2,2'-Dimethyldiphenyljodoniumbromid. Sm. 151° (B. 41, 2082 C. 1908 [2] 301).
- $C_{14}H_{13}O_2N_3Cl_3P$  1) Trichloracetylamidid[Phenylamid d. Phosphorsäure. Sm. 194 bis 195° (B. 41, 3585 C. 1908 [2] 1685).
- $C_{14}H_{13}O_3N_2BrS$  1) 2-Brom-4,4'-Dimethylazobenzol-3'-Sulfonsäure. Na, K (B. 21, 1215). — IV, 1381.  
2) 3-Brom-4,4'-Dimethylazobenzol-3'-Sulfonsäure (B. 21, 121, 1218). — IV, 1381; \*IV, 1022.
- $C_{14}H_{13}O_4NBr_2S_2$  1) Äthylimid d. 4-Brombenzol-1-Sulfonsäure. Sm. 132° (C. 1899 [2] 867). — \*II, 73.
- $C_{14}H_{13}O_4N_2ClS$  1) Benzylchloramid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 144° (Soc. 87, 161 C. 1905 [1] 1011).
- $C_{14}H_{13}O_4N_2Cl_3S$  1) p-Trichlor-p-Dimethylamidophenylamid-1-Oxybenzol-p-Sulfonsäure. Ba (J. pr. [2] 24, 442). — II, 835.
- $C_{14}H_{13}O_4N_2BrS$  1) Benzylbromamid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 151° (Soc. 87, 170 C. 1905 [1] 1012).
- $C_{14}H_{13}O_5N_2ClIJ$  1) Di[5-Nitro-2-Methylphenyl]jodoniumhydroxyd. Salze, siehe (B. 41, 2079 C. 1908 [2] 301).
- $C_{14}H_{14}ONSP$  1) 2-Methylphenylimid d. Thiophosphorsäuremono-4-Methylphenylester. Sm. 247° (B. 28, 1243). — \*II, 434.
- $C_{14}H_{14}ON_3JS$  1) Base (aus Amidomethylenblau).  $2 + HJ$  (J. pr. [2] 76, 422 C. 1908 [1] 532).
- $C_{14}H_{14}O_2NClIS$  1) 6-Chlor-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 148—149° (C. 1904 [1] 1075; Soc. 85, 377 C. 1904 [1] 1412).  
2) Benzylchloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 136° (Soc. 87, 159 C. 1905 [1] 1011).  
3) 2-Methylphenylechloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 101° (Soc. 85, 1186 C. 1904 [2] 1115).  
4) 4-Methylphenylechloramid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 109° (Soc. 85, 1186 C. 1904 [2] 1115).
- $C_{14}H_{14}O_2NBrS$  1) Phenylamid d. 6-Brom-1,3-Dimethylbenzol-4-Sulfonsäure. Sm. 152° (B. 35, 3756 C. 1902 [2] 1452).  
2) Phenylamid d. 4-Brom-1,3-Dimethylbenzol-5-Sulfonsäure. Sm. 179° (B. 35, 3756 C. 1902 [2] 1452).  
3) Benzylbromamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 149° (Soc. 87, 169 C. 1905 [1] 1012).
- $C_{14}H_{14}O_2NJS$  1) Phenylamid d. 4-Jod-1,3-Dimethylbenzol-6-Sulfonsäure. Sm. 153° (B. 26, 1106). — II, 425.  
2) Methyl-3-Jodphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 81° (A. 332, 60 C. 1904 [2] 41).
- $C_{14}H_{14}O_2N_3Cl_2P$  1) Dichloracetylamidid[Phenylamid] d. Phosphorsäure. Sm. 219 bis 220° (B. 41, 3581 C. 1908 [2] 1685).
- $C_{14}H_{14}O_2ClSP$  1) Monochlorid d. Thiophosphorsäuredi-4-Methylphenylester. Sm. 53° (B. 31, 1107). — \*II, 434.
- $C_{14}H_{14}O_3N_2Cl_2S$  1) 3,3'-Dichlor-4-Amido-4'-Sulfomethylamidodiphenylmethan. Sm. 168—169° (D.R.P. 148760 C. 1904 [1] 555).



- $C_{14}H_{14}O_3N_3ClS$  1) 2-Chlor-4-Dimethylamidoazobenzol-4'-Sulfonsäure (aus 3-Chlor-1-Dimethylamidobenzol. Ba +  $3H_2O$  (B. 35, 3542 C. 1902 [2] 1504). — \*IV, 1015.
- $C_{14}H_{14}O_4N_2Cl_2S_2$  1)  $\alpha\beta$ -Di[Phenylsulfonchloramido]äthan. Sm. 113° (Soc. 87, 386 C. 1905 [1] 1587).
- $C_{14}H_{14}O_4N_2Br_2S_2$  1)  $\alpha\beta$ -Di[Phenylsulfonbromamido]äthan. Sm. 134° (Soc. 87, 386 C. 1905 [1] 1587).
- $C_{14}H_{14}O_4N_4Br_2S_2$  1) Amid d.  $\beta$ -Dibrom-4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Sm. oberhalb 260° (A. 221, 188). — IV, 1381.
- $C_{14}H_{15}O_2N_5Cl_3P$  1) Trichloracetylamididi[Phenylhydrazid] d. Phosphorsäure. Sm. 237—238° u. Zers. (B. 41, 3585 C. 1908 [2] 1685).
- $C_{14}H_{15}O_3NClP$  1) Verbindung (aus Diphenylacetamid) +  $H_2O$ .  $Na_2$ ,  $Ag_2$  (B. 14, 2374). — II, 368.
- $C_{14}H_{16}ON_2ClP$  1) Di[2-Methylphenylamid] d. Phosphorsäuremonochlorid. Sm. 190° (B. 27, 2578). — \*II, 250.
- 2) Di[4-Methylphenylamid] d. Phosphorsäuremonochlorid. Sm. 210° (B. 27, 2577; A. 326, 249 C. 1903 [1] 868). — \*II, 269.
- 3) Phenylamid-Äthylphenylamid d. Phosphorsäuremonochlorid. Sm. 113° (A. 326, 255 C. 1903 [1] 869).
- $C_{14}H_{16}O_2NSP$  1) Monamid d. Thiophosphorsäuredi-4-Methylphenylester. Sm. 131° (B. 31, 1107). — \*II, 434.
- $C_{14}H_{16}O_2N_3Cl_2P$  1) Dichloracetylamididi[Phenylhydrazid] d. Phosphorsäure. Sm. 190° u. Zers. (B. 41, 3581 C. 1908 [2] 1685).
- $C_{14}H_{17}O_5N_2ClS$  1) Chlorid d. 5-Keto-4,4-Diäthoxyl-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-1'-Sulfonsäure. Sm. 68° (B. 25, 1947). — IV, 736.
- $C_{14}H_{18}O_2NClS$  1) Nitril d.  $\delta$ -(4-Chlorphenyl)sulfonheptan- $\delta$ -Carbonsäure. Fl. (J. pr. [2] 72, 327 C. 1905 [2] 1785).
- 2) Nitril d.  $\gamma$ -[4-Chlorphenyl)sulfon- $\beta\delta$ -Dimethylpentan- $\gamma$ -Carbonsäure. Fl. (J. pr. [2] 72, 328 C. 1905 [2] 1785).
- $C_{14}H_{19}O_3N_2JS$  1) Jodmethylat d. Hydrocotarninthiocarbonsäureamid. Sm. 203° (B. 35, 1750 C. 1902 [2] 68). — \*III, 680.
- $C_{14}H_{33}ON_2SP$  1) Di[Dipropylamid] d. Thiophosphorsäuremonoäthylester. Sd. 178—180°<sub>22</sub> (A. 326, 165 C. 1903 [1] 761).

### $C_{14}$ -Gruppe mit sechs Elementen.

- $C_{14}H_8O_4N_2Cl_2Br_4S_2$  1) Chlorid d. 4,6,4',6'-Tetrabrom-2,2'-Dimethylazobenzol-5,5'-Disulfonsäure. Zers. bei 243° (A. 221, 190). — IV, 1381.
- $C_{14}H_{10}O_4N_2Cl_2Br_2S_2$  1) Chlorid d.  $\beta$ -Dibrom-4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Sm. 226° (A. 221, 187). — IV, 1381.

### $C_{15}$ -Gruppe mit einem Element.

- $C_{15}H_{10}$  C 94,7 — H 5,3 — M. G. 190.
- 1) Fluoranthren (Idryl). Sm. 109—110°; Sd. 250—251°<sub>60</sub>. Pikrat (A. 193, 142; 200, 1; J. 1881, 373; B. 10, 2022; M. 1, 221; 2, 7). — II, 278.
- 2) Succisteren. Sm. 160°; Sd. oberhalb 300° u. ger. Zers. (A. ch. [3] 9, 96). — II, 279.
- 3) Kohlenwasserstoff (aus Erdöl). Sd. 250,5°. Pikrat (Sm. 178°) (C. 1900 [2] 358).
- $C_{15}H_{12}$  C 93,8 — H 6,2 — M. G. 192.
- 1) 9-Äthylidenfluoren. Sm. 104° (B. 38, 4107 C. 1906 [1] 366; Bl. [4] 1, 1236 C. 1908 [1] 850).
- 2) 1-Methylantracen. Sm. 199—200° (B. 20, 2070). — II, 272.
- 3) 2-Methylantracen. Subl. oberhalb 100°; Sm. 199—200° (202°; 207°) (A. 183, 163; 212, 34; 311, 181; B. 7, 1185, 1195; 10, 118, 1049, 2014; 11, 273, 1065; 17, 2848; 33, 1633; Am. 22, 154; J. pr. [2] 35, 474; [2] 41, 3; Soc. 81, 1581 C. 1903 [1] 34, 167; C. r. 139, 977 C. 1905 [1] 256; Ar. 246, 433 C. 1908 [2] 1440; J. pr. [2] 79, 555 C. 1909 [2] 445). — II, 272; \*II, 123.
- 4) isom. Methylantracen (B. 23, 3171). — II, 273.
- 5) Isomethylantracen. Sm. 203° (B. 15, 1821; A. 234, 238; B. 39, 1241 C. 1906 [1] 1768). — II, 273.

- C<sub>15</sub>H<sub>12</sub>**
- 6) **1-Methylphenanthren.** Sm. 123°. Pikrat (*B.* 39, 3111 *C.* 1906 [2] 1328).
  - 7) **3-Methylphenanthren.** Sm. 65°. Pikrat (*B.* 39, 3113 *C.* 1906 [2] 1329).
  - 8) **isom. Methylphenanthren.** Sm. 90—95° (*B.* 33, 2267). — \*II, 123.
  - 9) **Methanthren.** Sm. 117°; Sd. oberhalb 360° (*J. pr.* [2] 9, 416; *A.* 170, 243). — II, 273.
- C<sub>15</sub>H<sub>14</sub>**
- 10) **Idrylhydrür.** Sm. 76°. Pikrat (*M.* 1, 225). — II, 279.  
C 92,8 — H 7,2 — M. G. 194.
  - 1)  **$\alpha\alpha$ -Diphenylpropen.** Sm. 52°; Sd. 169—170°<sub>28</sub> (280—281°) (*B.* 35, 2647 *C.* 1902 [2] 587; *C. r.* 135, 533 *C.* 1902 [2] 1209; *B.* 37, 232 *C.* 1904 [1] 660; *B.* 37, 1450 *C.* 1904 [1] 1352; *B.* 41, 2720 *C.* 1908 [2] 1356).
  - 2)  **$\alpha\beta$ -Diphenylpropen.** Sm. 82—83°; Sd. 183°<sub>28</sub> (*B.* 35, 2648 *C.* 1904 [2] 587; *B.* 36, 1495 *C.* 1903 [1] 1351; *B.* 37, 458 *C.* 1904 [1] 949; *B.* 37, 1134 *C.* 1904 [1] 1256; *C. r.* 139, 482 *C.* 1904 [2] 1038).
  - 3)  **$\alpha\gamma$ -Diphenylpropen.** Sm. 57°; Sd. 276° (*Soc.* 75, 869). — \*II, 119.
  - 4) **isom.  $\alpha\gamma$ -Diphenylpropen.** Sd. 178—179°<sub>15</sub> (*B.* 39, 3049 *C.* 1906 [2] 1263).
  - 5)  **$\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthen.** Sd. 285—286° (*C.* 1907 [1] 1579).
  - 6)  **$\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthen.** Sm. 120° (117°) (*B.* 14, 1646; 18, 1946; *B.* 35, 3967 *C.* 1903 [1] 31). — II, 251.
  - 7) **9-Äthylfluoren.** Sm. 107—108°; Sd. 165—166°<sub>18</sub> (*B.* 35, 763 *C.* 1902 [1] 814).
  - 8) **Tetrahydroderivat d. Kohlenw. C<sub>15</sub>H<sub>10</sub> (aus Erdöl).** Sm. 177° (*C.* 1900 [2] 358).
  - 9) **Kohlenwasserstoff (aus d. Verb. C<sub>16</sub>H<sub>10</sub>O<sub>8</sub>).** Sm. 79° (*M.* 26, 827 *C.* 1905 [2] 620).  
C 91,8 — H 8,2 — M. G. 196.
- C<sub>15</sub>H<sub>16</sub>**
- 1)  **$\alpha\alpha$ -Diphenylpropan.** Sd. 278,5—280°<sub>754</sub> (139°<sub>10</sub>) (*B.* 35, 2648 *C.* 1902 [2] 587; *C. r.* 135, 533 *C.* 1902 [2] 1209; *B.* 37, 1450 *C.* 1904 [1] 1352; *C.* 1905 [2] 826).
  - 2)  **$\alpha\beta$ -Diphenylpropan.** Sd. 280—281°<sub>758</sub> (*J.* 1879, 379; *J. r.* 27, 298; *B.* 35, 2648 *C.* 1902 [2] 587; *B.* 37, 1450 *C.* 1904 [1] 1352; *C.* 1905 [2] 826). — II, 239; \*II, 115.
  - 3)  **$\alpha\gamma$ -Diphenylpropan (Dibenzylmethan).** Sd. 298—299°<sub>758</sub> (*B.* 7, 1627; 10, 760; 14, 2466; 18, 2935; 34, 1293; *Bl.* [3] 25, 240; *C.* 1905 [2] 826). — II, 238.
  - 4)  **$\beta\beta$ -Diphenylpropan.** Sd. 281—282° (*Bl.* 34, 674; 35, 289). — II, 238.
  - 5)  **$\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthan.** Sd. 291—293° (*B.* 23, 3274; 24, 2788). — \*II, 115.
  - 6)  **$\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthan.** Sm. 27°; Sd. 278—280° (286°) (*B.* 7, 1016; 14, 1646). — II, 237.
  - 7)  **$\beta$ -Äthylidiphenylmethan.** Sd. 294—295° (*B.* 5, 686; 15, 1682). — II, 239.
  - 8) **2,4-Dimethyldiphenylmethan.** Sd. 290° (295—296°) (*B.* 5, 799; 9, 1761; 15, 1682; *Soc.* 67, 828). — II, 238.
  - 9) **2,5-Dimethyldiphenylmethan.** Sd. 293,5—294,5° (*B.* 5, 799). — II, 239.
  - 10) **3,3'-Dimethyldiphenylmethan (*C. r.* 139, 977 *C.* 1905 [1] 256).**
  - 11) **4,4'-Dimethyldiphenylmethan.** Sm. 22,5°; Sd. 285,5—286,5° (*B.* 7, 1181; 12, 2302; 14, 1531; 18, 347; *Bl.* 41, 323; 43, 50; *C. r.* 139, 977 *C.* 1905 [1] 256; *C.* 1909 [1] 534, 535; *J. pr.* [2] 79, 557 *C.* 1909 [2] 445). — II, 238.
  - 12) **5-Phenyläthynyl-1-Methyl-1,2,3,4-Tetrahydrobenzol (oder 6-Phenyläthynyl-2-Methyl-1,2,3,4-Tetrahydrobenzol).** Sd. 167—168°<sub>10</sub> (*C.* 1905 [2] 1020).  
C 90,9 — H 9,1 — M. G. 198.
- C<sub>15</sub>H<sub>18</sub>**
- 1) **1-Isoamylnaphtalin.** Sd. 303°. (Pikrat Sm. 85—90°) (*B.* 15, 2236; *G.* 12, 209). — II, 220.
  - 2) **2-Isoamylnaphtalin.** Sd. 288—292°. (Pikrat Sm. 110°) (*A. ch.* [6] 12, 319; *G.* 20, 719). — II, 220.
  - 3) **isom. Amylnaphtalin.** Sd. 304—306°. (Pikrat Sm. 140—141°) (*B.* 15, 2236; 16, 802).
  - 4) **1-Methylhexahydroanthracen (*A.* 242, 256).** — II, 272.

- C<sub>15</sub>H<sub>18</sub>** 5) Idryloktohydrür. Sm. 309—311° (*M.* 1, 226). — **II**, 279.  
 6) Triscyklo-Trimethylenbenzol. Sm. 96—97°; Sd. 180—200°<sub>18</sub> (*B.* 30, 1094). — **\*II**, 108.
- C<sub>15</sub>H<sub>20</sub>** 7) Kohlenwasserstoff. Sd. 245° (*Bl.* 37, 303).  
 C 90,0 — H 10,0 — M. G. 200.  
 1) Kohlenwasserstoff (aus Acetylen). Sd. 210—310° (*Bl.* [2] 23, 637).  
 2) Kohlenwasserstoff (aus Aceton). Sd. 230—282° (*Am.* 15, 269; *B.* 28 [2] 780). — **II**, 176.
- C<sub>15</sub>H<sub>22</sub>** C 89,1 — H 10,9 — M. G. 202.  
 1) δ-Phenyl-βξ-Dimethyl-γ-Hepten. Sd. 124—126°<sub>20</sub> (*B.* 40, 3114 *C.* 1907 [2] 813).  
 2) d-α-[4-Isopropylphenyl]-γ-Methyl-α-Penten. Sd. 139—140,5°<sub>9,5</sub> (*B.* 38, 2312 *C.* 1905 [2] 481).  
 3) Trimethyldicyklodekatrien. Sd. 85—87°<sub>15</sub> (*B.* 35, 2136 *C.* 1902 [2] 187).  
 4) Calamen. Sd. 144°<sub>15,5</sub> (151°<sub>22</sub>) (*B.* 35, 3194 *C.* 1902 [2] 1255; *B.* 35, 3199 *C.* 1902 [2] 1256).  
 5) Kohlenwasserstoff (aus Calmusöl). Sd. 146°<sub>19</sub> (*B.* 35, 3194 *C.* 1902 [2] 1255).  
 6) Kohlenwasserstoff (aus α-Homodypnopinakolin) (*C.* 1903 [1] 880).  
 7) Kohlenwasserstoff (aus Knoblauchöl) (*J.* 1876, 398). — **III**, 547.  
 8) Kohlenwasserstoff (aus Nelkenöl). Sd. 250—260° (*Soc.* [2] 14, 1). — **II**, 173.  
 9) Kohlenwasserstoff (aus Santalal). Sd. 140—145°<sub>25</sub> (*C.* 1896 [2] 668). — **III**, 549.  
 C 88,2 — H 11,8 — M. G. 204.
- C<sub>15</sub>H<sub>24</sub>** 1) d-α-[4-Isopropylphenyl]-γ-Methylpentan. Sd. 265°<sub>748</sub> (*B.* 38, 2313 *C.* 1905 [2] 481).  
 2) 4-Oktyl-1-Methylbenzol. Sm. 11—12°; Sd. 281—283° (*B.* 31, 940). — **\*II**, 23.  
 3) 4-Oktyl-1-Methylbenzol? Sd. 269—271° (*J. r.* 27, 305). — **\*II**, 23.  
 4) 1-Methyl-4-Isopropyl-2-Isoamylbenzol. Sd. 245° (*J. pr.* [2] 46, 489). — **II**, 39.  
 5) 1,3,5 - Triisopropylbenzol. Sd. 234—236° (236—238,5°). + Al<sub>2</sub>Cl<sub>6</sub>, (2 + HCl, Al<sub>2</sub>Cl<sub>6</sub>), (+ Al<sub>2</sub>Cl<sub>6</sub> + 6C<sub>6</sub>H<sub>6</sub>) (*C. r.* 140, 940 *C.* 1905 [1] 1379; *J. pr.* [2] 72, 57 *C.* 1905 [2] 818).  
 6) Amorphen. Sd. 250—270° (*C.* 1904 [2] 224).  
 7) Aralien. Sd. 270° (*C.* 1899 [2] 623). — **\*III**, 402.  
 8) Aromadendren. Sd. 260—265°<sub>760</sub> (*C.* 1902 [1] 351). — **\*III**, 402.  
 9) Atractylen. Sd. 125—126°<sub>10</sub> (*Ar.* 241, 33 *C.* 1903 [1] 712).  
 10) polym. Atractylen. Sd. 133—141°<sub>14,5</sub> (*Ar.* 241, 34 *C.* 1903 [1] 712).  
 11) d-Cadinen. Sd. 260—261° (274—275°) (*Ar.* 240, 291 *C.* 1902 [2] 124; *C. r.* 135, 1058 *C.* 1903 [1] 233; *Ar.* 241, 148 *C.* 1903 [1] 1029). — **\*III**, 402.  
 12) l-Cadinen. Sd. 274—275° (264—269°) (*A.* 34, 323; 238, 80; 252, 150; 271, 303; *G.* 5, 468; *Bl.* [3] 11, 576; [3] 25, 931; *C.* 1898 [2] 666, 786; 1899 [2] 860; 1900 [1] 858; 1902 [1] 1059; *Ar.* 240, 291 *C.* 1902 [2] 124; *C.* 1908 [2] 1354). — **III**, 537; **\*III**, 402.  
 13) Caparrapen. Fl. + 2HCl (*Bl.* [3] 19, 643). — **\*III**, 402.  
 14) Caryophyllen. Sd. 258—260° (260—261°) (*J.* 1875, 853; *A.* 9, 68, 69 Anm.; 271, 298; *J. pr.* [2] 56, 146; *C.* 1899 [1] 108; 1899 [2] 860, 943; *J. pr.* [2] 66, 54 *C.* 1902 [2] 520; *A.* 359, 245 *C.* 1908 [1] 1932). — **III**, 537; **\*III**, 402.  
 15) Cedren. Sd. 237° (*A.* 39, 249; 48, 37). — **III**, 538.  
 16) isom. Cedren. Sd. 261—262° (*C.* 1896 [2] 668; *Bl.* [3] 17, 486; *B.* 40, 3521 *C.* 1907 [2] 1693). — **III**, 538; **\*III**, 403.  
 17) Cloven. Sd. 261—263° (*A.* 271, 294; *C.* 1902 [1] 42). — **III**, 538; **\*III**, 403.  
 18) Conimen. Sd. 264° (*A.* 180, 253). — **III**, 557.  
 19) Cubeben. Sd. 250—260° (*B.* 10, 189; *J.* 1869, 333). — **III**, 538.  
 20) Dilemen. Sd. 260—263°<sub>740</sub> (*R.* 24, 311 *C.* 1905 [2] 1180).  
 21) d-Galipen. Sd. 258—259° (*Ar.* 235, 528; 236, 394). — **\*III**, 403.  
 22) l-Galipen. Sd. 265° (*Ar.* 235, 641, 642). — **\*III**, 403.  
 23) i-Galipen. Sd. 255—260° (*C.* 1898 [2] 786; *Ar.* 236, 401). — **\*III**, 403.



$C_{15}H_{24}$ 

- 24) **Gonystylen.** *Sd.* 137—139°<sub>17</sub> (*R.* 25, 46 *C.* 1906 [1] 842; *C.* 1907 [2] 164).
- 25) **Guajen.** *Sd.* 123—124°<sub>9</sub> (*A.* 279, 397; *Ar.* 241, 43 *C.* 1903 [1] 713; *B.* 41, 4363 *C.* 1909 [1] 291). — **III**, 539.
- 26) **Hanföl.** *Sd.* 120—121°<sub>9</sub> (258—259°) (*G.* 11, 196; 25 [1] 114; *Soc.* 69, 542). — **III**, 538.
- 27) **Heerabolen.** *Sd.* 130—136°<sub>16</sub> (*Ar.* 245, 441 *C.* 1907 [2] 1912).
- 28) **Heveen.** *Sd.* 315° (*A.* 27, 35). — **III**, 538.
- 29) **Humulen.** *Sd.* 166—170°<sub>60</sub> (263—266°) (*Soc.* 67, 59, 780; *C.* 1898 [2] 360; 1899 [1] 108; *B.* 32, 3183). — **III**, 538; \***III**, 403.
- 30) **Leden.** *Sd.* 255° (*B.* 28, 3088). — **III**, 538.
- 31) **Limen.** *Sd.* 262—263°<sub>756</sub> (260—268°) (*Soc.* 85, 415 *C.* 1904 [1] 1443; *A.* 368, 19 *C.* 1909 [2] 1242).
- 32) **Maalisesquiterpen.** *Sd.* 270,8—271°<sub>764</sub> (*C.* 1909 [1] 23).
- 33) **Patschoulen.** *Sd.* 254—256° (*Bl.* 28, 415; *A.* 279, 394; *Ar.* 241, 41 *C.* 1903 [1] 713). — **III**, 538.
- 34)  $\alpha$ -**Santalen.** *Sd.* 252—252,5° (253—254°) (*Bl.* [3] 23, 218, 540; *B.* 40, 3322 *C.* 1907 [2] 906). — \***III**, 414.
- 35)  $\beta$ -**Santalen.** *Sd.* 261—262° (263—264°) (*C.* 1899 [1] 1082; 1900 [2] 479; *Bl.* [3] 23, 218, 540; *B.* 40, 3322 *C.* 1907 [2] 906). — \***III**, 415.
- 36)  $\gamma$ -**Santalen.** *Sd.* 118—120°<sub>9-10</sub> (*B.* 40, 1130 *C.* 1907 [1] 1327).
- 37)  $\alpha$ -**Isosantalen.** *Sd.* 255—256° (*Bl.* [3] 23, 543). — \***III**, 415.
- 38)  $\beta$ -**Isosantalen.** *Sd.* 259—260° (*Bl.* [3] 23, 543). — \***III**, 415.
- 39) **Trivalerylen.** *Sd.* 265—270° (240—250°) (*A.* 143, 373; *Z.* 1867, 174; *Bl.* 33, 24). — **III**, 539.
- 40) **Vetiven.** *Sd.* 262—263°<sub>740</sub> (*C. r.* 135, 1060 *C.* 1903 [1] 234).
- 41) **Zingiberen.** *Sd.* 269—270° (*C.* 1900 [2] 97; 1901 [2] 1007, 1226). — \***III**, 403.
- 42) **Sesquiterpen** (aus *Asa foetida*). *Sd.* 123°<sub>9</sub> (*B.* 23, 3532). — **III**, 545.
- 43) **Sesquiterpen** (aus *Balaoharz*balsam). *Sd.* 118—119°<sub>8</sub> (*C.* 1909 [2] 1450).
- 44) **Sesquiterpen** (aus *Cadinen*). *Sd.* 145—148°<sub>20</sub> (*C.* 1908 [2] 1354).
- 45) **Sesquiterpen** (aus *Canangaöl*) (*Bl.* [3] 11, 1045). — **III**, 546.
- 46) **Sesquiterpen** (aus *Caryophyllen*). *Sd.* 104—105°<sub>5-6</sub> (*A.* 356, 20 *C.* 1907 [2] 1793).
- 47) **Sesquiterpen** (aus *Caryophyllen*). *Sd.* 126—127°<sub>24</sub> (*A.* 369, 50 *C.* 1909 [2] 2000).
- 48) **Sesquiterpen** (aus *Cascarillöl*). *Sd.* 255—257° (*C.* 1900 [2] 575; 1901 [1] 259).
- 49) **Sesquiterpen** (aus *Cascarillöl*). *Sd.* 260—265° (*C.* 1900 [2] 574; 1901 [1] 259).
- 50) **Sesquiterpen** (aus *Cedrol*). *Sd.* 115—117°<sub>8,5</sub> (*Bl.* [3] 17, 488). — \***III**, 386.
- 51) **Sesquiterpen** (aus *Citronenöl*). *Sd.* 240—242° (*G.* 21, 322). — **III**, 542.
- 52) **Sesquiterpen** (aus *Citronellöl*). *Sd.* 260—270° u. *Zers.* (*C.* 1899 [2] 879). — \***III**, 403.
- 53) **Sesquiterpen** (aus *Citronellöl*). *Sd.* 272—275°<sub>760</sub> (*C.* 1899 [2] 879). — \***III**, 403.
- 54) **Sesquiterpen** (aus *Copaivabalsam*). *Sd.* 252°<sub>759</sub> (*C.* 1906 [1] 1893; *Ar.* 244, 163 *C.* 1906 [2] 126).
- 55) **Sesquiterpene** (aus *Cubebenöl*). *Sd.* 220 u. 250° (*Z.* 1870, 190). — **III**, 546.
- 56) **d-Sesquiterpen** (aus *Eucalyptusöl*). *Sd.* 265,5—266°<sub>750</sub> (*C.* 1904 [1] 1264).
- 57) **l-Sesquiterpen** (aus *Eucalyptusöl*). *Sd.* 247—248°<sub>748</sub> (*C.* 1904 [1] 1264).
- 58) **Sesquiterpen** (aus *Knoblauchöl*). *Sd.* 253,9° (*J.* 1876, 398). — **III**, 547.
- 59) **Sesquiterpen** (aus *Lavendelöl*). *Sd.* 130°<sub>15</sub> (*B.* 25, 1187). — **III**, 547.
- 60) **Sesquiterpen** (aus *Myrrhenöl*). *Sd.* 151—154°<sub>15</sub> (*Ar.* 244, 427 *C.* 1907 [1] 43).
- 61) **isom. Sesquiterpen** (aus *Myrrhenöl*). *Sd.* 163—168°<sub>12</sub> (*Ar.* 244, 429 *C.* 1907 [1] 43).
- 62) **Sesquiterpen** (aus *Ocotea usambarensis*). *Sd.* 136—142°<sub>12</sub> (*B.* 39, 655 *C.* 1906 [1] 1021).
- 63) **Sesquiterpen** (aus *Oleum cadineum*). *Sd.* 262—266°<sub>760</sub> (*C.* 1908 [1] 2040; 1908 [2] 598).
- 64) **Sesquiterpen** (aus *Patschouliöl*). *Sd.* 264—265°<sub>750</sub> (*B.* 37, 3354 *C.* 1904 [2] 1308).

- C<sub>15</sub>H<sub>24</sub>** 65) Sesquiterpen (aus Pimentöl). *Sd.* 255° (*A.* 131, 277). — **III**, 549.  
 66) Sesquiterpen (aus Salveiöl). *Sd.* 264—271° (*J.* 1878, 981). — **III**, 549.  
 67) Sesquiterpen (aus Sandelholzöl). *Sd.* 139—141°<sub>28</sub> (*Ar.* 240, 290 *C.* 1902 [2] 124).  
 68) Sesquiterpen (aus Selleriöl). *Sd.* 262—269° (*B.* 30, 496). — **\*III**, 416.  
 69) Sesquiterpen (aus d. Öl von American Pennyroyal). *Sd.* 270—280° (*Soc.* 91, 885 *C.* 1907 [2] 243).  
 70) Kohlenwasserstoff (aus Aceton). *Sd.* 127—128°<sub>10</sub> (*B.* 39, 3465 *C.* 1906 [2] 1560).  
 71) Kohlenwasserstoff (aus Caryophyllennitrosit). *Sd.* 125—125,5°<sub>14,5</sub> (*A.* 359, 251 *C.* 1908 [1] 1933).  
 72) Kohlenwasserstoff (aus Dypnon). *Sm.* 144° (*C.* 1900 [2] 257).  
 73) Kohlenwasserstoff (aus Jodsanton). *Fl.* (*B.* 7, 1104). — **I**, 139.  
 74) Kohlenwasserstoff (aus d. Öl von *Monodora grandiflora*). *Sd.* 260 bis 270° (*C.* 1909 [2] 1870).  
 75) Kohlenwasserstoff (aus Sandelöl). *Sd.* 260° (*B.* 15, 1197). — **III**, 549.  
 76) Kohlenwasserstoff (aus Santonin). *Sd.* 247° (*B.* 26 [2] 599).  
 77) Kohlenwasserstoff (aus d. Kohlenw. C<sub>15</sub>H<sub>24</sub>). *Sd.* 132—134°<sub>15</sub> (*A.* 359, 256 *C.* 1908 [1] 1933).  
**C<sub>15</sub>H<sub>26</sub>** C 87,4 — H 12,6 — *M. G.* 206.  
 1) Dihydrocedren. *Sd.* 116—122°<sub>10</sub> (*B.* 40, 3527 *C.* 1907 [2] 1694).  
 2) Dihydroguajen. *Sd.* 122°<sub>11</sub> (*B.* 41, 4361 *C.* 1909 [1] 291).  
 3) Dihydroisocaryophyllen. *Sd.* 137—138°<sub>19</sub> (*B.* 36, 1038 *C.* 1903 [1] 1135).  
 4) Santon. *Sd.* 235—245° (*B.* 7, 1104). — **I**, 139.  
 5) Kohlenwasserstoff (aus Benylenbromid). *Sd.* 220° (*A.* 147, 255). — **I**, 139.  
 6) Kohlenwasserstoff (aus Santalol). *Sd.* 125—130°<sub>12</sub> (*B.* 40, 1131 *C.* 1907 [1] 1328).  
**C<sub>15</sub>H<sub>28</sub>** C 86,5 — H 13,5 — *M. G.* 208.  
 1) Benylen (aus Triamylenbromid). *Sd.* 223—228° (*A.* 147, 252). — **I**, 137.  
 2) Tetrahydrosesquiterpen. *Sd.* 257—261° (*A.* 271, 296). — **III**, 539.  
 3) Kohlenwasserstoff (aus Lävulinsäure) (*A.* 206, 249).  
**C<sub>15</sub>H<sub>30</sub>** 4) Kohlenwasserstoff (aus Petroleum). *Sd.* 140—145°<sub>25</sub> (*C.* 1900 [2] 761).  
 C 85,7 — H 14,3 — *M. G.* 210.  
 1) Triamylen. *Sd.* 245—248° (*J.* 1861, 660); siehe auch (*A.* 137, 249; 147, 254). — **I**, 124.  
 2) Pentadekanaphten. *Sd.* 246—248° (*J. r.* 15, 339). — **II**, 16.  
 3) isom. Pentadekanaphten. *Sd.* 160—162°<sub>60</sub> (*Am.* 25, 282).  
 4) Spilanthen. *Sd.* 220—225° (*Ar.* 241, 278 *C.* 1903 [2] 451).  
 5) Kohlenwasserstoff (aus Bienenwachs). *Sd.* 220—250° (*R.* 20, 76).  
 6) Kohlenwasserstoff (aus Petroleum). *Sd.* 152—154°<sub>30</sub> (*Am.* 33, 256 *C.* 1905 [1] 1349).  
 7) Kohlenwasserstoff (aus Petroleum). *Sd.* 159—160°<sub>50</sub> (*Am.* 33, 267 *C.* 1905 [1] 1349).  
**C<sub>15</sub>H<sub>32</sub>** 8) Kohlenwasserstoff (aus Petroleum). *Sd.* 240—250° (*B.* 15, 734).  
 C 84,9 — H 15,1 — *M. G.* 212.  
 1) norm. Pentadekan. *Sm.* 10°; *Sd.* 270,5° (256—257°) (*B.* 15, 1701; 22, 2134; *C.* 1900 [2] 452; *Am.* 28, 173 *C.* 1902 [2] 1081). — **I**, 106.  
 2) Kohlenwasserstoff. *Sd.* 255—260° (*J.* 1863, 530).  
**C<sub>15</sub>Cl<sub>10</sub>** 1) Verbindung (aus Pyren). *Sm.* oberhalb 300° (*B.* 16, 2880). — **II**, 285.

### C<sub>15</sub>-Gruppe mit zwei Elementen.

- C<sub>15</sub>H<sub>8</sub>O<sub>4</sub>** C 72,0 — H 2,4 — O 25,6 — *M. G.* 250.  
 1) Anhydrid d. Pyrensäure (*A.* 240, 174). — **II**, 1980.  
**C<sub>15</sub>H<sub>8</sub>O<sub>9</sub>** C 54,6 — H 1,8 — O 43,6 — *M. G.* 330.  
 1) 2,3,2',3'-Dicarbonat d. Kohlensäuredi[2,3-Dioxyphenylester] (Dipyrogallotricarbonat). *Sm.* 177° (*B.* 37, 107 *C.* 1904 [1] 584).  
**C<sub>15</sub>H<sub>8</sub>N<sub>6</sub>** C 66,7 — H 2,2 — N 31,1 — *M. G.* 270.  
 1) Nitril d. 2,2'-Bisazodiphenylmethan-4,4'-Dicarbonsäure. *Sm.* oberhalb 350° (*C. r.* 146, 1408 *C.* 1908 [2] 511).  
**C<sub>15</sub>H<sub>7</sub>Cl<sub>3</sub>** 1) Trichloridryl (*M.* 1, 223). — **II**, 279.

- $C_{15}H_7Br_3$  1) Tribromidryl (*M.* 1, 224). — II, 279.  
 $C_{15}H_8O_2$  C 81,8 — H 3,6 — O 14,5 — *M. G.* 220.  
 1) Fluoranthenchinon. *Sm.* 188°. + 2 Molec. Fluoranthen (*Sm.* 102°) (*A.* 193, 149; 200, 3; *B.* 10, 2029). — III, 459.  
 2) Verbindung (aus d. Diphenylmethan-2,4'-Dicarbonsäurechlorid). *Sm.* 290 bis 292° (*A.* 309, 119). — \*II, 1096.  
 $C_{15}H_8O_3$  C 76,3 — H 3,4 — O 20,3 — *M. G.* 236.  
 1) Anhydroverbindung d. Indonresorcinäther (*B.* 32, 923). — \*III, 187.  
 2) Aldehyd d. 9,10-Anthrachinon-2-Carbonsäure (*D. R. P.* 174984 *C.* 1906 [2] 1371).  
 $C_{15}H_8O_4$  C 71,4 — H 3,2 — O 25,4 — *M. G.* 252.  
 1) 9,10-Anthrachinon-1-Carbonsäure ( $\gamma$ -Säure). *Sm.* 293—294°. *Ba.* (*B.* 13, 49; 15, 1822; 30, 1115; *A.* 290, 231). — II, 1905; \*II, 1103.  
 2) 9,10-Anthrachinon-2-Carbonsäure ( $\beta$ -Säure). *Sm.* 282—284° (290 bis 292°). *Ca.*, *Ba.* (*B.* 7, 1186, 1196; 8, 248; 16, 2609; 17, 888; *A.* 183, 168; 212, 35; 309, 122; 311, 182; *D. R. P.* 80407). — II, 1904; \*II, 1102.  
 3) 9,10-Phenanthrenchinon-2-Carbonsäure. *Sm.* oberhalb 300° (*A.* 321, 356 *C.* 1902 [2] 62).  
 4) 9,10-Phenanthrenchinon-3-Carbonsäure. *Sm.* oberhalb 315° (*A.* 196, 14; *A.* 321, 355 *C.* 1902 [2] 62). — II, 1905.  
 5) Anhydrid d. Diphenylketon-2,3-Dicarbonsäure. *Sm.* 183° (*A.* 290, 231). — \*II, 1148.  
 6) Anhydrid d. Diphenylketon-2,4'-Dicarbonsäure? *Sm.* 184° (*A.* 309, 103). — \*II, 1147.  
 7)  $\alpha,2-\alpha,2'$ -Dilakton d.  $\alpha\alpha$ -Dioxydiphenylmethan-2,2'-Dicarbonsäure. *Sm.* 212° (*A.* 242, 246). — II, 1975.  
 $C_{15}H_8O_5$  C 67,1 — H 3,0 — O 29,8 — *M. G.* 268.  
 1) Alochrysin? *Sm.* 223—224° (*Ar.* 237, 89). — \*III, 455.  
 2) 1-Oxy-9,10-Anthrachinon-2[*p*]-Carbonsäure. *Sm.* 260°. *Ba.* (*B.* 11, 83). — II, 1979.  
 3) 6[oder 7]-Oxy-9,10-Anthrachinon-2-Carbonsäure. *Sm.* 314° (*Soc.* 65, 846). — II, 1979.  
 4) 1-Oxy-9,10-Anthrachinon-4-Carbonsäure (Erythrooxanthrachinon-carbonsäure). *Sm.* 236—238° u. Zers. (*B.* 20, 2438). — II, 1979.  
 5) 9-Ketofluoren-1,7-Dicarbonsäure. *Ag*<sub>2</sub> (*A.* 229, 151; *M.* 29, 767 *C.* 1908 [2] 1602). — II, 1979.  
 6) Pyrensäure. Zers. oberhalb 250°. *Ba* + *H*<sub>2</sub>O, *Ag*<sub>2</sub> (*A.* 240, 168). — II, 1980.  
 $C_{15}H_8O_6$  C 63,4 — H 2,8 — O 33,8 — *M. G.* 284.  
 1) 2,5-Dioxy-9,10-Anthrachinon-1-Carbonsäure? (Rhein). *Sm.* 313 bis 314° (310°) (*A.* 309, 43; *C.* 1903 [1] 297; *Ar.* 240, 610 *C.* 1903 [1] 176; *C.* 1904 [1] 1077; 1908 [2] 1929; *Soc.* 95, 1091 *C.* 1909 [2] 623).  
 2) 1,4-Dioxy-9,10-Anthrachinon-2-Carbonsäure? (*D. R. P.* 84505). — \*II, 1185.  
 3) 1,2-Dioxy-9,10-Anthrachinon-*p*-Carbonsäure (Alizarin- $\beta$ -Carbonsäure). *Sm.* 305°. *Ba*<sub>3</sub> (*Soc.* 65, 847; *B.* 11, 86). — II, 2027.  
 4) 1,3-Dioxy-9,10-Anthrachinon-*p*-Carbonsäure (Purpuroxanthincarbon-säure). *Sm.* 231°. *Pb.* (*A.* 130, 325; *B.* 10, 172, 616, 790; *Bl.* 28, 219, 407). — II, 2027.  
 5) Xanthon-4,5-Dicarbonsäure. *Sm.* noch nicht bei 285° (*B.* 25, 3647). — II, 2055.  
 6) Diacetat d. Anhydropurpurogallon. *Sm.* 174—176° (*Soc.* 83, 198 *C.* 1903 [1] 402, 639).  
 7) Diacetat d. Anhydroisopurpurogallon. *Sm.* 280—282° (*Soc.* 83, 198 *C.* 1903 [1] 402, 640).  
 $C_{15}H_8O_7$  C 60,0 — H 2,7 — O 37,3 — *M. G.* 300.  
 1) *p*-Trioxy-9,10-Anthrachinon-1-Carbonsäure (Pseudopurpurin-1-Carbon-säure). *Sm.* 218—220° (*Bl.* 4, 13; *B.* 10, 614, 1618; *A. ch.* [5] 13, 256). — II, 2059.  
 2) 5,6,8[oder 5,7,8]-Trioxy-9,10-Anthrachinon-2-Carbonsäure. *Sm.* oberhalb 315° (*Soc.* 65, 848). — II, 2059.  
 $C_{15}H_8O_8$  C 56,9 — H 2,5 — O 40,5 — *M. G.* 316.  
 1) Ellagmethylläthersäure (*M.* 26, 1144 *C.* 1905 [2] 1589).



- $C_{15}H_8O_9$  C 54,2 — H 2,4 — O 43,4 — M. G. 332.
- $C_{15}H_8O_{10}$  1) 3,4,5-Trioxylfluoron-1,8-Dicarbonsäure (B. 31, 267). — \*III, 581.  
C 51,7 — H 2,3 — O 46,0 — M. G. 348.
- $C_{15}H_6Br_2$  1) Galloflavin (oder  $C_{15}H_6O_9$ ) (M. 25, 603 C. 1904 [2] 907).
- $C_{15}H_8Br_4$  1) Dibromidryl. Sm. 204—205° (A. 193, 146; M. 1, 224). — II, 279.
- $C_{15}H_9O_5$  1)  $\beta$ -Tetrabrom-2-Methylantracen (B. 11, 1606; A. 212, 36). — II, 273.
- $C_{15}H_9O_6$  1) Dossetin. Sm. 271—272° (C. 1908 [1] 1900).
- $C_{15}H_9N$  1) Delokansäure =  $(C_{15}H_9O_6)_x$  (B. 18, 3427). — III, 597.  
C 88,7 — H 4,4 — O 6,9 — M. G. 203.
- 1) Thebenidin. Sm. 144—148°. (2HCl, PtCl<sub>4</sub>) (B. 34, 768). — \*IV, 270.
- 2) Nitril d. Anthracen-1-Carbonsäure. Sm. 126° (B. 8, 246; 13, 47; B. 39, 932 C. 1906 [1] 1256).
- 3) Nitril d. Phenanthren-2-Carbonsäure. Sm. 105° (A. 321, 328 C. 1902 [2] 60).
- 4) Nitril d. Phenanthren-3-Carbonsäure. Sm. 102° (A. 321, 323 C. 1902 [2] 60).
- 5) Nitril d. Phenanthren-9-Carbonsäure. Sm. 103° (A. 321, 327 C. 1902 [2] 60).
- $C_{15}H_9N_3$  C 77,9 — H 3,9 — N 18,2 — M. G. 231.
- 1) Phenotripyridin. Sm. 236°; Sd. oberhalb 360°. HCl, 2HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> + 1½H<sub>2</sub>O, H<sub>2</sub>CrO<sub>4</sub> (Bl. [3] 13, 28). — IV, 1200.
- $C_{15}H_9Br$  1) Bromderivat d. Kohlenw.  $C_{15}H_{10}$  (aus Erdöl). Sm. 276° (C. 1900 [2] 358).
- $C_{15}H_{10}O$  C 87,4 — H 4,8 — O 7,8 — M. G. 206.
- 1)  $\gamma$ -Keto- $\alpha$ - $\gamma$ -Diphenylpropin (Benzoylphenylacetylen). Sm. 48° (49—50°); Sd. 195—200°<sub>13</sub> (Bl. [3] 25, 312; A. 308, 276; C. 1900 [1] 1290; C. r. 134, 45 C. 1902 [1] 404). — \*III, 187.
- $C_{15}H_{10}O_2$  C 81,1 — H 4,5 — O 14,4 — M. G. 222.
- 1) Phenyläther d.  $\gamma$ -Keto- $\alpha$ -Oxy- $\gamma$ -Phenylpropin. Sm. 69°; Sd. 178 bis 179°<sub>90</sub> (B. 36, 293 C. 1903 [1] 581).
- 2) 1,3-Diketo-2-Phenyl-2,3-Dihydroinden. Sm. 145°. Na (B. 26, 2576; 30, 1739 Anm.). — III, 302; \*III, 232.
- 3) 1-Methyl-9,10-Anthrachinon. Sm. 166—167° (B. 20, 2070). — III, 448.
- 4) 2-Methyl-9,10-Anthrachinon. Sm. 177° (175—176°) (B. 8, 675; 10, 1485; 15, 1820; 16, 696, 1632; J. pr. [2] 41, 4; A. 234, 239; 311, 180; Soc. 65, 843; B. 41, 3632 C. 1908 [2] 1927; J. pr. [2] 79, 560 C. 1909 [2] 446). — III, 450; \*III, 323.
- 5) Methanthrachinon. Sm. 187° (J. pr. [2] 9, 421). — III, 455.
- 6) 1-Methyl-9,10-Phenanthrenchinon. Sm. 196° (B. 39, 3111 C. 1906 [2] 1328).
- 7) 2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 108° (B. 30, 1082; 31, 1759). — \*III, 531.
- 8) 1-Keto-2-Benzyliden-1,2-Dihydrobenzofuran. Sm. 76° (B. 42, 834 C. 1909 [1] 1164).
- 9) 1-Benzoylbenzofuran (Cumarylphenylketon; Benzoylcumaron). Sm. 91°; Sd. 360° (B. 29, 237; G. 25 [2] 286). — III, 247, 733; \*III, 530.
- 10) 3-Phenyl-1,2-Benzpyron (3-Phenylcumarin). Sm. 139—140° (140,5°) (J. 1879, 731; G. 14, 563; C. 1903 [1] 89; J. pr. [2] 61, 178; B. 37, 3165 C. 1904 [2] 983). — II, 1707; \*II, 1002.
- 11) 4-Phenyl-1,2-Benzpyron. Sm. 105° (B. 41, 340 C. 1908 [1] 836).
- 12) 3-Phenyl-1,2-Isobenzpyron (3-Phenylisocumarin; Isobenzalptalid). Sm. 90—91° (B. 18, 2445; 31, 377). — II, 1711; \*II, 1004.
- 13) 2-Phenyl-1,4-Benzpyron (Flavon). Sm. 97° (B. 31, 1760; 33, 333; B. 37, 2635 C. 1904 [2] 540).
- 14) Methyläther d. Morphenol. Sm. 65° (B. 15, 1487, 2179; 22, 183; 29, 68; 30, 2439; 31, 54; 33, 358; Soc. 79, 578; A. 222, 233, 3200). — III, 443; \*III, 320.
- 15) Anthracen-1-Carbonsäure ( $\beta$ -Säure). Sm. 260° (245°). Ca, Ba, Pb (B. 8, 246; 13, 48; 30, 1118; B. 37, 648 C. 1904 [1] 892; B. 39, 932 C. 1906 [1] 1256). — II, 1478; \*II, 877.
- 16) Anthracen-2-Carbonsäure ( $\gamma$ -Säure). Sm. oberhalb 280°. Na, Ba (B. 13, 47; 16, 2610; A. 290, 232). — II, 1478.
- 17) Anthracen-9-Carbonsäure. Sm. 206° u. Zers. Ag (B. 2, 678). — II, 1477.

- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>** 18) Phenanthren-2-Carbonsäure. Sm. 254° (A. 321, 329 C. 1902 [2] 60).  
 19) Phenanthren-3-Carbonsäure. Sm. 266° (269°). Na + 4H<sub>2</sub>O, Ba + 7H<sub>2</sub>O (A. 196, 13; Soc. 37, 86; A. 321, 325 C. 1902 [2] 60). — II, 1479.  
 20) Phenanthren-9-Carbonsäure. Sm. 250–252°. Na + 5H<sub>2</sub>O, Ba + 6H<sub>2</sub>O (Soc. 37, 84; B. 29, 499; A. 321, 328 C. 1902 [2] 60). — II, 1479; \*II, 877.  
 21) Laktone d. 1-[α-Oxy-β-Phenyläthenyl]benzol-2-Carbonsäure (Benzylidenphthalid). Sm. 98–99° (B. 11, 1017; 18, 3470; 20, 2863). — II, 1708; \*II, 1003.
- C<sub>15</sub>H<sub>10</sub>O<sub>3</sub>** C 75,6 — H 4,2 — O 20,2 — M. G. 238.  
 1) αβγ-Triketo-αγ-Diphenylpropan (Diphenyltriketon). Sm. 69–70° (66 bis 67°); Sd. 247–248°<sub>80</sub> (289°<sub>175</sub>), + H<sub>2</sub>O (Sm. 90°) (B. 23, 3379; B. 37, 1531 C. 1904 [1] 1609). — III, 316.  
 2) 2-Oxy-1-Methyl-9,10-Anthrachinon. Sm. oberhalb 300°. K (Soc. 91, 1631 C. 1907 [2] 2058).  
 3) 3-Oxy-1-Methyl-9,10-Anthrachinon. Subl. bei 200°; Sm. 299–300° (B. 31, 2795). — \*III, 323.  
 4) 4-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 169–170° (175°) (B. 20, 2069; A. 212, 346; Soc. 91, 1633 C. 1907 [2] 2059). — III, 449.  
 5) 1-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 184–185° (Soc. 91, 1635 C. 1907 [2] 2059).  
 6) 3-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 260–262° u. Zers. (A. 202, 163). — III, 450.  
 7) 4-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 177–178° (B. 16, 699; Soc. 91, 1636 C. 1907 [2] 2059). — III, 451.  
 8) Methyläther d. 1-Oxy-9,10-Anthrachinon. Sm. 140–145° (169,5°) (D.R.P. 75054; D.R.P. 156762 C. 1905 [1] 313; A. 349, 223 C. 1906 [2] 1338). — \*III, 300.  
 9) Methyläther d. 2-Oxy-9,10-Anthrachinon. Sm. 195–196° (186,5°) (B. 37, 65 C. 1904 [1] 520; D.R.P. 156762 C. 1905 [1] 313; D.R.P. 166748 C. 1906 [1] 517; A. 349, 222 C. 1906 [2] 1338; Soc. 91, 2070 C. 1908 [1] 646).  
 10) Methyläther d. 2-Oxy-9,10-Phenanthrenchinon. Sm. 170–171° (A. 322, 163 C. 1902 [2] 283). — \*III, 317.  
 11) Methyläther d. 3-Oxy-9,10-Phenanthrenchinon. Sm. 204° (204 bis 205°; 208°) (B. 33, 175; 34, 4007; A. 321, 289 C. 1902 [2] 58; A. 322, 145 C. 1902 [2] 282). — \*III, 317.  
 12) 1-[4-Oxybenzoyl]benzofuran. Sm. 179–180° (B. 41, 1338 C. 1908 [1] 1981).  
 13) 2-Keto-1-[2-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 208° u. Zers. (B. 33, 3179). — \*III, 531.  
 14) 2-Keto-1-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 242° u. Zers. (B. 33, 3178). — \*III, 531.  
 15) 7-Oxy-4-Phenyl-1,2-Benzpyron (β-Phenylumbelliferon). Sm. 244° (B. 16, 2126; 34, 356; B. 36, 193 C. 1903 [1] 469). — II, 1888; \*II, 1095.  
 16) 3-Oxy-2-Phenyl-1,4-Benzpyron (Flavonol). Sm. 169–170° (B. 37, 2820 C. 1904 [2] 712).  
 17) 6-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 231–232° (B. 32, 331; 33, 2514). — \*III, 560.  
 18) 7-Oxy-2-Phenyl-1,4-Benzpyron (Oxyflavon). Sm. 240° (242–243°) (B. 31, 703; J. pr. [2] 67, 342 C. 1903 [1] 1361). — \*III, 561.  
 19) 2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 208° (B. 34, 1692). — \*III, 561.  
 20) 2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 268° (B. 33, 2516). — \*III, 561.  
 21) 2-Acetyl-3,4-β-Naphtopyron (α-Acetyl-β-Naphtocumarin). Sm. 187° (B. 36, 1973 C. 1903 [2] 377; B. 37, 4484 C. 1905 [1] 248).  
 22) Phenyläther d. Oxymethylenphthalyl. Sm. 142–143,5° (B. 14, 922). — III, 274.  
 23) Fluoren-9-Ketocarbonsäure + H<sub>2</sub>O. Sm. 160–162° (150–151°) (B. 33, 773; B. 35, 760 C. 1902 [1] 813).  
 24) 9-Oxyanthracen-2-Carbonsäure. Sm. 305–310° (A. 309, 121). — \*II, 1015.  
 25) 9-Oxyanthracen-9-Carbonsäure. Sm. 252–253° (A. 242, 255). — II, 1720.  
 26) 2-Oxyphenanthren-3-Carbonsäure. Sm. 277° (B. 35, 4425 C. 1903 [1] 334).

- C<sub>15</sub>H<sub>10</sub>O<sub>8</sub>** 27) **2-Oxyphenanthren-9-Carbonsäure**. Sm. 278° (*B.* 39, 3123 *C.* 1906 [2] 1332).
- 28) **3-Oxyphenanthrencarbonsäure**. Sm. 303° u. Zers. (*B.* 35, 4425 *C.* 1903 [1] 334).
- 29) **Anhydrid d. Diphenylmethan-2,4'-Dicarbonsäure**. Sm. 195° (*A.* 309, 118). — \*II, 1096.
- 30) **Methylester d. 9-Ketofluoren-1-Carbonsäure**. Sm. 86–89° (*M.* 25, 1176 *C.* 1905 [1] 364).
- 31) **Methylester d. 9-Ketofluoren-2-Carbonsäure**. Sm. 181° (186–187°) (*M.* 25, 451 *C.* 1904 [2] 450; *M.* 29, 769 *C.* 1908 [2] 1602).
- 32) **Methylester d. 9-Ketofluoren-4-Carbonsäure**. Sm. 132° (*A.* 247, 278). — II, 1719.
- 33) **Phenylester d. Benzfuran-1-Carbonsäure**. Sm. 101° (*B.* 34, 773). — \*II, 980.
- 34) **Acetat d. 1-Oxy-9-Ketofluoren**. Sm. 130–131° (*B.* 31, 3034; *J. pr.* [2] 59, 451). — \*III, 178.
- 35) **Acetat d. 3-Oxy-9-Ketofluoren**. Sm. 115° (*G.* 35 [2] 547 *C.* 1906 [1] 850).
- C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>** C 70,9 — H 3,9 — O 25,2 — M. G. 254.
- 1) **2,4-Dioxy-1-Methyl-9,10-Anthrachinon** (Rubiadin). Sm. bei 290° (*Soc.* 63, 973; 65, 183). — III, 449.
- 2) **4,6[oder 4,7]-Dioxy-1-Methyl-9,10-Anthrachinon**. Sm. 244–246° (*Soc.* 91, 1639 *C.* 1907 [2] 2060).
- 3) **5,7-Dioxy-1-Methyl-9,10-Anthrachinon** (*Soc.* 69, 69). — III, 449.
- 4) **6,8-Dioxy-1-Methyl-9,10-Anthrachinon**. Sm. 246° (*Soc.* 69, 70). — III, 449.
- 5) **1,3-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 290° (*Soc.* 65, 183; *Soc.* 91, 1912 *C.* 1908 [1] 397). — III, 451.
- 6) **1,4-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 160° (*B.* 10, 2012; 19, 2330). — III, 451.
- 7) **3,4-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 250–252° (*B.* 8, 676; 19, 2330; *A.* 202, 166). — III, 451.
- 8) **4,6[oder 4,7]-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 284° (*Soc.* 91, 1638 *C.* 1907 [2] 2059).
- 9) **5,6[oder 7,8]-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 216° (*B.* 33, 1632). — \*III, 324.
- 10) **5,7-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 267° (*Soc.* 63, 1142; 65, 863). — III, 451.
- 11) **5,8-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 175° (*B.* 33, 1634). — \*III, 324.
- 12) **6,7-Dioxy-2-Methyl-9,10-Anthrachinon**. Sm. 320–340° u. Zers. (*B.* 33, 1633). — \*III, 324.
- 13) **6,8-Dioxy-2-Methyl-9,10-Anthrachinon** (*Soc.* 69, 69). — III, 451.
- 14) **isom. Dioxymethyl-9,10-Anthrachinon** (Chrysophansäure). Sm. 178° (162°; 190–191°; 196°). + BaH<sub>2</sub>O<sub>2</sub> + H<sub>2</sub>O (*A.* 48, 13; 50, 214; 107, 324; 183, 171; 212, 36; 284, 178, 191; 291, 306; 309, 35; 310, 366; *B.* 2, 373; 15, 902; 28 [2] 1058; 30, 365; *J.* 1857, 516; 1864, 555; *C. r.* 129, 60; *C.* 1900 [1] 1292; 1900 [2] 872; 1905 [2] 144; *Soc.* 81, 1583 *C.* 1903 [1] 34, 167; *Ar.* 240, 602 *C.* 1903 [1] 176; *Soc.* 83, 1327 *C.* 1904 [1] 100; *C.* 1904 [1] 1077; *Ar.* 243, 434 *C.* 1905 [2] 897; *Ar.* 243, 450 *C.* 1905 [2] 1365; *Ar.* 245, 142 *C.* 1907 [1] 1803). — III, 452; \*III, 323.
- 15) **Sennachrysophansäure**. Sm. 171–172° (*Ar.* 238, 435). — \*III, 324.
- 16) **1-Methyläther d. 1,2-Dioxy-9,10-Anthrachinon**. Sm. 178–179° (*K.* *Soc.* 63, 1174; *Soc.* 91, 1913 *C.* 1908 [1] 397; *Soc.* 91, 2068 *C.* 1908 [1] 646). — III, 422.
- 17) **2-Methyläther d. 1,2-Dioxy-9,10-Anthrachinon** (M. d. Alizarin). Sm. 232–233° (224–226°; 230–231°). Na (*J.* 1873, 446; *A.* 318, 369; *B.* 20, 86; 28, 1428; *Soc.* 65, 185; 75, 446; D. R. P. 158278 *C.* 1905 [1] 704; *B.* 39, 115 *C.* 1906 [1] 676). — III, 421; \*III, 302.
- 18) **3-Methyläther d. 1,3-Dioxy-9,10-Anthrachinon**. Sm. 193° (*A.* 349, 230 *C.* 1906 [2] 1339).
- 19) **2-Methyläther d. 2,3-Dioxy-9,10-Anthrachinon**. Sm. 232° (236°) (*Soc.* 67, 822; *A.* 342, 101 *C.* 1905 [2] 1594). — III, 429.



- $C_{16}H_{10}O_4$  20) 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran (Benzalanhydroglykogallol). Sm. 221°. Ba (B. 29, 879, 1751, 1886, 2430). — III, 248; \*III, 532.
- 21) 5-Oxy-2-Keto-1-[3-Oxybenzyliden]-1,2-Dihydrobenzofuran. Zers. bei 240° (B. 30, 300). — \*III, 531.
- 22) 2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 224° (B. 30, 1082). — \*III, 531.
- 23) 5,7-Dioxy-4-Phenyl-1,2-Benzpyron (5,7-Dioxy-4-Phenylcumarin). Sm. 233—234° (234—235°) (B. 26, 2907; 27, 421; M. 18, 744). — III, 248; \*II, 1144.
- 24) 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 233—234° (B. 37, 777 C. 1904 [1] 1156).
- 25) 3,7-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 257—259° (B. 37, 1182 C. 1904 [1] 1275).
- 26) 5,7-Dioxy-2-Phenyl-1,4-Benzpyron (Chrysin; Dioxyflavon). Sm. 275° (257°) (B. 6, 884; 7, 888; 26, 2901; 27, 21; 32, 2449; Soc. 73, 669; B. 37, 3168 C. 1904 [2] 1059). — III, 627; \*III, 463.
- 27) 7,8-Dioxy-2-Phenyl-1,4-Benzpyron +  $H_2O$  ( $\beta$ -Phenylidaphnetin). Sm. 190—192° (wasserfrei) (239°) (B. 26, 2906; B. 36, 4242 C. 1904 [1] 382). — III, 248; \*III, 561.
- 28) 3-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 237° (B. 38, 935 C. 1905 [1] 1026).
- 29) 3-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 276° (B. 38, 1509 C. 1905 [1] 1405).
- 30) 6-Oxy-2-[2-Oxyphenyl]-1,4-Benzpyron (Dioxyflavon). Sm. 304—305° (B. 33, 2512). — \*III, 562.
- 31) 6-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 300° (B. 33, 1480). — \*III, 562.
- 32) 6-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Zers. bei 320° (B. 32, 1929). — \*III, 562.
- 33) 7-Oxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 320° (B. 32, 1033). — \*III, 562.
- 34) 7-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron +  $H_2O$  (3,3'-Dioxyflavon). Sm. 277—278° (B. 33, 325). — \*III, 563.
- 35) 7-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 315° (B. 32, 325). — \*III, 563.
- 36) 2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 243° (B. 38, 2180 C. 1905 [2] 258).
- 37) 5,7-Dioxy-4-Phenyl-2,1-Benzpyron. Sm. 293° (D.R.P. 73700). — \*II, 1144.
- 38) 4-Oxy-3-Acetyl-1,2- $\alpha$ -Naphtopyron. Sm. 180°. K, Cu, Ag (A. 368, 46 C. 1909 [2] 1443).
- 39) 4-Oxy-3-Acetyl-1,2- $\beta\beta$ -Naphtopyron. Sm. 239°. Na, Cu, Ag (A. 367, 261 C. 1909 [2] 1240).
- 40) Morindadiol. Sm. 244° (Ar. 246, 155 C. 1908 [1] 1844).
- 41) Rumicin. Sm. 186—188° (A. 291, 306; B. 29, 325). — III, 453.
- 42) Soranjidiol. Sm. 276° (Ar. 246, 158 C. 1908 [1] 1844).
- 43) 3-Oxy-9-Ketofluoren-3-Methyläther-2-Carbonsäure. Sm. 261° u. Zers. (G. 35 [2] 545 C. 1906 [1] 850).
- 44)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan-2-Carbonsäure (Benzil-o-Carbonsäure).  $\alpha$ -Modif. Sm. 115—125°;  $\beta$ -Modif. Sm. 141,5° (C. 1898 [2] 481; B. 21, 2003; 23, 1344; 29, 2745). — II, 1895; \*II, 1098.
- 45) Fluoren-1,4-Dicarbonsäure. Ag<sub>2</sub> (A. 229, 161). — II, 1895.
- 46)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxydiphenylmethan-2,4-Dicarbonsäure (L. d. Benzhydrylisophtalsäure). Sm. 206—207°. Ca, Ba + 2 $\frac{1}{2}$ H<sub>2</sub>O, Ag (B. 9, 1764). — II, 1973.
- 47)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxydiphenylmethan-2,5-Dicarbonsäure (L. d. Benzhydrylterephthalsäure). Ca + 3H<sub>2</sub>O (J. 1878, 403). — II, 1973.
- 48)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxydiphenylmethan-2,2'-Dicarbonsäure (L. d. Benzhydroldicarbonsäure). Sm. 203°. Ba + 2 $\frac{1}{2}$ H<sub>2</sub>O, Cu + 3H<sub>2</sub>O, Ag (A. 242, 238). — II, 1973.
- 49) Methylester d. 3-Oxy-9-Ketofluoren-2-Carbonsäure. Sm. 250° (G. 35 [2] 544 C. 1906 [1] 850).
- 50) Acetat d. 1-Oxyxanthon. Sm. 167—168° (Am. 5, 91). — III, 201.

- $C_{15}H_{10}O_4$  51) Acetat d. 2-Oxyxanthon. Sm. 161° (B. 25, 1649). — III, 201.  
 52) Acetat d. 3-Oxyxanthon. Sm. 157—158° (B. 25, 1651). — III, 201.  
 53) Acetat d. 4-Oxyxanthon. Sm. 137—138° (B. 25, 1650). — III, 201.  
 54) Verbindung (aus d. Lakton d. Benzhydroidicarbonsäure). Sm. 171—172° (A. 242, 239). — II, 1973.
- $C_{15}H_{10}O_5$  55) Verbindung (aus Krapp) (B. 3, 294). — III, 425.  
 C 66,7 — H 3,7 — O 29,6 — M. G. 270.  
 1) 4,5,6[oder 4,7,8]-Trioxy-1-Methyl-9,10-Anthrachinon (A. 240, 304). — III, 450.  
 2) 5,6,7-Trioxy-1-Methyl-9,10-Anthrachinon? Sm. 235—240° (A. 240, 284). — III, 449.  
 3) 6,7,8-Trioxy-1-Methyl-9,10-Anthrachinon (Methylantragallol). Sm. 297—298° (A. 240, 283). — III, 449.  
 4) 5,6,7-Trioxy-2-Methyl-9,10-Anthrachinon. Sm. 275° (A. 240, 284). — III, 453.  
 5) 6,7,8-Trioxy-2-Methyl-9,10-Anthrachinon? Sm. 312—313° (A. 240, 284). — III, 449.  
 6) 9-Trioxy-2-Methyl-9,10-Anthrachinon + H<sub>2</sub>O (Emodin). Sm. 253 bis 254° (254—255°) (A. 183, 161; 309, 42; 310, 368; B. 2, 373; 9, 1775; 21 [2] 842; 28 [2] 1058; J. 1857, 517; Ar. 237, 699; 238, 473; Soc. 57, 46; 67, 1086; Ar. 240, 607 C. 1903 [1] 176; Soc. 83, 1329 C. 1904 [1] 100; C. 1904 [1] 1077; Ar. 245, 143 C. 1907 [1] 1803; C. 1909 [1] 773). — III, 454; \*III, 324.  
 7) isom. Emodin (aus Feroxaloe). Sm. 216° (Ar. 241, 348 C. 1903 [2] 726).  
 8) isom. Emodin. Sm. 183—184° (C. 1905 [1] 389).  
 9) Isoemodin (Rhabarberon). Sm. 212° (A. 309, 42; 310, 367; C. 1904 [1] 1077; 1905 [2] 144, 145; Ar. 245, 144 C. 1907 [1] 1803). — \*III, 325.  
 10) isom. Isoemodin (Senna-Isoemodin) (C. 1900 [2] 872). — \*III, 326.  
 11) Nataloemodin. Sm. 220,5° (214,5°) (C. r. 134, 1113 C. 1902 [2] 62; C. r. 140, 1465 C. 1905 [2] 137). — \*III, 326.  
 12) Trioxymethylantrachinon (aus Aloë). Sm. 216° (223—224°) (C. 1898 [2] 118, 211; 1899 [1] 887; 1900 [1] 423; 1900 [2] 871; C. r. 134, 1111 C. 1902 [2] 62; C. 1906 [2] 882; Ar. 247, 413 C. 1909 [2] 2083). — \*III, 325.  
 13) Trioxymethylantrachinon (aus Frangularinde). Sm. 250° (255°) (C. 1900 [1] 423; 1900 [2] 874; Ar. 246, 321 C. 1908 [2] 808).  
 14) Methyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 275° (Soc. 63, 1171). — III, 432.  
 15) isom. Monomethyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 233° (235—236°) (M. 23, 1017 C. 1903 [1] 291; Soc. 93, 437 C. 1908 [1] 1697).  
 16) 2-Methyläther d. 1,2,4-Trioxy-9,10-Anthrachinon. Sm. 228—230° (240°) (Soc. 75, 446; A. 349, 228 C. 1906 [2] 1338). — \*III, 311.  
 17) 2-Methyläther d. 1,2,5-Trioxy-9,10-Anthrachinon. Sm. 202° (A. 349, 217 C. 1906 [2] 1337).  
 18) 2-Methyläther d. 1,2,8-Trioxy-9,10-Anthrachinon. Sm. 220° (A. 349, 221 C. 1906 [2] 1338).  
 19) Monomethyläther eines Trioxyanthrachinon. Sm. 172° (Ar. 246, 153 C. 1908 [1] 1844).  
 20) 5,6-Dioxy-2-Keto-1-[2-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 214—216° (B. 29, 2433). — \*III, 533.  
 21) 5,6-Dioxy-2-Keto-1-[3-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 221—223° (B. 29, 2433). — \*III, 533.  
 22) 5,6-Dioxy-2-Keto-1-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 220° (B. 29, 2434). — \*III, 533.  
 23) 5-Oxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran (B. 30, 299). — \*III, 532.  
 24) 3-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 303° u. Zers. (B. 38, 2181 C. 1905 [2] 258).  
 25) 6-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 328° u. Zers. (B. 33, 330). — \*III, 566.  
 26) 7-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 326—327° (B. 34, 3725 C. 1902 [1] 46). — \*III, 566.

- $C_{15}H_{10}O_6$
- 27) 7-Oxy-2-[3,5-Dioxyphenyl]-1,4-Benzpyron. Sm. 329° (B. 35, 2886 C. 1902 [2] 1054).
  - 28) 3,6-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 242—243° (B. 37, 2348 C. 1904 [2] 230).
  - 29) 3,6-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 300° u. Zers. (B. 37, 960 C. 1904 [1] 1160).
  - 30) 3,6-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 340° u. Zers. (B. 37, 784 C. 1904 [1] 1159).
  - 31) 3,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 271° (B. 37, 4158 C. 1904 [2] 1658).
  - 32) 3,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 298—300° (B. 37, 4160 C. 1904 [2] 1658).
  - 33) 3,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 310° (B. 37, 4162 C. 1904 [2] 1659).
  - 34) 5,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 281° (B. 34, 1455). — \*III, 563.
  - 35) 5,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 299° (B. 34, 111). — \*III, 564.
  - 36) 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Apigenin). Sm. 347° (B. 9, 1124; 33, 1992, 2334; A. 318, 127, 135; Soc. 71, 807; 73, 666; 77, 1315; C. 1900 [2] 1212; Soc. 81, 1175 C. 1902 [2] 704; B. 38, 932 C. 1905 [1] 1026). — III, 571; \*III, 431, 564.
  - 37) 3,5,7-Trioxo-2-Phenyl-1,4-Benzpyron +  $H_2O$  (Galangin). Sm. 214 bis 215° (219—221°). +  $\frac{1}{2}C_6H_6$ , Pb (B. 14, 2807; G. 30 [2] 338; Soc. 83, 135 C. 1903 [1] 89, 466; B. 37, 2805 C. 1904 [2] 712). — III, 632; \*III, 464.
  - 38) 3,7,8-Trioxo-2-Phenyl-1,4-Benzpyron. Sm. 249° (B. 37, 2808 C. 1904 [2] 713).
  - 39) Chrysaron. Sm. 164° (J. pr. [2] 77, 347 C. 1908 [1] 1714).
  - 40) Erythrolaccin +  $H_2O$  (C. 1899 [1] 688). — \*III, 423.
  - 41) Morindon. Sm. 271—272° (J. 1847/48, 749; 1864, 543; Z. 1866, 343; Soc. 51, 56; 53, 171; 65, 856; Ar. 245, 546 C. 1908 [1] 371). — III, 455.
  - 42) Protophyscion. Sm. 198° (A. 284, 185; J. pr. [2] 57, 437). — III, 641; \*III, 470.
  - 43) Pseudobaptigenin. Sm. 303—304°. Na +  $2H_2O$  (C. 1897 [2] 1077; Ar. 244, 403 C. 1907 [1] 47). — \*III, 433.
  - 44) Diphenylketon-2,3-Dicarbonsäure +  $H_2O$  (A. 290, 230; B. 30, 1115). — \*II, 1148.
  - 45) Diphenylketon-2,4-Dicarbonsäure? Sm. 278—280°. Ca +  $H_2O$ , Ba +  $H_2O$ ,  $Ag_2$  (B. 9, 1762). — II, 1975.
  - 46) Diphenylketon-2,5-Dicarbonsäure. Sm. oberhalb 290°. Ca +  $H_2O$ , Ba +  $5H_2O$  (J. 1878, 402; J. pr. [2] 35, 479). — II, 1975.
  - 47) Diphenylketon-2,6-Dicarbonsäure. Sm. 260° (A. 290, 232). — \*II, 1148.
  - 48) Diphenylketon-3,4-Dicarbonsäure. Sm. 127—128° (A. 247, 188). — II, 1976.
  - 49) Diphenylketon-2,2'-Dicarbonsäure (Benzophenon-oo-Dicarbonsäure). Sm. 150—155° u. Zers. Ba +  $5H_2O$  (A. 242, 243). — II, 1975.
  - 50) Diphenylketon-2,4'-Dicarbonsäure +  $H_2O$ . Sm. 239° (wasserfrei) (235°).  $(NH_4)_2$  +  $2H_2O$ , Ba +  $2\frac{1}{2}H_2O$ ,  $Ag_2$  (B. 28, 1134; A. 309, 98, 116). — II, 1976; \*II, 1147.
  - 51) Diphenylketon-4,4'-Dicarbonsäure. Subl. Sm. oberhalb 360°.  $Ag_2$  (B. 7, 1154; 10, 2175; A. 312, 96). — II, 1976; \*II, 1148.
  - 52) isom. Diphenylketon-4,4'-Dicarbonsäure? Subl.  $Ag_2$  +  $Ag_2O$  (B. 20, 522; A. 312, 97). — II, 1976; \*II, 1148.
  - 53) Diphenylketon-?-Dicarbonsäure. Sm. 155° (J. 1886, 1651). — II, 1976.
  - 54) Dibenzoylcarbonat (C. 1901 [1] 347).
  - 55) Carbonat d. 2-Oxybenzol-1-Carbonsäurealdehyd. Sm. 88—89° (B. 38, 3631 C. 1905 [2] 1729).
  - 56) Verbindung +  $H_2O$  (aus d. Verb.  $C_{15}H_{12}O_6$ ). Sm. 220—230° (M. 26, 830 C. 1905 [2] 620).  
C 62,9 — H 3,5 — O 33,5 — M. G. 286.
- $C_{15}H_{10}O_6$
- 1) Tetraoxymethylantrachinon (B. 33, 3213). — \*III, 326.



$C_{15}H_{10}O_6$ 

- 2) 7-Oxy-2-[3,4,5-Trioxyphenyl]-1,4-Benzpyron +  $H_2O$ . Sm. 340° u. Zers. (wasserfrei) (B. 35, 2546 C. 1902 [2] 596).
- 3) 3,6-Dioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron +  $H_2O$ . Sm. 285° (wasserfrei) (B. 39, 90 C. 1906 [1] 678).
- 4) 3,6-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 335° u. Zers. (B. 37, 781 C. 1904 [1] 1156).
- 5) 3,7-Dioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron (Resomorin) (B. 39, 94 C. 1906 [1] 679).
- 6) 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron +  $4H_2O$  (Fisetin). Sm. 330° u. Zers. Na, K,  $H_2SO_4$  (J. 1864, 564; B. 19, 1739; Soc. 67, 648; 69, 1304; 71, 1195; 73, 1016; 75, 441; M. 12, 182; B. 37, 790 C. 1904 [1] 1157; B. 38, 3587 C. 1905 [2] 1731). — III, 583; \*III, 439.
- 7) 5,7-Dioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron (Lotoflavin) (C. 1901 [2] 594). — \*III, 566.
- 8) 5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Luteolin; Digitoflavon). Sm. 328—329,5° (324°). Na, K,  $PbO$ ,  $HCl$  +  $H_2O$ ,  $HBr$  +  $H_2O$ ,  $HJ$ ,  $H_2SO_4$  (J. 1861, 707; Z. 1866, 602; H. 40, 27; A. 100, 180; M. 17, 422; Soc. 69, 206, 799, 1442; 75, 831; 77, 1323; B. 29, 1013; 32, 1184; 33, 2341, 3417; 34, 1453, 3577; B. 37, 2627 C. 1904 [2] 538). — III, 584; \*III, 439.
- 9) 3,5,7-Trioxo-2-[4-Oxyphenyl]-1,4-Benzpyron +  $H_2O$  (Kämpferol; Robigenin). Sm. 271° (276—277°). K,  $HJ$ ,  $H_2SO_4$  (C. 1901 [1] 1168; 1901 [2] 121; 1904 [1] 1610; B. 34, 3723 Anm. C. 1902 [1] 46; Soc. 81, 475, 586 C. 1902 [1] 1356; B. 37, 2098 C. 1904 [2] 121; C. 1904 [2] 453; Soc. 91, 436 C. 1907 [1] 1439; Ar. 242, 223 C. 1904 [1] 1651; Ar. 247, 447 C. 1909 [2] 2082). — \*III, 464.
- 10) 3,7,8-Trioxo-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 298° u. Zers. (B. 37, 2630 C. 1904 [2] 539).
- 11) 3,7,8-Trioxo-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 260° (B. 37, 2633 C. 1904 [2] 540).
- 12) 3,7,8-Trioxo-2-[4-Oxyphenyl]-1,4-Benzpyron +  $H_2O$ . Sm. 319° u. Zers. (wasserfrei) (B. 38, 2751 C. 1905 [2] 1257).
- 13) Aloëxantin. Sm. 260—265° (J. 1877, 909). — III, 618.
- 14) Datisctin. Sm. 268—269° (C. 1906 [2] 1265).
- 15) Digitoflavon (C. 1899 [1] 495).
- 16) Paradatisctin. Sr, Ba (A. 112, 102; J. 1864, 563). — III, 606.
- 17) Rhamnolutin. Sm. oberhalb 260° (C. 1900 [2] 873). — \*III, 492.
- 18) Rhein. Sm. 314° (316°).  $K_2$  (B. 28 [2] 1058; A. 309, 43; 310, 367; C. 1905 [2] 145; Ar. 241, 604 C. 1904 [1] 168; J. pr. [2] 77, 387 C. 1908 [1] 2046). — \*III, 475.
- 19) Scutellarein. Sm. oberhalb 300°.  $H_2SO_4$  (M. 22, 693). — \*III, 475.
- 20) Ventilagin (Soc. 65, 940). — III, 455.
- 21) 4-Keto-1-[4-Oxybenzyliden]-1,4-Dihydrobenzol-1<sup>3</sup>,3-Dicarbonsäure (Formaurindicarbonsäure) (B. 31, 148). — \*II, 1183.
- 22) Biphenyl-2,3,6-Tricarbonsäure.  $Ag_3$  (A. 229, 159). — II, 2024.
- 23) Phtaloylsalicylsäure. Sm. 244°. Ba,  $Ag_2$  (A. 303, 280). — \*II, 1183.
- 24) Anhydro- $\alpha\alpha$ -Di[2,3,4(p)Trioxo-phenyl]propionsäure (B. 16, 2406). — II, 2078.
- 25) 2-Methoxyphenylester d. 3,4-Carbonyldioxybenzol-1-Carbonsäure. Sm. 159° (Soc. 93, 570 C. 1908 [1] 1689).
- 26) Glykosid (aus Delphinium consolida). K,  $HJ$ ,  $H_2SO_4$  (C. 1900 [2] 1279).
- 27) Pigment d. Geraniums.  $K_2$  (B. 36, 3959 C. 1904 [1] 39). C 59,6 — H 3,3 — O 37,1 — M. G. 302.
- 1) 3,5,7-Trioxo-2-[2,4-Dioxyphenyl]-1,4-Benzpyron (Morin; Morinsäure). Sm. 285°.  $NH_4$ , Na, K, Ca, Mg, Ba, Zn,  $PbO$ ,  $HCl$ ,  $HBr$ ,  $HJ$ ,  $H_2SO_4$  (J. 1850, 529; 1864, 557; Fr. 14, 119; A. 127, 351; M. 5, 167; 17, 427; 18, 708; Soc. 67, 937; 60, 792, 1441; 73, 670; 75, 436; C. 1898 [1] 851; B. 37, 2350 C. 1904 [2] 230; B. 39, 627 C. 1906 [1] 1028). — III, 683; \*III, 496.
- 2) 3,5,7-Trioxo-2-[3,4-Dioxyphenyl]-1,4-Benzpyron +  $2H_2O$  (Quercetin; Sophoretin). Sm. 313—314° u. Zers. Na, K, Zn,  $HCl$ ,  $HBr$ ,  $H_2SO_4$ . Lit. bedeutend. — III, 603; \*III, 447.
- 3) 3,7,8-Trioxo-2-[3,4-Dioxyphenyl]-1,4-Benzpyron +  $H_2O$ . Sm. 308° u. Zers. (B. 38, 938 C. 1905 [1] 1027).

 $C_{15}H_{10}O_7$

- $C_{15}H_{10}O_7$  4) Quercetinsäure +  $3H_2O$  (*J.* 1859, 525; 1864, 560). — II, 2055.  
5) Farbstoff (aus d. Blättern von *Aretostaphylos uva ursi*) (*C.* 1898 [1] 1306).  
 $C_{15}H_{10}O_8$  C 56,6 — H 3,1 — O 40,2 — M. G. 318.  
1) 3,5,7-Trioxo-2-[3,4,5-Trioxyphenyl]-1,4-Benzpyron +  $H_2O$  (Myricetin; Oxyquercetin). Sm. 355—360° (wasserfrei). K, HBr,  $H_2SO_4$  (*Soc.* 69, 1287, 1301; 71, 1136; 73, 375, 1016; 75, 441; 77, 425, 427; *Soc.* 81, 203 *C.* 1902 [1] 528, 815). — III, 606; \*III, 448.  
2) Quercetagetin (siehe auch  $C_{27}H_{22}O_{13}$ ). Sm. 318—320°. K,  $H_2SO_4$  (*C.* 1902 [1] 1060). — \*III, 474.  
 $C_{15}H_{10}O_9$  C 53,9 — H 3,0 — O 43,1 — M. G. 334.  
1) 3,4,5,6-Tetraoxoxanthen-1,8-Dicarbonsäure (*B.* 31, 270). — \*II, 1228.  
2) Anhydrid d. Methylendigallussäure (*B.* 31, 260). — \*II, 1229.  
3) Anhydrid d. isom. Methylendigallussäure (*B.* 31, 263). — \*II, 1229.  
 $C_{15}H_{10}N_2$  C 82,6 — H 4,6 — N 12,8 — M. G. 218.  
1) Chindolin. Sm. 247—248°. HCl, HJ,  $HNO_3$ , Pikrat (*B.* 39, 3940 *C.* 1907 [1] 119).  
2) Chinindolin. Sm. 342—343°. HCl, (2HCl,  $PtCl_4$ ) (*B.* 30, 3020). — IV, 1037.  
3) Nitril d. Diphenylmethan-4,4'-Dicarbonsäure. Sm. 165° (169°); Sd. 407—410°<sub>757</sub> (*B.* 27, 2325; *C. r.* 141, 198 *C.* 1905 [2] 770). — II, 1888.  
 $C_{15}H_{10}N_4$  C 73,2 — H 4,1 — N 22,7 — M. G. 246.  
1) Amidophenantriazin. Sm. 262° (*A.* 302, 310). — IV, 1295.  
2) Nitril d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 242° (*C.* 1908 [2] 594; *J. pr.* [2] 78, 533 *C.* 1908 [2] 594).  
3) Nitril d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 156—156,5° (*B.* 22, 797). — IV, 1164.  
 $C_{15}H_{10}Cl_4$  1)  $\gamma\gamma$ -Dichlor- $\alpha\gamma$ -Di[4-Chlorphenyl]propen. Sm: 54—55° (*B.* 42, 1813 *C.* 1909 [2] 131).  
 $C_{15}H_{10}Br_2$  1) 9,10-Dibrom-2-Methylantracen. Sm. 142—143° (*B.* 7, 1196; 11, 1606; *A.* 212, 35; *J. pr.* [2] 79, 559 *C.* 1909 [2] 446). — II, 273.  
2) ?-Dibrom-Isomethylantracen. Sm. 148° (*B.* 15, 1822). — II, 273.  
 $C_{15}H_{11}N$  C 87,8 — H 5,4 — N 6,8 — M. G. 205.  
1)  $\alpha$ -Benzylenindol. Sm. 245° (235°) u. Zers. (*B.* 22, 2022; *Soc.* 65, 494). — IV, 432.  
2) 2-Phenylchinolin. Sm. 86° (84°); Sd. 363°. (2HCl,  $PtCl_4$  +  $2H_2O$ ), (HCl,  $AuCl_3$ ), (2HCl,  $AuCl_3$ ),  $H_2Cr_2O_7$ , Pikrat (*J.* 1883, 1326; D.R.P. 33497; *M.* 13, 59; *Bl.* [3] 13, 26; *B.* 16, 1665, 1835; 19, 1466; 28, 986; *J. pr.* [2] 56, 298; *A.* 242, 294; 245, 379; 281, 4; *C.* 1904 [2] 454; *M.* 25, 621 *C.* 1904 [2] 1154; *C.* 1907 [1] 1543; 1907 [2] 73). — IV, 425; \*IV, 256.  
3) 3-Phenylchinolin. Sm. 52°. HCl, (2HCl,  $PtCl_4$ ), Pikrat (*B.* 16, 1836; *B.* 41, 482 *C.* 1908 [1] 1065). — IV, 428.  
4) 4-Phenylchinolin. Sm. 61—62°. HCl, (2HCl,  $PtCl_4$ ),  $H_2SO_4$ , Pikrat (*B.* 19, 2430; 28, 1039, 1050). — IV, 428.  
5) 6-Phenylchinolin. Sm. 110—111°; Sd. 260°<sub>77</sub>. (2HCl,  $PtCl_4$ ),  $H_2Cr_2O_7$ , Ditartrat (*B.* 15, 562; *A.* 230, 8). — IV, 429.  
6) 8-Phenylchinolin. Sd. 283°<sub>187</sub>. (2HCl,  $PtCl_4$ ),  $H_2Cr_2O_7$ , Pikrat (*A.* 230, 38; *B.* 26, 2004; *B.* 39, 862 *C.* 1906 [1] 1147). — IV, 430.  
7) 1-Phenylisochinolin. Sm. 87—88° (93—94°). (2HCl,  $PtCl_4$ ) (*M.* 18, 5; *B.* 42, 1976 *C.* 1909 [2] 454). — IV, 430.  
8) 3-Phenylisochinolin. Sm. 103—105°. (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ) (*B.* 13, 1685; 18, 3477; 25, 3573; D.R.P. 69138; *B.* 42, 430 *C.* 1909 [1] 846). — IV, 431; \*IV, 258.  
9) Truxonanilid. Sm. 270° u. Zers. (*B.* 22, 785). — III, 170.  
10) Nitril d.  $\alpha\beta$ -Diphenylakrylsäure. Sm. 86°; Sd. 359—360° (*A.* 250, 124, 129, 155, 157; D.R.P. 94132; *Am.* 22, 255; *J. pr.* [2] 53, 454; *B.* 36, 2862 *C.* 1903 [2] 1129). — II, 1474; \*II, 872.  
11) Nitril d.  $\beta\beta$ -Diphenylakrylsäure. Sm. 49° (*Am.* 33, 344 *C.* 1905 [1] 1391).  
12) Verbindung (aus 3-Keto-1-Benzyl-1,3-Dihydroisindol). Pikrat (*B.* 20, 2865; 29, 2743). — II, 1710; \*II, 1004.  
 $C_{15}H_{11}N_3$  C 77,3 — H 4,7 — N 18,0 — M. G. 233.  
1) 2,4-Diphenyl-1,3,5-Triazin. Sm. 75°; Sd. 205° (*B.* 23, 2383). — IV, 1190.

$C_{15}H_{11}N_3$ 

- 2) Methenyl- $\beta$ -o-Amidophenyl-m[oder p]-Tolimidazol. Sm. 237° (B. 32, 1483). — \*IV, 850.
- 3) Methenyl- $\beta$ -o-Amido-p-Tolylbenzimidazol. Sm. 215°. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (B. 32, 1479). — \*IV, 850.
- 4) Äthenyl- $\beta$ -o-Amidophenylbenzimidazol. Sm. 177—178°. 2HCl (B. 32, 1476). — \*IV, 850.
- 5) 2-Phenylazochinolin. Sm. 93° (B. 24, 2819). — IV, 1485.
- 6) Methylindophenazin. Sm. 248° (B. 29, 201). — IV, 1190.
- 7) Pr-Methylindophenazin. Sm. 148° (B. 34, 4011 C. 1902 [1] 205). — \*IV, 848.
- 8) N-Methyl-ps-Indophenazin. Sm. 175—176°. HCl (B. 34, 4013 C. 1902 [1] 205). — \*IV, 848.
- 9) Toluindophenazin (Toluindazin). Sm. oberhalb 290° (A. 237, 344). — IV, 1190.

 $C_{15}H_{11}N_6$ 

C 69,0 — H 4,2 — N 26,8 — M. G. 261.

- 1) Nitril d. 2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin-5-Carbonsäure (Glyoxylylcyanidosotetrazon). Sm. 137° u. Zers. (B. 21, 3000). — IV, 756.

 $C_{15}H_{11}Br_3$ 

- 1)  $\alpha\alpha\beta$ -Tribrom- $\gamma\gamma$ -Diphenylpropen. Sm. 117—130° u. Zers. (Am. 19, 649). — \*II, 119.

 $C_{15}H_{12}O$ 

C 86,5 — H 5,7 — O 7,7 — M. G. 208.

- 1)  $\gamma$ -Oxy- $\alpha\gamma$ -Diphenylpropin. Sd. 220—222°<sub>20</sub> (247—248°) (C. r. 134, 356 C. 1902 [1] 629; Bl. [3] 33, 156 C. 1905 [1] 589; C. 1906 [1] 1407; Bl. [3] 35, 1174 C. 1907 [1] 562).
  - 2) Methanthrol. Sm. 122° (A. 170, 267). — II, 1686.
  - 3) 9-Oxy-2-Methylantracen. Sm. 80—84° (100°?) (A. 314, 241; B. 38, 1792 C. 1905 [1] 1647). — \*II, 542.
  - 4) Methyläther d. 1-Oxyanthracen. Sm. 70° (B. 38, 2864 C. 1905 [2] 1094).
  - 5) Methyläther d. 2-Oxyanthracen. Sm. 175—178° (B. 15, 1427). — II, 901.
  - 6) Methyläther d. 1-Oxyphenanthren. Sm. 105—106°. Pikrat (B. 33, 170). — \*II, 541.
  - 7) Methyläther d. 2-Oxyphenanthren. Sm. 99° (100—101°). Pikrat (B. 34, 4003 C. 1902 [1] 202; A. 321, 306 C. 1902 [2] 59).
  - 8) Methyläther d. 3-Oxyphenanthren. Sm. 63° (61°; 59°). Pikrat (B. 33, 175; B. 34, 4006 C. 1902 [1] 203; A. 321, 283 C. 1902 [2] 57). — \*II, 541.
  - 9) Methyläther d. 4-Oxyphenanthren. Sm. 68°. Pikrat (B. 33, 1827). — \*II, 542.
  - 10) Methyläther d. 9-Oxyphenanthren. Sm. 96—97° (Soc. 71, 1122). — \*III, 319.
  - 11)  $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen (Benzylidenacetophenon). Sm. 57—58°; Sd. 345—348°. HCl, Pikrat (B. 14, 2463; 20, 657; 29, 1492; 32, 1923; A. 281, 49; Am. Soc. 23, 790; B. 37, 1652 C. 1904 [1] 1603; A. 341, 34 C. 1905 [2] 821; B. 41, 3648 C. 1908 [2] 1866). — III, 246; \*III, 178.
  - 12) 3-Keto-1-Phenyl-2,3-Dihydroinden. Sm. 78° (Am. 31, 650 C. 1904 [2] 446).
  - 13) 1-Keto-2-Phenyl-2,3-Dihydroinden. Sm. 78°; Sd. bei 344° u. Zers. (B. 25, 2096, 2124). — III, 248.
- C 80,3 — H 5,3 — O 14,3 — M. G. 224.
- 1) 3,4-Methylenäther d.  $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]äthen. Sm. 95 bis 96° (B. 37, 1432 C. 1904 [1] 1351).
  - 2)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen (Dibenzoylmethan?). Sm. 81° (77,5 bis 78°); Sd. oberhalb 200° (219—221°<sub>18</sub>). Cu (B. 16, 2134; 20, 655; 30, 958; Soc. 47, 250; A. 291, 52, 84; 308, 227, 240; A. ch. [6] 22, 349; J. 1883, 984; C. 1897 [2] 261; 1899 [2] 1118; 1902 [1] 37; B. 36, 3677 C. 1903 [2] 1442). — III, 297; \*III, 224.
  - 3)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[2-Oxyphenyl]propen. Sm. 153—155° u. Zers. (150°) (B. 29, 233, 378; 33, 1327). — III, 247; \*III, 180.
  - 4)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[3-Oxyphenyl]propen. Sm. 159—160° (B. 29, 235). — III, 247.
  - 5)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 182—183,5° (B. 29, 236). — III, 247.
  - 6)  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 88—89° (B. 31, 715). — \*III, 180.

 $C_{15}H_{12}O_2$



- $C_{15}H_{12}O_2$
- 7)  $\gamma$ -Keto- $\gamma$ -[3-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 126° (B. 32, 1924). — \*III, 180.
  - 8)  $\gamma$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 172—173° (B. 32, 1924). — \*III, 180.
  - 9)  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan (Dibenzoylmethan). Sm. 77,5—78°; Sd. 219—221°<sub>18</sub> (C. 1897 [2] 261; B. 30, 559; A. 308, 225, 240; Ph. Ch. 23, 311; B. 38, 696 C. 1905 [1] 801). — \*III, 225.
  - 10)  $\epsilon$ -Keto- $\alpha$ -Furanyl- $\epsilon$ -Phenyl- $\alpha\gamma$ -Pentadiën (Furfurakroleïnacetophenon). Sm. 52—53° (B. 31, 283). — \*III, 522.
  - 11)  $\gamma$ -Keto- $\delta$ -[2-Furanyl]- $\alpha$ -Phenyl- $\alpha\delta$ -Pentadiën (Furalbenzalaceton). Sm. 55—56° (A. 223, 147). — III, 728.
  - 12) 2-Oxy-1-Keto-2-Phenyl-2,3-Dihydroinden? Sm. 129° (B. 25, 2098). — III, 248.
  - 13) Äthyläther d. 1-Oxy-9-Ketofluoren. Sm. 99—100° (B. 31, 3034; J. pr. [2] 59, 453). — \*III, 177.
  - 14) 3,10-Dioxy-1-Methylantracen. Sm. 224° (B. 31, 2795). — \*II, 695.
  - 15) 3-Methyläther d. 3,4-Dioxyphenanthren (Methylmorphol). Sm. 65° (B. 37, 3497 C. 1904 [2] 1320).
  - 16) 10-Oxy-9-Keto- $\beta$ -Methyl-9,10-Dihydroanthracen (Methyloxanthranol). Sm. 98° (102,5°) (B. 21, 1175; A. 323, 236 C. 1902 [2] 802). — III, 243.
  - 17) 10-Oxy-9-Keto- $\beta$ -Methyl-9,10-Dihydroanthracen. Sm. 187° (A. 212, 75; B. 14, 456). — III, 243.
  - 18) Methyläther d. 1-Oxy-9-Keto-9,10-Dihydroanthracen. Sm. 105° (A. 349, 225 C. 1906 [2] 1338).
  - 19) Cyklopentadiën- $\alpha$ -Naphtochinon. Sm. 115—116° (A. 348, 46 C. 1906 [2] 770).
  - 20) Methyläther d. 5-Oxy-2-Phenylbenzfuran. Sm. 41—42° (B. 42, 3149 C. 1909 [2] 1347).
  - 21) 1-Keto-2-Benzyl-1,2-Dihydrobenzfuran. Sm. 61° (B. 42, 833 C. 1909 [1] 1164).
  - 22) 4-Benzoyl-1,2-Dihydrobenzfuran. Sm. 44° (B. 40, 3665 C. 1907 [2] 1420).
  - 23) 2-Oxy-2-Phenyl-1,2-Benzpyran (A. 356, 306 C. 1907 [2] 1919).
  - 24) 4-Phenyl-3,4-Dihydro-1,2-Benzpyron (Phenylhydrocumarin). Sm. 82°; Sd. 237°<sub>80</sub> (B. 24, 2582). — II, 1700.
  - 25) 2-Phenyl-2,3-Dihydro-1,4-Benzpyron (Flavanon). Sm. 75—76° (B. 37, 2634 C. 1904 [2] 540).
  - 26) 2,4-Dimethylxanthon. Sm. 152° (B. 38, 2116 C. 1905 [2] 246).
  - 27) 2,7-Dimethylxanthon. Sm. 143° (B. 18, 1988; C. r. 136, 1568 C. 1903 [2] 384). — III, 232.
  - 28) 3,5-Dimethylxanthon. Sm. 167° (166°) (B. 25, 1745; B. 38, 2115 C. 1905 [2] 246). — III, 216.
  - 29) 3,6-Dimethylxanthon. Sm. 166° (B. 25, 1745; B. 42, 3593 C. 1909 [2] 1652). — III, 234.
  - 30) 4,5-Dimethylxanthon. Sm. 172°; Sd. 350—360° (B. 25, 3644; C. r. 136, 1007 C. 1903 [1] 1267; Bl. [3] 31, 267 C. 1904 [1] 1089). — III, 232.
  - 31) 2-Äthyl-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Äthyl- $\beta$ -Naphtocumarin). Sm. 110° (B. 36, 1970 C. 1903 [2] 377).
  - 32) Pyrokresoloxyd.  $\alpha$ -Modif. Erstarrt bei 168°;  $\beta$ -Modif. Erstarrt bei 95°;  $\gamma$ -Modif. Erstarrt bei 77° (M. 3, 733; B. 15, 2204; 16, 2144). — III, 646.
  - 33)  $\alpha\beta$ -Diphenylakrylsäure ( $\alpha$ -Phenylzimtsäure). Sm. 172° (169—170°). Ba + 4H<sub>2</sub>O, Pb, Ag (J. 1878, 820; Soc. 73, 89; B. 26, 659; G. 27 [2] 49; 31 [2] 77). — II, 1473; \*II, 872.
  - 34) Allo- $\alpha\beta$ -Diphenylakrylsäure. Sm. 136—137°. Ba + 3(5)H<sub>2</sub>O, Anilinsalz (G. 27 [2] 51; 31 [2] 77; Soc. 73, 92). — \*II, 872.
  - 35)  $\beta\beta$ -Diphenylakrylsäure. Sm. 142° (155°; 162°) (Am. 33, 34 C. 1905 [1] 523; Am. 33, 39 C. 1905 [1] 524; B. 40, 4539 C. 1908 [1] 131).
  - 36)  $\alpha\beta$ -Diphenyläthen-2-Carbonsäure. Sm. 158—160°. NH<sub>4</sub> + H<sub>2</sub>O, Ag (B. 27, 2506; 34, 2829). — II, 1475.
  - 37) 9,10-Dihydroanthracen-1-Carbonsäure. Sm. 203° (B. 16, 2612). — II, 1475.

- $C_{15}H_{12}O_2$
- 38) 9,10-Dihydroanthracen-2-Carbonsäure. Sm. 276° (A. 309, 122). — \*II, 874.
  - 39) 9,10-Dihydroanthracen-?-Carbonsäure. Sm. 209° (A. 242, 256). — II, 1475.
  - 40) Lakton d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan- $\alpha^2$ -Carbonsäure. Sm. 60—61° (B. 27, 2505). — II, 1699.
  - 41) Lakton d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure. Sm. 89—90° (B. 18, 2448; 34, 2832). — II, 1699.
  - 42) Lakton d. 6-Oxy-2[oder 4]-Methyldiphenylelessigsäure. Sm. 122° (B. 30, 130). — \*II, 997.
  - 43) Lakton d. 6-Oxy-3-Methyldiphenylelessigsäure. Sm. 106°; Sd. 213°<sub>18</sub> (B. 28, 990; 30, 129; B. 36, 4001 C. 1904 [1] 174). — II, 1700.
  - 44) Lakton d.  $\alpha$ -Oxy-4-Methyldiphenylmethan-2'-Carbonsäure (p-Tolylphtalid). Sm. 129° (A. 234, 235; 314, 251). — II, 1700; \*II, 997.
  - 45) Lakton d. Ditolylearbolaktensäure. Sm. 143° (B. 18, 1988). — II, 1700.
  - 46) Aldehyd d.  $\beta$ -Keto- $\alpha\beta$ -Diphenyläthan- $\alpha$ -Carbonsäure (A. d. Benzoylphenylelessigsäure). Sm. 110° (B. 22, 3278). — III, 96.
  - 47) Methylester d. Fluoren-2-Carbonsäure. Sm. 120° (M. 25, 449 C. 1904 [2] 449).
  - 48) Methylester d. Fluoren-4-Carbonsäure. Sm. 64° (A. 247, 283). — II, 1473.
  - 49) Phenylester d.  $\beta$ -Phenylakrylsäure. Sm. 72,5°; Sd. 205—207°<sub>15</sub> (B. 18, 1945; G. 30 [2] 357). — II, 1406; \*II, 850.
  - 50) Acetylderivat d. Cyclophenylenbenzylacetoxyd. Sm. 190° (M. 16, 281). — \*II, 694.
  - 51) Acetat d. 9-Oxyfluoren (A. d. Fluorenalkohol). Sm. 75° (69—70') (A. ch. [5] 7, 506; B. 39, 3899 C. 1907 [1] 167). — II, 1082.
  - 52) isom. Acetat d. 9-Oxyfluoren. Sm. 208—209° (B. 39, 3900 C. 1907 [1] 167).
  - 53) Benzoat d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sm. 41°; Sd. 229—230°<sub>50</sub> (Soc. 83, 152 C. 1903 [1] 72, 436; B. 36, 3675 C. 1903 [2] 1442).
  - 54) Benzoat d. 3-Oxy-1-Äthenylbenzol. Sm. 62,5—63,5° (B. 26 [2] 677). — II, 1148.
- $C_{15}H_{11}O_3$
- C 75,0 — H 5,0 — O 20,0 — M. G. 240.
- 1) 1,3,9[oder 1,3,10]-Trioxo-2-Methylantracen. Sm. 235° (Soc. 91, 1912 C. 1908 [1] 397).
  - 2)  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropen. Sm. 175° (C. 1908 [2] 1024).
  - 3)  $\alpha\beta$ -Diketo- $\beta$ -[4-Oxy-3-Methylphenyl]- $\alpha$ -Phenyläthan. Sm. 182—183° (M. 26, 1157 C. 1905 [2] 1182).
  - 4) 2-Keto-1,3-Di[2-Fural]-R-Pentamethylen (Pyroxanthin). Sm. 163° (A. 21, 143; B. 10, 938; 11, 456; 29, 1839; J. 1847/48, 669; 1880, 702; J. pr. [1] 7, 94; Am. 3, 322). — III, 736.
  - 5) Dimethyläther d. 3,4-Dioxy-9-Ketofluoren. Sm. 164° (B. 39, 4336 C. 1907 [1] 347).
  - 6) Ozononid d. 9-Äthylidenfluoren. Zers. bei 160° (Bl. [4] 1, 1237 C. 1908 [1] 850).
  - 7) 7-Oxy-2-Phenylbenzpyran-1-Hydroxyd. Chlorid, Pikrat (B. 40, 3817 C. 1907 [2] 1749).
  - 8) 4,7-Dioxy-2-Phenyl-1,4-Benzpyran. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 34, 3892 C. 1902 [1] 122). — \*III, 549.
  - 9) Phenyloxyhydrocumarin (aus Zimtsäure). Sm. 133° (B. 25, 958). — II, 1882.
  - 10) isom. Phenyloxyhydrocumarin (aus Allozimtsäure). Sm. 135° (B. 25, 958). — II, 1882.
  - 11) Phenyloxyhydrocumarin? (Phenylhydroumbelliferon). Sm. 137° (B. 24, 2585; 25, 958, 2130). — II, 1882.
  - 12) 1-Oxy-2,4-Dimethylxanthon. Sm. 160° (B. 26, 74). — III, 233.
  - 13) 1-Oxy-3,5-Dimethylxanthon. Sm. 145° (B. 27, 1990). — III, 233.
  - 14) 1-Oxy-3,6-Dimethylxanthon. Sm. 139° (B. 27, 1990). — III, 234.
  - 15) 1-Oxy-3,7-Dimethylxanthon. Sm. 169° (B. 27, 1990). — III, 233.
  - 16) 3-Oxy-1,8-Dimethylfluoron (Formaldehydoxytolufluoron) (B. 27, 2890; 31, 147 Ann.). — \*III, 570.

- $C_{15}H_{12}O_3$  17) 8-Oxy-5,7-Dimethylfluoron. Sm. 275°. HCl (*M.* 21, 66; *M.* 25, 319 *C.* 1904 [1] 1495). — \*III, 571.
- 18) 2,4,6-Trimethyl-1,3,5-Benzotrifuran. Sm. 115–120° (*B.* 19, 2936). — III, 737.
- 19) Anhydrooxylapachol. Sm. 110–111° (*Soc.* 67, 793; 69, 1377). — III, 402; \*III, 288.
- 20) Anhydrorhapontigenin. Sm. 203° (*J. pr.* [2] 77, 337 *C.* 1908 [1] 1714).
- 21) Chrysarobin (siehe auch  $C_{20}H_{26}O_7$ ). Sm. 174° (177°; 202°) (*A.* 309, 57; *C. r.* 129, 60; *Soc.* 81, 1578 *C.* 1903 [1] 33, 166). — \*III, 323.
- 22) Chrysophanhydroanthron. Sm. 196° (205–210°) (*A.* 284, 194; 291, 307; 309, 60; *B.* 21, 436; *Ar.* 240, 606 *C.* 1903 [1] 176; *B.* 38, 1795 *C.* 1905 [1] 1648). — III, 452; \*III, 323.
- 23) Isopropylfuran- $\alpha$ -Naphtochinon. Sm. 110° (*Soc.* 69, 1370). — \*III, 289.
- 24) Isopropylfuran- $\beta$ -Naphtochinon. Sm. 94–95° (*Soc.* 69, 1376). — \*III, 289.
- 25)  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 172° (142°). Ca + 2H<sub>2</sub>O, Ba + 3H<sub>2</sub>O, Ag (*B.* 28, 1998; *B.* 37, 4132 *Anm.* *C.* 1904 [2] 1736). — \*II, 1006.
- 26)  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]akrylsäure. Sm. 223° (*A.* 349, 110 *C.* 1906 [2] 1256).
- 27)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -Phenylakrylsäure. Sm. 155° (*B.* 42, 834 *C.* 1909 [1] 1164).
- 28)  $\alpha$ -Oxy- $\beta$ -Phenylakrylphenyläthersäure. Sm. 179–180° (181°). Na, Ba + 10H<sub>2</sub>O, Ag, Anilinsalz (*J.* 1880, 876; *G.* 10, 481; 30 [2] 373; *C.* 1897 [1] 1120; *B.* 35, 3555 *C.* 1902 [2] 1311; *B.* 38, 1956 *C.* 1905 [2] 132; *B.* 38, 1961 *C.* 1905 [2] 133). — II, 1637; \*II, 953.
- 29)  $\beta$ -Oxy- $\beta$ -Phenylakrylphenyläthersäure. Sm. 143°. Ag (*Soc.* 77, 986). — \*II, 961.
- 30)  $\alpha\alpha$ -Diphenyläthan- $\alpha\beta$ -Oxyd- $\beta$ -Carbonsäure. Sm. 116° (*C. r.* 148, 419 *C.* 1909 [1] 1094).
- 31)  $\alpha$ -Benzoyl- $\alpha$ -Phenylelessigsäure (*A.* 266, 20; *J. pr.* [2] 55, 317). — II, 1707.
- 32)  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan- $\alpha^2$ -Carbonsäure (o-Desoxylbenzoïn-carbonsäure). Sm. 74–75°. Ag (*B.* 11, 1019). — II, 1707.
- 33)  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure ( $\beta$ -o-Desoxybenzoïn-carbonsäure). Sm. 162–163° (169–170°). Ag (*B.* 18, 2445; 25, 2101; 31, 376). — II, 1711; \*II, 1004.
- 34) 4-Methyldiphenylketon-2'-Carbonsäure + 2H<sub>2</sub>O. Sm. 146° (wasserfrei) (138–139°). Na, Ba + 4H<sub>2</sub>O, Cd +  $\frac{1}{2}$ H<sub>2</sub>O, Zn, Ni, Pb, Cu + 4H<sub>2</sub>O (*A. ch.* [6] 14, 447; *Bl.* 35, 505; [3] 17, 969; *B.* 28, 1134; *A.* 299, 300; 311, 178; *B.* 41, 3632 *C.* 1908 [2] 1927). — II, 1712; \*II, 1005.
- 35) 4-Methyldiphenylketon-4'-Carbonsäure. Sm. 228° (222°). K, Ba, Ag (*B.* 7, 1184, 1195; 10, 2175; *A.* 312, 91). — II, 1712; \*II, 1006.
- 36)  $\delta$ -Furanyl- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure (Furfurakroleïnphenylelessigsäure). Sm. 212–213° (*B.* 31, 285). — \*III, 508.
- 37) Xanthen-9-Methylcarbonsäure (Xanthylelessigsäure). Sm. 155,5–156° (*C. r.* 143, 61 *C.* 1906 [2] 612).
- 38) Säure (aus  $\beta$ -Bromäthylbenzol). Sm. 184–186° (*B.* 15, 1985). — II, 1713.
- 39)  $\alpha$ ,6-Lakton d. 4,6-Dioxy-2-Methyldiphenylmethan- $\alpha$ -Carbonsäure? Sm. 155° (*B.* 31, 2829). — \*II, 1091.
- 40)  $\alpha$ ,2-Lakton d. 2,6-Dioxy-4-Methyldiphenylmethan- $\alpha$ -Carbonsäure. Sm. 172° (*B.* 31, 2829). — \*II, 1091.
- 41)  $\alpha$ ,2'-Lakton d.  $\alpha$ ,4-Dioxy-2-Methyldiphenylmethan-2'-Carbonsäure (m-Kresylphtalid). Sm. 169–170° (*B.* 27, 2637; 31, 2792). — II, 1882; \*II, 1091.
- 42)  $\alpha$ ,2'-Lakton d.  $\alpha$ -Oxy-4-Methoxydiphenylmethan-2'-Carbonsäure (4-Methoxyphenylphtalid). Sm. 116–117° (*Bl.* 46, 206; *B.* 31, 2791). — II, 1881; \*II, 1089.
- 43) Lakton d. 1-[ $\alpha$ -Oxy- $\gamma$ -Ketobutyl]naphtalin-8-Carbonsäure (Naphtaliddimethylketon). Sm. 76–78° (*M.* 22, 815).



- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>**
- 44) Methylester d. Diphenylketon-2-Carbonsäure. Sm. 52°; Sd. 350 bis 352° (*B.* 7, 987; *C.* 1900 [1] 260; *M.* 25, 475 *C.* 1904 [2] 336; *Bl.* [3] 35, 553 *C.* 1906 [2] 788; *M.* 28, 1234 *C.* 1908 [1] 738). — II, 1704; \*II, 999.
  - 45) isom. Methylester d. Diphenylketon-2-Carbonsäure. Sm. 80—81°; Sd. 345—348° (*M.* 25, 477 *C.* 1904 [2] 337).
  - 46) Methylester d. Diphenylketon-3-Carbonsäure. Sm. 62° (*A.* 220, 241). — II, 1705.
  - 47) Methylester d. Diphenylketon-4-Carbonsäure. Sm. 107° (*B.* 7, 988). — II, 1705.
  - 48) Methylester d. 9-Oxyfluoren-9-Carbonsäure. Sm. 158—160° (*B.* 39, 3897 *C.* 1907 [1] 167).
  - 49) Carbonat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 126° (*A.* 226, 81). — II, 1101.
  - 50) Carbonat d. Isohydrobenzoïn. Sm. 110° (*J. pr.* [2] 25, 262; *A.* 226, 80). — II, 1102.
  - 51) Acetat d. 4-Oxydiphenylketon. Sm. 81° (*B.* 10, 1970; *A.* 210, 251). — III, 194.
  - 52) Benzoat d. Oxymethylphenylketon. Sm. 117—117,5° (*B.* 10, 1488, 2010; *A.* 216, 308). — III, 133.
  - 53) Benzoat d. Methyl-4-Oxyphenylketon (*B.* d. Piceol). Sm. 134° (*Bl.* [3] 11, 949; *C. r.* 133, 741). — III, 601; \*III, 105.
  - 54) Verbindung (aus Aloe-Emodin). Sm. 182° (*J. pr.* [2] 77, 386 *C.* 1908 [1] 2046).
  - 55) Verbindung (aus Essigsäurephenylester). Sm. 48° (*Soc.* 37, 481). — II, 661.
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>**
- C 70,3 — H 4,7 — O 25,0 — M. G. 256.
- 1)  $\beta\beta$ -Dioxy- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan (Diphenylketonhydrat). Sm. 90° (89°) (*B.* 23, 3379; *B.* 37, 1531 *C.* 1904 [1] 1609). — III, 316.
  - 2) Emodinantranol. Sm. 280° (*C.* 1909 [1] 774).
  - 3) Anthranol (aus Rhabarberemodin). Sm. 236° (*J. pr.* [2] 77, 386 *C.* 1908 [1] 2046).
  - 4) Monomethyläther d. 1,2,5,9[oder 1,2,5,10]-Tetraoxy-9,10-Anthrachinon. Sm. 140° (*A.* 349, 218 *C.* 1906 [2] 1337).
  - 5) 4,5,7-Trioxy-2-Phenyl-1,4-Benzpyran. HCl (*B.* 34, 3896 *C.* 1902 [1] 122). — \*III, 552.
  - 6) 4,7,8-Trioxy-2-Phenyl-1,4-Benzpyran (*B.* 34, 3896 *C.* 1902 [1] 122). — \*III, 552.
  - 7) Dimethyläther d. 1,7-Dioxyxanthon (*D.* d. Euxanthon). Sm. 149,5° (130°) (*B.* 15, 1677; *A.* 318, 367; *A.* 350, 115 *C.* 1907 [1] 173). — III, 206; \*III, 157.
  - 8) Dimethyläther d. 3,4-Dioxyxanthon. Sm. 155° (*B.* 39, 4337 *C.* 1907 [1] 347).
  - 9) 1-Monäthyläther d. 1,7-Dioxyxanthon. Sm. 223—225°. (2HCl, SnCl<sub>4</sub>) (*M.* 12, 167; *B.* 41, 3896 *C.* 1909 [1] 28). — III, 206.
  - 10) 7-Monäthyläther d. 1,7-Dioxyxanthon. Sm. 144—145°. K (*M.* 12, 163; *B.* 41, 3895 *C.* 1909 [1] 28). — III, 206.
  - 11) Rhabarberhydranthron. Sm. 215—220° (*A.* 309, 43). — \*III, 325.
  - 12) Protophyscihydron. Sm. 210° (*A.* 284, 188; 286, 376; *J. pr.* [2] 57, 437). — III, 642; \*III, 470.
  - 13)  $\alpha$ -Oxy- $\beta$ -[2-Oxyphenyl]akryl- $\alpha$ -Phenyläthersäure. Sm. 191° (*B.* 35, 3557 *C.* 1902 [2] 1311).
  - 14)  $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan- $\alpha^3$ -Carbonsäure. Sm. 224°. Na, Ag (*M.* 28, 282 *C.* 1907 [1] 1749).
  - 15) 2-Oxy-3-Methyldiphenylketon-2'-Carbonsäure. Sm. 196—197° (*Soc.* 91, 1635 *C.* 1907 [2] 2059).
  - 16) 4-Oxy-3-Methyldiphenylketon-2'-Carbonsäure. Sm. 230° u. Zers. (*B.* 26, 2263). — II, 1888.
  - 17) 6-Oxy-3-Methyldiphenylketon-2'-Carbonsäure. Sm. 194—195° (*Soc.* 91, 1637 *C.* 1907 [2] 2059).
  - 18) 2-Oxy-4-Methyldiphenylketon-2'-Carbonsäure. Sm. 210—211° (*Soc.* 91, 1636 *C.* 1907 [2] 2059).

- $C_{15}H_{13}O_4$  19) 4'-Oxydiphenylketon-4'-Methyläther-2-Carbonsäure. Sm. 142—143°.  $NH_4$ , Na, K, Ca +  $2H_2O$ , Ba +  $4H_2O$ , Cu, Ag (B. 19, 2103; Bl. 46, 204; B. 36, 2965 C. 1903 [2] 1007; M. 30, 485 C. 1909 [2] 1338). — II, 1887.
- 20) 2-Oxyacetylbenzolphenyläther-1-Carbonsäure. Sm. 110—110,5°. Ag (B. 14, 923). — II, 1779.
- 21) Diphenylmethan-2,4-Dicarbonsäure? (1-Benzylbenzol-2,4-Dicarbonsäure). Sm. 242—243°. Ca +  $H_2O$ , Ba (B. 9, 1765). — II, 1888.
- 22) Diphenylmethan-2,5-Dicarbonsäure (1-Benzylbenzol-2,5-Dicarbonsäure). Ca +  $3H_2O$ , Ba (J. 1878, 403). — II, 1888.
- 23) Diphenylmethan-2,2'-Dicarbonsäure. Sm. 254,5°. Ba +  $6H_2O$  (A. 242, 253). — II, 1887.
- 24) Diphenylmethan-2,4'-Dicarbonsäure +  $H_2O$ . Sm. 220°.  $(NH_4)_2$  +  $H_2O$ , Ba +  $3H_2O$ , Ag<sub>2</sub> (A. 309, 115). — \*II, 1095.
- 25) Diphenylmethan-3,3'-Dicarbonsäure. Sm. 220—225° (254°) (B. 27, 2324, 3315). — II, 1888.
- 26) Diphenylmethan-4,4'-Dicarbonsäure. Sm. 290° (323°) (B. 27, 2325; C. r. 141, 198 C. 1905 [2] 770). — II, 1888.
- 27)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy-2'-Oxy-4'-Methoxyldiphenylmethan-2-Carbonsäure. Sm. 175° (Soc. 93, 511 C. 1908 [1] 1700).
- 28)  $\alpha$ ,2'-Lakton d.  $\alpha$ -Oxy- $\alpha$ -[3,5-Dioxy-1-Methylphenyl]- $\alpha$ -Phenylmethan-2'-Carbonsäure (Orcylphthalid). Sm. 241—242° u. Zers. (B. 27, 2638; 31, 2792). — II, 1971; \*II, 1142.
- 29) Aldehyd d. 3-Benzoxyl-4-Methoxybenzol-1-Carbonsäure. Sm. 75° (B. 35, 4398 C. 1903 [1] 341).
- 30) Aldehyd d. 4-Benzoxyl-3-Methoxybenzol-1-Carbonsäure. Sm. 75° (78°) (B. 29, 144; B. 40, 3505 C. 1907 [2] 1739). — III, 104.
- 31) Aldehyd d. 4,4'-Dioxydiphenylmethan-3,3'-Dicarbonsäure. Sm. 140° (A. 356, 138 C. 1907 [2] 1698).
- 32) Methylenester d. Benzolcarbonsäure. Sm. 99°; Sd. 255° u. Zers. (C. r. 133, 371).
- 33) Methylester d. 4'-Oxydiphenylketon-2-Carbonsäure. Sm. 134° (M. 25, 1188 C. 1905 [1] 365).
- 34) isom. Methylester d. 4'-Oxydiphenylketon-2-Carbonsäure. Sm. 134 bis 135° (M. 25, 1188 C. 1905 [1] 365).
- 35) Methylester d. 4-Oxydiphenylketon-3-Carbonsäure. Sm. 92° (A. 290, 166). — \*II, 1094.
- 36) Methylester d. 2-Benzoxylbenzol-1-Carbonsäure (Benzosalin). Sm. 82° (84—85°; 92°); Sd. 350—385° (A. ch. [3] 45, 104; A. 89, 362; C. 1906 [1] 953; 1907 [1] 368; 1908 [1] 1042; B. 41, 3363 C. 1908 [2] 1687). — II, 1497.
- 37) Methylester d. 4-Benzoxylbenzol-1-Carbonsäure. Sm. 135° (J. pr. [2] 49, 502).
- 38) Monomethylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 110° (A. 247, 267). — II, 1884.
- 39) Äthylester d. 2-Oxy- $\beta$ - $\beta$ -Naphthofuran-1-Carbonsäure. Sm. 124° (C. 1900 [1] 495). — \*III, 536.
- 40) Phenylester d. 2-Acetoxybenzol-1-Carbonsäure (Vesipyrin). Sm. 97° (98°); Sd. 197—198°<sub>11</sub> (J. pr. [2] 43, 378; A. 273, 83; B. 32, 3572; C. 1906 [1] 953). — II, 1496; \*II, 890.
- 41) Phenylester d. 4-Acetoxybenzol-1-Carbonsäure. Sm. 84° (J. pr. [2] 28, 215). — II, 1527.
- 42) Monobenzylester d. Benzol-1,2-Dicarbonsäure. Sm. 104° (106—107°) (B. 30, 781; B. 35, 4093 C. 1903 [1] 76; J. pr. [2] 68, 242 Ann. C. 1903 [2] 1063). — \*II, 1048.
- 43) Diphenylester d. Malonsäure. Sm. 50° (B. 35, 3455 C. 1902 [2] 1304).
- 44) Carbonat d. 3,5-Dioxy-1-Methylbenzol. Sm. 195° u. Zers. (B. 13, 700). — II, 961.
- 45) Methylcarbonat d. 4-Oxydiphenylketon. Sm. 94—95° (B. 42, 1017 C. 1909 [1] 1238).
- 46) Benzoat d. 1,2,3-Trioxybenzoläthylenäther. Sm. 109° (B. 12, 1862). — II, 1152.
- 47) 2-Oxybenzoat d.  $\alpha$ -Keto- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 113—114° (C. 1896 [1] 764).

- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>** 48) Dibenzoat d. Dioxymethan (Methylendibenzoat) (*C. r.* 133, 1213 *C.* 1902 [1] 256; *C.* 1903 [2] 656).  
**C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>** C 66,2 — H 4,4 — O 29,4 — M. G. 272.
- 1)  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen + H<sub>2</sub>O (Buten). Sm. 213—215° (wasserfrei) (*C.* 1903 [1] 1415; 1904 [2] 451).
  - 2) 3,4,5-Trioxy-1,2-Dibenzoylbenzol (Gallacetobenzophenon) (*J. r.* 25, 115). — III, 297.
  - 3) 3,5-Dimethyläther d. 3,5-Dioxy-2-Keto-1-Fural-1,2-Dihydrobenzofuran. Sm. 177—179° (*B.* 30, 2155). — \*III, 530.
  - 4) 7-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron +  $\frac{1}{2}$ H<sub>2</sub>O (Butin). Sm. 224—226° (*C.* 1903 [1] 1415; 1904 [2] 453; *Soc.* 85, 1461 *C.* 1905 [1] 183).
  - 5) 3,7-Dimethyläther d. 1,3,7-Trioxyxanthon. Sm. 167° (*M.* 12, 318; 16, 922). — III, 210.
  - 6) Naringenin. Sm. 248° u. Zers. (*B.* 18, 1322; 20, 297). — III, 594.
  - 7) 3-Oxy-4-Benzoxylbenzol-3-Methyläther-1-Carbonsäure (Benzoylvanillinsäure). Sm. 178° (*B.* 15, 2068). — II, 1744.
  - 8) 6,4'[oder 6,5']-Dioxy-3-Methyldiphenylketon-2'-Carbonsäure. Sm. 234° (*Soc.* 91, 1639 *C.* 1907 [2] 2060).
  - 9) 2,4'[oder 2,5']-Dioxy-4-Methyldiphenylketon-2'-Carbonsäure. Sm. 228—229° (*Soc.* 91, 1638 *C.* 1907 [2] 2059).
  - 10) 2',4'-Dioxydiphenylketon-2'[oder 4']-Methyläther-2-Carbonsäure. Sm. 164—165°. Ba, Ag (*G.* 20, 128). — II, 1972.
  - 11) ?-Dioxydiphenylketonmethyldäther-2-Carbonsäure. Sm. 86—87° (*B.* 28, 1427). — II, 1972.
  - 12)  $\alpha$ -Oxydiphenylmethan- $\alpha$ ,2-Dicarbonsäure. Sm. 80—90° u. Zers. K<sub>2</sub> + 2H<sub>2</sub>O (*B.* 21, 2004). — II, 1973.
  - 13)  $\alpha$ -Oxydiphenylmethan-2,2'-Dicarbonsäure (Benzhydroldicarbonsäure). Ba + H<sub>2</sub>O (*A.* 242, 238). — II, 1973.
  - 14)  $\alpha$ -Oxydiphenylmethan-4,4'-Dicarbonsäure. Sm. 286° u. Zers. (*A.* 312, 98). — \*II, 1144.
  - 15) 2-Oxybenzobenzyläther-1,4-Dicarbonsäure. Sm. 230—240° (*B.* 22, 2188). — II, 1938.
  - 16)  $\gamma$ -Keto- $\alpha$ -Di[2-Furanyl]- $\alpha\delta$ -Pentadien- $\beta$ -Methylcarbonsäure ( $\beta\delta$ -Difurallävulinsäure). Sm. 148°. Ca + 3H<sub>2</sub>O, Cd + 3H<sub>2</sub>O, Pb + H<sub>2</sub>O, Ag (*B.* 26, 349; 28, 918). — III, 719.
  - 17) Aldehyd d. 4-[2-Oxybenzoxyl]-3-Methoxybenzol-1-Carbonsäure. Sm. 110° (*Ar.* 247, 76 *C.* 1909 [1] 747).
  - 18) Methylester d. 2-[2-Oxybenzoxyl]benzol-1-Carbonsäure. Sm. 86° (*D. R. P.* 43713). — \*II, 891.
  - 19) Dimethylester d. Benzocycloheptadienondicarbonsäure. Sm. 181° (*A.* 369, 296 *C.* 1909 [2] 2168).
  - 20) Monoäthylester d. Benzocycloheptadienondicarbonsäure. Sm. 185° (*A.* 369, 295 *C.* 1909 [2] 2168).
  - 21) 3,5-Dioxybenzoat d.  $\alpha$ -Oxymethylphenylketon. Sm. 206° (*D. R. P.* 73700). — \*III, 103.
  - 22) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>10</sub>O<sub>8</sub>). Sm. oberhalb 300° (*M.* 26, 829 *C.* 1905 [2] 620).  
**C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>** C 62,5 — H 4,2 — O 33,3 — M. G. 288.
  - 1) Datisctin. Sm. 237°. Pb (*A.* 98, 167; 277, 268; 278, 346). — III, 580.
  - 2) Eriodiktyol. Sm. 267° (*Soc.* 91, 895 *C.* 1907 [2] 247).
  - 3) Xanthomicrol. Sm. 225° (*C.* 1908 [1] 1292).
  - 4) 3,4-Di[Acetoxyl]naphtalin-2-Carbonsäure. Sm. 206,5—207° u. Zers. (185° u. Zers.) (*B.* 28, 3094; *J. pr.* [2] 62, 59). — \*II, 1081.
  - 5) 3,5-Di[Acetoxyl]naphtalin-2-Carbonsäure. Sm. 188° (*B.* 26, 673). — II, 1875.
  - 6) Di[?-Oxyphenyl]methan-2,4'-Dicarbonsäure. Sm. 236° (*A.* 309, 125). — \*II, 1182.
  - 7) Di[4-Oxyphenyl]methan-3,3'-Dicarbonsäure (Methylendisalicylsäure). Sm. 242° (243—244°) (*B.* 31, 148; *D. R. P.* 49970; *Ar.* 245, 44 *C.* 1907 [1] 1322). — \*II, 1182.
  - 8) Dioxymalondiphenyläthersäure. Sm. 173° u. Zers. (*B.* 24, 3005). — II, 667.



- C<sub>18</sub>H<sub>12</sub>O<sub>8</sub>** 9) 1,3,4-Trimethyl-p-β-Benzdifuran-2,5-Dicarbonsäure (A. 283, 265). — III, 736.
- 10) Dimethylester d. 3-Oxy-4-Keto-1,4-Dihydronaphtalin-1-Methylen-dicarbonsäure. Sm. 130° (C. 1907 [1] 1130).
- 11) Diacetat d. Chinon C<sub>11</sub>H<sub>8</sub>O<sub>4</sub>. Sm. 238–240° (B. 11, 534). — III, 616.
- 12) Diacetat d. Verb. C<sub>11</sub>H<sub>8</sub>O<sub>4</sub>. Sm. 109–110° (Soc. 63, 1088; B. 11, 606). — III, 661.
- 13) Farbstoff (aus Rosa gallica). Sm. noch nicht bei 220° (C. 1904 [2] 1405).
- 14) Verbindung (aus 1-Keto-2,3-Dihydroinden-2-Carbonsäure). Sm. 149 bis 150° u. Zers. (A. 369, 292 C. 1909 [2] 2168).
- C<sub>15</sub>H<sub>12</sub>O<sub>7</sub>** C 59,2 — H 3,9 — O 36,8 — M. G. 304.
- 1) Anhydro-αα-Di[2,3,4(β)-Trioxyphenyl]propionsäure (B. 16, 2410). — II, 2078.
- 2) Lakton d. αα-Di[2,3,4(β)-Trioxyphenyl]propionsäure (B. 16, 2406). — II, 2078.
- 3) Gerbsäure (Fr. 14, 127). — III, 682.
- 4) Monacetat d. 3,4,2',4',6'-Pentaoxydiphenylketon (M. d. Maklurin). Fl. (J. 1864, 560). — III, 207.
- 5) Verbindung (aus 1,3,4-Triketo-2-Methyl-1,2,3,4-Tetrahydroisochinolin). Sm. 199° (B. 37, 1945 C. 1904 [2] 124).
- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>** C 56,2 — H 3,7 — O 40,0 — M. G. 320.
- 1) Di[β-Dioxyphenyl]methan-ββ-Dicarbonsäure (aus 2,4-Dioxybenzol-1-Carbonsäure). Sm. 236° u. Zers. (B. 25, 944). — II, 2079.
- C<sub>15</sub>H<sub>12</sub>O<sub>9</sub>** C 53,6 — H 3,6 — O 42,8 — M. G. 336.
- 1) Quercinsäure (Quercin) + 2H<sub>2</sub>O (A. 238, 366). — III, 589.
- 2) Säure (aus Ketongerbsäure C<sub>18</sub>H<sub>14</sub>O<sub>9</sub>) (M. 10, 662). — II, 2091.
- 3) Verbindung (aus Sordidin). Sm. 180–181° (G. 24 [2] 332). — II, 2059.
- C<sub>15</sub>H<sub>12</sub>O<sub>10</sub>** C 51,1 — H 3,4 — O 45,5 — M. G. 352.
- 1) Methylendigallussäure (kryst. schwerlöslich). (Di-4,5,6-Trioxyphenylmethan-2,2'-Dicarbonsäure) (B. 25, 946; 31, 260). — II, 2099; \*II, 1228.
- 2) isom. Methylendigallussäure (kryst., leichtlöslich) (B. 31, 261). — \*II, 1228.
- 3) isom. Methylendigallussäure (amorph, schwerlöslich) (B. 5, 1096; 31, 263; A. 263, 285). — \*II, 1228.
- 4) isom. Methylendigallussäure (amorph, leichtlöslich) (B. 31, 262). — \*II, 1228.
- C<sub>15</sub>H<sub>12</sub>N<sub>2</sub>** C 81,8 — H 5,4 — N 12,7 — M. G. 220.
- 1) Phenylhydrazon d. Truxon = (C<sub>15</sub>H<sub>12</sub>N<sub>2</sub>)<sub>x</sub>. Sm. 270° (B. 22, 785). — IV, 775.
- 2) 1,3-Diphenylpyrazol. Sm. 84–85°; Sd. 341–342°<sub>270</sub> (B. 26, 114; B. 36, 3988 C. 1904 [1] 171). — IV, 905.
- 3) 1,5-Diphenylpyrazol. Sm. 55° (53–54°); Sd. 340°. (2HCl, PtCl<sub>4</sub>) (B. 20, 2187; 21, 1139; 22, 176; 25, 3145; 26, 109). — IV, 907.
- 4) 3,5-Diphenylpyrazol. Sm. bei 200°; Sd. 347°<sub>175</sub>. HCl (B. 26, 115; A. 308, 253; B. 34, 3984 C. 1902 [1] 193; C. r. 136, 1264 C. 1903 [2] 122). — IV, 1028; \*IV, 688.
- 5) 2,4-Diphenylimidazol. Sm. 193°. HCl, Ag (B. 34, 639). — IV, 689.
- 6) 2,5-Diphenylimidazol. Sm. 162°. HCl (B. 29, 2103). — IV, 1028.
- 7) 4,5-Diphenylimidazol. Sm. 227° (230°). HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Oxalat, Pikrat (Soc. 57, 558; B. 35, 4139 C. 1903 [1] 295; B. 38, 1536 C. 1905 [1] 1560; B. 40, 2633 C. 1907 [2] 339). — IV, 1028; \*IV, 688.
- 8) 2-[1-Naphtyl]amidopyridin. Sm. 115° (B. 35, 3675 C. 1902 [2] 1473). — \*IV, 552.
- 9) 2-[2-Naphtyl]amidopyridin. Sm. 133° (B. 35, 3675 C. 1902 [2] 1473). — \*IV, 552.
- 10) 3-Phenylimido-2-Methylpseudoindol. Sm. 183° (C. 1908 [2] 605).
- 11) 2-Amido-3-Phenylchinolin. Sm. 155–156°; Sd. oberhalb 360°. Pikrat (B. 31, 1293; 32, 3402). — IV, 1025; \*IV, 687.
- 12) 6-Amido-4-Phenylchinolin. Sm. 205°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), Pikrat (B. 28, 1044; D.R.P. 79385). — IV, 1026; \*IV, 687.
- 13) β-Amido-4-Phenylchinolin. Sm. 150° (B. 20, 627). — IV, 1025.
- 14) β-Amido-4-Phenylchinolin. Sm. 198° (B. 20, 628). — IV, 1025.

- $C_{15}H_{12}N_2$
- 15) 4-Amido-3-Phenylisochinolin. Sm. oberhalb 100°. HJ (*B.* 19, 834). — IV, 1026.
  - 16) 2-Phenylamidochinolin. Sm. 98°; Sd. oberhalb 360° (*B.* 18, 1532; 23, 277). — IV, 908.
  - 17) 4-Phenylamidochinolin. Sm. 198°. HCl, (*B.* 26, 2229). — IV, 909.
  - 18) 2-[3-Amidophenyl]chinolin. Sm. 120°. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (*B.* 18, 1904). — IV, 1024.
  - 19) 2-[4-Amidophenyl]chinolin. Sm. 138° (136,5°). 2HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 14, 1940; *M.* 7, 351; 8, 123). — IV, 1024.
  - 20) 6-[4-Amidophenyl]chinolin. Sm. 182°. HCl + 2H<sub>2</sub>O (*M.* 9, 139). — IV, 1025.
  - 21) 2-Methyl-4-[4-Pyridyl]chinolin. Sm. 101–102° (*M.* 22, 621). — \*IV, 689.
  - 22) 4-[4-Methylphenyl]-1,2-Benzdiazin. Sm. 58–59° (*B.* 42, 3131 *C.* 1909 [2] 1355).
  - 23) 3-Methyl-4-Phenyl-1,2-Benzdiazin. Sm. 135–136°. (2HCl, PtCl<sub>4</sub>) (*B.* 42, 3131 *C.* 1909 [2] 1355).
  - 24) 2-Benzyl-1,3-Benzdiazin. Sm. 59–60°; Sd. 350–355° (*B.* 28, 289). — IV, 1026.
  - 25) 4-Methyl-2-Phenyl-1,3-Benzdiazin. Sm. 90°. Pikrat (*B.* 26, 1391). — IV, 1026.
  - 26) 6-Methyl-2-Phenyl-1,3-Benzdiazin. Sm. 133°; Sd. oberhalb 360° (*B.* 28, 738). — IV, 1026.
  - 27) 2-Methyl-4-Phenyl-1,3-Benzdiazin. Sm. 47–48°; Sd. 349–353°. HCl, (HCl, HgCl<sub>2</sub> + H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 25, 3082). — IV, 1026.
  - 28) 6-Methyl-2-Phenyl-1,4-Benzdiazin. Sm. 135° (*A.* 237, 370; *B.* 20, 2905). — IV, 1027.
  - 29) 7-Methyl-2-Phenyl-1,4-Benzdiazin. Sm. 79°. + HgCl<sub>2</sub> (*B.* 23, 170). — IV, 1027.
  - 30) 1-Benzyl-2,3-Benzdiazin. Sm. 81–82°. (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (*B.* 38, 3919 *C.* 1906 [1] 246).
  - 31) o-Benzylentolimidazol. Sm. 192–193°. (2HCl, PtCl<sub>4</sub>) (*A.* 347, 130 *C.* 1906 [2] 777).
  - 32) Pseudocyanmethylyl d. Phenanthridin. Sm. 120° (*Soc.* 89, 861 *C.* 1906 [2] 347).
  - 33) Nitril d. 2-Amido- $\alpha$ - $\beta$ -Diphenyläthen-4-Carbonsäure. Sm. 123° (*B.* 41, 2294 *C.* 1908 [2] 599).
  - 34) Nitril d.  $\beta$ -Phenylamido- $\alpha$ -Phenylakrylsäure. Sm. 155–156° (*J. pr.* [2] 55, 339; *B.* 35, 2506 *C.* 1902 [2] 438). — \*II, 849.
  - 35) Nitril d.  $\beta$ -Phenylamido- $\beta$ -Phenylakrylsäure. Sm. 125–136° (*Bl.* [3] 35, 1183 *C.* 1907 [1] 562).
  - 36) Nitril d.  $\beta$ -Imido- $\alpha$ - $\beta$ -Diphenylpropionsäure. Sm. 146° (*J. pr.* [2] 52, 115; [2] 55, 320; *Soc.* 91, 592 *C.* 1907 [2] 69). — \*II, 1003.
  - 37) Nitril d.  $\alpha$ -Benzylidenamido- $\alpha$ -Phenylelessigsäure (Benzoylazotid; Hydrocyanbenzid). Sm. 202° u. Zers. (*Berz. J.* 18, 353; *J.* 1850, 488; *J. pr.* [2] 53, 344; *A.* 28, 267; 81, 127; 136, 174; *B.* 14, 1142; *Soc.* 71, 529; 75, 208). — III, 36; \*III, 28.
  - 38) Nitril d.  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Phenylelessigsäure. Sm. 85° (*B.* 34, 500; 35, 3333). — \*II, 941.
  - 39) Nitril d.  $\alpha$ -[3-Methylphenyl]imido- $\alpha$ -Phenylelessigsäure. Sm. 43° (*B.* 35, 3332 *C.* 1902 [2] 1192).
  - 40) Nitril d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Phenylelessigsäure. Sm. 96° (*B.* 34, 500; *B.* 35, 3332 *C.* 1902 [2] 1192). — \*II, 942.
  - 41) Nitril d. 10-Methyl-5,10-Dihydroakridin-5-Carbonsäure. Sm. 143°. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 42, 2004 *C.* 1909 [2] 225). *C* 72,6 — *H* 4,8 — *N* 22,6 — *M. G.* 248.
- $C_{15}H_{12}N_4$
- 1) 4-Phenylazo-1-Phenylpyrazol. Sm. 123–124° (126°) (*B.* 21, 2993; 22, 1479; 23, 3385; 24, 3259; 27, 222; *A.* 252, 343, 345; *B.* 36, 3669 *C.* 1903 [2] 1313). — IV, 1487; \*IV, 1077.
  - 2) 3-Benzylidenamido-1-Phenyl-1,2,4-Triazol. Sm. 155° (*G.* 29 [1] 23). — \*IV, 898.
  - 3) 3-Amido-5,6-Diphenyl-1,2,4-Triazin. Sm. 175° (*A.* 302, 309). — IV, 1294.

- C<sub>15</sub>H<sub>13</sub>N<sub>4</sub>** 4) **6-Amido-2,4-Diphenyl-1,3,5-Triazin**. Sm. 172° (B. 26, 2227). — IV, 1293.
- 5) **Azimid d. 5[oder 6]-Methyl-2-[2-Amido-4-Methylphenyl]benzimidazol**. Sm. 197° (B. 31, 318). — IV, 1294.
- 6) **Di[6-Benzimidazolyl]methan**. Sm. 212°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), 2HNO<sub>3</sub> (B. 33, 259). — \*IV, 960.
- 7) **6-Phenylidiazooacchinolin**. Sm. 142°. HCl (A. 310, 87). — \*IV, 1140.
- 8) **Nitril d. Phenylhydrazonbenzylidenamidoessigsäure**. Sm. 129 bis 129,5° (B. 22, 796). — IV, 751.  
C 65,2 — H 4,3 — N 30,4 — M. G. 276.
- C<sub>15</sub>H<sub>12</sub>N<sub>6</sub>** 1) **Tetrolecyanamid (polym. 1-Cyanpyrrol)**. Sm. 210° (B. 16, 65). — IV, 67.
- 2) **Nitril d. 2,2'-Diamidodiphenylmethan-4,4'-Dicarbonsäure**. Sm. 236° (C. r. 146, 1325 C. 1908 [2] 416).
- C<sub>15</sub>H<sub>12</sub>Cl<sub>2</sub>** 1) **γγ-Dichlor-αγ-Diphenylpropen**. Sm. 37,5—38° (B. 42, 3975 C. 1909 [2] 1733).
- C<sub>15</sub>H<sub>12</sub>Br<sub>2</sub>** 1) **9-Brom-9-[α-Bromäthyl]fluoren**. Sm. 93,5° (94°) (B. 38, 4108 C. 1906 [1] 366; Bl. [4] 1, 1236 C. 1908 [1] 850).
- 2) **9,10-Dibrom-3-Methyl-9,10-Dihydrophenanthren**. Sm. 86—87° (B. 39, 3113 C. 1906 [2] 1329).
- C<sub>15</sub>H<sub>12</sub>S<sub>2</sub>** 1) **Dithiänylphenylmethan**. Sm. 74—75° (B. 29, 2205; 30, 2033, 2043). — III, 769; \*III, 596.
- C<sub>15</sub>H<sub>18</sub>O<sub>2</sub>** 1) **Verbindung = (C<sub>15</sub>H<sub>18</sub>O<sub>2</sub>)<sub>x</sub> (aus d. Anhydrid d. αβ-Diphenyl-αβ-Dioxyäthan)**. Sm. 144—145° (A. 198, 174). — II, 1101.  
C 87,0 — H 6,3 — N 6,6 — M. G. 207.
- C<sub>15</sub>H<sub>18</sub>N** 1) **γ-Phenylimido-α-Phenylpropen (Zimtanilid)**. Sm. 109°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 16, 1665; 17, 2117; G. 36 [2] 98 C. 1906 [2] 1054). — III, 61.
- 2) **α-Phenyl-δ-[4-Pyridyl]-αγ-Butadiën**. Sm. 137—138°. (HCl, AuCl<sub>3</sub>) (B. 42, 1451 C. 1909 [1] 1935).
- 3) **1-Benzylindol**. Sm. 44,5°. Pikrat (A. 227, 363). — IV, 219.
- 4) **1-Methyl-2-Phenylindol**. Sm. 100—101° (B. 21, 2197, 2596; A. 236, 155; 253, 39; D. R. P. 128660 C. 1902 [1] 610). — IV, 413; \*IV, 251.
- 5) **3-Methyl-2-Phenylindol**. Sm. 91—92°; Sd. 280—290°<sub>120</sub> (Bl. [3] 17, 74). — IV, 417.
- 6) **5-Methyl-2-Phenylindol**. Sm. 213°. Pikrat (B. 25, 2874; D. R. P. 127245 C. 1902 [1] 154). — IV, 417; \*IV, 252.
- 7) **7-Methyl-2-Phenylindol**. Sm. 118—119°; Sd. 250°<sub>10</sub>. Pikrat (B. 25, 2870). — IV, 417.
- 8) **1-Methyl-3-Phenylindol**. Sm. 64—65°. Pikrat (A. 253, 38). — IV, 414.
- 9) **2-Methyl-3-Phenylindol**. Sm. 59—60°. Pikrat (A. 248, 111). — IV, 417.
- 10) **1-Phenyl-3,4-Dihydroisochinolin**. Sm. 73—74°; Sd. 320°<sub>718</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 26, 1907; B. 42, 1975 C. 1909 [2] 453; B. 42, 2076 C. 1909 [2] 1224). — IV, 417.
- 11) **2,4-Dimethyl-α-Naphtochinolin**. Sm. 43—44°. Pikrat (J. pr. [2] 35, 312). — IV, 418.
- 12) **β-Dimethyl-α-Naphtochinolin**. Sm. 44°; Sd. 360—362°. (2HCl, PtCl<sub>4</sub>) (B. 21 [2] 532). — IV, 419.
- 13) **3-Äthyl-β-Naphtochinolin**. Sm. 63° (B. 27, 2022). — \*IV, 418.
- 14) **1,3-Dimethyl-β-Naphtochinolin**. Sm. 126—127°; Sd. oberhalb 300°. (2HCl, PtCl<sub>4</sub> + 2½ H<sub>2</sub>O), HBr + 2H<sub>2</sub>O, HNO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (J. pr. [2] 35, 299). — IV, 419.
- 15) **β-Dimethyl-β-Naphtochinolin**. Sm. 66—67°; Sd. 380°. (2HCl, PtCl<sub>4</sub>) (B. 21 [2] 532). — IV, 419.
- 16) **5-Äthylakridin**. Sm. 116° (112—113°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> (G. 21 [2] 229; B. 32, 3609). — IV, 418; \*IV, 253.
- 17) **1,3-Dimethylakridin**. Sm. 71°. (2HCl, PtCl<sub>4</sub>), Pikrat (A. 279, 286). — IV, 418.
- 18) **3,5-Dimethylakridin**. Sm. 122—123°. HCl, HJ, Pikrat (A. 239, 63). — IV, 418.
- 19) **3,7-Dimethylakridin**. Sm. 176° (171°). (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Bichromat (B. 36, 590 C. 1903 [1] 724; B. 36, 1018 C. 1903 [1] 1268). — \*IV, 253.



- C<sub>15</sub>H<sub>13</sub>N** 20) 9-Äthylphenanthridin. Sm. 54—55°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Pikrat (*B.* 29, 1186). — IV, 417.
- 21) Nitril d.  $\alpha\beta$ -Diphenylpropionsäure. Sm. 58°; Sd. 335° (*A.* 250, 129). — II, 1467.
- 22) Nitril d.  $\beta\beta$ -Diphenylpropionsäure. Sm. 100° (*Am.* 33, 340 *C.* 1905 [1] 1390).
- 23) Nitril d. 4-Methyldiphenylelessigsäure. Sm. 61° (59°); Sd. 240°<sub>40</sub> (*A.* 250, 149; *B.* 25, 1616). — II, 1469.
- 24) Nitril d. 4-Methyldiphenylmethan-4'-Carbonsäure. Sd. 198—199°<sub>15</sub> (*B.* 33, 2628). — \*II, 871.
- 25) Nitril d. 2-Methyldiphenylmethan-2-Carbonsäure. Sd. 325—326°<sub>750</sub> (*B.* 25, 3025). — II, 1469.
- C<sub>15</sub>H<sub>13</sub>N<sub>3</sub>** C 76,6 — H 5,5 — N 17,9 — M. G. 235.
- 1)  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Phenyläthyliden]hydrazin. Sm. 67° (*G.* 37 [1] 626 *C.* 1907 [2] 803).
- 2) 3-[4-Amidophenyl]-5-Phenylpyrazol. Sm. 179°. HCl (*B.* 37, 1152 *C.* 1904 [1] 1267).
- 3) 3-Imido-2,5-Diphenyl-2,3-Dihydropyrazol. Sm. 129,5° (121°). HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (*J. pr.* [2] 47, 132; [2] 58, 137; *C. r.* 143, 1242 *C.* 1907 [1] 738; *Bl.* [4] 1, 1078 *C.* 1908 [1] 233). — IV, 771; \*IV, 814.
- 4) 5-Methyl-3-[2-Pyridyl]-1-Phenylpyrazol. Sd. 215°<sub>15</sub> (*M.* 17, 448). — IV, 1160.
- 5) 3-Methyl-1,4-Diphenyl-1,2,5-Triazol. Sm. 37,5—38°; Sd. 355° (*G.* 30 [2] 455, 461). — \*IV, 812.
- 6) 2-Phenyl-5-[4-Methylphenyl]-1,3,4-Triazol. Sm. 170° (*B.* 27, 3279; *A.* 298, 6). — IV, 1188.
- 7) 3-Phenylazo-2-Methylindol. Sm. 115—116° (*A.* 242, 384). — IV, 1485; \*IV, 1076.
- 8) 2-[ $\beta$ -2-Amidophenyläthenyl]benzimidazol. Sm. 213° (*C.* 1904 [1] 103).
- 9) 2-[ $\beta$ -3-Amidophenyläthenyl]benzimidazol +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 116° (153° wasserfrei). HCl, (2HCl, PtCl<sub>4</sub>) (*C.* 1904 [1] 103).
- 10) 2-[ $\beta$ -4-Amidophenyläthenyl]benzimidazol. Sm. 225°. 2HCl (*C.* 1904 [1] 103).
- 11) 2-Amido-3-[4-Amidophenyl]chinolin. 2HCl + H<sub>2</sub>O (*B.* 34, 3108). — \*IV, 846.
- 12) 2-Phenylhydrazidochinolin. Sm. 191° (*B.* 24, 2818). — IV, 800.
- 13) 4-Phenylhydrazon-1,4-Dihydrochinolin. Sm. 168° (*B.* 21, 1378). — IV, 269.
- 14) 4-[4-Methylphenyl]-1,2-Benzdiazin. Sm. 215°. HCl (*B.* 25, 2852). — IV, 1156.
- 15) Nitril d. Phenylimido-2-Methylphenylamidoessigsäure? (Hydrocyan-carbophenyl-o-Tolylimid). Sm. 90—91° (*C.* 1900 [2] 1251). — \*II, 259.
- 16) Nitril d. Phenylimido-4-Methylphenylamidoessigsäure? Sm. 103 bis 104° (*C.* 1900 [2] 1251). — \*II, 285.
- 17) Nitril d.  $\alpha$ -[4-Methylamidophenyl]imido- $\alpha$ -Phenylelessigsäure. Sm. 126° (*B.* 34, 120). — \*IV, 390.
- 18) Nitril d.  $\alpha\beta$ -Di[3-Amidophenyl]akrylsäure. Sm. 145—146° (*B.* 34, 3106).
- 19) Nitril d.  $\alpha\beta$ -Di[4-Amidophenyl]akrylsäure. Sm. 188° (*B.* 34, 3106).
- 20) Nitril d.  $\alpha$ -[4-Amidophenyl]- $\beta$ -[3-Amidophenyl]akrylsäure. Sm. 108 bis 110° (*B.* 34, 3107).
- 21) Nitril d.  $\beta$ -Phenylhydrazon- $\beta$ -Phenylpropionsäure (Cyanacetophenon-phenylhydrazon). Sm. 147° (*J. pr.* [2] 58, 135). — \*IV, 455.
- 22) Nitril d. 2,6-Dimethyl-4-Phenyl-1,4-Dihydropyridin-3,5-Dicarbon-säure. Sm. 205—206° (*J. pr.* [2] 52, 101; [2] 56, 127). — III, 37; \*IV, 220.
- C<sub>15</sub>H<sub>13</sub>N<sub>5</sub>** C 68,4 — H 4,9 — N 26,6 — M. G. 263.
- 1) Diphenylformoguanamin. Sm. 206° (*B.* 34, 2598). — \*IV, 981.
- 2) 2,4,5-Triimido-1,3-Diphenyltetrahydroimidazol (Cyanid d. Diphenyl-guanidin). Sm. 154° (174°) (*A.* 67, 160; 74, 1; *B.* 2, 688; *B.* 40, 3740 *Ann. C.* 1907 [2] 1608). — II, 348.
- 3) 2,3-Benzyliden-3,5-Diimido-1-Phenyltetrahydro-1,2,4-Triazol. Sm. 228° (*G.* 31 [1] 481). — \*IV, 980.
- 4) 3-Phenylhydrazonmethyl-1-Phenyl-1,2,4-Triazol. Sm. 118—140° (*A.* 262, 295). — IV, 1119.

- C<sub>15</sub>H<sub>13</sub>N<sub>5</sub>** 5) 4-Phenylazo-3-Methyl-1-Phenyl-1,2,5-Triazol. Sm. 122° (B. 25, 3543; 28, 1285; J. pr. [2] 64, 227). — IV, 1230, 1491; \*IV, 1086.
- 6) 3-[ $\alpha$ -Phenylhydrazonäthyl]-1,2,4-Benzotriazin. Sm. 202° (B. 25, 3540; J. pr. [2] 64, 233). — IV, 1165.
- 7) Nitril d.  $\alpha\beta$ -Di[Phenylhydrazon]propionsäure. Sm. 161° u. Zers. (B. 21, 3000). — IV, 756.
- 8) Verbindung (aus Glyoxylcyanidphenylhydrazoxim). Sm. 165° (B. 21, 3002). — IV, 756.
- C<sub>15</sub>H<sub>13</sub>Cl** 1) flüssiges  $\alpha$ -Chlor- $\alpha\beta$ -Diphenylpropen. Sd. 316° (B. 25, 2237). — II, 251; \*II, 119.
- 2) festes  $\alpha$ -Chlor- $\alpha\beta$ -Diphenylpropen. Sm. 124° (117–118°); Sd. 311°<sub>760</sub> (Soc. 71, 224; B. 25, 2237). — II, 251; \*II, 119.
- 3)  $\beta$ -Chlor- $\alpha\gamma$ -Diphenylpropen. Sd. 240° u. Zers. (B. 37, 1143 C. 1904 [1] 1266).
- C<sub>15</sub>H<sub>13</sub>Cl<sub>3</sub>** 1)  $\alpha\alpha\beta$ -Trichlor- $\alpha\beta$ -Diphenylpropan. Sm. 130° u. Zers. (Soc. 71, 225). — \*II, 115.
- C<sub>15</sub>H<sub>13</sub>Br** 1)  $\beta$ -Brom- $\alpha\alpha$ -Diphenylpropen. Sm. 48–49°; Sd. 169–170°<sub>12</sub> (B. 37, 232 C. 1904 [1] 660).
- C<sub>15</sub>H<sub>14</sub>O** C 85,7 — H 6,6 — O 7,6 — M. G. 210.
- 1)  $\gamma$ -Oxy- $\alpha\gamma$ -Diphenylpropen. Fl. (Am. 31, 660 C. 1904 [2] 447).
- 2) 6-Oxy-3-Methyl- $\alpha\alpha$ -Diphenyläthen. Sd. 187°<sub>30</sub> (B. 36, 4001 C. 1904 [1] 174).
- 3) Methyläther d. 2-Oxy- $\alpha\alpha$ -Diphenyläthen. Sm. 35°; Sd. 166°<sub>14</sub> (B. 36, 4000 C. 1904 [1] 174).
- 4) Methyläther d. 4-Oxy- $\alpha\alpha$ -Diphenyläthen. Sm. 75° (B. 37, 4166 C. 1904 [2] 1643).
- 5) Methyläther d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]äthen. Sm. 70° (B. 38, 940 C. 1905 [1] 1019).
- 6) Methyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthen. Sm. 136° (J. 1879, 732; J. pr. [2] 61, 175; B. 37, 457 C. 1904 [1] 949; A. 333, 269 C. 1904 [2] 1392). — II, 900; \*II, 540.
- 7) 2-Methylphenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sd. 158°<sub>10</sub> (Soc. 77, 988). — \*II, 651.
- 8) 3-Methylphenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sd. 167–168°<sub>12</sub> (Soc. 77, 1121). — \*II, 651.
- 9) 4-Methylphenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sd. 162–163°<sub>10</sub> (Soc. 77, 989). — \*II, 652.
- 10) 4-Methylphenyläther d.  $\beta$ -Oxy- $\alpha$ -Phenyläthen. Fl. (B. 38, 1968 C. 1905 [2] 134).
- 11) 9-Oxy-9-Äthylfluoren. Sm. 101° (B. 38, 4107 C. 1906 [1] 365; Bl. [4] 1, 1236 C. 1908 [1] 850).
- 12)  $\alpha\alpha$ -Diphenylpropan- $\alpha\beta$ -Oxyd. Sm. 67°; Sd. oberhalb 300° u. Zers. (B. 39, 2301 C. 1906 [2] 524).
- 13)  $\beta$ -Keto- $\alpha\alpha$ -Diphenylpropan. Sm. 46° (u. 61°) (B. 39, 2302 C. 1906 [2] 525; C. r. 143, 127 C. 1906 [2] 670).
- 14)  $\alpha$ -Keto- $\alpha\beta$ -Diphenylpropan (Methyldesoxybenzoin). Sm. 58°; Sd. 317,5 bis 318,5° (B. 21, 1297; C. r. 143, 127 C. 1906 [2] 670). — III, 230.
- 15)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan (Benzylacetophenon). Sm. 72–73° (87°); Sd. oberhalb 360° (B. 21, 1325; A. 296, 327; Soc. 59, 1007; B. 38, 698 C. 1905 [1] 802; B. 41, 3648 C. 1908 [2] 1866; C. r. 149, 7 C. 1909 [2] 600). — III, 227; \*III, 166.
- 16)  $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan (Dibenzylketon). Sm. 33,9° (34–35°); Sd. 330,6° (B. 6, 560; 7, 1627; 26, 1438; 34, 2075; A. 308, 175 Ann.; Soc. 59, 623; 75, 865, 871; J. pr. [2] 55, 350; B. 37, 1428 C. 1904 [1] 1355). — III, 229; \*III, 170.
- 17)  $\alpha$ -Keto- $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenyläthan (Benzyl-4-Tolylketon). Sm. 109° (107,5°); Sd. oberhalb 360° (B. 14, 1646; 22, 1229; C. r. 134, 1507). — III, 229; \*III, 171.
- 18)  $\alpha$ -Keto- $\beta$ -[4-Methylphenyl]- $\alpha$ -Phenyläthan (Phenyl-4-Methylbenzylketon). Sm. 94° (84–85°; 57°) (B. 22, 1231; C. 1902 [1] 1011; 1907 [1] 1579; Bl. [3] 17, 507; C. r. 134, 1507 C. 1902 [2] 361). — III, 230; \*III, 171.
- 19) 4-Acetyldiphenylmethan. Sm. 39°; Sd. 197–198° (C. r. 146, 343 C. 1908 [1] 1393).

$C_{15}H_{14}O$ 

- 20) 4-Äthyldiphenylketon. Sd. oberhalb  $300^{\circ}$  (B. 15, 1682). — III, 231.
- 21) 2,4-Dimethyldiphenylketon. Sd.  $321^{\circ}_{744}$  ( $362^{\circ}$ ) (B. 15, 1682; 32, 1565, 2421; J. pr. [2] 35, 469; C. 1909 [2] 23). — III, 231; \*III, 171.
- 22) 2,5-Dimethyldiphenylketon. Sm.  $36^{\circ}$ ; Sd.  $317,2^{\circ}_{744}$  (B. 17, 2847; Am. 18, 552; J. pr. [2] 35, 472; C. 1909 [2] 23). — III, 232; \*III, 172.
- 23) 3,4-Dimethyldiphenylketon. Sm.  $47-48^{\circ}$ ; Sd.  $340,2^{\circ}_{744}$  (J. pr. [2] 35, 467; C. 1909 [2] 23). — III, 233.
- 24) 2,4'-Dimethyldiphenylketon. Sd.  $316-318^{\circ}$  (B. 36, 2025 C. 1903 [2] 376).
- 25) 3,4'-Dimethyldiphenylketon. Sm.  $82^{\circ}$ ; Sd.  $328-330^{\circ}$  (B. 36, 2027 C. 1903 [2] 376; C. 1909 [1] 753).
- 26) 4,4'-Dimethyldiphenylketon. Sm.  $92^{\circ}$  ( $95^{\circ}$ ); Sd.  $333-333,5^{\circ}_{725}$  (B. 6, 1255; 7, 1183, 1195, 1414; 10, 2174; 12, 2303; J. pr. [2] 35, 466; A. 306, 85; 312, 92). — III, 233; \*III, 172.
- 27) Äthylderivat d. Cyklophenylenbenzylidenoxyd. Sm.  $168-170^{\circ}$  (M. 16, 279). — \*II, 694.
- 28) Pyrokresol.  $\alpha$ -Modif. Sm.  $195^{\circ}$ ;  $\beta$ -Modif. erstarrt bei  $124^{\circ}$ ;  $\gamma$ -Modif. erstarrt bei  $104-105^{\circ}$  (B. 15, 2203; 16, 2141; M. 3, 729). — III, 645.
- 29) 4-Methyl-2-Phenyl-1,2-Dihydrobenzofuran. Sm.  $57^{\circ}$ ; Sd.  $184^{\circ}_{18}$  (B. 36, 4001 C. 1904 [1] 174).
- 30) 2-Phenyl-3,4-Dihydro-1,2-Benzpyron. Sm.  $44-45^{\circ}$  (B. 29, 380; 34, 411). — \*II, 694.
- 31) 2,7-Dimethylxanthen. Sm.  $165^{\circ}$  (C. r. 136, 1569 C. 1903 [2] 384).
- 32) Aldehyd d.  $\alpha\alpha$ -Diphenylpropionsäure. Sd.  $301-304^{\circ}$  (C. r. 143, 1243 C. 1907 [1] 727; C. 1909 [1] 1335).
- 33) Verbindung (aus Aluminium-2-Methylphenylat) (Soc. 49, 29). — II, 737.
- 34) Verbindung (aus Aluminium-3-Methylphenylat). Sm.  $200^{\circ}$  (Soc. 41, 11). — II, 744.
- 35) Verbindung (aus Aluminium-4-Methylphenylat). Sm.  $108^{\circ}$ ; Sd.  $307^{\circ}$  (Soc. 41, 8). — II, 748.

 $C_{15}H_{14}O_2$ 

- C 79,6 — H 6,2 — O 14,2 — M. G. 226.
- 1) 2-Methoxyphenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sm.  $43-44^{\circ}$ ; Sd.  $183^{\circ}_{15}$  (Soc. 77, 1181). — \*II, 652.
- 2) 3-Methoxyphenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sd.  $199-200^{\circ}_{18}$  (Soc. 83, 1134 C. 1903 [2] 1060).
- 3)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[2-Oxyphenyl]propan. Sm.  $91-92^{\circ}$  (B. 31, 718; 34, 409). — \*III, 167.
- 4)  $\alpha$ -Keto- $\alpha$ -[4-Oxy-2-Methylphenyl]- $\beta$ -Phenyläthan. Sm.  $142^{\circ}$  (M. 26, 1163 C. 1905 [2] 1182).
- 5)  $\alpha$ -Keto- $\alpha$ -[4-Oxy-3-Methylphenyl]- $\beta$ -Phenyläthan. Sm.  $152^{\circ}$  (M. 26, 1149 C. 1905 [2] 1182).
- 6) 4-Oxy-3,5-Dimethyldiphenylketon. Sm.  $141-142^{\circ}$  (B. 41, 2339 C. 1908 [2] 784).
- 7) Oxydimethyldiphenylketon ( $CH_3:CH_3:OH = 1:2:4$ ). Sm.  $110-111^{\circ}$  (G. 32 [1] 498 C. 1902 [2] 581).
- 8) Oxydimethyldiphenylketon ( $CH_3:CH_3:OH = 1:3:4$ ). Sm.  $145-146^{\circ}$  (G. 33 [2] 60 C. 1903 [2] 995).
- 9) Oxydimethyldiphenylketon ( $CH_3:CH_3:OH = 1:4:2$ ). Sm.  $166-167^{\circ}$  (G. 32 [1] 495 C. 1902 [2] 581).
- 10) Methyläther d. 1- $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan. Sm.  $53-54^{\circ}$  (Soc. 95, 1584 C. 1909 [2] 2006).
- 11) Methyläther d. i- $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (M. d. Benzoin). Sm.  $49-50^{\circ}$  ( $48,5^{\circ}$ ) (B. 26, 2413; B. 39, 2357 C. 1906 [2] 527; B. 42, 3361 C. 1909 [2] 1430). — III, 222.
- 12) Methyläther d.  $\alpha$ -Keto- $\beta$ -[ $\alpha$ -Oxyphenyl]- $\alpha$ -Phenyläthan. Sm.  $76^{\circ}$ ; Sd.  $360^{\circ}$  (B. 21, 2450). — III, 227.
- 13) Methyläther d.  $\beta$ -Keto- $\beta$ -[4-Oxyphenyl]- $\alpha$ -Phenyläthan. Sm.  $77-78^{\circ}$  (A. 355, 291 C. 1907 [2] 1625).
- 14) Methyläther d. p-Oxy-3-Methyldiphenylketon. Sm.  $80^{\circ}$  (B. 24, 3897; G. 30 [2] 233). — III, 212; \*III, 161.
- 15) Methyläther d. p-Oxy-p-Methyldiphenylketon (Methyläther d. ?-Benzoyl-3-Oxy-1-Methylbenzol). Fi. (G. 30 [2] 228). — \*III, 165.
- 16) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[2-Oxy-1-Naphtyl]- $\alpha$ -Buten. Sm.  $171^{\circ}$  (Bl. [3] 29, 882 C. 1903 [2] 885).



- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>** 17) Äthyläther d. 4-Oxydiphenylketon. Sm. 38–39°; Sd. oberhalb 300° (242°<sub>40</sub>). (B. 23, 1206; 31, 1001). — III, 194; \*III, 153.
- 18) Phenyläther d. Oxymethyl-4-Methylphenylketon. Sm. 73°; Sd. 210 bis 215°<sub>13</sub>. (B. 35, 3564 C. 1902 [2] 1313).
- 19) 3-Methylphenyläther d. Oxymethylphenylketon. Sm. 84° (B. 30, 577). — \*III, 103.
- 20) 4-Methylphenyläther d. Oxymethylphenylketon. Sm. 68° (B. 30, 577). — \*III, 103.
- 21) Methyläther d. 2-[4-Oxyphenyl]-1,2-Dihydrobenzofuran. Sm. 94 bis 95° (B. 39, 34 C. 1906 [1] 674).
- 22)  $\alpha\alpha$ -Diphenylpropionsäure. Sm. 173°; Sd. oberhalb 300°. Ca + 1½ H<sub>2</sub>O, Ba + 2 H<sub>2</sub>O, Zn (B. 11, 1993; 14, 1595; B. 38, 840 C. 1905 [1] 874; C. r. 143, 1243 C. 1907 [1] 727; C. 1908 [2] 1100). — II, 1468.
- 23)  $\alpha\beta$ -Diphenylpropionsäure.  $\alpha$ -Form Sm. 88–89°;  $\beta$ -Form Sm. 95–96°;  $\gamma$ -Form Sm. 82°; Sd. 330–340°. Ca + H<sub>2</sub>O, Ba, Zn, Pb, Ag (A. Spl. 8, 51; J. 1878, 821; A. 250, 133; B. 21, 1311; 25, 2018; 28, 818). — II, 1466; \*II, 870.
- 24) isom.  $\beta$ - $\alpha\beta$ -Diphenylpropionsäure. Sm. 120°. Ca (Soc. 37, 485). — II, 1468.
- 25)  $\beta\beta$ -Diphenylpropionsäure. Sm. 155° (151°). Na + 4 H<sub>2</sub>O, Ca, Ag (Soc. 59, 734; B. 25, 960, 2124; Am. 31, 651 C. 1904 [2] 446; Am. 33, 83 C. 1905 [1] 610; C. 1908 [2] 1100). — II, 1468.
- 26) 4-Methyldiphenyllessigsäure. Sm. 115°. Na + 6 H<sub>2</sub>O, K + 4 H<sub>2</sub>O, Ca + 2 H<sub>2</sub>O (B. 10, 996; 25, 1617; C. r. 148, 419 C. 1909 [1] 1094; B. 41, 4321 C. 1909 [1] 150). — II, 1468.
- 27)  $\alpha\beta$ -Diphenyläthan-2-Carbonsäure. Sm. 129–132°. Ag (B. 11, 1020; 18, 2444, 2446; 27, 2506). — II, 1468.
- 28) 4-Methyldiphenylmethan-2'-Carbonsäure. Sm. 133° (133,5–134°). Na + 2 H<sub>2</sub>O, Ba, Ag (A. 234, 236; 314, 237). — II, 1469; \*II, 870.
- 29) 4-Methyldiphenylmethan-4'-Carbonsäure. Sm. 134–135° (B. 33, 2628). — \*II, 871.
- 30) Tetrahydroanthracen-1-Carbonsäure. Sm. 164–165° (B. 16, 2612). — II, 1469.
- 31) Laktone d.  $\delta$ -Oxy- $\alpha$ -Phenyl- $\epsilon$ -Methyl- $\alpha\gamma\epsilon$ -Heptatrien- $\zeta$ -Carbonsäure. Sm. 153° (A. 306, 242). — \*II, 991.
- 32) Methylester d. Diphenyllessigsäure. Sm. 59–60° (58,5°) (B. 21, 1317; B. 42, 3361 C. 1909 [2] 1430). — II, 1464.
- 33) Methylester d. Diphenylmethan-2-Carbonsäure. Fl. (J. 1875, 598; M. 25, 1185 C. 1905 [1] 364). — II, 1465.
- 34) Äthylester d. Biphenyl-2-Carbonsäure. Sd. 314° (300–305°) (A. 193, 123; 279, 260). — II, 1461.
- 35) Äthylester d. Biphenyl-3-Carbonsäure. Fl. (M. 3, 809). — II, 1462.
- 36) Äthylester d. Biphenyl-4-Carbonsäure. Sm. 46° (A. 172, 114). — II, 1463.
- 37) Benzylester d. Phenyllessigsäure. Sd. 317–319° (B. 7, 1056; Soc. 37, 483). — II, 1310.
- 38) Benzylester d. 1-Methylbenzol-2-Carbonsäure. Sd. 315° (B. 25 [2] 748). — II, 1329.
- 39) 2,3-Dimethylphenylester d. Benzolcarbonsäure. Sm. 57°; Sd. 326 bis 327° (Bl. [3] 11, 603; J. pr. [2] 36, 8). — II, 1147.
- 40) 2,4-Dimethylphenylester d. Benzolcarbonsäure. Sm. 38,5°; Sd. 321° (Bl. [3] 11, 603). — II, 1147.
- 41) 2,5-Dimethylphenylester d. Benzolcarbonsäure. Sm. 61°; Sd. 318 bis 319° (Bl. [3] 11, 603). — II, 1147.
- 42) 3,4-Dimethylphenylester d. Benzolcarbonsäure. Sm. 58,5°; Sd. 333° (Bl. [3] 11, 603). — II, 1147.
- 43) 3,5-Dimethylphenylester d. Benzolcarbonsäure. Sm. 24°; Sd. 326° (Bl. [3] 11, 603). — II, 1147.
- 44) 2-Äthylphenylester d. Benzolcarbonsäure. Sm. 38–39°; Sd. 314 bis 315° (Bl. [3] 11, 210). — II, 1147.
- 45) 3-Äthylphenylester d. Benzolcarbonsäure. Sm. 52°; Sd. 322–323° (Bl. [3] 11, 212). — II, 1147.
- 46) 4-Äthylphenylester d. Benzolcarbonsäure. Sm. 59–60°; Sd. 328° (Bl. [3] 11, 209). — II, 1147.

- $C_{15}H_{14}O_2$  47) Acetat d.  $\alpha$ -Oxydiphenylmethan. Sm. 41,5° (40°); Sd. 301—302°<sub>781</sub> (A. 133, 20; 298, 233; B. 33, 340; 35, 304; [3] 21, 290). — II, 1078; \*II, 657.
- 48) Acetat d. 4-Oxydiphenylmethan. Sd. 317° (J. 1873, 440; Soc. 37, 721). — II, 897.
- 49) Acetat d. 2-Oxymethylbiphenyl. Sd. 182°<sub>20</sub> (M. 19, 591). — \*II, 659.
- 40) Benzoat d.  $\alpha$ -Oxyäthylbenzol. Sd. 189°<sub>21</sub> (B. 31, 1003; G. 37 [2] 360 C. 1908 [1] 32). — \*II, 716.
- 51) Benzoat d. Dracoeresinotannol (C. 1896 [2] 713).
- 52) Verbindung (aus  $\alpha$ -p-Kresoxyzimtsäure). Sm. 62° (B. 38, 1968 C. 1905 [2] 134).
- $C_{15}H_{14}O_3$  C 74,4 — H 5,8 — O 19,8 — M. G. 242.
- 1)  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropan. Sm. 88° (C. 1908 [2] 1024).
- 2) Di[3-Oxy-4-Methylphenyl]keton. Subl. (A. 271, 10). — III, 234.
- 3) Di[p-Oxy-4-Methylphenyl]keton. Sm. 104—105° (A. 212, 344). — III, 234.
- 4) Di[p-Oxy-4-Methylphenyl]keton. Sm. 138° (A. 257, 74). — III, 234.
- 5) 4-Methyläther d.  $\beta$ [oder  $\alpha$ ]-Oxy- $\alpha$ [oder  $\beta$ ]-Keto- $\beta$ -[4-Oxyphenyl]- $\alpha$ -Phenyläthan. Sm. 105—106° (108°) (A. 355, 292 C. 1907 [2] 1625; C. 1908 [2] 1690).
- 6) 4'-Methyläther d. 6,4'-Dioxy-3-Methyldiphenylketon. Sm. 108 bis 109° (B. 40, 3517 C. 1907 [2] 1410).
- 7) 6-Methyläther d. 6,4'-Dioxy-3-Methyldiphenylketon. Sm. 160° (B. 40, 3519 C. 1907 [2] 1410).
- 8) 3-Methyläther d. 3,4-Dioxy-p-Benzoyl-1-Methylbenzol. Sm. 150° (G. 28 [2] 286). — \*III, 165.
- 9) Monomethyläther d. p-Dioxy-p-Methyldiphenylketon (M. d. Benzomethylresorcin). Sm. 125° (B. 28, 2306 Anm.). — III, 216.
- 10) Dimethyläther d. 2,4-Dioxydiphenylketon. Sm. 87—88° (B. 39, 4028 C. 1907 [1] 263).
- 11) Dimethyläther d. 2,5-Dioxydiphenylketon. Sm. 51°; Sd. 225°<sub>30</sub> (B. 38, 796 C. 1905 [1] 866; A. 344, 46 C. 1906 [1] 1097; B. 41, 143 C. 1908 [1] 1058).
- 12) Dimethyläther d. 3,4-Dioxydiphenylketon (Benzoylveratrol). Sm. 99° (101—102°; 103—104°) (J. pr. [2] 53, 253; G. 27 [1] 284; B. 39, 4028 C. 1907 [1] 264). — III, 199; \*III, 155.
- 13) Dimethyläther d. 2,2'-Dioxydiphenylketon. Sm. 104° (98°) (J. pr. [2] 28, 287; B. 19, 2610). — III, 195.
- 14) Dimethyläther d. 2,4'-Dioxydiphenylketon. Sm. 100° (B. 41, 323 Anm. C. 1908 [1] 822).
- 15) Dimethyläther d. 4,4'-Dioxydiphenylketon. Sm. 144° (B. 14, 328; 28, 2870; A. 306, 86; B. 36, 654 C. 1903 [1] 768). — III, 198.
- 16) Monäthyläther d. 4,4'-Dioxydiphenylketon. Sm. 146—147° (A. 194, 337). — III, 198.
- 17) 4-Methyläther- $\alpha$ -Phenyläther d. Oxymethyl-4-Oxyphenylketon. Sm. 67°; Sd. 230—233°<sub>20</sub> (B. 35, 3565 C. 1902 [2] 1313).
- 18) 2-Methoxyphenyläther d. Oxymethylphenylketon. Sm. 101° (Bl. [4] 5, 505 C. 1909 [2] 21).
- 19) Lapachol (3-Oxy-2-Amylen-1,4-Naphtochinon; Grönhartin; Taigusäure). Sm. 139,5—140,5°.  $NH_4$ , Na + 5H<sub>2</sub>O, K, Ca + 1½ H<sub>2</sub>O, Sr + 1½ H<sub>2</sub>O, Ba + 7H<sub>2</sub>O, Pb, Ag, Anilinsalz, o- und p-Toluidinsalz (Z. 1867, 92; J. 1858, 264; 1879, 908; 1880, 831; G. 10, 80; 12, 337; 21, 381; Soc. 69, 1356; Am. 11, 267). — III, 398; \*III, 288.
- 20) Iso- $\beta$ -Lapachol. Sm. 120° (Soc. 69, 1362). — III, 403; \*III, 290.
- 21)  $\alpha$ -Lapachon. Sm. 117° (Soc. 61, 635). — III, 400; \*III, 288.
- 22)  $\beta$ -Lapachon. Sm. 155—156° (G. 12, 372; Soc. 61, 634). — III, 400; \*III, 288.
- 23) 1,3-Dioxy-2,4-Dimethylxanthen. Sm. 185—186° (M. 25, 326 C. 1904 [1] 1495).
- 24)  $\alpha$ -Oxy- $\alpha\beta$ -Diphenylpropionsäure? Sm. 160—161° (B. 25, 1276). — II, 1698.
- 25)  $\alpha$ -Oxy- $\beta\beta$ -Diphenylpropionsäure? Sm. 150—159°. Pb, Ag (A. 248, 43). — II, 1699.

- $C_{15}H_{14}O_3$  26)  $\beta$ -Oxy- $\beta\beta$ -Diphenylpropionsäure. Sm.  $212^\circ$  (B. 40, 4539 C. 1908 [1] 131).
- 27)  $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]propionsäure. Sm.  $120^\circ$ . Ag (G. 13, 273). — II, 1699.
- 28)  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]propionsäure. Fl. (B. 37, 4134 C. 1904 [2] 1736).
- 29)  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]propionsäure. Sm.  $179$ – $180^\circ$  (G. 25 [1] 186). — II, 1699.
- 30)  $\beta$ -Phenyl- $\beta$ -[2-Oxyphenyl]propionsäure? Sm.  $151^\circ$ . Ba (B. 24, 2582). — II, 1700.
- 31) 6-Oxy-3-Methyldiphenylelessigsäure (Phenyl-p-Kresylelessigsäure). Sm.  $118^\circ$ . Ba +  $4H_2O$  (B. 28, 991; 30, 129). — II, 1700; \*II, 996.
- 32)  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan- $\alpha^2$ -Carbonsäure ( $\alpha$ -o-Tolylenhydratcarbon-säure). Sm.  $94$ – $96^\circ$  (B. 11, 1020; 18, 3480). — II, 1698.
- 33)  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure. Sm.  $130^\circ$  ( $125$ – $127^\circ$ ). Ag (B. 18, 2447; 25, 2101). — II, 1699.
- 34)  $\alpha$ -Oxy-4-Methyldiphenylmethan-4'-Carbonsäure +  $1\frac{1}{2}H_2O$ . Sm.  $161,5^\circ$ . Ag, (A. 312, 95). — \*II, 997.
- 35) 4-Oxy-2-Methyldiphenylmethan-2'-Carbonsäure. Sm.  $168$ – $169^\circ$ . Ba (B. 31, 2794). — \*II, 997.
- 36) ?-Oxymethyldiphenylmethancarbonsäure (4-Oxy-?-Benzyl-1-Methylbenzol-?-Carbonsäure; Benzylkresotinsäure). Sm.  $164$ – $166^\circ$  (B. 11, 2030). — II, 1700.
- 37) 4-Oxydiphenylelessig-4-Methyläthersäure. Sm.  $100^\circ$  (C. r. 148, 419 C. 1909 [1] 1094).
- 38) 4'-Oxydiphenylmethanmethylläther-2-Carbonsäure. Sm.  $110$ – $111^\circ$ . Na +  $\frac{1}{2}H_2O$  (Bl. 46, 206). — II, 1698.
- 39) 3-Oxybiphenyläthyläther-2-Carbonsäure. Fl. Ag (B. 31, 3035; J. pr. [2] 59, 462). — \*II, 993.
- 40) 2,4-Dimethyldiphenyläther-2'-Carbonsäure. Sm.  $152^\circ$  (B. 38, 2116 C. 1905 [2] 246).
- 41) 2,2'-Dimethyldiphenyläther-6-Carbonsäure. Sm.  $115^\circ$  (Bl. [3] 31, 267 C. 1904 [1] 1088).
- 42) 4,4'-Dimethyldiphenyläther-2-Carbonsäure. Sm.  $113$ – $114^\circ$  (C. r. 136, 1569 C. 1903 [2] 384).
- 43)  $\alpha$ -Oxy- $\beta$ -Phenylpropionphenyläthersäure. Sm.  $81^\circ$  (C. 1897 [1] 1120). — \*II, 932.
- 44) Oxyessig-4-Benzylphenyläthersäure. Sm.  $100^\circ$  (G. 11, 437). — II, 897.
- 45) Anhydrid d.  $\epsilon$ -Phenyl- $\beta$ -Methyl- $\beta\delta$ -Hexadien- $\gamma\delta$ -Dicarbonsäure. Sm.  $132$ – $133^\circ$  (B. 38, 3679 C. 1905 [2] 1724).
- 46) Anhydrid d.  $\alpha$ -[4-Methylphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm.  $107^\circ$  (B. 38, 3896 C. 1906 [1] 191).
- 47) Aldehyd d. 3,4-Dioxybenzol-3-Methyläther-4-Benzyläther-1-Carbonsäure. Sm.  $63$ – $64^\circ$  (D.R.P. 65937). — \*III, 75.
- 48) Methylester d.  $\alpha$ -Oxydiphenylelessigsäure. Sm.  $74$ – $75^\circ$  ( $73^\circ$ ) (B. 22, 1212, 1539; B. 37, 2765 C. 1904 [2] 708). — II, 1696.
- 49) Methylester d.  $\alpha$ -Oxydiphenylmethan-4-Carbonsäure. Sm.  $109$  bis  $110^\circ$  (J. 1875, 599). — II, 1698.
- 50) Methylester d. 2-Oxybenzolbenzyläther-1-Carbonsäure. Sd. oberhalb  $320^\circ$  (A. 148, 27). — II, 1496.
- 51) Äthylester d. 3-Oxybiphenyl-2-Carbonsäure. Sm.  $46$ – $47^\circ$  (B. 31, 3035; J. pr. [2] 59, 460). — \*II, 992.
- 52) Äthylester d. 6-Oxybiphenyl-2-Carbonsäure. Sm.  $111^\circ$  (A. 284, 322). — II, 1695.
- 53) Äthylester d. Diphenyläther-2-Carbonsäure. Sd. oberhalb  $360^\circ$  (A. 257, 79). — II, 1495.
- 54) Äthylester d. 2-Naphtoylessigsäure. Sm.  $34^\circ$  (Soc. 89, 124 C. 1906 [1] 1023).
- 55) Phenylester d.  $\alpha$ -Oxypropionphenyläthersäure. Sm.  $52^\circ$ ; Sd.  $190^\circ_{18}$  (B. 39, 3833 C. 1907 [1] 92).
- 56) Phenylester d. 4-Oxybenzoläthyläther-1-Carbonsäure. Sm.  $110^\circ$  (D.R.P. 46756). — \*II, 906.
- 57) 2-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm.  $38^\circ$  (D.R.P. 46756). — \*II, 919.



- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>** 58) 2-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 34° (D.R.P. 46756). — \*II, 920.  
 59) 2-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 48° (D.R.P. 46756). — \*II, 922.  
 60) 3-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 57° (D.R.P. 46756). — \*II, 919.  
 61) 3-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 63° (D.R.P. 46756). — \*II, 920.  
 62) 3-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 68° (D.R.P. 46756). — \*II, 922.  
 63) 4-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 29° (D.R.P. 46756). — \*II, 919.  
 64) 4-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 74—75° (D.R.P. 46756). — \*II, 920.  
 65) 4-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 79° (D.R.P. 46756). — \*II, 922.  
 66) 2,4-Dimethylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 41° (D.R.P. 70487). — \*II, 888.  
 67) 2,5-Dimethylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 37° (D.R.P. 70487). — \*II, 888.  
 68) 3,4-Dimethylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 36° (D.R.P. 70487). — \*II, 888.  
 69) Dibenzylester d. Kohlensäure. Sm. 29°; Sd. 203,5°<sub>14</sub> (B. 35, 3434 C. 1902 [2] 1303; B. 36, 159 C. 1903 [1] 502).  
 70) Di[2-Methylphenylester] d. Kohlensäure. Sm. 60° (A. 301, 115; C. r. 127, 1021). — \*II, 423.  
 71) Di[3-Methylphenylester] d. Kohlensäure. Sm. 111° (D.R.P. 81375). — \*II, 429.  
 72) Di[4-Methylphenylester] d. Kohlensäure. Sm. 115° (B. 19, 2268). — II, 750.  
 73) Benzoat d. 1,2-Dioxybenzolmonoäthyläther. Sm. 31° (C. 1899 [1] 706). — \*II, 719.  
 74) Monobenzoat d. 1,4-Di[Oxymethyl]benzol. Sm. 73—74° (A. 155, 341). — II, 1144.  
 75) 4-Benzoat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Sm. 75° (D.R.P. 57941). — \*II, 720.  
 76) Benzoat d. 1-Oxy-4-Keto-1,3-Dimethyl-1,4-Dihydrobenzol. Sm. 72,5 bis 73,5° (B. 33, 3655). — \*III, 253.  
**C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>** C 69,8 — H 5,4 — O 24,8 — M. G. 258.  
 1) Methylenäther d.  $\varepsilon$ -Keto- $\delta$ -Acetyl- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadien. Sm. 105° (B. 37, 1700 C. 1904 [1] 1497).  
 2) 3,4-Dimethyläther d. 2,3,4-Trioxydiphenylketon. Sm. 131° (120 bis 121°) (A. 269, 302; G. 26 [2] 437; 27 [2] 19; B. 42, 3151 C. 1909 [2] 1347; M. 30, 537 C. 1909 [2] 1569). — III, 202; \*III, 156.  
 3) 2,4-Dimethyläther d. 2,4,6-Trioxydiphenylketon (Hydrocotoïn). Sm. 98° (93—95°) (A. 199, 57; B. 27, 1500; M. 18, 741). — III, 203; \*III, 156.  
 4)  $\beta$ -Acetyl-4-Keto-2-Methyl-2,3-Dihydro-5-Naphtofuran. Sm. 133 bis 134° (A. 317, 90).  
 5) Alkannin. 5 + 2BaO (A. 6, 27; 62, 141; B. 13, 1514; 20, 2428). — III, 650.  
 6) Pontigenin. Sm. 187,5° (Ar. 243, 443 C. 1905 [2] 1365).  
 7) Peucedanin (oder C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>). Sm. 109° (C. 1899 [1] 431). — \*III, 470.  
 8) Rhapontigenin + H<sub>2</sub>O. Sm. 190—191° (J. pr. [2] 77, 333 C. 1908 [1] 1713).  
 9) Isorhapontigenin. Sm. 192° (J. pr. [2] 77, 338 C. 1908 [1] 1714).  
 10) Xanthoxylin N. Sm. 132,5° (C. 1907 [1] 169).  
 11) Yangonin. Sm. 153—154° (Ar. 246, 359 C. 1908 [2] 888).  
 12) Monomethyläther d. Oreoselin. Sm. 104—105° (M. 19, 272). — \*III, 458.  
 13)  $\alpha$ -Oxylapachol (Lomatiol). Sm. 127°. Ca + H<sub>2</sub>O, Ba + H<sub>2</sub>O, Ag + H<sub>2</sub>O (Soc. 67, 787; 69, 1381). — III, 402; \*III, 288.  
 14)  $\beta$ -Oxylapachol (Isolomatiol). Sm. 109—110° (Soc. 67, 793; 69, 1382). — III, 402; \*III, 288.

- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>**
- 15) Oxyisalapachol. Sm. 133,5—134° (Soc. 69, 1375). — \*III, 290.
  - 16) Anhydriodioxyhydrolapachol. Sm. 190,5—191° (Soc. 69, 1378). — \*III, 289.
  - 17) Oxy- $\alpha$ -Lapachon. Sm. 187° (Soc. 69, 1374). — \*III, 289.
  - 18) Oxy- $\beta$ -Lapachon. Sm. 201,5° (Soc. 61, 649; 67, 792; 69, 1368). — III, 402; \*III, 288.
  - 19)  $\alpha\alpha$ -Di[ $p$ -Oxyphenyl]propionsäure. Zers. oberhalb 280°. Ca, Ba (B. 16, 2071). — II, 1881.
  - 20)  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropionphenyläthersäure. Sm. 93—94°. Na + 5H<sub>2</sub>O, Anilinsalz (B. 38, 1956 C. 1905 [2] 132).
  - 21) 4-Oxybenzol- $\beta$ -Phenoxyläthyläther-1-Carbonsäure. Sm. 196°. Na (J. pr. [2] 27, 227). — II, 1527.
  - 22) Anhydrid d.  $\alpha$ -[2-Methoxylphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 97,5° (B. 39, 766 C. 1906 [1] 1017).
  - 23) Anhydrid d.  $\alpha$ -[4-Methoxylphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 114,5° (B. 39, 763 C. 1906 [1] 1017).
  - 24) Äthylester d. 2-Oxynaphtalinmethyläther-1-Ketocarbonsäure. Sm. 75°; Sd. 235—237°<sub>10</sub>. Pikrat (Bl. [3] 17, 309). — \*II, 1088.
  - 25) Äthylester d. 4-Oxynaphtalinmethyläther-1-Ketocarbonsäure. Sm. 70°; Sd. 239—242°<sub>10</sub>. Pikrat (Bl. [3] 17, 305). — \*II, 1088.
  - 26) Äthylester d. 3-Acetoxylnaphtalin-2-Carbonsäure. Sm. 82—83° (Z. Kr. 29, 285). — \*II, 989.
  - 27) Äthylester d. 3-Keto-5-Methyl-2-Benzyliden-2,3-Dihydrofuran-4-Carbonsäure. Sm. 140—141° (Soc. 87, 1393 C. 1905 [2] 1542).
  - 28) Äthylester d. 6-Methyl-4-Phenyl-1,2-Pyron-5-Carbonsäure. Sm. 104°; Sd. 207—214° u. ger. Zers. (Soc. 75, 251; B. 35, 786 C. 1902 [1] 761). — \*II, 1138.
  - 29) 2-Methoxylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 60—61° (D.R.P. 57941). — \*II, 919.
  - 30) 2-Methoxylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 97—98° (D.R.P. 57941). — \*II, 920.
  - 31) 2-Methoxylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 86° (D.R.P. 57941). — \*II, 922.
  - 32) 2-Methoxylphenylester d. Oxyessigphenyläthersäure. Sm. 56—57° (D.R.P. 85490). — \*II, 551.
  - 33) 2-Methoxylphenylester d. 4-Oxybenzoldimethyläther-1-Carbonsäure. Sm. 85—86° (D.R.P. 57941). — \*II, 906.
  - 34) 2-Äthoxyphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 40—41° (C. 1899 [1] 706). — \*II, 888.
  - 35) Benzyl-2-Methoxylphenylester d. Kohlensäure (Bl. [3] 21, 823). — \*II, 638.
  - 36) 2-Methoxylphenyl-4-Methylphenylester d. Kohlensäure. Sm. 99° (Bl. [3] 21, 826). — \*II, 550.
  - 37) Benzoat d. 1,2,3-Trioxybenzol-1,2-Dimethyläther. Sm. 55—57° (M. 25, 515 C. 1904 [2] 1118).
  - 38) Benzoat d. 1,2,3-Trioxybenzol-1,3-Dimethyläther. Sm. 118° (B. 12, 1373; G. 26 [2] 440). — II, 1152.
  - 39) Benzoat d. 1,3,5-Trioxybenzoldimethyläther. Sm. 41—43° (M. 18, 738). — \*II, 720.
  - 40) 4-Oxybenzoat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Sm. 170° (D.R.P. 57941). — \*II, 906.  
C 65,7 — H 5,1 — O 29,2 — M. G. 274.
- C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>**
- 1) Phlorethin. Sm. 253—255° u. Zers. Ag, + 3NH<sub>3</sub>, 2 + 5PbO (A. 30, 201; 172, 356; 229, 374; B. 27, 1631, 2686; 28, 1393; Soc. 49, 860). — III, 230; \*III, 171.
  - 2) Isophlorethin (Z. 1868, 711). — III, 231.
  - 3) Santalin (Santalsäure) oder C<sub>17</sub>H<sub>16</sub>O<sub>8</sub>. Sm. 104°. K, Ba, PbO (J. 1847/48, 784; A. 74, 226; B. 12, 14; Z. 1870, 84; Soc. 75, 443). — III, 672; \*III, 492.
  - 4) Solorinsäure. Sm. 199—201° (A. 284, 111; 314, 110). — II, 1971; \*II, 1142.
  - 5) Methylester d.  $\varepsilon$ -Keto- $\alpha$ -[3,4-Dioxyphenyl]hexan-3,4-Methylenäther- $\zeta$ -Carbonsäure (Kawain; Methysticin). Sm. 137° (J. 1860, 550, 551; 1874, 912; M. 10, 784; J. r. 19, 522; Ar. 246, 351 C. 1908 [2] 888). — II, 1968.

$C_{15}H_{14}O_5$ 

- 6) Pseudomethysticin. Sm. 113—114° (*Ar.* 246, 354 *C.* 1908 [2] 888).
- 7) Dimethylester d. Inden-1-Ketocarbonsäure-3-Methylcarbonsäure. Sm. 109—110° (*A.* 347, 284 *C.* 1906 [2] 959).
- 8) Monäthylester d. 1-Keto-4-Phenyl-2,3-Dihydro-R-Penten-3,5-Dicarbonsäure (M. d. Phenylthronsäure). Sm. 112,5°.  $Ca + 3H_2O$ ,  $Ba_2 + H_2O$ , Ag (*A.* 250, 213). — II, 1970.
- 9) Di[2-Methoxyphenylester] d. Kohlensäure. Sm. 86° (*Bl.* [3] II, 704; *D.R.P.* 99057). — II, 910; \*II, 550.
- 10) Diacetat d. 5,7-Dioxy-4-Methylen-2-Methyl-1,4-Benzpyran. Sm. 145—155° (*B.* 34, 1206). — \*III, 549.
- 11) Diacetat d. 7,8-Dioxy-4-Methylen-2-Methyl-1,4-Benzpyran (*B.* 34, 1209). — \*III, 549.
- 12) Verbindung (aus d. Farbstoff Tesu). Sm. 217° (*B.* 29 [2] 658).

 $C_{15}H_{14}O_6$ 

- C 62,1 — H 4,8 — O 33,1 — M. G. 290.
- 1) Trimethyläther d. Tetraoxybiphenylchinon (*A.* 169, 248). — II, 1042.
- 2) Cyanomaklurin (oder  $C_{15}H_{12}O_6$ ). Zers. bei 250° (*Soc.* 67, 939; *Soc.* 81, 1173 *C.* 1902 [2] 199; *C.* 1904 [2] 438; *Soc.* 87, 716 *C.* 1905 [2] 251). — III, 684.
- 3) Decocacetin. Sm. 238° (*J.pr.* [2] 66, 412 *C.* 1903 [1] 527).
- 4) 3,5-Dioxy-4- $[\alpha,3,4$ -Trioxybenzyl]-1,2-Dihydrobenzofuran + 4  $H_2O$  (Katechin) (*B.* 35, 1867 *C.* 1902 [2] 51; *B.* 39, 4007 *C.* 1907 [1] 259). — \*III, 496.
- 5) Katechin a + 3  $H_2O$  (Acakatechin). Sm. 204—205° u. Zers. (*Soc.* 81, 1169 *C.* 1902 [2] 199, 702; *C.* 1904 [2] 439; *Soc.* 87, 398 *C.* 1905 [1] 1253, 1649). — \*III, 495.
- 6) Katechin b + 4  $H_2O$ . Sm. 96° (210° wasserfrei) (*Soc.* 81, 1163 *C.* 1902 [2] 198, 702; *C.* 1903 [1] 883; *B.* 36, 101 *C.* 1903 [1] 397). — \*III, 495.
- 7) Katechin c. Sm. 235—237° (*Soc.* 81, 1168 *C.* 1902 [2] 199). — \*III, 495.
- 8) Pikropodophyllin (oder  $C_{23}H_{24}O_9$ ). Sm. 227° (*Soc.* 73, 213). — \*III, 473.
- 9) Podophyllotoxin + 2  $H_2O$  (oder  $C_{23}H_{24}O_9$ ). Sm. 117° (157° wasserfrei) (*Soc.* 73, 212). — \*III, 473.
- 10)  $\alpha,2$ -Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen- $\beta,\beta,2$ -Tricarbonsäure- $\beta\beta$ -Diäthylester (Diäthylester d. Phtalylmalonsäure). Sm. 74,5°. Na (*A.* 242, 26). — II, 2047.
- 11) Dimethylester d.  $\delta$ -Benzoxyl- $\alpha\gamma$ -Butadien- $\alpha\gamma$ -Dicarbonsäure (D. d. Benzoxylmethylenglutakonsäure). Sm. 90° (*A.* 273, 176). — II, 1154.
- 12) Äthylester d. 4-Acetoxy-7-Methyl-1,2-Benzpyron-3-Carbonsäure. Sm. 217° (*A.* 367, 227 *C.* 1909 [2] 1236).
- 13) Diäthylester d. 1,3-Diketo-2,3-Dihydroinden-2,4-Dicarbonsäure +  $H_2O$ . Na +  $H_2O$  (*B.* 31, 2085). — \*II, 1177.

 $C_{15}H_{14}O_7$ 

- C 58,8 — H 4,6 — O 36,6 — M. G. 306.
- 1) Saponaretin. Zers. oberhalb 300° (*Soc.* 89, 1218 *C.* 1906 [2] 1062).
- 2) Vitexin (oder  $C_{17}H_{16}O_8$ ). Sm. 260° (*Soc.* 73, 1021; *Soc.* 89, 1216 *C.* 1906 [2] 1062).
- 3) Triketosantonensäure. Sm. 234° u. Zers.  $Ba + 2H_2O$  (*G.* 29 [2] 252). — \*II, 1200.
- 4) Dimethylester d. 6-Methoxyl-1,3-Diketo-4-Methyl-2,3-Dihydroinden-2,7-Dicarbonsäure. Sm. 98—100° u. Zers.  $Na + H_2O$  (*B.* 33, 2448; 34, 2157). — \*II, 1200.

 $C_{15}H_{14}O_8$ 

- C 55,9 — H 4,3 — O 39,7 — M. G. 322.
- 1)  $\alpha\alpha$ -Di[2,3,4(?)-Trioxyphenyl]propionsäure (Dipyrogallolpropionsäure). Sm. 162°. Ba (*B.* 16, 2404). — II, 2078.
- 2) Ursalicylsäure. Sm. 187—188° (*C.* 1909 [2] 846).

 $C_{15}H_{14}N_2$ 

- C 81,1 — H 6,3 — N 12,6 — M. G. 222.
- 1)  $\alpha$ -Phenylamido- $\gamma$ -Phenylimidopropen. Sm. 115°. HCl (*B.* 36, 3667 *C.* 1903 [2] 1312).
- 2) Di[2-Methylphenylimido]methan (o-Carbotitolyimid). Sd. oberhalb 300° (223°<sub>34</sub>). (2 + 2HCl, PtCl<sub>4</sub>) (*B.* 15, 1317; 27, 2696; *C.* 1899 [1] 829). — II, 459; \*II, 249.



- $C_{15}H_{14}N_2$
- 3) Di[4-Methylphenylimido]methan (p-Carboditolyimid). Sm. 60° (49 bis 50°); Sd. 222—224°<sub>20</sub>.  $2 + 3HCl$ , ( $2 + 2HCl$ ,  $PtCl_4$ ) (B. 14, 1488; 15, 1310; 25, 2892; 27, 2696; C. 1899 [1] 829). — II, 512; \*II, 285.
  - 4) isom. Di[4-Methylphenylimido]methan. Sm. 148—149°; Sd. 276 bis 279°<sub>60—70</sub> (B. 25, 2893). — II, 512.
  - 5)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylpropen. Sm. 168° (B. 17, 575; 29, 2138; 23, 913). — IV, 754; \*IV, 489.
  - 6)  $\gamma$ -Phenylhydrazon- $\gamma$ -Phenylpropen. Sm. 130° (152—153°) (A. ch. [7] 2, 201; B. 39, 2186 C. 1906 [2] 429). — IV, 774.
  - 7) s-Benzyliden- $\alpha$ -Phenyläthylidenhydrazin. Sm. 59° (J. pr. [2] 44, 542). — III, 130.
  - 8)  $\alpha$ -Benzyliden- $\beta$ -[4-Methylbenzyliden]hydrazin (B. 35, 3238 C. 1902 [2] 1045).
  - 9) 1-Phenylhydrazon-2,3-Dihydroinden. Sm. 130—131° u. Zers. (B. 22, 2021; Soc. 65, 493; A. 275, 345). — IV, 773.
  - 10) 1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 104° (B. 26, 114). — IV, 884.
  - 11) 1,5-Diphenyl-4,5-Dihydropyrazol. Sm. 136—137° (B. 21, 1213; 22, 176; 26, 112; B. 41, 4232 C. 1909 [1] 183). — IV, 884.
  - 12) 2,4[oder 2,5]-Diphenyl-4,5-Dihydroimidazol. Sm. 78° (B. 28, 3172). — IV, 1017.
  - 13) 2-Benzylidenamido-1,3-Dihydroisocindol. Sm. 127—129° (B. 33, 2813). — \*IV, 572.
  - 14) 1-Äthyl-2-Phenylbenzimidazol. Sm. 80—81°.  $HCl + 3H_2O$ , ( $2HCl$ ,  $PtCl_4$ ),  $HNO_3 + H_2O$ ,  $H_2SO_4$  (B. 9, 776; Am. 5, 421). — IV, 1006.
  - 15) 1,5-Dimethyl-2-Phenylbenzimidazol. Sm. 126—127°. ( $2HCl$ ,  $PtCl_4$ ) (B. 26, 197). — IV, 1013.
  - 16) 5,7-Dimethyl-2-Phenylbenzimidazol. Sm. 195°.  $HCl$ ,  $HNO_3$ ,  $H_2SO_4$ , Oxalat (A. 208, 320; B. 10, 1711). — IV, 1017.
  - 17) 2-Dimethyl-2-Phenylbenzimidazol. Sm. 214—215°.  $HCl + 3H_2O$  (A. 208, 323). — IV, 1017.
  - 18) 5-Methyl-2-[4-Methylphenyl]benzimidazol.  $HCl$ ,  $HNO_3$ ,  $H_2SO_4$  (A. 210, 331). — IV, 1017.
  - 19) 2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 80—82°; Sd. 345—346°.  $HCl + 2H_2O$ , ( $HCl$ ,  $SnCl_2$ ),  $2HCl$ ,  $PtCl_4$ ),  $H_2SO_4 + H_2O$  (B. 23, 2638; 24, 3051; J. pr. [2] 47, 360). — IV, 884.
  - 20) 6-Methyl-4-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 186—188°.  $HCl$ ,  $HNO_3$ ,  $H_2Cr_2O_7$ , Pikrat, Ferrocyanat (B. 32, 2025). — \*IV, 679.
  - 21) 3-[2-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Fl. ( $2HCl$ ,  $PtCl_4$ ) (B. 22, 2701). — IV, 874.
  - 22) 3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 120°.  $HCl + 2H_2O$ , ( $HCl$ ,  $SnCl_2$ ), ( $2HCl$ ,  $PtCl_4$ ) (B. 22, 2695; D.R.P. 51712, 52614). — IV, 875; \*IV, 585.
  - 23) 2-Amido-3,7-Dimethylakridin. Sm. 244°.  $HCl$  (D.R.P. 107626; B. 36, 1025 C. 1903 [1] 1268; Soc. 85, 531 C. 1904 [1] 1525). — \*IV, 678.
  - 24) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -Phenylpropionsäure. Sm. 152° (155 bis 156°) (B. 19, 1515; B. 39, 992 C. 1906 [1] 1341). — II, 1371.
  - 25) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -[3-Methylphenyl]essigsäure. Sm. 95° (B. 17, 1470). — II, 1374.
  - 26) Nitril d.  $\alpha$ -Methylphenylamido- $\alpha$ -Phenylessigsäure. Sm. 67° (63 bis 64°) (B. 35, 3352 C. 1902 [2] 1195; B. 37, 4085 C. 1904 [2] 1723).
  - 27) Nitril d.  $\alpha$ -[2-Methylphenyl]amido- $\alpha$ -Phenylessigsäure. Sm. 71° (72—73°) (B. 34, 502; B. 39, 995 C. 1906 [1] 1341; B. 39, 2811 C. 1906 [2] 1491). — \*II, 820.
  - 28) Nitril d.  $\alpha$ -[3-Methylphenyl]amido- $\alpha$ -Phenylessigsäure. Sm. 97° (B. 35, 3332 C. 1902 [2] 1192).
  - 29) Nitril d.  $\alpha$ -[4-Methylphenyl]amido- $\alpha$ -Phenylessigsäure. Sm. 109° (110°) (B. 35, 3332 C. 1902 [2] 1192; B. 37, 4079 C. 1904 [2] 1722; B. 39, 996 C. 1906 [1] 1341; B. 39, 2811 C. 1906 [2] 1491).
  - 30) Nitril d. Phenylbenzylamidoessigsäure. Fl. (B. 37, 4083 C. 1904 [2] 1723).
  - 31) Nitril d. Dibenzylamidoameisensäure. Sm. 54°; Sd. 145—148°<sub>10</sub> (220—230°) (B. 32, 1873; 33, 1452; A. 144, 318; 314, 364; B. 35, 1285 C. 1902 [1] 1094; B. 36, 1199 C. 1903 [1] 1215). — II, 532; \*II, 301.

$C_{15}H_{14}N_4$ 

C 72,0 — H 5,6 — N 22,4 — M. G. 250.

- 1) **p-Phenylazo-1-Phenyl-4,5-Dihydropyrazol.** Sm. 156°. HCl (*J. pr.* [2] 50, 551). — **IV**, 1487.
- 2) **5-Phenylamido-2-Methyl-1-Phenyl-1,3,4-Triazol.** Sm. 227—228°. HCl (*B.* 33, 1068). — **\*IV**, 902.
- 3) **5-Methyl-2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin.** Sm. 106 bis 107° u. Zers. (*B.* 21, 2756; *B.* 38, 2990 *C.* 1905 [2] 1454). — **IV**, 1307.
- 4) **3-Phenylazo-5,7-Dimethylindazol.** Sm. 206,5—207,5° (*A.* 305, 318). — **\*IV**, 1082.
- 5) **5-[2,4-Diamidophenyl]amidochinolin + H<sub>2</sub>O.** Sm. 191° (*J. pr.* [2] 77, 487 *C.* 1908 [2] 75).
- 6) **6-[2,4-Diamidophenyl]amidochinolin.** Sm. 173° (*J. pr.* [2] 77, 483 *C.* 1908 [2] 75).
- 7) **8-[2,4-Diamidophenyl]amidochinolin + H<sub>2</sub>O.** Sm. 129° (*J. pr.* [2] 77, 479 *C.* 1908 [2] 74).
- 8) **7-Benzylidenamido-1,5-Dimethyl-1,2,3-Benzotriazol.** Sm. 151,5—152,5° (*J. pr.* [2] 63, 361). — **\*IV**, 935.
- 9) **Base (aus d. Verb. C<sub>15</sub>H<sub>12</sub>N<sub>4</sub>).** Sm. 75—77°. HCl, H<sub>2</sub>SO<sub>4</sub> (*B.* 22, 1481). — **IV**, 763.
- 10) **Base (aus d. Verb. C<sub>15</sub>H<sub>12</sub>N<sub>4</sub>).** Sm. 192—193° (*B.* 22, 1482). — **IV**, 763.
- 11) **Nitril d. Phenylamido-4-Methylphenylimidomethylamidoameisensäure (Phenyl-p-Tolyldicyandiamid).** Sm. 186° (*A.* 361, 308 *C.* 1908 [2] 881).

 $C_{15}H_{14}N_6$ 

C 64,7 — H 5,0 — N 30,2 — M. G. 278.

- 1) **Diphenylmelamin.** Sm. 202—204°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 21, 871). — **II**, 353.
- 2)  **$\alpha$ -Benzylidenbenzyltetrazyldiazin.** Sm. 160—161°. HCl (*A.* 287, 262). — **IV**, 1328.
- 3)  **$\beta$ -Benzylidenbenzyltetrazyldiazin.** Sm. 199° (*A.* 287, 263). — **IV**, 1328.
- 4) **Verbindung (aus Acetylamidrazonphenylhydrazon) (*B.* 28, 1284).** — **IV**, 1229.

 $C_{15}H_{14}Cl_2$ 

- 1)  **$\alpha\alpha$ -Dichlordi[4-Methylphenyl]methan.** Fl. (*R.* 24, 4 *C.* 1905 [1] 1248).
- 2) **Di[P-Chlormethylphenyl]methan.** Sm. 106—108° (*B.* 7, 1187). — **II**, 238.

 $C_{15}H_{14}Br_2$ 

- 1)  **$\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropan.** Sm. 134—135° (127° u. Zers.) (*B.* 37, 458 *C.* 1904 [1] 949; *B.* 36, 1496 *C.* 1903 [1] 1351; *B.* 37, 458 *C.* 1904 [1] 949; *B.* 37, 1134 *C.* 1904 [1] 1256).
- 2)  **$\alpha\beta$ -Dibrom- $\alpha\gamma$ -Diphenylpropan.** Sm. 231° u. Zers. (*Soc.* 75, 869). — **\*II**, 115.
- 3) **isom.  $\alpha\beta$ -Dibrom- $\alpha\gamma$ -Diphenylpropan.** Sm. 110° (*B.* 39, 3049 *C.* 1906 [2] 1263).
- 4)  **$\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthan.** Sm. 185° (*B.* 35, 3967 *C.* 1903 [1] 31).
- 5) **Di[P-Brommethylphenyl]methan.** Sm. 115° (*B.* 7, 1182). — **II**, 238.

 $C_{15}H_{14}S_2$ 

- 1) **Äthylenäther d.  $\alpha\alpha$ -Dimerkaptodiphenylmethan.** Sm. 106° (*B.* 21, 1477). — **III**, 180.
- 2) **Benzylidenäther d. 1,3-Di[Merkaptomethyl]benzol.** Sm. 170° (*B.* 34, 1776). — **\*III**, 15.

 $C_{15}H_{15}N$ 

C 86,1 — H 7,2 — N 6,7 — M. G. 209.

- 1)  **$\alpha$ -[2-Amidophenyl]- $\alpha$ -Phenylpropen.** Sm. 50—52°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 42, 3123 *C.* 1909 [2] 1354).
- 2)  **$\alpha$ -[2-Amidophenyl]- $\alpha$ -[4-Methylphenyl]äthen.** Sd. 224—226°<sub>50</sub>. H<sub>2</sub>SO<sub>4</sub> (*B.* 42, 3122 *C.* 1909 [2] 1354).
- 3)  **$\alpha$ -Benzylidenamidoäthylbenzol.** Sd. 273—275°<sub>14</sub> (*B.* 27, 2308). — **III**, 30.
- 4) **4-Äthylbenzylidenamidobenzol.** Sm. 2—3°; Sd. 208—210°<sub>30</sub> (*C.* r. 136, 558 *C.* 1903 [1] 832).
- 5) **2-Benzylidenamido-1,3-Dimethylbenzol.** Fl. (*B.* 32, 1009). — **\*III**, 23.
- 6) **2-Benzylidenamido-1,4-Dimethylbenzol.** Sm. 101—102° (96°) (*A.* 255, 169; 274, 237). — **III**, 30.
- 7) **2,4-Dimethylbenzylidenamidobenzol.** Sd. 190°<sub>10</sub> (*Bl.* [3] 17, 369).
- 8) **2,5-Dimethylbenzylidenamidobenzol.** Sm. 44° (51°); Sd. 197°<sub>10</sub> (*Bl.* [3] 17, 941; *Am. Soc.* 23, 662; *C.* 1901 [2] 772). — **\*III**, 43.

**C<sub>15</sub>H<sub>15</sub>N**

- 9)  $\alpha$ -Benzylimidoäthylbenzol. Sm. 43—44° (B. 30, 3006). — \*III, 99.
- 10) 5-Amido-1-Methyldihydroanthracen. Sm. 78—79°; subl. bei 130 bis 140° u. Zers. HCl (B. 16, 1633). — II, 639.
- 11)  $\beta$ -Amido-2-Methyl-9,10-Dihydroanthracen. Sm. 78—79°. HCl (B. 16, 1633). — IV, 401.
- 12)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Methyl-2-Pyridyl]äthen. Sm. 202°. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr (B. 38, 3706 C. 1906 [1] 52).
- 13)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen. Sm. 144—145°. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 36, 1684 C. 1903 [2] 46). — \*IV, 240.
- 14) 5-Äthyl-2-[ $\beta$ -Phenyläthenyl]pyridin. Sm. 58,5°; Sd. 356,5°<sub>788</sub>. HCl, (HCl, HgCl<sub>2</sub>), (HCl, SnCl<sub>2</sub> + 3 H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub> + 2 H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), Pikrat (B. 21, 3087; 22, 1057). — IV, 398.
- 15) 6-[ $\beta$ -Phenyläthenyl]-2,4-Dimethylpyridin. Sd. 188—189°. HCl + 2 H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2 H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), (HCl, HgCl<sub>2</sub> + H<sub>2</sub>O), HBr + 2 H<sub>2</sub>O, HNO<sub>3</sub> + 2 H<sub>2</sub>O, Pikrat (B. 27, 80; B. 38, 3908 C. 1906 [1] 192). — IV, 398.
- 16) 2-Benzyl-1,3-Dihydroisindol. Sm. 41° (B. 31, 424). — \*IV, 140.
- 17) 2-[3-Methylphenyl]-1,3-Dihydroisindol. Sm. 115° (B. 31, 422). — \*IV, 140.
- 18) 2-[4-Methylphenyl]-1,3-Dihydroisindol. Sm. 195° (B. 31, 422). — \*IV, 140.
- 19) 2-Phenyl-1,2,3,4-Tetrahydrochinolin. Sd. 341—344° (B. 19, 1198). — IV, 399.
- 20) 4-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 74°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 28, 1042; D. R. P. 79385). — IV, 400; \*IV, 239.
- 21) 6-Phenyl-1,2,3,4-Tetrahydrochinolin. HCl + 1½ H<sub>2</sub>O, Pikrat (A. 230, 21). — IV, 400.
- 22) 2-Phenyl-1,2,3,4-Tetrahydroisochinolin. Sm. 45—48° (B. 18, 3479). — IV, 401.
- 23) 1,3,7-Trimethylcarbazol. Sm. 119°. Pikrat (A. 359, 77 C. 1908 [1] 1551).
- 24) 1,2-Dimethyl-3,4-Dihydro- $\beta$ -Naphtochinolin. Sm. 115°. HJ (A. 242, 364). — IV, 399.
- 25) 1,3-Dimethyl-5,10-Dihydroakridin. Sm. 80° (A. 279, 287). — IV, 399.
- 26) 3,7-Dimethyl-5,10-Dihydroakridin. Sm. 218—220° (B. 36, 1019 C. 1903 [1] 1268). — \*IV, 240.
- 27) 5,10-Dimethyl-5,10-Dihydroakridin. Sm. 135—140° (B. 42, 1756 C. 1909 [2] 36).

**C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>**

- C 76,0 — H 6,3 — N 17,7 — M. G. 237.
- 1) 2-[2-Amidobenzyliden]amido-1-Methylimidomethylbenzol. Sm. 189 bis 190°. 2HCl (B. 37, 3653 C. 1904 [2] 1514).
  - 2)  $\alpha$ -Amido- $\alpha$ -Benzylidenhydrazon- $\alpha$ -[4-Methylphenyl]methan (Benzyliden- $p$ -Tolennyldiazidin). Sm. 154° (B. 27, 3277; A. 298, 3). — IV, 1139.
  - 3)  $\alpha$ -Methylen- $\beta$ -Phenyl- $\beta$ -[2-Methylenamidobenzyl]hydrazin. + C<sub>2</sub>H<sub>5</sub>O (Sm. 84°) (J. pr. [2] 53, 426). — IV, 1130.
  - 4) 4-Benzylidenamidoozobenzol. Sm. 128° (B. 17, 1403). — IV, 1357.
  - 5) 2-Imido-1,3-Diphenyltetrahydroimidazol. Sm. 162° (B. 33, 1385). — \*IV, 742.
  - 6) 1-Phenylazo-2-Methyl-2,3-Dihydroindol. Sm. 51,5° (B. 26, 1287). — IV, 1581.
  - 7) 5,7-Dimethyl-2-[4-Amidophenyl]benzimidazol. Sm. 183°. H<sub>2</sub>SO<sub>4</sub> + 6 H<sub>2</sub>O (B. 26, 2763). — IV, 1185.
  - 8) 5-Methyl-2-[2-Amido-4-Methylphenyl]benzimidazol. Sm. 188°. HCl (B. 30, 3069). — IV, 1185.
  - 9) 2-[4-Methylphenyl]imido-5-Methyl-2,3-Dihydrobenzimidazol (4-Tolyltolylenguanidin). Sm. 197—198°. HCl, (2HCl, PtCl<sub>4</sub> + 5 H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> + 5 H<sub>2</sub>O (B. 24, 2518). — IV, 623.
  - 10) 2-Phenylazo-1,2,3,4-Tetrahydroisochinolin. Sm. 61,5° (B. 26, 1210). — IV, 1581.
  - 11) 4,6-Dimethyl-2-[2-Methylphenyl]-2,1,5-Benztriazol. Sm. 121°. HJ (A. 366, 405 C. 1909 [2] 290).



- C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>** 12) **4,6-Dimethyl-2-[4-Methylphenyl]-2,1,5-Benzotriazol.** Sm. 131–132°. HCl (A. 366, 403 C. 1909 [2] 290).
- 13) **7-Methyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benzotriazin.** Sm. 178°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 24, 1008). — IV, 1151.
- 14) **7-Dimethylamido-2-Methyl-5,10-Naphtdiazin.** Sm. 170–171° (A. 236, 340). — IV, 1181.
- 15) **2,8-Diamido-3,7-Dimethylakridin.** Sm. oberhalb 300°. HCl, (2HCl, PtCl<sub>4</sub>) (D.R.P. 52324; B. 34, 4308 C. 1902 [1] 322; B. 36, 589 C. 1903 [1] 724). — \*IV, 842.
- 16) **N-Äthyltoluaposafranin.** HCl (B. 31, 1187). — IV, 1182.
- 17) **Triazin (aus 4-Methylphenyl-6-Amido-3-Methylbenzylamin).** Sm. 173° u. Zers. (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 71, 159 C. 1905 [1] 929).
- 18) **Nitril d. ββ-Di[Phenylamido]propionsäure (Cyanäthylidendiphenyldiamin).** Sm. 113° (A. ch. [6] 16, 181). — II, 443.
- 19) **Nitril d. α-[ββ-Diphenylhydrazido]propionsäure.** Sm. 65° (B. 25, 2064). — IV, 740.
- C<sub>16</sub>H<sub>15</sub>N<sub>5</sub>** C 67,9 — H 5,7 — N 26,4 — M. G. 265.
- 1) **Di[Benzylidenamido]guanidin.** Sm. 176° (180°). HCl, HBr (B. 37, 4525 C. 1905 [1] 158; G. 35 [1] 298 C. 1905 [2] 122).
- 2) **Di[Phenylazo]allylamin.** Sm. 74° (B. 22, 941). — IV, 1568.
- 3) **3[oder 5]-Amido-5[oder 3]-[4-Methylphenyl]amido-1-Phenyl-1,2,4-Triazol.** Sm. 148°. HCl (A. 361, 318 C. 1908 [2] 881).
- 4) **5-Benzylamido-1-Benzyl-1,2,3,4-Tetrazol.** Sm. 88,5°. HCl, HNO<sub>2</sub>, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (A. 287, 255). — \*IV, 978.
- 5) **isom. Dibenzyl-5-Amido-1,2,3,4-Tetrazol.** Sm. 169–170° (A. 287, 258). — \*IV, 978.
- 6) **5-[2-Methylphenyl]imido-1-[2-Methylphenyl]-4,5-Dihydro-1,2,3,4-Tetrazol.** Sm. 152° (B. 33, 1071). — \*IV, 978.
- 7) **5-[4-Methylphenyl]imido-1-[4-Methylphenyl]-4,5-Dihydro-1,2,3,4-Tetrazol.** Sm. 207° (B. 33, 1073). — \*IV, 978.
- 8) **3-[4-Dimethylamidophenyl]azoindazol.** Sm. 256–257° (B. 32, 1784). — \*IV, 1081.
- C<sub>16</sub>H<sub>15</sub>Cl** 1) **α-Chlor-αβ-Diphenylpropan.** Sm. 139–140° (C. 1907 [1] 1579).
- C<sub>16</sub>H<sub>16</sub>O** C 84,9 — H 7,5 — O 7,5 — M. G. 212.
- 1) **α-Oxy-αα-Diphenylpropan.** Sm. 92° (94–95°); Sd. 170–172°<sub>14</sub> (C. r. 135, 533 C. 1902 [2] 1209; C. r. 138, 154 C. 1904 [1] 577; B. 37, 231 C. 1904 [1] 660; B. 41, 2716 C. 1908 [2] 1355; B. 41, 2719 C. 1908 [2] 1356).
- 2) **α-Oxy-αβ-Diphenylpropan.** Sd. 185–190°<sub>20</sub> (C. r. 140, 1460 C. 1905 [2] 235; C. 1907 [1] 1579).
- 3) **β-Oxy-αβ-Diphenylpropan.** Sm. 50–51°; Sd. 175°<sub>15</sub> (B. 37, 457 C. 1904 [1] 949).
- 4) **γ-Oxy-αβ-Diphenylpropan.** Sd. 300–302° (B. 23, 2863). — II, 1080.
- 5) **α-Oxy-αγ-Diphenylpropan.** Sd. 240°<sub>70</sub> (330–332°) (Soc. 59, 1008; A. 296, 325). — II, 1080; \*II, 662.
- 6) **β-Oxy-αγ-Diphenylpropan.** Sd. 327° (B. 25, 1272; Am. 14, 229; B. 39, 3050 Anm. C. 1906 [2] 1264). — II, 1080.
- 7) **2-Oxy-1-Methyl-αα-Diphenyläthan.** Fl. (B. 24, 3895). — II, 899.
- 8) **3-Oxy-1-Methyl-αα-Diphenyläthan.** Sm. 124° (B. 24, 3898). — II, 899.
- 9) **α-Oxy-β-Phenyl-α-[4-Methylphenyl]äthan.** Sm. 66°; Sd. oberhalb 360° (B. 14, 1646). — II, 1080.
- 10) **α-Oxy-2,4-Dimethyldiphenylmethan.** Sm. 57°; Sd. 330,8°<sub>744</sub> (J. pr. [2] 35, 472; C. 1902 [2] 1199). — II, 1080.
- 11) **α-Oxy-2,5-Dimethyldiphenylmethan.** Sm. 88° (J. pr. [2] 35, 475). — II, 1081; \*II, 663.
- 12) **α-Oxy-3,4-Dimethyldiphenylmethan.** Sm. 68°; Sd. 336°<sub>744</sub> (J. pr. [2] 35, 469). — II, 1080.
- 13) **α-Oxy-4,4'-Dimethyldiphenylmethan.** Sm. 69° (61–61,5°) (B. 7, 1184; 10, 2175; A. 312, 92). — II, 1080.
- 14) **Methyläther d. 2-Oxy-αα-Diphenyläthan.** Sm. 26°; Sd. 160–161°<sub>11</sub> (B. 36, 4008 C. 1904 [1] 175).
- 15) **Methyläther d. 2-Oxy-αβ-Diphenyläthan.** Sd. 259° (B. 38, 943 C. 1905 [1] 1020).

- C<sub>15</sub>H<sub>16</sub>O**
- 16) Methyläther d. 4-Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 61° (B. 23, 2865). — II, 899.
  - 17) Äthyläther d.  $\alpha$ -Oxydiphenylmethan. Sd. 288° (A. 133, 17; 296, 252; B. 29, 2082; Bl. 33, 339; B. 39, 4019 C. 1907 [1] 261). — II, 1077; \*II, 657.
  - 18) Äthyläther d. 4-Oxydiphenylmethan. Sd. 317° (B. 31, 1001). — \*II, 539.
  - 19) Äthyläther d. 3-Oxymethylbiphenyl. Fl. (A. ch. [6] 15, 243). — II, 1079.
  - 20) Äthyläther d.  $\alpha$ -[4-Oxy-1-Naphtyl]propen. Sd. 177—178°. Pikrat (Bl. [3] 17, 815). — \*II, 540.
  - 21) Phenyläther d.  $\gamma$ -Oxy- $\alpha$ -Phenylpropan. Sd. 171—172°<sub>11</sub> (C. r. 138, 1049 C. 1904 [1] 1493).
  - 22) 4-Keto-6-Methyl-2-[ $\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 56°; Sd. 243°<sub>0</sub> (A. 281, 92). — III, 177.
  - 23) 4-Keto-3-Benzyliden-2,6-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 102° (G. 23 [1] 572; A. 281, 118; Am. 37, 382 C. 1907 [1] 1540). — III, 177.
  - 24) Isobutyl-1-Naphtylketon. Sd. 319—321° (Bl. [3] 15, 69). — III, 176.
  - 25) Isobutyl-2-Naphtylketon. Sm. 36°; Sd. 182—184°. Pikrat (Bl. [3] 15, 70; [3] 17, 313). — III, 177; \*III, 143.
  - 26)  $\alpha$ -Lapachan. Sm. 112—113,5°. Pikrat (Soc. 69, 1367). — \*III, 289.
  - 27)  $\beta$ -Lapachan. Fl. Pikrat (Soc. 69, 1366). — \*III, 290.
  - 28) Verbindung (aus Benzophenon). Sm. 182° (C. 1900 [2] 334).  
C 78,9 — H 7,0 — O 14,0 — M. G. 228.
- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>**
- 1)  $\alpha\beta$ -Dioxy- $\alpha\alpha$ -Diphenylpropan. Sm. 96,5° (B. 39, 2302 C. 1906 [2] 525; C. r. 143, 127 C. 1906 [2] 670).
  - 2)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylpropan. Sm. 104° (C. r. 143, 127 C. 1906 [2] 670; C. 1909 [1] 1335).
  - 3)  $\alpha$ -Oxy- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -Phenylpropan (Phenyldihydrocumar-alkohol). Sm. 96—97° (B. 29, 379; 34, 411). — \*II, 694.
  - 4)  $\alpha\alpha$ -Di[4-Oxyphenyl]propan. Sm. 130° (C. 1908 [2] 589).
  - 5)  $\beta\beta$ -Di[4-Oxyphenyl]propan. Sm. 151—152° (152—153°) (J. r. 23, 493; A. 343, 85 C. 1906 [1] 132). — II, 996.
  - 6) 5,5'-Dioxy-2,2'-Dimethyldiphenylmethan. Sm. 159—160° (A. 356, 158 C. 1907 [2] 1699).
  - 7) 4,4'-Dioxy-3,3'-Dimethyldiphenylmethan. Sm. 126° (128,5°) (B. 27, 1814; A. 356, 153 C. 1907 [2] 1699). — \*II, 605.
  - 8) 2-Methyläther d.  $\alpha,2$ -Dioxy- $\alpha\alpha$ -Diphenyläthan. Sm. 75,5°; Sd. 285 bis 287° (B. 36, 4002 C. 1904 [1] 174).
  - 9) Monomethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 100—102° (Soc. 91, 1390 C. 1907 [2] 1244).
  - 10) Dimethyläther d.  $\alpha\alpha$ -Dioxydiphenylmethan. Sm. 106,5—107°; Sd. 288—290° (Soc. 69, 987; B. 39, 3005 C. 1906 [2] 1430; B. 42, 2342 C. 1909 [2] 354). — \*III, 145.
  - 11) Dimethyläther d. 2,4'-Dioxydiphenylmethan. Sm. 26° (J. pr. [2] 65, 314 C. 1902 [1] 1351).
  - 12) Dimethyläther d. 4,4'-Dioxydiphenylmethan. Sm. 48—49°; Sd. 330 bis 340° (A. 194, 323). — II, 993.
  - 13) Dimethyläther d. Di[ $\beta$ -Oxyphenyl]methan. Sm. 52°; Sd. oberhalb 360° (B. 7, 1200). — II, 992.
  - 14) Diphenyläther d.  $\alpha\gamma$ -Dioxypropan. Sm. 61° (57°); Sd. 338—340° (B. 24, 2632; J. r. 26 [1] 3; Bl. [3] 15, 1224; C. 1899 [1] 248; B. 42, 2044 C. 1909 [2] 450). — II, 655; \*II, 356.
  - 15) Phenyl-[4-Methylphenyl]äther d.  $\alpha\beta$ -Dioxyäthan. Sm. 99° (B. 24, 196). — II, 749.
  - 16) Dibenzyläther d. Dioxymethan. Sd. oberhalb 360° (330°) (A. 240, 201; Bl. [3] 21, 1060; Bl. [3] 27, 1217 C. 1903 [1] 225). — II, 1048; \*II, 636.
  - 17) Di[2-Methylphenyl]äther d. Dioxymethan. Sm. 32,5° (A. 240, 202). — II, 737.
  - 18) Di[3-Methylphenyl]äther d. Dioxymethan. Sm. 45°; Sd. oberhalb 360° (A. 240, 202). — II, 744.
  - 19) Di[4-Methylphenyl]äther d. Dioxymethan. Sm. 40,2°; Sd. oberhalb 360° (A. 240, 202). — II, 748.

- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>** 20) Methyläther d. 4-Oxy-1-Butyrylnaphtalin. Sm. 49—50°; Sd. 205°. Pikrat (*Bl.* [3] 15, 632; [3] 17, 308). — \*III, 143.
- 21) Methyläther d. 1-Oxy- $\beta$ -Butyrylnaphtalin. Sm. 33—34°; Sd. 222 bis 226°. Pikrat (*Bl.* [3] 15, 635). — \*III, 143.
- 22) Methyläther d. 1-Oxy- $\beta$ -Butyrylnaphtalin. Sd. 212—217°<sub>18</sub> (*Bl.* [3] 15, 635). — \*III, 143.
- 23)  $\alpha$ -[5,8-Dimethyl-2-Naphtyl]propionsäure (Santinsäure). Sm. 132 bis 132,5°. Ag (*G.* 22 [2] 35). — II, 1461.
- 24) Isosantinsäure. Sm. 132,5—133°. Ag (*G.* 22 [2] 39). — II, 1461.
- 25) Hexahydroanthracen-1-Carbonsäure. Sm. 232° (*B.* 16, 2612). — II, 1460.
- 26) 2-Naphtylester d. Isovaleriansäure. Sd. 180—184°<sub>20</sub> (*A.* 301, 113). — \*II, 521.
- 27) Farbstoff (aus  $\beta$ -[o-Methylpseudobutyl]benzoylakrylsäure) (*C.* 1907 [1] 1788).
- C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>** C 73,8 — H 6,5 — O 19,7 — M. G. 244.
- 1)  $\alpha\beta\gamma$ -Trioxy- $\alpha$ -Diphenylpropan. Sm. 157—158° (*B.* 40, 1820 *C.* 1907 [2] 47).
- 2) 3,4-Dimethyläther d.  $\alpha,3,4$ -Trioxydiphenylmethan. Sm. 99° (*B.* 39, 4029 *C.* 1907 [1] 264).
- 3) 4,4'-Dimethyläther d.  $\alpha$ -Oxydi[4-Oxyphenyl]methan. Sm. 72° (*B.* 36, 655 *C.* 1903 [1] 768).
- 4)  $\alpha\gamma$ -Diphenyläther d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 81—82°; Sd. 287 bis 288° (*Soc.* 93, 840 *C.* 1908 [1] 2032; *C.* 1909 [1] 1556).
- 5)  $\alpha$ -Phenyläther- $\beta$ -[2-Methoxyphenyl]äther d.  $\alpha\beta$ -Dioxyäthan. Sm. 75° (*C.* 1897 [2] 481). — \*II, 547.
- 6) Isobutyl-1,8-Dioxy-2-Naphtylketon. Sm. 71—72° (*C.* 1901 [2] 1287). — \*III, 143.
- 7) Hydrolapachon (*G.* 19, 611). — II, 1028.
- 8) Osthol. Sm. 83—84° (*C.* 1909 [2] 1768).
- 9) Artemisinsäure. Sm. 135—136°. Ba (*C.* 1903 [2] 1377).
- 10) Hydrolapachosäure (*G.* 19, 604). — II, 1028.
- 11)  $\alpha$ -Oxyisovalerian-1-Naphtyläthersäure. Sm. 89,5—90,5° (*B.* 33, 1389). — \*II, 504.
- 12)  $\alpha$ -Oxyisovalerian-2-Naphtyläthersäure. Sm. 140° (*B.* 33, 1392). — \*II, 522.
- 13) Methylester d.  $\epsilon$ -Keto- $\alpha$ -Phenyl- $\alpha\gamma$ -Heptadien- $\eta$ -Carbonsäure. Sm. 88° (*B.* 38, 1118 *C.* 1905 [1] 1241).
- 14) Äthylester d.  $\alpha$ -Oxypropion-1-Naphtyläthersäure. Sd. 205°<sub>22</sub> (*B.* 33, 1387). — \*II, 504.
- 15) Äthylester d.  $\alpha$ -Oxypropion-2-Naphtyläthersäure (*B.* 33, 1390). — \*II, 522.
- 16) Äthylester d. 3-Oxynaphtalinäthyläther-2-Carbonsäure. Sm. 60° (*Z. Kr.* 29, 285). — \*II, 989.
- 17) Äthylester d.  $\epsilon$ -Keto- $\alpha$ -Phenyl- $\alpha\gamma$ -Hexadien- $\delta$ -Carbonsäure. Sd. 213 bis 214°<sub>17</sub> (*B.* 31, 734). — \*II, 991.
- 18) Acetat d.  $\gamma$ -Oxy- $\gamma$ -Phenyl- $\alpha$ -[2-Furanyl]propan. Sd. 171—172°<sub>11</sub> (*B.* 42, 2357 *C.* 1909 [2] 361).
- 19) Acetat d. Pyroguajacin. Sm. 122° (122—124°) (*M.* 1, 598; 19, 98; 21, 567). — III, 645; \*III, 474.
- 20) Verbindung (aus p-Anisol). HCl (*B.* 36, 650 *C.* 1903 [1] 768).
- 21) Verbindung (aus Salicylidenacetylaceton). Sm. 105° u. Zers. (*B.* 37, 4500 *C.* 1905 [1] 251).
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>** C 69,2 — H 6,1 — O 24,6 — M. G. 260.
- 1) Di[4,6-Dioxy-2-Methylphenyl]methan (Methylen diorcin) (*B.* 27, 2890; *A.* 329, 302 *C.* 1904 [1] 793). — \*II, 632.
- 2) Di[4,6-Dioxy-3-Methylphenyl]methan (Methylenbiskresorcin). Sm. 195 bis 200° (*Ar.* 244, 562 *C.* 1907 [1] 547).
- 3) 4,4'-Dimethyläther d. Di[3,4-Dioxyphenyl]methan? (Methylen-diguajakol; Pulmoform) (*C.* 1901 [1] 642).
- 4) Di[2-Methoxyphenyl]äther d. Dioxymethan. Sm. 79° (83—84°); Sd. 217°<sub>10</sub> (*C.* 1896 [1] 543; *Bl.* [3] 17, 950; *J.* 1890, 1197). — \*II, 554.
- 5) Propyläther d. 4-Oxy-3-Acetyl-7-Methyl-1,2-Benzpyron. Sm. 135° (*A.* 367, 236 *C.* 1909 [2] 1238).



- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>**
- 6) Oxydihydrolapachol. Sm. 125°. Ca, Ba + 2H<sub>2</sub>O, Ag + H<sub>2</sub>O (*Soc.* 61, 628). — III, 403.
  - 7) Dihydroxanthoxylin N. Sm. 142—143° (*C.* 1907 [1] 169).
  - 8) Methyläther d. Curcumin. Sm. 145° (*Am.* 39, 716 *C.* 1908 [2] 513).
  - 9) Methyläther d. Rosocyanin (*Am.* 39, 717 *C.* 1908 [2] 514).
  - 10) α-[3,4-Dioxyphenyl]-s-Methyl-αγ-Hexadien-3,4-Methylenäther-δ-Carbonsäure (α-Isopropylpiperinsäure). Zers. bei 240° (*B.* 28, 1189). — II, 1871.
  - 11) s-Phenyl-β-Methyl-βδ-Hexadien-γδ-Dicarbonsäure (α-Isopropyl-γ-Methylphenylitakonsäure). Sm. 223° u. Zers. (208—210°) (*B.* 30, 97; *B.* 38, 3678 *C.* 1905 [2] 1724). — \*II, 1085.
  - 12) α-[4-Methylphenyl]-δ-Methyl-αγ-Pentadien-βγ-Dicarbonsäure. Sm. 224° (*B.* 38, 3896 *C.* 1906 [1] 191).
  - 13) 2,6-Diketo-1,3-Dimethyl-4-Phenylhexahydrobenzol-5-Carbonsäure. Sm. 124° u. Zers. (*A.* 294, 297; *B.* 30, 2265). — \*II, 1085.
  - 14) Methylester d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-methyläther-3-Carbonsäure. Sm. 110—111° (*A.* 294, 277). — \*II, 1084.
  - 15) Äthylester d. γs-Diketo-α-Phenyl-α-Hexen-δ-Carbonsäure (Ä. d. Cinnamylacetessigsäure). Sm. 40° (44°) (*B.* 16, 166; *B.* 35, 933 *C.* 1902 [1] 808). — II, 1877.
  - 16) Äthylester d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 144—145° (140°). Na, Ag (*Am.* 9, 117; *B.* 27, 2053, 2127, 2343; *J. pr.* [2] 43, 391; *A.* 294, 275; 308, 197). — II, 1877; \*II, 1084.
  - 17) Äthylester d. 1,4-Dioxynaphtalin-4-Äthyläther-2-Carbonsäure. Sm. 98° (*J. pr.* [2] 62, 41). — \*II, 1082.
  - 18) Verbindung (aus Aceton u. 1,3-Dioxybenzol) + H<sub>2</sub>O. Sm. 212—213° (*Bl.* [3] 7, 564). — II, 919.
  - 19) Verbindung (aus γ-Phenylhydrazon-βδ-Diketopentan). Sm. 186° (*B.* 35, 2189). — \*IV, 516.  
C 65,1 — H 5,8 — O 29,0 — M. G. 276.
- C<sub>15</sub>H<sub>16</sub>O<sub>5</sub>**
- 1) γ-Oxy-βs-Diketo-γ-Benzoyl-δ-Acetylhexan. Sm. 103° (*B.* 36, 3229 *C.* 1903 [2] 941).
  - 2) Osthin. Sm. 199—200° (*C.* 1896 [1] 561).
  - 3) Dioxydihydrolapachol. Sm. 181—182° (*Soc.* 61, 647; 67, 792). — III, 403; \*III, 289.
  - 4) Dimethyläther d. Excoëcarin. Sm. 117—119° (*Soc.* 81, 216 *C.* 1902 [1] 532, 822). — \*III, 486.
  - 5) Tetramethyläther d. Purpurogallin. Sm. 93—94° (*C.* 1905 [2] 626).
  - 6) Tetramethyläther d. Isopurpurogallon. Sm. 211—213° (*C.* 1905 [2] 626).
  - 7) α-[2-Methoxyphenyl]-δ-Methyl-αγ-Pentadien-βγ-Dicarbonsäure. Sm. 200° u. Zers. (*B.* 39, 766 *C.* 1906 [1] 1017).
  - 8) α-[4-Methoxyphenyl]-δ-Methyl-αγ-Pentadien-βγ-Dicarbonsäure. Sm. 226—227° u. Zers. (*B.* 39, 763 *C.* 1906 [1] 1017).
  - 9) γ-Keto-αs-Di[2-Furanyl]pentan-β-Methylcarbonsäure (βδ-Difuryl-lävulinsäure). Sm. 71—72° (*B.* 26, 351). — III, 719.
  - 10) Decarbounsäure. Sm. 198—199° (*G.* 12, 236; *A.* 310, 281). — II, 2057; \*II, 1206.
  - 11) Dimethylester d. 4-Keto-1-Phenyl-R-Pentamethylen-2,3[oder 2,5]-Dicarbonsäure. Sm. 94°. Na, Cu + C<sub>2</sub>H<sub>5</sub>O (*A.* 315, 239). — \*II, 1138.
  - 12) Dimethylester d. Inden-1-Oxyessigsäure-3-Methylcarbonsäure. Fl. (*A.* 347, 285 *C.* 1906 [2] 959).
  - 13) Äthylester d. α-Benzoyl-β-Acetoxylerotonsäure (Ä. d. Diacetylbenzoyl-essigsäure). Fl. (*A.* 282, 165).
  - 14) Äthylester d. 4[oder 5]-Acetoxy-1,6[oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 96° (*A.* 283, 256). — III, 732.
  - 15) Äthylester d. 4-Oxy-6-Methyl-1,2-Benzpyron-4-Äthyläther-3-Carbonsäure. Sm. 87° (*A.* 367, 248 *C.* 1909 [2] 1239).
  - 16) Äthylester d. 4-Oxy-7-Methyl-1,2-Benzpyron-4-Äthyläther-3-Carbonsäure. Sm. 104° (*A.* 367, 224 *C.* 1909 [2] 1236).  
C 61,6 — H 5,5 — O 32,9 — M. G. 292.
- C<sub>15</sub>H<sub>16</sub>O<sub>6</sub>**
- 1) Methylenbismethylphloroglucin. Sm. 230° (*A.* 329, 279 *C.* 1904 [1] 796).

- $C_{15}H_{16}O_6$
- 2) Trimethyläther d.  $\alpha$ -Hexaoxybiphenyl.  $K_2 + 2H_2O$ , Ba (B. 8, 160). — II, 1041.
  - 3) Ozonid d. Kohlenw.  $C_{15}H_{16}$  (aus Petroleum) (B. 41, 3707 C. 1908 [2] 2034).
  - 4) Pikrotoxinin +  $H_2O$ . Sm. 200—201° (wasserfrei) (A. 10, 18; 222, 340; B. 31, 2964; C. 1897 [1] 500; M. 1, 99; 2, 801; G. 36 [2] 645 C. 1907 [1] 1043). — III, 643; \*III, 471.
  - 5) Pikrotoxid. Sm. oberhalb 310° (B. 10, 83, 1100; M. 1, 177; A. 222, 333). — III, 643.
  - 6) Hydroquereinsäure +  $H_2O$ . Ba, Pb, Ag (A. 263, 110). — III, 589.
  - 7)  $\beta\delta$ -Lakton d.  $\beta$ -Oxy- $\gamma\delta$ -Diacetoxyl- $\alpha$ -Phenylbutan- $\delta$ -Carbonsäure. Fl. (A. 347, 135 C. 1906 [2] 779).
  - 8) Dimethylester d. 1,3,5-Trimethylbenzol-2,4-Di[Ketocarbonsäure]. Sm. 103,5—104°. — \*II, 1174.
  - 9) Trimethylester d. 1-Phenyl-R-Trimethylen-2,3,3-Tricarbonsäure. Sm. 47°; Sd. 209—210°<sub>20</sub> (B. 25, 1153). — II, 2018.
- $C_{15}H_{16}O_7$
- 10) Diäthylester d.  $\alpha$ -[3,4-Dioxyphenyl]äthen-3,4-Methylenäther- $\beta\beta$ -Dicarbonsäure. Sm. 63°; Sd. 216—219°<sub>11</sub> (B. 31, 2594). — \*II, 1169.
  - 11) Diäthylester d.  $\gamma$ -Keto- $\alpha$ -[2-Oxyphenyl]propen- $\beta\gamma$ -Dicarbonsäure. Sm. 91° HCl (Bl. [3] 35, 1273 C. 1907 [1] 740).
  - 12) Verbindung (aus d. Brasilintrimethyläther). Sm. 155° (C. 1899 [1] 750). C 58,4 — H 5,2 — O 36,4 — M. G. 308.
    - 1) Socotraloin (J. 1865, 572; 1874, 899). — \*III, 618.
    - 2) Aloëresinsäure (J. 1863, 597). — III, 618.
    - 3) Diploschistessäure. Sm. 164—165° u. Zers. (A. 346, 91 C. 1906 [1] 1887).
    - 4) Podophyllsäure (oder  $C_{20}H_{24}O_9$ ). Cu, Ag (Soc. 73, 214). — \*III, 473.
    - 5) Verbindung (aus Äthylxanthophansäure). Sm. 118—120° (113—115°) (A. 297, 54; B. 39, 2077 C. 1906 [2] 423). C 55,5 — H 4,9 — O 39,5 — M. G. 324.
- $C_{15}H_{16}O_8$
- 1) Leukodrin. Sm. 211—213° (C. 1896 [1] 561).
  - 2) Skimmin. Sm. 210° (R. 3, 206). — III, 611.
  - 3)  $\alpha$ -[3,4-Dioxyphenyl]butan-3,4-Methylenäther- $\delta\delta$ -Dicarbonsäure- $\gamma$ -Methylcarbonsäure. Sm. 80° (A. 345, 249 C. 1906 [1] 1497).
  - 4) Dianhydrid d.  $\alpha\epsilon$ -Diketo- $\gamma$ -Hexylpentan- $\alpha\beta\delta\epsilon$ -Tetracarbonsäure. Sm. 89—90° (Bl. [4] 1, 47 C. 1907 [1] 1053).
  - 5) Methylester d. 2,4,6-Triacetoxyl-1-Methylbenzol-3-Carbonsäure. Sm. 103—104° (M. 23, 100 C. 1902 [1] 1099).
  - 6) Trimethylester d. 5-Acetoxyl-1-Methylbenzol-2,3,4-Tricarbonsäure. Sm. 106—108° (B. 35, 2913 C. 1902 [2] 1042).
  - 7) Äthylester d. 3,4,5-Triacetoxylbenzol-1-Carbonsäure (A. 163, 216). — II, 1922.
  - 8) Tetraacetat d. 2,3,4,5[oder 2,3,4,6]-Tetraoxy-1-Methylbenzol. Sm. 132—133° (A. 311, 351). — \*II, 629.
  - 9) Tetraacetat d. 2,3,5,6-Tetraoxy-1-Methylbenzol. Sm. 198° (A. 361, 401 C. 1908 [2] 591).
- $C_{15}H_{16}O_9$
- 10) Verbindung (aus  $\alpha\beta$ -Dioxypropionsäurealdehyd u. Phloroglucin). Sm. noch nicht bei 280° (B. 33, 3104). — \*II, 616. C 52,9 — H 4,7 — O 42,3 — M. G. 340.
    - 1) Äskulin +  $1\frac{1}{2}H_2O$ . Sm. 160° u. Zers. (wasserfrei) (Berz. J. 12, 274; J. 1856, 678; 1872, 788; A. 15, 266; 87, 186; 88, 356; 90, 65; Fr. 22, 153; B. 9, 1184; 13, 1590, 1950; 14, 200, 303; 15, 2633; R. 24, 463 C. 1905 [2] 1254). — III, 566; \*III, 428.
    - 2) Daphnin +  $2H_2O$ . Sm. bei 200° u. Zers. (wasserfrei) (A. 115, 1; B. 12, 110; J. 1863, 591). — III, 580. C 48,4 — H 4,3 — O 47,3 — M. G. 372.
- $C_{15}H_{16}O_{11}$
- 1) Tri[Methylcarbonat]d. 3,4,5-Trioxybenzol-1-Carbonsäureäthylester. Sm. 86—87° (B. 42, 1021 C. 1909 [1] 1239).
  - 2) Gerbstoff (aus Eichenholz) (C. 1897 [2] 1151). C 80,4 — H 7,1 — N 12,5 — M. G. 224.
- $C_{15}H_{16}N_2$
- 1)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamidopropan. Sm. 105° (B. 33, 620). — \*II, 160.
  - 2)  $\alpha$ -Phenylamido- $\alpha$ -[4-Methylphenyl]imidoäthan. Sm. 82—83° (76°). ( $2HCl$ ,  $PtCl_4$ ), Pikrat (A. 214, 206; B. 28, 873). — II, 488; \*II, 267.

- C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>** 3)  $\beta$ -[4-Methylphenyl]imido- $\beta$ -Amido- $\alpha$ -Phenyläthan. Sm. 118—119°. (2HCl, PtCl<sub>4</sub>) (A. 184, 346). — IV, 850.
- 4)  $\alpha$ -Äthylimido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan. Sm. 74—76°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (Soc. 83, 321 C. 1903 [1] 580, 876). — \*IV, 566.
- 5) 2-Methylphenylamido-2-Methylphenylimidomethan. Sm. 151°. (2HCl, PtCl<sub>4</sub>) (B. 10, 1261; 18, 2294; A. 270, 312; J. pr. [2] 52, 430; [2] 53, 473). — II, 459; \*II, 249.
- 6) 3-Methylphenylamido-3-Methylphenylimidomethan. Sm. 123°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 20, 1893). — II, 478.
- 7) 4-Methylphenylamido-4-Methylphenylimidomethan. Sm. 141°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 18, 2296; Am. 16, 379; J. pr. [2] 52, 430; [2] 53, 474; [2] 57, 226). — II, 488; \*II, 267.
- 8)  $\alpha$ -Imido- $\alpha$ -[2,4-Dimethylphenyl]amido- $\alpha$ -Phenylmethan (Benzenyl-2,4-Dimethylphenylamidin). Sm. 107—108° (106°) (J. pr. [2] 54, 127; Am. 20, 575). — IV, 845; \*IV, 566.
- 9) 1-[ $\alpha$ -Methylimido- $\alpha$ -Methylphenylamidomethyl]benzol (Benzenyl-phenylmethylamidmethylamidin). Sm. 56°. HJ, Pikrat (B. 28, 2371). — IV, 842.
- 10) 1-[ $\alpha$ -Phenylimido- $\alpha$ -Dimethylamidomethyl]benzol (Benzenyldimethylamidphenylimidin). Sm. 73—74° (72°). HJ, Pikrat (B. 28, 2372; B. 37, 2680 C. 1904 [2] 521). — IV, 842.
- 11) 4-Dimethylamido-1-Phenylimidomethylbenzol. Sm. 100° (B. 31, 2252; B. 35, 3573 C. 1902 [2] 1384).
- 12) 4-Benzylidenamido-1-Dimethylamidobenzol. Sm. 101° (90°; 93°). HCl, 2HCl (B. 17, 2940; 25, 636; 31, 2181, 2252; A. 241, 361; B. 35, 3346 C. 1902 [2] 1194; C. 1907 [1] 107; 1908 [1] 1540). — IV, 596; \*IV, 393.
- 13)  $\gamma$ -[ $\alpha$ -Phenylhydrazido]- $\alpha$ -Phenylpropan (uns-Phenylstyrylhydrazin). Sm. 54°. HCl (B. 22, 2239). — IV, 814.
- 14)  $\alpha$ -Propyliden- $\beta\beta$ -Diphenylhydrazin. Sm. 20—21° (B. 39, 3584 C. 1907 [1] 18).
- 15)  $\beta$ -Benzyliden- $\alpha$ -Äthyl- $\alpha$ -Phenylhydrazin. Sm. 49° (A. 252, 272). — IV, 749.
- 16)  $\alpha$ -Benzyliden- $\beta$ -[4-Äthylphenyl]hydrazin. Sm. 78° (J. pr. [2] 71, 411 C. 1905 [2] 41).
- 17)  $\alpha$ -Benzyliden- $\beta$ -[2,5-Dimethylphenyl]hydrazin. Sm. 110° (J. pr. [2] 71, 401 C. 1905 [2] 40).
- 18) Phenyl-2,4-Dimethylbenzylidenhydrazin. Sm. 88° (114°) (C. 1896 [2] 378; A. 347, 372 C. 1906 [2] 605).
- 19) Phenyl-2,5-Dimethylbenzylidenhydrazin. Sm. 86° (84—84,5°) (C. 1898 [2] 952; 1901 [2] 772). — \*IV, 489.
- 20) Phenyl-3,4-Dimethylbenzylidenhydrazin. Sm. 96° (90,5°) (C. 1898 [2] 952; A. 347, 369 C. 1906 [2] 605). — \*IV, 488.
- 21) 4-Isopropylidenhydrazidobiphenyl (Acetonhydrazonbiphenyl). Sm. 86 bis 87° (B. 27, 3107). — IV, 970.
- 22)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylpropan. Fl. (B. 19, 2897). — IV, 772.
- 23)  $\beta$ -Phenylhydrazon- $\alpha$ -Phenylpropan. Sm. 83° (85°) (A. 248, 110; B. 31, 3163; C. 1907 [1] 1579). — IV, 773.
- 24)  $\alpha$ -Methylphenylhydrazon- $\alpha$ -Phenyläthan. Sm. 49—50° (A. 236, 154). — IV, 770.
- 25)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Methylphenyl]äthan. Sm. 97° (95°) (B. 19, 588; J. pr. [2] 41, 403; B. 35, 1877 C. 1903 [2] 287). — IV, 773.
- 26) 2,4,5-Trimethylazobenzol. Fl. (B. 31, 994). — IV, 1388.
- 27) 2,4,4'-Trimethylazobenzol. Sm. 62° (B. 31, 994). — IV, 1388.
- 28) 1,3-Diphenyltetrahydroimidazol. Sm. 124° (B. 31, 3255). — \*IV, 296.
- 29) 2-[2-Amidobenzyl]-1,3-Dihydroisindol. Sm. 99—100° (B. 33, 2818). — \*IV, 140.
- 30) 1,3-Dimethyl-2-Phenyl-2,3-Dihydrobenzimidazol. Sm. 102—103° (B. 34, 4203 C. 1902 [1] 262). — \*IV, 367.
- 31) 2-[3-Amidophenyl]-1,2,3,4-Tetrahydrochinolin. Fl. 2HCl (B. 18, 1907). — IV, 399.
- 32) 2-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 94 bis 95° (B. 24, 3057). — IV, 853.
- 33) 3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 140° (J. pr. [2] 53, 422). — IV, 637.



- C<sub>15</sub>H<sub>16</sub>N<sub>2</sub>** 34) **3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.** Sm. 127° (*J. pr.* [2] 53, 421; *B.* 22, 2700; 25, 2859). — *IV*, 637.
- 35) **1-Benzyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin.** Fl. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 38, 3921 *C.* 1906 [1] 247).
- 36) **2-Butyl-peri-Naphtimidazol.** Sm. 165°. HCl (*B.* 42, 3677 *C.* 1909 [2] 1663).
- C<sub>15</sub>H<sub>16</sub>N<sub>4</sub>** 37) **Verbindung** (Base aus Anilin u. Dichlorhydrin) (*A.* 177, 227). — *II*, 427. C 71,4 — H 6,3 — N 22,2 — M. G. 252.
- 1)  **$\alpha$ -[ $\alpha$ -Phenyläthyliden]amido- $\alpha$ -Phenylguanidin.** HNO<sub>3</sub>, Pikrat (*G.* 31 [1] 535). — *\*IV*, 890.
- 2) **Benzylidenamido-4-Methylphenylguanidin.** HNO<sub>3</sub>, Pikrat (*G.* 26 [2] 189). — *IV*, 810.
- 3)  **$\alpha\beta$ -Di[Phenylhydrazon]propan** (Phenylosazon d. Methylglyoxal). Sm. 145° (148°; 150—154°) (*B.* 20, 2543; 21, 2755, 2996; 26, 2203; 30, 2059; 31, 35; *J. pr.* [2] 49, 405; *A.* 243, 248; 247, 207; *A.* 335, 254 *C.* 1904 [2] 1283; *B.* 41, 3619 *C.* 1908 [2] 1814). — *IV*, 757; *\*IV*, 490.
- 4)  **$\alpha$ -[ $\alpha$ -Amidobenzyliden]- $\beta$ -[ $\alpha$ -Amido-4-Methylbenzyliden]hydrazin** (Benzenyl-4-Methylbenzenylhydrazidin). Sm. 170° (*A.* 298, 9). — *IV*, 1288.
- 5)  **$\beta$ -[4-Methylphenyl]azomethylen- $\alpha$ -[4-Methylphenyl]hydrazin** (Dip-Tolylformazylwasserstoff). Sm. 105° (*B.* 36, 1373 *C.* 1903 [1] 1343). — *\*IV*, 893.
- 6) **1-[4-Dimethylamidophenyl]-6-Methyl-1,2,3-Benztriazol.** Sm. 88 bis 89° (*Soc.* 65, 887). — *IV*, 612.
- 7) **5-Amido-2-[2,4,5-Trimethylphenyl]-2,1,3-Benztriazol.** Sm. 146° (147—148°). HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (*J. pr.* [2] 71, 392 *C.* 1905 [2] 39).
- 8) **3-Amido-7-Dimethylamido-1-Methyl-5,10-Naphtdiazin** (*B.* 25, 3009). — *IV*, 1286.
- 9) **3-Amido-7-Dimethylamido-2-Methyl-5,10-Naphtdiazin** (Toluylenrot) (*D.R.P.* 15272; *B.* 12, 937; *C.* 1901 [2] 1108). — *IV*, 608; *\*IV*, 402.
- 10) **N-Äthyltolusafranin.** HCl (*B.* 31, 1180). — *IV*, 1286.
- 11) **Nitril d.  $\alpha\alpha'$ -Benzylidendi[ $\beta$ -Amidocrotonsäure].** Sm. 190° (*J. pr.* [2] 56, 125). — *\*II*, 1176.
- 12) **Verbindung** (aus Formaldehyd u. Phenylhydrazin). Sm. 183° (*Bl.* [3] 13, 493; *Soc.* 69, 1280; *B.* 18, 3300). — *IV*, 744.
- 13) **isom. Verbindung** (aus Formaldehyd u. Phenylhydrazin). Sm. 112° (*B.* 29, 1361; *Soc.* 69, 1280). — *IV*, 745.
- C<sub>15</sub>H<sub>16</sub>N<sub>6</sub>** C 64,3 — H 5,7 — N 30,0 — M. G. 280.
- 1) **Verbindung** (Base aus Acetamid u. Phenylecyanamid). Sm. 212—213°. HCl (*M.* 5, 467). — *II*, 450.
- C<sub>15</sub>H<sub>16</sub>J<sub>2</sub>** 1) **2-Methyl-4-Äthylidiphenyljodoniumjodid.** Sm. 139° (*A.* 327, 294 *C.* 1903 [2] 352).
- 2) **2,4,4'-Trimethyldiphenyljodoniumjodid.** Sm. 165° (*B.* 33, 849). — *\*II*, 43.
- C<sub>15</sub>H<sub>16</sub>S** 1) **2,4,6-Trimethyldiphenylsulfid.** Sd. 230° u. ger. Zers. (*B.* 28, 2324). — *\*II*, 489.
- 2) **2,4,4'-Trimethyldiphenylsulfid.** Sd. 188°<sub>11</sub> (*B.* 28, 2326). — *\*II*, 488.
- 3) **2,5,4'-Trimethyldiphenylsulfid.** Sm. 6°; Sd. 185°<sub>11</sub> (*B.* 28, 2326). — *\*II*, 488.
- 4) **3,4,4'-Trimethyldiphenylsulfid.** Sm. 28,6°; Sd. 193,7°<sub>11</sub> (*B.* 28, 2325). — *\*II*, 488.
- 5) **Benzyläther d. 2-Merkapto-1,4-Dimethylbenzol.** Sm. 35°; Sd. 195 bis 200°<sub>15</sub> (*C.* 1908 [2] 1351).
- 6) **Benzyläther d. 3-Merkaptomethyl-1-Methylbenzol.** Sd. 193—196°<sub>15</sub> (*Am.* 26, 205).
- C<sub>15</sub>H<sub>16</sub>S<sub>2</sub>** 1) **Diphenyläther d.  $\beta\beta$ -Dimerkaptopropan.** Sm. 56° (*B.* 19, 2804). — *II*, 790.
- C<sub>15</sub>H<sub>17</sub>N** C 85,3 — H 8,1 — N 6,6 — M. G. 211.
- 1)  **$\gamma$ -Amido- $\alpha\beta$ -Diphenylpropan.** Sd. 315—317°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 23, 2859). — *II*, 637.
- 2)  **$\alpha$ -Amido- $\alpha\gamma$ -Diphenylpropan.** HCl, (2HCl, PtCl<sub>4</sub>), Tartrat, Pikrat (*A.* 351, 180 *C.* 1907 [1] 1418).
- 3)  **$\beta$ -Amido- $\alpha\gamma$ -Diphenylpropan.** Sm. 47°; Sd. 330°. HCl, (2HCl, PtCl<sub>4</sub>) (*Am.* 14, 226). — *II*, 638.

$C_{15}H_{17}N$ 

- 4)  $\alpha$ -Phenylamido- $\alpha$ -Phenylpropan. *Sd.* 192°<sub>20</sub>.  $HNO_3$  (*B.* 38, 1764 *C.* 1905 [1] 1599).
- 5)  $\beta$ -Benzylamido- $\alpha$ -Phenyläthan. *Sd.* 327—328°<sub>760</sub>.  $HCl$ ,  $HJ$ ,  $H_2SO_4$  (*B.* 29, 211). — \*II, 307.
- 6)  $\alpha$ -Äthylamidodiphenylmethan. *Sd.* 175°<sub>20</sub>.  $HCl$ ,  $HNO_3$  (*J. pr.* [2] 77, 23 *C.* 1908 [1] 631).
- 7)  $\alpha$ -Dimethylamidodiphenylmethan. *Sd.* 330—340° (*A.* 206, 113).
- 8) 4-Dimethylamidodiphenylmethan. *Sm.* 31°.  $HCl$  (*A.* 307, 310). — \*II, 350.
- 9)  $\alpha$ -Amidodi[4-Methylphenyl]methan (p-Tolhydrilamin). *Sm.* 93°; *Sd.* 317—318°.  $HCl$  (*C.* 1899 [2] 949; *B.* 24, 2798; *B.* 31, 1773). — II, 638; \*II, 350.
- 10) Äthylphenylbenzylamin. *Sd.* 285—286°<sub>710</sub> u. ger. Zers. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 22, 588; D.R.P. 59811; *B.* 35, 1292 *C.* 1902 [1] 1094; *A.* 334, 236 *C.* 1904 [2] 900; *C.* 1905 [1] 813; *J. pr.* [2] 71, 150 *C.* 1905 [1] 812). — II, 518; \*II, 291.
- 11) Methylbibenzylamin. *Sd.* 304—305°<sub>765,5</sub>. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), (2HCl, AuCl<sub>3</sub>), (3HJ, J) (*Ar.* 247, 356, 367 *C.* 1909 [2] 1440; *C.* 1909 [2] 1800).
- 12) Methyl-di[4-Methylphenyl]amin. *Sd.* 235—240°<sub>30</sub> (*Bl.* 24, 120). — II, 486.
- 13) Methylbenzyl-2-Methylphenylamin. *Sd.* 210—215°<sub>15,2</sub> (167°<sub>13</sub>). Pikrat (*Bl.* [3] 6, 137; *B.* 37, 3898 *C.* 1904 [2] 1612). — II, 518.
- 14) Methylbenzyl-4-Methylphenylamin. *Sd.* 210—220°<sub>30</sub> (*Bl.* [3] 6, 137). — II, 518.
- 15) Benzyl-2,4-Dimethylphenylamin. *Sd.* 200—201° (*Bl.* [3] 6, 21). — II, 543.
- 16) Benzyl-2,5-Dimethylphenylamin. *Sd.* 320—325° (*A.* 255, 169). — II, 546.
- 17)  $\beta$ -Methylphenyl-[ $\beta$ -Dimethylphenyl]amin (Tolylylidin). *Sm.* 70°; *Sd.* 298—302°<sub>487</sub> (*Bl.* 18, 69). — II, 548.
- 18)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Methyl-2-Pyridyl]äthan. *Sm.* 103°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 38, 3707 *C.* 1906 [1] 52).
- 19)  $\alpha$ -Phenyl- $\beta$ -[5-Äthyl-2-Pyridyl]äthan (Äthylidihydrostilbazol). *Sd.* 316,3°<sub>761</sub>. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O (*B.* 21, 3093). — IV, 380.
- 20) 1-[1-Naphtyl]hexahydropyridin. *Sd.* 215°<sub>35</sub>.  $HCl$ , (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O), Pikrat (*B.* 23, 1383; 28, 3106). — IV, 10.
- 21) 1-[2-Naphtyl]hexahydropyridin. *Sm.* 57—58° (56°).  $HCl$ , (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + 4H<sub>2</sub>O),  $H_2SO_4$  + 3H<sub>2</sub>O, Pikrat (*B.* 23, 1384; 29, 1175; *B.* 40, 856 *C.* 1907 [1] 1123). — IV, 10.
- 22)  $\beta$ -[4-Isopropylbenzyl]pyridin. *Sd.* 240—250°<sub>110</sub>. (2HCl, PtCl<sub>4</sub>) (*A.* 280, 71). — IV, 380.
- 23)  $\alpha$ -[8-Methyl-2-Chinolyl]- $\gamma$ -Methyl- $\alpha$ -Buten.  $HCl$ , (2HCl, AuCl<sub>3</sub>), Pikrat (*B.* 38, 3714 *C.* 1906 [1] 53).
- 24) Base (aus 3-Methyldiazobenzolchlorid). *Fl.*  $HCl$  (*C.* 1907 [1] 1789).  $C$  75,3 —  $H$  7,1 —  $N$  17,6 —  $M. G.$  239.

 $C_{15}H_{17}N_3$ 

- 1)  $\alpha$ -Imidodi[4-Methylamidophenyl]methan (D. R. P. 68011). — \*IV, 829.
- 2) Äthylimidodi[Phenylamido]methan (Äthylidiphenylguanidin). *Sd.* 145 bis 147°<sub>50</sub>.  $HBr$  (*Bl.* [3] 33, 652 *C.* 1905 [2] 229).
- 3) Phenylimidoäthylamidophenylamidomethan (Äthylidiphenylguanidin). (2HCl, PtCl<sub>4</sub>) (*B.* 8, 1532). — II, 349.
- 4) 4-Amido-1-[4-Dimethylamidobenzyliden]amidobenzol (*C. r.* 134, 551 *C.* 1902 [1] 874). — \*IV, 393.
- 5) 4-[4-Amidobenzyliden]amido-1-Dimethylamidobenzol. *Sm.* 191 bis 192° (*B.* 31, 2252). — \*IV, 394.
- 6) Di[2-Methylphenyl]guanidin. *Sm.* 179°. (2HCl, PtCl<sub>4</sub>) (*B.* 12, 1855). — II, 459.
- 7) Di[4-Methylphenyl]guanidin. *Sm.* 168° (2HCl, PtCl<sub>4</sub>) (*A.* 77, 218; *B.* 7, 1739; 8, 520; *Soc.* 37, 696; *J. pr.* [2] 65, 386 *C.* 1902 [1] 1330; (*G.* 39 [1] 154 *C.* 1909 [1] 1092). — II, 488.
- 8) 2,4'-Dimethyldiphenylguanidin. *Sm.* 120—121° (*J. pr.* [2] 65, 385 *C.* 1902 [1] 1330).

- $C_{15}H_{17}N_3$
- 9) Dibenzylguanidin. Sm. 100°. (HCl Sm. 176°) (B. 5, 695). — II, 523.
  - 10)  $\alpha$ -Äthyl- $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Imidobenzyl]hydrazin (Äthylphenylbenzenylhydrazidin). Sm. 105°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 54, 170). — IV, 1136.
  - 11) Phenyl-4-Äthylamidobenzylidenhydrazin. Sm. 178° (160°) (B. 37, 858 C. 1904 [1] 1206; B. 41, 1997 C. 1908 [2] 600).
  - 12)  $\alpha$ -Äthylamido- $\beta$ -Benzyliden- $\alpha$ -Phenylhydrazin (Benzylidenäthylphenyltriazan). Sm. 163° (B. 32, 2489).
  - 13) 2-Dimethylamidobenzylidenphenylhydrazin. Sm. 74—74,5° (B. 37, 977 C. 1904 [1] 1079).
  - 14) 4-Dimethylamidobenzylidenphenylhydrazin. Sm. 148° (B. 20, 3195; B. 37, 859 C. 1904 [1] 1206). — IV, 753.
  - 15) 4-Methylamido-3-Methylbenzylidenphenylhydrazin. Sm. 124° (B. 37, 863 C. 1904 [1] 1206).
  - 16) 1-Äthylphenylamido-4-Methyldiazobenzol. Fl. (B. 20, 3010). — IV, 1570.
  - 17) 1-[Äthyl-4-Methylphenyl]amidodiazobenzol. Sm. 38—39° (B. 20, 3011). — IV, 1570.
  - 18) 4-Dimethylamido-2-Methylazobenzol. Sm. 66°. (2HCl, PtCl<sub>4</sub>) (B. 33, 3479). — IV, 1022.
  - 19) 4'-Dimethylamido-4-Methylazobenzol. Sm. 168—168,5°. HCl, HBr, H<sub>2</sub>SO<sub>4</sub> (B. 17, 1492; Soc. 65, 880; B. 41, 1183 C. 1908 [1] 1884). — IV, 1383.
  - 20) 3-[ $\alpha$ -Phenylhydrazonbutyl]pyridin. Sm. 182° (B. 24, 2541). — IV, 800.
  - 21) 3-[2-Amidobenzyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 88 bis 89°. HCl, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 55, 365). — IV, 636.
  - 22) 2,8-Diamido-3,7-Dimethyl-5,10-Dihydroakridin (C. 1901 [2] 78). C 67,4 — H 6,4 — N 26,2 — M. G. 267.
- $C_{15}H_{17}N_5$
- 1)  $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha$ -Amidopropan. Sm. 224°. HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 26, 2785; 28, 1283; J. pr. [2] 64, 239). — IV, 1229; \*IV, 894.
  - 2) Di[4-Methylphenylazo]methylamin. Sm. 146—147° (B. 22, 935; 28, 172). — IV, 1569.
  - 3) Verbindung (aus salpetrigs. Acetylamidrazonphenylhydrazon) (B. 28, 1284). — IV, 1229.
- $C_{15}H_{17}P$
- 1) Äthylphenyl-4-Methylphenylphosphin. Sd. 340°. (2HCl, PtCl<sub>4</sub>) (A. 315, 60). — \*IV, 1180.
  - 2) Dimethyl-4-Benzylphenylphosphin. Sd. 197°<sub>20</sub> (A. 315, 46).
  - 3) Methylidi[4-Methylphenyl]phosphin. Sd. 345° (A. 315, 69). — \*IV, 1178.
- $C_{15}H_{17}As$
- 1) Äthylphenyl-4-Methylphenylarsin. Sd. 210—225°<sub>50</sub> (A. 321, 158 C. 1902 [2] 43). — \*IV, 1194.
- $C_{15}H_{18}O$
- C 84,1 — H 8,4 — O 7,5 — M. G. 214.
  - 1) 3-Oxy-3-Phenyläthiny-1-Methylhexahydrobenzol ( $\alpha$ -Phenyl- $\beta$ -1-Oxy-3-Methylhexahydrophenyläthin). Sm. 99° (C. 1905 [2] 1020).
  - 2) Methyläther d. 2-Oxy-1-Isobutylnaphtalin? Sm. 66°; Sd. 188°<sub>14</sub> (Bl. [3] 19, 1007). — \*II, 537.
  - 3) Isoamyläther d. 1-Oxynaphtalin. Sd. 317—319°<sub>742</sub> (G. 19, 496). — II, 857.
  - 4) Isoamyläther d. 2-Oxynaphtalin. Sm. 26,5°; Sd. 323—326° u. Zers. (315—316°) (G. 19, 496; Bl. [3] 19, 367). — II, 877; \*II, 520.
  - 5) 3-Keto-4-Benzyliden-1,1-Dimethylhexahydrobenzol. Sm. 56° (Bl. [4] 3, 784 C. 1908 [2] 776).
  - 6) 5-Keto-3 [oder 4]-Benzyliden-1,1,2-Trimethyl-R-Pentamethylen. Sm. 34° (Bl. [3] 27, 76 C. 1902 [1] 586).
  - 7) 3-Keto-4 [oder 5]-Benzyliden-1,1,2-Trimethyl-R-Pentamethylen. Sm. 74° (B. 32, 2292). — \*I, 520.
- $C_{15}H_{18}O_2$
- 1) Monoisoamyläther d. 1,4-Dioxynaphtalin. Sm. 98° (D.R.P. 173730 C. 1906 [2] 934).
  - 2) Methyläther d. d-3-Keto-4-[4-Oxybenzyliden]-1-Methylhexahydrobenzol. Sm. 97° (C. r. 136, 1225 C. 1903 [2] 116; Bl. [3] 33, 973 C. 1905 [2] 1180).
  - 3) Äthyläther d.  $\gamma$ -Oxy- $\gamma$ -Phenyl- $\alpha$ -[2-Furanyl]propan. Sd. 145—147°<sub>11</sub> (B. 42, 2358 C. 1909 [2] 362).



- $C_{15}H_{18}O_2$
- 4) **5,8-Dimethyl-1,2-Dihydronaphtalin-3-[Äthyl- $\alpha$ -Carbonsäure]** (Dihydrosantonsäure). Sm. 120—121° (*G.* 22 [2] 24). — II, 1444.
  - 5) **Isodihydrosantonsäure**. Sm. 96—97° (*G.* 22 [2] 24). — II, 1444.
  - 6) **Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\zeta$ -Methyl- $\alpha$ -Hepten- $\gamma$ -Carbonsäure**. Sd. 310—320° (*B.* 23, 1505). — II, 1670.
  - 7) **1,2- $\alpha$ -Lakton d. 1-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-[Äthyl- $\alpha$ -Carbonsäure]** (Hyposantonin). Sm. 152—153°; subl. (*G.* 19, 378; 22 [1] 13; 22 [2] 14; 26 [2] 456). — II, 1672; \*II, 979.
  - 8) **Lakton d. Isohyposantoninsäure** (Isohyposantonin). Sm. 168,5°; subl. (*G.* 22 [2] 18; 26 [2] 456). — II, 1672; \*II, 979.
  - 9) **Phenylester d. Isolaureonolsäure**. Sm. 24,5°; Sd. 300°<sub>760</sub> (*C.* 1899 [2] 831). — \*II, 361.
- $C_{15}H_{18}O_3$
- 10) **Benzylester d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure**. Sd. 184—190°<sub>16—18</sub> (D.R.P. 133631 *C.* 1902 [2] 553).  
C 73,2 — H 7,3 — O 19,5 — M. G. 246.
  - 1) **Santonin** (Lakton d. Santoninsäure). Sm. 169—170° (171—172°). Lit. bedeutend. — II, 1785; \*II, 1044.
  - 2) **Chromosantonin** (*G.* 32 [1] 325 *C.* 1902 [1] 1406).
  - 3) **Desmotroposantonin**. Sm. 260° (259°) (*G.* 23 [2] 469; *B.* 31, 1677; *C.* 1897 [1] 169; *G.* 32 [1] 341 *C.* 1902 [1] 1406; *C. r.* 135, 43 *C.* 1902 [2] 446; *B.* 36, 2667 *C.* 1903 [2] 951; *Ar.* 244, 637 *C.* 1907 [1] 637). — II, 1790; \*II, 1046.
  - 4) **1-Desmotroposantonin**. Sm. 194° (*B.* 31, 3131; *G.* 28 [2] 533). — \*II, 1046.
  - 5) **rac. Desmotroposantonin**. Sm. 198° (*B.* 31, 3132; *G.* 28 [2] 539). — \*II, 1046.
  - 6) **Iso-Desmotroposantonin**. Sm. 187—188° u. Zers. (*G.* 23 [2] 484; 25 [1] 477). — II, 1790; \*II, 1046.
  - 7) **Isosantonin** (Metasantonin). Sm. 137—138° (*J.* 1880, 894; *G.* 25 [2] 464; 29 [2] 194, 235). — II, 1788; \*II, 1044.
  - 8)  **$\alpha$ -Metasantonin**. Sm. 160,5°; Sd. 238—240° (*J.* 1878, 828; 1880, 894; *B.* 7, 1105; 13, 2210). — II, 1787.
  - 9)  **$\beta$ -Metasantonin**. Sm. 136° (*B.* 13, 2210; *J.* 1878, 828; 1880, 894). — II, 1787.
  - 10) **Santonid**. Sm. 127° (*J.* 1878, 826; *B.* 13, 2210; *C.* 1903 [2] 1067; *G.* 13, 149; 25 [2] 471). — II, 1788; \*II, 1044.
  - 11) **Parasantonid**. Sm. 110° (*J.* 1878, 826; *B.* 13, 2210; 14, 1512; *C.* 1903 [2] 1066; *G.* 13, 145; 25 [2] 473). — II, 1788.
  - 12) **Perezinon**. Sm. 143—144°. Na (*B.* 18, 944). — II, 1674.
  - 13) **7-Oxy-5,8-Dimethyl-1,2[?]-Dihydronaphtalin-2-[Äthyl- $\alpha$ -Carbonsäure]**. Sm. 170° (*B.* 28 [2] 394).
  - 14)  **$\beta$ -[o-Methylpseudobutyl]benzoylakrylsäure**. Sm. 123—124° (*C.* 1907 [1] 1788).
  - 15)  **$\beta$ -[p-Methylpseudobutyl]benzoylakrylsäure**. Sm. 115—117° (*C.* 1907 [1] 1788).
  - 16) **isom.  $\beta$ -[p-Methylpseudobutyl]benzoylakrylsäure**. Sm. 133—134° (*C.* 1907 [1] 1788).
  - 17) **Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta\beta\delta$ -Trimethylpentan- $\delta$ -Carbonsäure**. Sm. 134—135°; Sd. 325° (*C.* 1906 [2] 316; *B.* 41, 593 *C.* 1908 [1] 1263; *J. pr.* [2] 78, 101 *C.* 1908 [2] 935).
  - 18) **Lakton d. Säure  $C_{15}H_{20}O_4$**  (aus Artemisin). Sm. 269—270° (*C.* 1902 [2] 369). — \*III, 456.
  - 19) **Methylester d. trans- $\epsilon$ -Keto- $\alpha$ -Phenyl- $\beta$ -Hepten- $\eta$ -Carbonsäure**. Sd. 204—205°<sub>18</sub> (*B.* 38, 1122 *C.* 1905 [1] 1241).
  - 20) **Äthylester d.  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Hexen- $\delta$ -Carbonsäure** (Ä. d. Äthylcinnamylessigsäure). Sd. 205—220°<sub>22</sub> (*A.* 218, 183). — II, 1684.
  - 21) **Äthylester d.  $\delta$ -Benzoyl- $\alpha$ -Penten- $\delta$ -Carbonsäure** (Ä. d. Methylallylbenzoylessigsäure). Sd. 243—245°<sub>225</sub> (*Soc.* 59, 999). — II, 1684.
  - 22) **Methylester d. 5-Keto-1-Phenylhexahydrobenzol-3-Methylcarbon-säure**. Sm. 81° (*A.* 360, 344 *C.* 1908 [2] 318).  
C 68,7 — H 6,9 — O 24,4 — M. G. 262.
- $C_{15}H_{18}O_4$
- 1) **Artemisin** (Oxysantonin). Sm. 200°. +  $CHCl_3$  (*C.* 1895 [1] 436; 1901 [2] 937; *G.* 38 [1] 554 *C.* 1908 [2] 419). — \*III, 456.
  - 2) **Isoartemisin** (1- $\delta$ -Oxysantonin). Sm. 214—215° (*B.* 38, 1849 *C.* 1905 [2] 48).

- $C_{15}H_{18}O_4$
- 3)  $\alpha$ -Oxysantonin (Santogenin). Sm.  $286^\circ$  u. Zers. (*H.* 22, 539; *J. Th.* 1890, 72; *G.* 27 [2] 87). — II, 1786; \*II, 1128.
  - 4)  $\beta$ -Oxysantonin. Sm.  $128-131^\circ$  (*H.* 22, 553). — \*II, 1128.
  - 5) 1-[ $\gamma$ -Ketobutyl]benzol-4-[ $\gamma$ -Ketobutyl- $\beta$ -Carbonsäure]. Sm.  $206^\circ$ . Ag (*C.* 1905 [1] 342).
  - 6) Pikrotoxinsäure. Sm.  $134^\circ$ . Ag (*G.* 21 [2] 213). — III, 644.
  - 7) Dimethylester d.  $\alpha$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Buten- $\delta\delta$ -Dicarbonsäure. Sd.  $210^\circ_{30}$  (*Am.* 38, 233 *C.* 1907 [2] 1241).
  - 8) Dimethylester d.  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure. Sm.  $70^\circ$  (*B.* 36, 2339 *C.* 1903 [2] 438; *A.* 345, 211 *C.* 1906 [1] 1493).
  - 9) Äthylester d.  $\delta$ -Keto- $\gamma$ -Benzoylpentan- $\beta$ -Carbonsäure. Sd.  $205^\circ_{99}$  (*C.* 1909 [2] 799).
  - 10) Diäthylester d.  $\alpha$ -Phenylpropen- $\beta\gamma$ -Dicarbonsäure (D. d. Phenylitakonsäure). Sd.  $315^\circ$  (*A.* 256, 70). — II, 1866.
  - 11) Diäthylester d.  $\beta$ -Phenylpropen- $\alpha\gamma$ -Dicarbonsäure. Sd.  $186-187^\circ_{11}$  (*Soc.* 75, 248). — \*II, 1076.
  - 12) Diäthylester d. 1-Phenyl-R-Trimethylen-2,3-Dicarbonsäure. Sd.  $256-257^\circ_{120}$  (*B.* 21, 2645; 25, 1147; 26, 259). — II, 1868.
  - 13) Saures Phtalat d. 3-Oxy-1-Methylhexahydrobenzol. Sm.  $89,5-90,5^\circ$  (*C.* 1907 [1] 1407).
- $C_{15}H_{18}O_5$
- 14) Verbindung (Harz aus Kamala). Sm.  $80^\circ$  (*J.* 1860, 562). — III, 671. *C* 64,7 — H 6,5 — O 28,8 — M. G. 278.
  - 1) Mekoninmethypropylketon. Sm.  $91-95^\circ$  (*M.* 25, 1054 *C.* 1904 [2] 1644).
  - 2) Mekoninmethyisopropylketon. Sm.  $88-91^\circ$  (*M.* 25, 1055 *C.* 1904 [2] 1644).
  - 3) Coriamyrtin. Sm.  $225^\circ$  (*Soc.* 79, 125). — \*III, 435.
  - 4) Dehydrodioxyparasantonsäure. Sm.  $187-188^\circ$ . Ba + H<sub>2</sub>O, Ag<sub>2</sub> (*C.* 1903 [2] 1447).
  - 5) Äthylester d.  $\gamma$ -Oxy- $\alpha$ -Acetoxyl- $\alpha$ -Phenyl- $\beta$ -Buten- $\beta$ -Carbonsäure. Sm.  $150-151^\circ$  (*B.* 31, 606).
  - 6) Diäthylester d. Oxyfumar-2-Methylphenyläthersäure. Sd. 184 bis  $185^\circ_{14}$  (*Soc.* 77, 1124). — \*II, 424.
  - 7) Diäthylester d. Oxyfumar-3-Methylphenyläthersäure. Sd.  $192^\circ_{14}$  (*Soc.* 77, 1124). — \*II, 429.
  - 8) Diäthylester d. Oxyfumar-4-Methylphenyläthersäure. Sd. 191 bis  $192^\circ_{12}$  (*Soc.* 77, 1125). — \*II, 435.
  - 9) Diäthylester d.  $\alpha$ -[2-Methoxyphenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sd.  $193-195^\circ_{14}$  (*B.* 31, 2594). — \*II, 1131.
  - 10) Diäthylester d.  $\alpha$ -[4-Methoxyphenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sm.  $38-40^\circ$ ; Sd.  $200-217^\circ_{14}$  (*B.* 31, 2594). — \*II, 1131.
  - 11) Diäthylester d.  $\alpha$ -Keto- $\alpha$ -Phenylpropan- $\beta\gamma$ -Dicarbonsäure (D. d. Benzoylbernsteinsäure). Sd.  $260-265^\circ_{180}$ . Na (*Soc.* 47, 273; 71, 333). — II, 1963; \*II, 1132.
  - 12) Diäthylester d.  $\beta$ -Keto- $\alpha$ -Phenylpropan- $\gamma\gamma$ -Dicarbonsäure. Fl. Na (*B.* 29, 1988; *A.* 298, 376). — \*II, 1133.
  - 13) Diäthylester d.  $\gamma$ -Keto- $\alpha$ -Phenylpropan- $\beta\gamma$ -Dicarbonsäure (D. d. Benzylalolessigsäure). Fl. Cu (*B.* 31, 554). — \*II, 1133. *C* 61,2 — H 6,1 — O 32,7 — M. G. 294.
- $C_{15}H_{18}O_6$
- 1)  $\beta$ -Phenylpropan- $\alpha\alpha$ -Dicarbonsäure- $\delta$ -Methylcarbonsäure. Sm. 141 bis  $142^\circ$  (*A.* 360, 337 *C.* 1908 [2] 318).
  - 2) Säure (aus Isodehydracetsäureäthylester). Sm.  $234^\circ$  ( $221^\circ$  u. Zers.). K<sub>3</sub>, Ba, Cu (*A.* 259, 158; *A.* 345, 98 *C.* 1906 [1] 1331). — I, 734.
  - 3) Trimethylester d.  $\beta$ -Phenylpropan- $\beta,2,4$ -Tricarbonsäure (Tr. d. Ioni-regentricarbonsäure). Sm.  $93^\circ$  (*B.* 26, 2686). — II, 2015.
  - 4) Diäthylester d. 2-Methoxyphenoxylfumarsäure. Sd.  $212-213^\circ_{15}$  (*Soc.* 81, 421 *C.* 1902 [1] 757; *Soc.* 81, 421 *C.* 1902 [1] 757).
  - 5) Diäthylester d. 3-Methoxyphenoxylfumarsäure. Sd.  $206-207^\circ_{12}$  (*Soc.* 83, 1132 *C.* 1903 [2] 1059).
  - 6) Diäthylester d.  $\alpha$ -[3,4-Dioxyphenyl]äthen-3-Methyläther- $\beta\beta$ -Dicarbonsäure (D. d. Vanillylidenmalonsäure). Sm.  $110^\circ$  (*B.* 37, 4481 *C.* 1905 [1] 247).
  - 7) Diäthylester d.  $\alpha$ -Benzoxyläthan- $\alpha\beta$ -Dicarbonsäure. Sd.  $210-220^\circ_{12}$  (*Soc.* 75, 339). — \*II, 723.

- C<sub>15</sub>H<sub>18</sub>O<sub>6</sub>**
- 8)  $\beta\beta$ -Diäthylester d.  $\alpha$ -Phenyläthan- $\beta\beta$ ,2-Tricarbonsäure. Sm. 86°. Na, Ag (A. 242, 34). — II, 2014.
  - 9) Triäthylester d. Benzol-1,2,3-Tricarbonsäure. Sm. 39° (B. 31, 2084). — \*II, 1167.
  - 10) Triäthylester d. Benzol-1,3,5-Tricarbonsäure. Sm. 133° (133,5 bis 134,5°) (A. 147, 309; J. pr. [2] 15, 314; C. 1898 [2] 473). — II, 2011; \*II, 1168.
  - 11) Diacetat d. 2,3,4,5-Tetraoxy-1-Allylbenzoldimethyläther. Sm. 125 bis 126° (G. 22 [1] 559; B. 29, 1802). — II, 1034.
  - 12) Triacetat d. 2,4,6-Trioxo-1,3,5-Trimethylbenzol. Sm. 162° (M. 19, 261; 21, 509). — \*II, 624.
  - 13) Triacetat d. 2-Oxy-5-Dioxyethyl-1,3-Dimethylbenzol. Sm. 95° (A. 311, 367). — \*III, 66.
  - 14) Benzoat d. Rhamnidimethylenäther. Sm. 136—137° (A. 299, 323). — \*II, 715.
- C<sub>15</sub>H<sub>18</sub>O<sub>7</sub>**
- C 58,1 — H 5,8 — O 36,1 — M. G. 310.
- 1) Pikrocin + 3½ H<sub>2</sub>O (oder C<sub>25</sub>H<sub>30</sub>O<sub>12</sub>). Sm. 245° (248—250°) (M. 1, 125; 2, 797; C. 1897 [1] 500; B. 10, 1100; 12, 685; 14, 818, 1243; 31, 2970; A. 222, 344; G. 36 [2] 649 C. 1907 [1] 1045). — III, 643; \*III, 471.
  - 2) Pikrotoxinsäure. Sm. 229—230° (B. 31, 2968). — \*III, 472.
  - 3) Glyko-o-Cumarylaldehyd + H<sub>2</sub>O. Sm. 199° (wasserfrei) (B. 18, 1958). — III, 93.
  - 4) Äthylester d. 2,4,6-Trimethoxybenzoylbrenztraubensäure. Sm. 80° (B. 34, 2477).
  - 5) Diäthylester d. d-Monobenzoylweinsäure. Sm. 64° (66—66,5°) (A. Spl. 5, 276; Bl. [3] 13, 200; Soc. 73, 310). — II, 1154; \*II, 723.
  - 6) Diäthylester d. Monobenzoyltraubensäure. Sm. 57° (A. Spl. 5, 278). — II, 1155.
  - 7) Triäthylester d. 2-Oxybenzol-1,3,5-Tricarbonsäure. Sm. 83°. Na (J. pr. [2] 14, 117; B. 31, 1684). — II, 2047; \*II, 1195.
  - 8) 2,5,6-Triacetat d. 2,4,5,6-Tetraoxy-1,3-Dimethylbenzol-4-Methyläther. Sm. 76° (M. 21, 1029). — \*II, 630.
- C<sub>15</sub>H<sub>18</sub>O<sub>8</sub>**
- C 55,2 — H 5,5 — O 39,3 — M. G. 326.
- 1) Kaffeegerbsäure, siehe C<sub>21</sub>H<sub>28</sub>O<sub>14</sub>. Ba, Pb, Pb<sub>2</sub>, Pb<sub>3</sub> (A. 59, 303; 60, 39, 66, 35; 142, 220; J. 1850, 387; 1851, 410; 1857, 311; 1877, 938; C. 1897 [2] 351). — II, 2071.
  - 2) Triäthylester d. 2,4-Dioxybenzol-1,3,5-Tricarbonsäure. Sm. 104 bis 105° (B. 32, 2793; G. 31 [1] 162). — \*II, 1214.
  - 3) Verbindung (aus Pikrocin). Sm. 254—255° (G. 36 [2] 654 C. 1907 [1] 1044).
- C<sub>15</sub>H<sub>18</sub>O<sub>9</sub>**
- C 52,6 — H 5,3 — O 42,1 — M. G. 342.
- 1) Triäthylcarbonat d. 1,2,3-Trioxymethylbenzol. Sm. 58—60° (A. 301, 108). — \*II, 613.
  - 2) Triäthylcarbonat d. 1,3,5-Trioxymethylbenzol. Sd. 245,5—247° (M. 21, 994). — \*II, 615.
- C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>**
- C 79,6 — H 8,0 — N 12,4 — M. G. 226.
- 1) 2,4'-Diamido-3,5-Dimethyldiphenylmethan. Fl. (C. 1900 [1] 1112).
  - 2) 5,5'-Diamido-2,2'-Dimethyldiphenylmethan. Sm. 98—100° (B. 27, 3315). — IV, 984.
  - 3) 4,4'-Diamido-3,3'-Dimethyldiphenylmethan. 2HCl (Sm. 278° u. Zers.) (B. 27, 1811; D.R.P. 55565; C. 1900 [1] 1110). — IV, 984; \*IV, 658.
  - 4) 4,6'-Diamido-3,3'-Dimethyldiphenylmethan. Sm. 89° (C. 1900 [1] 1111). — \*IV, 658.
  - 5) 6,6'-Diamido-3,3'-Dimethyldiphenylmethan. Sm. 92° (B. 27, 1812). — IV, 984.
  - 6) 4-Amido-4'-Dimethylamidodiphenylmethan? Sm. 93° (83°; 90—91°) (C. 1898 [2] 158; 1900 [1] 1111; B. 33, 2590). — \*IV, 646.
  - 7) Di[4-Methylamidophenyl]methan. Sm. 56—57° (55°) (D.R.P. 68011; B. 37, 2675 C. 1904 [2] 443; B. 41, 2148 C. 1908 [2] 703). — \*IV, 646.
  - 8)  $\alpha\alpha$ -Di[Phenylamido]propan. Fl. H<sub>2</sub>SO<sub>3</sub> (A. 316, 128; A. 328, 127 C. 1903 [2] 790).
  - 9)  $\alpha\beta$ -Di[Phenylamido]propan. Sd. 265°<sub>60</sub>. (2HCl, PtCl<sub>4</sub>) (B. 25, 3271). — II, 344.



- $C_{15}H_{18}N_2$
- 10)  $\alpha\gamma$ -Di[Phenylamido]propan. Sd. 280—285°<sub>18</sub> (oberhalb 360°). HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 20, 781; 32, 2254). — II, 345; \*II, 159.
  - 11) Di[Benzylamido]methan. Sm. 45—46°; Sd. 225—230° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>), (2HCl, AuCl<sub>3</sub>), HBr, HJ, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, H<sub>3</sub>PO<sub>4</sub>, Oxalat (A. 256, 220; B. 28 [2] 852). — II, 531.
  - 12) Di[Methylphenylamido]methan. Sm. 35°; Sd. 227°<sub>33</sub> (B. 40, 762 C. 1907 [1] 1030; B. 41, 2147 C. 1908 [2] 702).
  - 13) Di[2-Methylphenylamido]methan. Sm. 52° (B. 27, 1808; A. 302, 349; B. 39, 3969 C. 1907 [1] 154). — \*II, 258.
  - 14) isom.  $\beta$ -Di[2-Methylphenylamido]methan. Sm. 135° (156—157°). 2HCl, 2HBr, H<sub>2</sub>SO<sub>4</sub>, H<sub>3</sub>PO<sub>4</sub>, Oxalat (A. 256, 307; Soc. 81, 283 C. 1902 [1] 527). — II, 473.
  - 15) isom.  $\beta$ -Di[2-Methylphenylamido]methan. Sd. oberhalb 350° u. Zers. (2HCl, PtCl<sub>4</sub>) (A. 256, 303). — II, 473.
  - 16) Di[3-Methylphenylamido]methan.  $\alpha$ -Form Sm. 78°;  $\beta$ -Form Sm. 160°; Sd. 146°<sub>18</sub> (Soc. 81, 284 C. 1902 [1] 527; B. 36, 43 C. 1903 [1] 504).
  - 17) Di[4-Methylphenylamido]methan. Sm. 86° (89°) (B. 27, 1808; A. 302, 350). — \*II, 284.
  - 18) isom.  $\beta$ -Di[4-Methylphenylamido]methan. Sm. 156° (149—150°); Sd. oberhalb 350° u. Zers. 2HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Oxalat (A. 256, 286; Soc. 81, 284 C. 1902 [1] 527). — II, 510.
  - 19) isom.  $\beta$ -Di[4-Methylphenylamido]methan. Sd. oberhalb 350° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (A. 256, 286). — II, 510.
  - 20) Äthylbenzyl-4-Amidobenzylamin. Sd. 225°<sub>31</sub>. HCl, H<sub>2</sub>SO<sub>4</sub>, Oxalat (B. 35, 1295 C. 1902 [1] 1094; A. 334, 262 C. 1904 [2] 902; J. pr. [2] 76, 490 C. 1908 [1] 860). — \*IV, 383.
  - 21) Äthylphenyl-3-Amidobenzylamin. Sd. 261—262°<sub>56-58</sub>. 2HCl (B. 35, 1294 C. 1902 [1] 1094). — \*IV, 409.
  - 22) 4-Methylphenyl-4-Amido-3-Methylbenzylamin (4-[4-Amido-3-Methylbenzyl]amido-1-Methylbenzol). Sm. 93° (C. 1899 [2] 950; B. 33, 2589). — \*IV, 418.
  - 23) 4-Methylphenyl-6-Amido-3-Methylbenzylamin. Sm. 86° (87°). 2HCl (C. 1900 [1] 496; B. 33, 2591; J. pr. [2] 71, 154 C. 1905 [1] 928). — \*IV, 418.
  - 24) Benzyl-4-Dimethylamidophenylamin (4-Benzylamido-1-Dimethylamidobenzol). Sm. 48° (A. 241, 361). — IV, 586.
  - 25) 3-Äthylamido-4-Methyldiphenylamin. Sm. 59—60° (D.R.P. 87667). — \*IV, 400.
  - 26) Phenylhydrazon d. Aromadendral. Sm. 105° u. Zers. (C. 1901 [2] 1006; 1905 [2] 1343). — \*III, 410.
  - 27) Nitril d.  $\alpha$ -Phenyl- $\gamma$ -[1-Piperidyl]propen- $\gamma$ -Carbonsäure. Sm. 98 bis 99° (B. 37, 4087 C. 1904 [2] 1724). C 70,9 — H 7,1 — N 22,0 — M. G. 254.
- $C_{15}H_{18}N_4$
- 1)  $\alpha$ -Hydrazido- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[2-Methylphenyl]amido-methan (Amidodi[o-Tolyl]guanidin). Sm. 120°. HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 33, 1070). — \*II, 250.
  - 2)  $\alpha$ -Hydrazido- $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]amido-methan. Sm. 152° (B. 33, 1072). — \*II, 268.
  - 3) 2,6-Diamido-3,5,4'-Trimethylazobenzol. Sm. 165—166° (Soc. 81, 95 C. 1902 [1] 186, 416). — \*IV, 1026.
  - 4) 4'-Dimethylamido-5-Amido-2-Methylazobenzol. Sm. 145° (A. 234, 356). — IV, 1383.
  - 5) 4'-Dimethylamido-3-Amido-4-Methylazobenzol. Sm. 215° (A. 234, 362). — IV, 1383.
  - 6) Toluylenblau (Dimethylamidophenamidotolazin). HCl + H<sub>2</sub>O (B. 12, 933; D.R.P. 15272). — IV, 603; \*IV, 402.
- $C_{15}H_{19}N$
- 1)  $\beta$ -Dipropylchinolin. Sd. 329°. Pikrat (C. 1907 [1] 235; C. 1908 [2] 292).
  - 2) N,4,7[oder N,6,7]-Trimethylcarbazolenin. Pikrat (C. 1904 [2] 343).
  - 3) Ettidin. Fl. (Z. 1867, 429). — IV, 343.
- $C_{15}H_{19}N_3$
- 1) 2,2,4'-Triamido-3,5-Dimethyldiphenylmethan (C. 1900 [1] 1112).
  - 2) 4,6,4'-Triamido-3,3'-Dimethyldiphenylmethan. Sm. 163° (C. 1900 [1] 1111; B. 33, 2589). — \*IV, 826.

- C<sub>15</sub>H<sub>19</sub>N<sub>3</sub>** 3) 4,6,6'-Triamido-3,3'-Dimethyldiphenylmethan. Sm. 155° (154°) (C. 1900 [1] 1111; B. 33, 2592). — \*IV, 826.  
 4) 2,4-Diamido-4'-Dimethylamidodiphenylmethan (C. 1900 [1] 1112).  
 5) 6-Amido-4'-Dimethylamido-3-Methyldiphenylamin. Sm. 69–70° (Soc. 65, 881). — IV, 612.  
 6) Methyl-di[2-Amidobenzyl]amin. Sm. 96° (B. 26, 2585). — IV, 628.  
 7) 6-Phenylamido-5-Methyl-2,4-Diäthyl-1,3-Diazin. Sm. 99°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 39, 274). — IV, 1133.  
 8) Verbindung (aus d. Verb. C<sub>18</sub>H<sub>19</sub>N<sub>4</sub>Cl, HCl + 2H<sub>2</sub>O). Sm. 118° (B. 37, 554 C. 1904 [1] 893).  
 C 83,3 — H 9,2 — O 7,4 — M. G. 216.
- C<sub>15</sub>H<sub>20</sub>O** 1) γ-Keto-α-Phenyl-α-Nonin. Sm. 34° (Bl. [3] 33, 161 C. 1905 [1] 601).  
 2) 3-Benzoyl-1-Isopropyl-R-Pentamethylen. Sd. 166°<sub>12</sub> (C. r. 148, 1400 C. 1909 [2] 126).  
 3) 3-Keto-1,3-Di[R-Pentamethylenylen]-R-Pentamethylen (Tricyklo-Di-Penten-Pentanon). Sm. 76–77°; Sd. 190°<sub>12</sub> (B. 29, 2964). — \*III, 134.  
 C 77,6 — H 8,6 — O 13,8 — M. G. 232.
- C<sub>15</sub>H<sub>20</sub>O<sub>2</sub>** 1) 2,4-Dipropionyl-1,3,5-Trimethylbenzol. Sm. 101–102°; Sd. 327° (B. 30, 1285). — \*III, 211.  
 2) Methyläther d. d-3-Keto-4-[4-Oxybenzyl]-1-Methylhexahydrobenzol. Sm. 52–53° (Bl. [3] 33, 973 C. 1905 [2] 1180).  
 3) 2-Phenyl-1,1,2-Trimethyl-R-Pentamethylen-3-Carbonsäure (Phenyl-dihydroisolaurenolsäure). Sm. 142° (135–137°); Sd. 320°. Ba + 9H<sub>2</sub>O, Ag (Bl. [3] 13, 902; [3] 19, 216, 353; [3] 21, 838). — III, 167; \*II, 861.  
 4) Hyposantonigesäure (5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure). Sm. 95,5°. Ba + 2H<sub>2</sub>O, Ag (G. 26 [2] 456). — \*II, 860.  
 5) Lakton d. γ-Oxy-γ-Phenyl-β-Methylheptan-ε-Carbonsäure (Lakton d. γ-Oxy-γ-Phenyl-α-Isoamylbuttersäure). Sd. 240°<sub>30</sub> (B. 23, 1504). — II, 1594.  
 6) Lakton d. Alantolsäure (Helenin). Sm. 76°; Sd. 192°<sub>10</sub> (A. 15, 349; 34, 192; 52, 389; 285, 356; B. 6, 1507; 9, 155). — II, 1594; \*II, 939.  
 7) Lakton d. Isoalantolsäure. Sm. 115° (109–110°) (B. 6, 1507; 34, 777; A. 285, 357 Anm.). — \*II, 939.  
 8) Äthylester d. α-Phenyl-δ-Methyl-β-Penten-δ-Carbonsäure. Sd. 154°<sub>12</sub> (Bl. [3] 35, 369 C. 1906 [2] 320).  
 9) Acetat d. 5-Oxy-1-Methyl-3-Phenylhexahydrobenzol. Sd. 294 bis 297° (A. 303, 263). — \*II, 653.  
 10) Benzoat d. d-Oxy-γ-Methyl-α-Hepten. Sd. 274–277° (Bl. [3] 15, 888). — \*II, 714.  
 11) Benzoat d. β-Oxy-γ-Methyl-α[oder β]-Hepten. Sd. 197–200°<sub>50</sub> (Soc. 83, 151 C. 1903 [1] 72, 436).  
 12) Benzoat d. 3-Oxy-1,1-Dimethylhexahydrobenzol. Sd. 200°<sub>50</sub> (Soc. 87, 1495 C. 1905 [2] 1672).  
 C 72,6 — H 8,0 — O 19,4 — M. G. 248.
- C<sub>15</sub>H<sub>20</sub>O<sub>3</sub>** 1) Hydrosantonid. Sm. 155–156° (J. 1878, 827; G. 8, 344). — II, 1770.  
 2) γ-Keto-ε-Phenyl-β-β-Dimethylhexan-ζ-Carbonsäure. Sm. 124° (B. 30, 2271; A. 308, 189). — \*II, 979.  
 3) ζ-Benzoyl-β-Methylhexan-ε-Carbonsäure (β-Benzoyl-α-Isoamylpropion-säure). Sm. 103° (B. 23, 1504). — II, 1670.  
 4) β-Pentamethylbenzoylpropionsäure. Sm. 104° (B. 28, 3217). — \*II, 979.  
 5) 1-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (Hyposantoninsäure) (G. 22 [1] 15). — II, 1672.  
 6) d-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (d-Santonig Säure). Sm. 178–179°. Na, Ba (B. 12, 1574; 13, 1516; 16, 427; 31, 2132; J. 1880, 895; G. 12, 393; 13, 385; 25 [1] 485; 28 [2] 535; 29 [1] 481; 29 [2] 126). — II, 1670; \*II, 977.  
 7) l-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (l-Santonig Säure). Sm. 176–177° (179–180°) (G. 23 [2] 488; 29 [1] 481; C. 1899 [2] 127). — II, 1671; \*II, 978.  
 8) r-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (r-Santonig Säure; Isosantonig Säure). Sm. 153–155° (J. 1880, 895; G. 12, 400; 23 [2] 489; 29 [1] 479; B. 12, 1575; 16, 428; 31, 3133; B. 36, 2668 C. 1903 [2] 951). — II, 1671; \*II, 978.

- $C_{15}H_{20}O_3$
- 9) isom. 7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Desmotroposantonige Säure). Sm. 175° (*G.* 23 [2] 477; *B.* 31, 1677; *C. r.* 135, 43 *C.* 1902 [2] 446). — II, 1671; \*II, 978.
  - 10) Isohyposantoninsäure (*G.* 22 [2] 20). — II, 1672.
  - 11) Hyposantoninsäure. Sm. 135—136° (*G.* 22 [1] 192). — II, 1673.
  - 12) Pipitzahoinsäure (Perezon). Sm. 103—104°. Pb, Cu, Ag (*A.* 95, 188; 237, 96; *J.* 1855, 492). — II, 1673.
  - 13) Säure (aus Lupulinsäure). Sm. 84—85° (*C.* 1900 [2] 916).
  - 14) Lakton d. Dihydrometasantoninsäure (Dihydrometasantonin). Sm. 181—182° (*G.* 25 [2] 466; 29 [2] 197, 236). — \*II, 1037.
  - 15) Äthylester d.  $\delta$ -Phenyl- $\beta$ -Methylpentan- $\delta$ -Oxyd- $\epsilon$ -Carbonsäure. *Sd.* 175—180°<sub>15</sub> (*C. r.* 139, 1216 *C.* 1905 [1] 347).
  - 16) Äthylester d.  $\beta$ -Keto- $\gamma$ -Benzylpentan- $\gamma$ -Carbonsäure ( $\ddot{A}$ . d. Äthylbenzylacetessigsäure). *Sd.* 295—298° (292—294°) (*B.* 11, 1057; 33, 2681). — II, 1669; \*II, 976.
  - 17) Äthylester d.  $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta$ -Methylpentan- $\beta$ -Carbonsäure. *Sd.* 179—183°<sub>20—21</sub> (*B.* 41, 1269 *C.* 1908 [1] 1877).
  - 18) Äthylester d.  $\delta$ -Benzoyl- $\beta$ -Methylbutan- $\delta$ -Carbonsäure ( $\ddot{A}$ . d. Benzoylisocaprönsäure). *Sd.* 246—247°<sub>225</sub> (*Soc.* 49, 165). — II, 1669.
  - 19) Acetat d.  $\alpha$ -Oxyäthyl-5-Isopropyl-2-Methylphenylketon. *Sd.* 178 bis 181°<sub>28</sub> (*C.* 1899 [1] 959). — \*III, 126.
  - 20) Propionat d. Oxymethyl-5-Isopropyl-2-Methylphenylketon. *Sd.* 185—187°<sub>30</sub> (*C.* 1899 [1] 959). — \*III, 125.  
*C* 68,2 — *H* 7,5 — *O* 24,2 — *M. G.* 264.
- $C_{15}H_{20}O_4$
- 1) Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2,4,5-Trioxyphenyl]- $\alpha$ -Hexen. Sm. 87° (*B.* 39, 1216 *C.* 1906 [1] 1659).
  - 2) Diäthyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,4-Dioxyphenyl]pentan. Sm. 74 bis 75° (*B.* 34, 1696). — \*III, 209.
  - 3) Diäthyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,5-Dioxyphenyl]pentan. Sm. 49° (*B.* 34, 1694). — \*III, 209.
  - 4) Diäthyläther d.  $\gamma$ -Keto- $\beta$ -[2,4-Dioxybenzoyl]butan. Sm. 72,5° (*B.* 34, 2949). — \*III, 210.
  - 5) Methylbutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 117° (*C.* 1905 [1] 815).
  - 6) Äthylpropyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 95° (*C.* 1905 [1] 815).
  - 7) Äthylisopropyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 101,5° (*C.* 1905 [1] 815).
  - 8) Methylisobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 102,5° (*C.* 1905 [1] 815).
  - 9) Di[2, 6 - Diketo - 4 - Methylhexahydrophenyl]methan (Methylenbis-methyldihydroresorcin). Sm. 152—153° (*B.* 35, 2183 *C.* 1902 [2] 374; *A.* 289, 171; 309, 370; *B.* 30, 1802; *B.* 35, 2183 *C.* 1902 [2] 374). — \*I, 545.
  - 10) Absinthiin. Sm. 68° (*Bl.* [3] 19, 538; *Ar.* 230, 100). — \*III, 452.
  - 11)  $\alpha$ -Oxydihydrosantonin? (*H.* 22, 551). — \*II, 1128.
  - 12)  $\beta$ -Oxy- $\beta$ -Phenyl- $\alpha\alpha$ -Dimethylpropionisobutyläthersäure. Sm. 65°.  $Ca + 2H_2O$ ,  $Ba + H_2O$ , Ag (*A.* 227, 62). — II, 1591.
  - 13)  $\gamma$ -Keto- $\epsilon$ -[4-Methoxyphenyl]- $\beta$ -Methylhexan- $\zeta$ -Carbonsäure. Sm. 118° (*A.* 294, 334). — \*II, 1043.
  - 14) Santonsäure. Sm. 171° (161—163°). Na, Ba, Ag (*B.* 6, 1201; 7, 1103; 13, 2210; 18, 2748; *G.* 13, 164; 25 [2] 461; 29 [2] 183, 224; *B.* 37, 258 *C.* 1904 [1] 642; *Ar.* 244, 634 *C.* 1907 [1] 637). — II, 1788; \*II, 1044.
  - 15) Isosantoninsäure. Sm. 152° (*G.* 25 [2] 471; *C.* 1903 [2] 1067). — \*II, 1046.
  - 16) Metasantoninsäure. Sm. 161—167°. Ag (*J.* 1873, 620; 1880, 894; *G.* 8, 336; 25 [2] 463, 468; 29 [2] 187, 232). — II, 1789; \*II, 1045.
  - 17) Parasantoninsäure. Sm. 170°. Na, Ba (*J.* 1878, 825; *B.* 13, 2210; *G.* 8, 340; 25 [2] 473; *C.* 1903 [2] 1067, 1446). — II, 1789; \*II, 1045.
  - 18) i-Dehydrophotosantoninsäure. Sm. 132—133° (134,5—135,5°). Ba (*B.* 18, 2862; *G.* 23 [1] 289; *G.* 32 [1] 305 *C.* 1902 [1] 1404). — II, 1932.
  - 19) isom. i-Dehydrophotosantoninsäure. Sm. 133,5—134,5° (*G.* 32 [1] 306 *C.* 1902 [1] 1404).
  - 20) aktive Dehydrophotosantoninsäure. Sm. 138,5—139°. Ba (*G.* 23 [1] 289; *G.* 32 [1] 305 *C.* 1902 [1] 1404). — II, 1932.



- $C_{15}H_{20}O_4$
- 21) Santoninsäure.  $Na + 3\frac{1}{2}H_2O$ ,  $Ca$ ,  $Ba + H_2O$ ,  $Pb$  (*J.* 1876, 618; 1878, 821; *A.* 63, 10; 176, 126; *B.* 6, 1280; *J. pr.* [2] 35, 334; *G.* 25 [1] 468). — II, 1785.
  - 22) l-Desmotroposantoninsäure.  $Ba$  (*R. A. L.* [5] 7 II, 322). — \*II, 1046.
  - 23) i-Desmotroposantoninsäure.  $Ba$  (*G.* 23 [2] 476; 29 [2] 102). — II, 1790; \*II, 1045.
  - 24) Iso-Desmotroposantoninsäure.  $Ba$  (*G.* 23 [2] 484). — II, 1790.
  - 25) Oxypipitzahoinsäure (Oxyperezon). Sm. 133–134° (129°) (*A.* 237, 119; *B.* 18, 942). — II, 1674.
  - 26) Säure (aus Artemisin).  $Ba$  (*C.* 1902 [2] 369). — \*III, 457.
  - 27) Säure (aus Santoninsäure) (*C.* 1907 [1] 1333).
  - 28) Äthylester d. l- $\alpha$ -Isovaleroxylphenylelessigsäure (*B.* 31, 1421).
  - 29) Äthylester d.  $\epsilon$ -Oxy- $\beta$ -Keto- $\gamma$ -Methylpentanphenyläther- $\gamma$ -Carbonsäure. Sd. 185°<sub>40</sub> (*Soc.* 69, 173). — \*II, 364.
  - 30) Diäthylester d.  $\alpha$ -Phenylpropan- $\beta\beta$ -Dicarbonsäure. Sd. 300° (*A.* 204, 177). — II, 1855.
  - 31) Diäthylester d.  $\alpha$ -Phenylpropan- $\gamma\gamma$ -Dicarbonsäure. Sd. 178–182°<sub>16</sub> (*B.* 39, 2211 *C.* 1906 [2] 680).
  - 32) Diäthylester d.  $\beta$ -Phenylpropan- $\alpha\alpha$ -Dicarbonsäure. Sd. 230–235°<sub>15</sub> (*Am.* 34, 145 *C.* 1905 [2] 1023; *B.* 39, 353 *C.* 1906 [1] 916; *B.* 39, 2210 *C.* 1906 [2] 679).
  - 33) Diäthylester d. 1-Methylbenzol-3-[Äthyl- $\beta\beta$ -Dicarbonsäure]. Sd. 320° (*B.* 23, 109). — II, 1855.
  - 34) Diäthylester d. Benzol-1-Methylcarbonsäure-2-[Äthyl- $\beta$ -Carbonsäure]. Sd. 210–212°<sub>40</sub> (*A.* 286, 274). — II, 1856.
  - 35) Isobutylester d. d- $\alpha$ -Benzoxylbuttersäure. Sd. 327° (*Bl.* [3] 15, 492). — \*II, 722.
  - 36) Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -Phenyl- $\beta\beta$ -Dimethylpropan. Sm. 55°; Sd. 295–297° (*M.* 11, 390; 18, 599). — II, 1099.
  - 37) Dibutyrat d. 3,5-Dioxy-1-Methylbenzol. Fl. (*A. ch.* [4] 6, 197). — II, 961.
- $C_{15}H_{20}O_5$
- C 64,3 — H 7,1 — O 28,6 — M. G. 280.
- 1)  $\alpha$ -Oxyheptanphenyläther- $\delta\delta$ -Dicarbonsäure. Sm. 104–106,5°; Zers. bei 150°.  $Ca$  (*B.* 28, 1201). — \*II, 366.
  - 2)  $\alpha$ -[2,3,4-Trioxyphenyltriäthyläther]äthen- $\beta$ -Carbonsäure (Daphnetintriäthyläthersäure). Sm. 193° (*B.* 17, 1086). — II, 1950.
  - 3)  $\alpha$ -Äskuletintriäthyläthersäure. Sm. 102–103° (*B.* 16, 2110). — II, 1950.
  - 4)  $\beta$ -Äskuletintriäthyläthersäure. Sm. 144° (*B.* 16, 2109). — II, 1950.
  - 5) Artemisinsäure.  $Ag + 2H_2O$  (*C.* 1901 [2] 938; *B.* 34, 3718 *C.* 1902 [1] 45). — \*III, 456.
  - 6)  $\alpha$ -Oxysantoninsäure.  $Ba$  (*H.* 22, 544). — \*II, 1128.
  - 7) Oxyparasantonsäure. Sm. 189–190°.  $Ba$  (*C.* 1903 [2] 1377).
  - 8) Äthylester d. Methyl-4,6-Dioxyphenylketon-4,6-Diäthyläther-3-Carbonsäure. Sm. 95–97° (*B.* 42, 1398 *C.* 1909 [1] 1885).
  - 9) Diäthylester d.  $\alpha$ -Oxybutterphenyläthersäure-2-Carbonsäure. Sd. 199–201°<sub>17</sub> (*B.* 33, 1402). — \*II, 890.
  - 10) Diäthylester d.  $\alpha$ -Oxyisobutterphenyläthersäure-2-Carbonsäure. Sd. 193°<sub>21</sub> (*B.* 33, 1403). — \*II, 890.
  - 11) Isoamylester d. 3,4-Dioxybenzoldimethyläther-1-Ketocarbonsäure. Sd. 220–225°<sub>10</sub> (*Bl.* [3] 17, 945). — \*II, 1122.
  - 12) Verbindung (aus Dimethyläthylcarbinol u. Opiansäure). Sm. 81° (*C.* 1898 [2] 527). — \*II, 1119.
- $C_{15}H_{20}O_6$
- C 60,8 — H 6,7 — O 32,4 — M. G. 296.
- 1) 4-Methylbenzyliden- $\alpha$ -Methylgalaktosid. Sm. 146° (*R.* 25, 159 *C.* 1906 [2] 24).
  - 2) 4-Methylbenzyliden- $\alpha$ -Methylglykosid. Sm. 178° (*R.* 25, 159 *C.* 1906 [2] 24).
  - 3) 4-Methylbenzyliden- $\alpha$ -Methylmannosid. Fl. (*R.* 25, 159 *C.* 1906 [2] 24).
  - 4) Dioxyparasantonsäure. Sm. 206–207° (*C.* 1903 [2] 1447).
  - 5) Oxydehydroisophotosantonsäure. Sm. 283–284°.  $Ba$  (*G.* 32 [1] 318 *C.* 1902 [1] 1405).
  - 6)  $\alpha$ -Oxybutter-5-Methyl-1,3-Phenylenäthersäure. Fl. (*B.* 33, 1685). — \*II, 581.

- C<sub>15</sub>H<sub>20</sub>O<sub>6</sub>** 7)  $\alpha$ -Oxyisobutter-5-Methyl-1,3-Phenyläthersäure. Fl. (B. 33, 1686).  
 8) Methylester d.  $\beta$ -[p-Tetraoxyphenyl]propentetramethyläther- $\alpha$ -Carbonsäure.  $\alpha$ -Form. Sm. 77,5—78°;  $\beta$ -Form. Sm. 68° (G. 23 [2] 617). — II, 2007.  
 9) Diäthylester d. Oxyessig-[5-Methyl-1,3-Phenyl]äthersäure. Sm. 107° (J. pr. [2] 21, 167). — II, 961.
- C<sub>15</sub>H<sub>20</sub>O<sub>7</sub>** 10)  $\alpha\beta$ -Diacetat d. 3,4-Dioxy-1-[ $\alpha\beta$ -Dioxypropyl]benzol-3,4-Dimethyläther. Sd. 208—209°<sub>14</sub> (C. 1897 [1] 915). — \*II, 700.  
 11)  $\beta\gamma$ -Diacetat d. 3,4-Dioxy-1-[ $\beta\gamma$ -Dioxypropyl]benzol-3,4-Dimethyläther. Sd. 248°<sub>111</sub> (B. 24, 3490). — II, 1117.  
 C 57,7 — H 6,4 — O 35,9 — M. G. 312.
- C<sub>15</sub>H<sub>20</sub>O<sub>8</sub>** 1) Sicaloin (Ar. 247, 91 C. 1909 [1] 1586).  
 2) Säure (aus Santoninsäure) (C. 1907 [1] 1333; 1908 [1] 1629).  
 3) Di[Äthylcarbonat] d. 2,4,6-Trioxy-1,3,5-Trimethylbenzol. Sd. 230 bis 232°<sub>14</sub> (M. 19, 263). — \*II, 624.  
 C 54,9 — H 6,1 — O 39,0 — M. G. 328.
- C<sub>15</sub>H<sub>20</sub>O<sub>9</sub>** 1) Androsin + 2H<sub>2</sub>O. Sm. 218—220° (Soc. 95, 746 C. 1909 [2] 42).  
 2) Globularin (J. 1860, 560; B. 16, 573; A. ch. [5] 28, 72). — III, 591.  
 3) Leditanssäure (J. 1883, 1402). — III, 688.
- C<sub>15</sub>H<sub>20</sub>O<sub>10</sub>** 4) Tetraäthylester d. Propadiäntetracarbonsäure. Sm. 93—95°. + 2H<sub>2</sub>O (flüssig) (B. 27, 3375). — \*I, 446.  
 C 52,3 — H 5,8 — O 41,9 — M. G. 344.
- 1) Aldehyd d. Glykosyringasäure. Sm. 162° (G. 18, 215). — II, 1117.  
 C 50,0 — H 5,6 — O 44,4 — M. G. 360.
- 1) Buchweizengelb. Pb (J. 1857, 489; 1859, 527, 528). — III, 634.  
 2) Oxyptinginsäure. Sm. 193°. (2 Ba, 3 Ba) (A. ch. [5] 20, 485).  
 3) Glykosyringasäure + 2H<sub>2</sub>O. Sm. 208° (214° wasserfrei) (G. 18, 214). — II, 1117.  
 4) Tetracetylchinasäure. Sm. 130—136°. Ag (B. 22, 1461; Ar. 244, 44 C. 1906 [1] 1344). — I, 805.  
 5) Verbindung (aus Saccharin u. Formaldehyd). Sm. 139—140° (A. 299, 333). — \*I, 469.  
 C 45,9 — H 5,1 — O 49,0 — M. G. 392.
- C<sub>15</sub>H<sub>20</sub>O<sub>12</sub>** 1) Hexamethylester d. Propan- $\alpha\alpha\beta\beta\gamma\gamma$ -Hexacarbonsäure. Sm. 136°; Sd. 250—255°<sub>28</sub> (B. 29, 1279, 1281, 1508, 1746). — \*I, 452.  
 C 78,9 — H 8,8 — N 12,3 — M. G. 228.
- C<sub>15</sub>H<sub>20</sub>N<sub>2</sub>** 1) 5-Methyl-6-[ $\alpha$ -Phenylhydrazonäthyl]-1,2,3,4-Tetrahydrobenzol. Fl. (Soc. 57, 20). — IV, 770.  
 2) Phenylhydrazon d. Campherphoron (B. 26, 811). — IV, 770.  
 3) Phenylhydrazon d. Isoacetophoron. Sm. 68—69 (A. 289, 10 Anm.; 297, 189; 299, 168). — IV, 770.  
 4) 5-Hexyl-1-Phenylpyrazol. Sd. 318—320° (B. 21, 1149). — IV, 531.  
 5) Nitril d.  $\beta$ -Benzylamido- $\alpha$ -Hepten- $\alpha$ -Carbonsäure. Sm. 64—65° (C. r. 143, 555 C. 1906 [2] 1842).  
 6) Verbindung (aus Mesidin). Sm. 114—115°. — II, 555.  
 C 70,3 — H 7,8 — N 21,9 — M. G. 256.
- C<sub>15</sub>H<sub>20</sub>N<sub>4</sub>** 1) Di[4,6-Diamido-3-Methylphenyl]methan. Sm. 203—204° (B. 33, 915; C. 1901 [2] 78). — \*IV, 948.  
 2) 4-Dimethylamido-2,2',4'-Triamidophenylmethan. Sm. 188—190° (D.R.P. 133709 C. 1902 [2] 615). — \*IV, 947.  
 3) 2,4-Di[ $\beta$ -Cyanpropylamido]-1-Methylbenzol. Sm. 85—86° (B. 39, 1002 C. 1906 [1] 1342).  
 4) 4,4'-Di[ $\alpha$ -Methylhydrazido]diphenylmethan. Sm. 102°. HCl (B. 41, 2172 C. 1908 [2] 707).  
 5) 4-Amido-5-Piperidyl-3-Methyl-1-Phenylpyrazol. Sm. 87° (A. 354, 114 C. 1907 [2] 611).  
 6) 6-Amido-p-Phenylamido-5-Methyl-2,4-Diäthyl-1,3-Diazin (Anilido-kyanäthin). Sm. 125° (J. pr. [2] 30, 157). — IV, 1133.  
 7) Leukotoluylenblau. (HCl, SnCl<sub>2</sub>) (B. 12, 936). — IV, 608.
- C<sub>15</sub>H<sub>20</sub>Cl<sub>8</sub>** 1) Verbindung (aus Cadinen). Sm. 65—70° (A. 359, 260 C. 1908 [1] 1934).
- C<sub>15</sub>H<sub>20</sub>S<sub>2</sub>** 1)  $\alpha\alpha$ -Dithiänylheptan. Sd. 200—203° i. V. (B. 30, 2039). — \*III, 591.
- C<sub>15</sub>H<sub>21</sub>N** C 83,7 — H 9,8 — N 6,5 — M. G. 215.  
 1) 1-[1,2,3,4-Tetrahydro-5-Naphtyl]hexahydropyridin. Sd. 218°<sub>83</sub>. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 28, 3109). — IV, 9.

- C<sub>15</sub>H<sub>21</sub>N** 2) 1-[1,2,3,4-Tetrahydro-6-Naphtyl]hexahydropyridin. *Sd.* 274—276°<sub>749</sub>. HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 29, 1178). — **IV**, 9.  
 3) 2-Methylen-1,3,3-Triäthyl-2,3-Dihydroindol. *Sd.* 265°<sub>760</sub>. HJ, Pikrat (*B.* 29, 2481; *G.* 28 [2] 90, 344). — **IV**, 230; \***IV**, 170.  
 4) Nitril d.  $\alpha$ -Phenylloktan- $\alpha$ -Carbonsäure. *Sd.* 327° (*B.* 22, 1237). — **II**, 1400.  
 5) Nitril d. d-Santalsäure. *Sd.* 162—166° (*B.* 40, 1129 *C.* 1907 [1] 1327).  
**C<sub>15</sub>H<sub>21</sub>N<sub>3</sub>** C 74,1 — H 8,6 — N 17,3 — M. G. 243.  
**C<sub>15</sub>H<sub>21</sub>Br** 1) 1-Phenylazodekahydrochinolin. *Sm.* 78,6° (*B.* 23, 1153). — **IV**, 1581.  
 2) Verbindung (aus Camaleon). *Fl.* (*B.* 35, 3198 *C.* 1902 [2] 1256).  
**C<sub>15</sub>H<sub>22</sub>O** C 82,6 — H 10,1 — O 7,3 — M. G. 218.  
 1) Phenyläther d.  $\iota$ -Oxy- $\beta$ -Nonen (*C.* 1899 [1] 26). — \***II**, 356.  
 2)  $\zeta$ -Keto- $\delta$ -Phenyl- $\gamma$ -Methyloktan. *Sd.* 152°<sub>17</sub> (*Am.* 38, 532 *C.* 1908 [1] 227).  
 3)  $\gamma$ -Keto- $\epsilon$ -Phenyl- $\beta\beta$ -Dimethylheptan. *Sm.* 34°; *Sd.* 145°<sub>15</sub> (*Am.* 38, 538 *C.* 1908 [1] 227).  
 4) Isobutyl-5-Isopropyl-2-Methylphenylketon. *Sd.* 270—272° (*J. pr.* [2] 46, 488). — **III**, 157.  
 5) Cedron. *Sd.* 147—151°<sub>7,5</sub> (*Bl.* [3] 17, 487; *B.* 40, 3525 *C.* 1907 [2] 1694). — \***III**, 403.  
 6) Aldehyd d. d-Santalsäure (d-Santalal). *Sd.* 152—155°<sub>10</sub> (*B.* 40, 1126 *C.* 1907 [1] 1327).  
 7) Verbindung (aus Caprylen u. Benzaldehyd) (*G.* 39 [1] 348 *C.* 1909 [2] 195).  
 8) Verbindung (aus Sylvan). *Sd.* 235—245° (*B.* 13, 882). — **III**, 692.  
**C<sub>15</sub>H<sub>22</sub>O<sub>2</sub>** C 76,9 — H 9,4 — O 13,7 — M. G. 234.  
 1) Methylenäther d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropen. *Sd.* 154—157°<sub>10</sub> (*M.* 24, 258 *C.* 1903 [2] 243).  
 2) 4'-Methyläther d. d-3-Oxy-4-[4-Oxybenzyl]-1-Methylhexahydrobenzol. *Sm.* 93—94° (*Bl.* [3] 33, 973 *C.* 1905 [2] 1180).  
 3) 3-Methyl-4-Isoamyläther d. 3,4-Dioxy-1-Allylbenzol. *Sd.* 300,6 bis 301,7°<sub>746</sub> u. Zers. (*J.* 1877, 581; *G.* 19, 496). — **II**, 974.  
 4) Acetyljonon. *Sd.* 170—177°<sub>25</sub> (*D. R. P.* 126960 *C.* 1902 [1] 77). — \***III**, 207.  
 5) Acetylpseudojonon. *Fl.* (*D. R. P.* 126960 *C.* 1902 [1] 77).  
 6) Cyclamiretin. *Sm.* 198° (*A.* 185, 218; *J.* 1887, 2305). — **III**, 579.  
 7) 1-Oktylbenzol-4-Carbonsäure. *Sm.* 139°. *Ag.* (*B.* 18, 138). — **II**, 1401.  
 8) d-Santalsäure. *Sd.* 192—195° (*B.* 40, 1129 *C.* 1907 [1] 1327).  
 9) Lakton d. Dihydroalantolsäure. *Sm.* 123°; *Sd.* 195°<sub>18</sub> (*A.* 285, 371). — **II**, 1595.  
 10) Lakton d. Dihydroisocalantolsäure. *Sm.* 166° (*B.* 34, 779). — \***II**, 940.  
 11) Oktylester d. Benzolcarbonsäure. *Sd.* 305—306° (*A.* 152, 7; *Soc.* 69, 1238). — **II**, 1141; \***II**, 714.  
 12) Acetat d.  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trimethylphenyl]butan. *Sd.* 140—141° (*B.* 35, 2259 *C.* 1902 [2] 275).  
 13) Acetat d. Lactucol. *Sm.* 198—200° (*A.* 238, 225). — **III**, 635.  
 14) Acetat d. 3-Oxy- $\beta$ -Dipropyl-1-Methylbenzol. *Sd.* 255—260° (*G.* 12, 510). — **II**, 776.  
 15) Acetat d. 3-Oxy- $\beta$ -Diisopropyl-1-Methylbenzol. *Sd.* 255—260° (*J. r.* 12, 508). — **II**, 776.  
**C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>** C 72,0 — H 8,8 — O 19,2 — M. G. 250.  
 1)  $\alpha$ -Oxyisovalerian-5-Isopropyl-2-Methylphenyläthersäure. *Sd.* 226 bis 229°<sub>88</sub> (*B.* 33, 1271). — \***II**, 459.  
 2)  $\alpha$ -Oxyisovalerian-6-Isopropyl-3-Methylphenyläthersäure. *Sd.* 228 bis 229°<sub>80</sub> (*B.* 33, 1274). — \***II**, 464.  
 3) Alantsäure (Alantolsäure). *Sm.* 94° u. Zers. K, Ca + 6H<sub>2</sub>O, Ba + 5H<sub>2</sub>O, *Ag.* (*B.* 9, 155; *A.* 285, 358). — **II**, 1594.  
 4) Isocalantolsäure. Ca, Ba + 5H<sub>2</sub>O, *Ag.* (*B.* 34, 778). — \***II**, 939.  
 5) Aldehyd (aus Benzaldehyd u. Isobuttersäurealdehyd). *Sm.* 94° (*M.* 20, 618). — **III**, 79.  
 6) Methylester d. Allylcamphocarbonsäure. *Sm.* 75,5—76° (*B.* 35, 3628 *C.* 1902 [2] 1467; *C. r.* 136, 791 *C.* 1903 [1] 1086).



- $C_{15}H_{22}O_3$
- 7) Äthylester d.  $\alpha$ -Oxyisovalerian-2,4-Dimethylphenyläthersäure. Sd. 267—274°<sub>789</sub> (B. 33, 1265). — \*II, 444.
  - 8) Äthylester d.  $\alpha$ -Oxyisovalerian-2,5-Dimethylphenyläthersäure. Sd. 270°<sub>789</sub> (B. 33, 1268). — \*II, 446.
  - 9) Äthylester d.  $\alpha$ -Oxyisovalerian-3,4-Dimethylphenyläthersäure. Sd. 275—283°<sub>744</sub> (B. 33, 1263). — \*II, 440.
  - 10) Äthylester d.  $\alpha$ -Oxypropion-5-Isopropyl-2-Methylphenyläthersäure. Sd. 277—279°<sub>751</sub> (B. 33, 1270). — \*II, 459.
  - 11) Äthylester d.  $\alpha$ -Oxypropion-6-Isopropyl-3-Methylphenyläthersäure. Sd. 267—272° (B. 33, 1272). — \*II, 464.
  - 12) norm. Oktylphenylester d. Kohlensäure. Sd. 145°<sub>90</sub> (Bl. [3] 21, 820). — \*II, 361.
  - 13) sec. Oktylphenylester d. Kohlensäure. Sd. 142—145°<sub>90</sub> (Bl. [3] 21, 820). — \*II, 361.
  - 14) Monacetat d. 3,5-Dioxy-2,4,6-Triäthyl-1-Methylbenzol. Sm. 71 bis 73° (M. 11, 321). — II, 961.
  - 15) Acetat d. 9-Methyl-3-Isopropenylbicyclo-[1,3,3]-nonan-5-ol-7-on. Sd. 178—182°<sub>15</sub> (B. 36, 230 C. 1903 [1] 514).
- $C_{15}H_{23}O_4$
- 16) Verbindung (aus d. Diozonid d. Urushioldimethyläther). Sd. 209 bis 215°<sub>15</sub> (B. 42, 3671 C. 1909 [2] 1880).  
C 67,7 — H 8,3 — O 24,0 — M. G. 266.
  - 1) Laserpitin (oder  $C_{24}H_{36}O_7$ ). Sm. 118°. Acetat (J. 1883, 1361). — III, 635.
  - 2) Di[Äthoxylmethyläther] d. 3,4-Dioxy-1-Propenylbenzol. Sd. 187 bis 191°<sub>10</sub> (D. R. P. 209608 C. 1909 [1] 1681).
  - 3) Hydrosantonsäure. Sm. 170° u. Zers.  $Na + 3H_2O$ ,  $K + 2H_2O$  (J. 1876, 619). — II, 1770.
  - 4) Lakton d. Pulegonmalonäthylestersäure. Sd. 193—195°<sub>20</sub> (A. 345, 162 C. 1906 [1] 1490).
  - 5) Methylester d. Camphoformylpropionsäure. Sm. 71,5° (C. 1907 [1] 1496).
  - 6) Dimethylester d.  $\delta\delta$ -Dimethyl- $\alpha\gamma\eta$ -Nonatrien- $\alpha\alpha$ -Dicarbonsäure. Sd. 190—195°<sub>20</sub> (A. 358, 79 C. 1908 [1] 732).
  - 7) Äthylester d.  $\beta\beta$ -Dioxy- $\beta$ -Phenylpropiondiäthyläthersäure. Sd. 130 bis 135°<sub>2</sub> (153°<sub>13</sub>) (Am. 20, 141; C. r. 138, 207 C. 1904 [1] 659).
  - 8) Äthylester d. Camphoformylessigsäure. Sm. 56° (C. 1907 [1] 1496).
  - 9) d-Monoborneolester d. Citrakonsäure. Sm. 150,5° (B. 35, 3400 C. 1902 [2] 1358).
  - 10) isom. d-Monoborneolester d. Citrakonsäure. Sm. 82,5° (B. 35, 3400 C. 1902 [2] 1358).
  - 11) l-Monoborneolester d. Citrakonsäure. Sm. 150,5° (B. 35, 3399 C. 1902 [2] 1358).
  - 12) isom. l-Monoborneolester d. Citrakonsäure. Sm. 82,5° (B. 35, 3399 C. 1902 [2] 1358).
  - 13) l-Monoborneolester d. Mesakonsäure. Sm. 116,5° (B. 35, 3400 C. 1902 [2] 1358).
  - 14) Saures Phtalat d. d- $\beta$ -Oxyoktan. Sm. 75°. l-Brucinsalz, Cinchonidinsalz (Soc. 91, 2059 C. 1908 [1] 641).
  - 15) Saures Phtalat d. l- $\beta$ -Oxyoktan. Sm. 75° (Soc. 91, 2060 C. 1908 [1] 641).
  - 16) Saures Phtalat d. r- $\beta$ -Oxyoktan. Sm. 55° (Soc. 91, 2059 C. 1908 [1] 640).
  - 17) Verbindung (aus Caryophyllen). Sm. 120,5° (A. 359, 259 C. 1908 [1] 1934).  
C 63,8 — H 7,8 — O 28,4 — M. G. 282.
- $C_{15}H_{22}O_5$
- 1)  $\beta$ -[ $\beta$ -Trioxyphenyl]propiontriäthyläthersäure. Sm. 77° (B. 16, 2111). — II, 1929.
  - 2) Photosantonsäure. Sm. 154—155°.  $(NH_4)_2 + 6H_2O$ ,  $Ca + 3H_2O$ ,  $Ca + xH_2O$ ,  $Ba + H_2O$ ,  $Ba, Ag_2 + 3H_2O$  (J. 1876, 622; 1879, 664; G. 12, 82; 13, 378; B. 18, 2859; G. 32 [1] 301 C. 1902 [1] 1404). — II, 1931.
  - 3) Isophotosantonsäure.  $Ba + H_2O$  (B. 19, 2260; G. 32 [1] 311 C. 1902 [1] 1404). — II, 1932.
  - 4) Santolsäure. Sm. 166—167°.  $Ba + H_2O$ ,  $Ag$  (G. 33 [1] 202 C. 1903 [1] 45).

- $C_{15}H_{22}O_5$  5)  $\alpha$ -Diterpodilakton (Anhydrid d.  $\alpha$ -Diterpoxylsäure). Sm. 153—154° (A. 256, 118). — I, 844.  
 6)  $\beta$ -Diterpodilakton. Sm. 134—135° (A. 256, 122). — I, 844.  
 7) Dimethylester d. 4-Hexyl-1,4-Pyran-2,6-Dicarbonsäure. Sm. 72° (Bl. [4] 1, 146 C. 1907 [1] 1428).  
 8) Dimethylester d. Camphoessigcarbonsäure. Sd. 194—196°<sub>15</sub> (C. r. 141, 13 C. 1905 [2] 484).  
 9) Äthylester d. 2,3,4-Trioxybenzoltriäthyläther-1-Carbonsäure. Fl. (B. 17, 2101). — II, 1918.  
 10) Äthylester d. 3,4,5-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 51° (B. 17, 2099). — II, 1921.  
 11) Diäthylester d.  $\epsilon$ -Keto- $\alpha$ -9-Nonadien- $\delta\zeta$ -Dicarbonsäure (D. d. Diallyl-acetondicarbonsäure). Sd. 185—186°<sub>10</sub> (A. 267, 86). — I, 781.
- $C_{15}H_{22}O_6$  1) 2,6-Dimethyl-1,4-Pyron + Methylmalonsäurediäthylester. Na (A. 341, 69 C. 1905 [2] 822).  
 2) Säure (aus Fichtelit). Ag<sub>2</sub> (C. 1908 [1] 1794).  
 3) Diäthylester d. 2,5-Diketo-1-Propylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Propylsuccinylbernsteinsäure). Sd. 200° (B. 26, 232).  
 4) Diäthylester d. 2,5-Diketo-1-Isopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Isopropylsuccinylbernsteinsäure). Sd. 200° (B. 26, 232).  
 C 57,3 — H 7,0 — O 35,7 — M. G. 314.
- $C_{16}H_{22}O_7$  1) Glyko-o-Oxyphenyläthylcarbinol. Sm. 145—150° u. Zers. (C. 1902 [2] 215; B. 36, 2582 C. 1903 [2] 621).  
 2)  $\alpha$ -Heerabomyrrholol. Sm. 207—220° (Ar. 243, 648 C. 1906 [1] 478).  
 3) Ozonid (aus Caryophyllen) (B. 42, 1067 C. 1909 [1] 1656).  
 4)  $\alpha$ -Heerabomyrrhololsäure. Sm. 220—225°. Pb, Ag (Ar. 245, 454 C. 1907 [2] 1913).  
 5) Diäthylester d. Trimethylparakonylmalonsäure. Sd. 250—255°<sub>60</sub> (Am. 33, 363 C. 1905 [1] 1374).  
 6) Triäthylester d.  $\epsilon$ -Keto- $\beta$ -Hexen- $\gamma\delta\zeta$ -Tricarbonsäure. Sd. 196 bis 197°<sub>10</sub> (Soc. 71, 328). — I, 433.  
 7) Triäthylester d. 3-Keto-1,2-Dimethyl-R-Tetramethylen-1,2,4-Tricarbonsäure. Sd. 207—208°<sub>20</sub> (B. 33, 3756).  
 8) Triäthylester einer Säure  $C_9H_{10}O_7$ . Sd. 198—200°<sub>15</sub> (M. 23, 851 C. 1902 [2] 1409).  
 C 54,5 — H 6,6 — O 38,8 — M. G. 330.
- $C_{16}H_{22}O_8$  1) Ketonsäure (aus Artemisin) (C. 1909 [1] 377).  
 2) Triäthylester d.  $\delta\delta$ -Dioxy- $\alpha\gamma$ -Butadienmonoäthyläther- $\alpha\alpha\gamma$ -Tricarbonsäure (Tetraäthylester d. Dicarboxyglutakonsäure). Sd. 270 bis 280° u. Zers. Na, Ca, Cu, CuOH (B. 15, 2842; 22, 1414; 27, 3061; 29, 1017; 30, 962; 31, 140, 2757; 34, 675; A. 222, 250; 297, 88; J. pr. [2] 54, 359; B. 35, 2883 C. 1902 [2] 1035; J. pr. [2] 73, 49 C. 1906 [1] 819; Soc. 91, 1143 C. 1907 [2] 895; C. 1908 [1] 1161). — I, 863; \*I, 444.  
 3) Tetraäthylester d. Propen- $\alpha\alpha\beta\gamma$ -Tetracarbonsäure. Sd. 198—199°<sub>12</sub> (Soc. 73, 1009). — \*I, 445.  
 4) Tetraäthylester d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sm. 101—102° (B. 31, 2757).  
 5) Tetraäthylester d. Propen- $\alpha\beta\gamma\gamma$ -Tetracarbonsäure. Sd. 249—250°<sub>19</sub> (Soc. 75, 963).  
 6) Tetraäthylester d. R-Trimethylen-1,1,2,2-Tetracarbonsäure. Sm. 43° (46°); Sd. 187°<sub>12</sub> (B. 19, 1056; A. 256, 194; Soc. 83, 782 C. 1903 [2] 201, 439; Soc. 87, 358 C. 1905 [1] 1243, 1643; J. pr. [2] 68, 167 C. 1903 [2] 760; J. pr. [2] 75, 477 C. 1907 [2] 450; J. pr. [2] 77, 52 C. 1908 [1] 622). — I, 865.  
 7) Tetraäthylester d. isom. R-Trimethylen-1,1,2,2-Tetracarbonsäure? Sd. 155—160°<sub>12</sub> (J. pr. [2] 64, 399).  
 8) Tetraäthylester d. R-Trimethylen-1,1,2,3-Tetracarbonsäure. Sd. 245—247°<sub>85</sub> (B. 17, 1652; Soc. 47, 823). — I, 864.  
 9) Tetraäthylester d. isom. R-Trimethylen-1,1,2,3-Tetracarbonsäure (T. d. Propargylentetracarbonsäure). Sd. 220—230°<sub>40</sub> (A. 229, 91). — I, 865.

- $C_{15}H_{22}O_9$  C 52,0 — H 6,4 — O 41,6 — M. G. 346.  
 1)  $\alpha\beta\gamma$ -Trimethylester- $\delta\delta$ -Diäthylester d.  $\epsilon$ -Ketohehexan- $\alpha\beta\gamma\delta\delta$ -Pentacarbonsäure. Sm. 102° (B. 36, 2296 C. 1903 [2] 1167).
- $C_{15}H_{22}O_{10}$  C 49,7 — H 6,1 — O 44,2 — M. G. 362.  
 1) Saponin (Ar. 241, 615 C. 1904 [1] 169).  
 2) Triäthylester d.  $\alpha\beta$ -Diacetoxyläthan- $\alpha\alpha\beta$ -Tricarbonsäure (Tr. d. Diacetyldesoalsäure). Fl. (B. 12, 543). — I, 857.  
 3) Tetraacetat d.  $\beta$ -Methylgalaktosid. Sm. 93–94° (B. 34, 979).  
 4) Tetraacetat d.  $\alpha$ -Methyl-d-Glykosid. Sm. 101°. +  $C_6H_6$  (B. 34, 970, 2893; R. 21, 43 C. 1902 [1] 988).  
 5) Tetraacetat d.  $\beta$ -Methyl-d-Glykosid. Sm. 104–105° (C. 1900 [2] 180; B. 34, 966; R. 21, 43 C. 1902 [1] 988; C. 1903 [1] 1369).  
 C 35,6 — H 4,3 — O 60,1 — M. G. 506.
- $C_{15}H_{22}O_{19}$  1) Glycerintrisweinsäure (J. 1859, 501). — I, 795.
- $C_{15}H_{22}N_2$  C 78,3 — H 9,6 — N 12,1 — M. G. 230.  
 1)  $\alpha$ -Amido-4-Diäthylamidodiphenylmethan. Sm. 120–121°. HCl (D. R. P. 167053 C. 1906 [1] 721).  
 2)  $\alpha\gamma$ -Di[2,5-Dimethyl-1-Pyrryl]propan. Sm. 76–77° (B. 19, 3157). — IV, 72.  
 3) 5-Methyl-2-Isopropyl-1-Isobutylbenzimidazol. Fl. HCl (B. 20, 1590). — IV, 888.  
 4) Base (aus Oxysparteïn). Fl. (2HCl, 2AuCl<sub>3</sub>) (B. 25, 3609). — III, 933.
- $C_{15}H_{22}Br_2$  1) d- $\alpha\beta$ -Dibrom- $\alpha$ -[4-Isopropylphenyl]- $\gamma$ -Methylpentan. Sm. 95–96° (B. 38, 2313 C. 1905 [2] 481).
- $C_{15}H_{23}N$  C 82,9 — H 10,6 — N 6,4 — M. G. 217.  
 1)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Methyl-2-Hexahydropyridyl]äthan. Fl. (2HCl, PtCl<sub>4</sub>) (B. 38, 3707 C. 1906 [1] 52).  
 2) d-2-Propyl-1-Benzylhexahydropyridin (N-Benzylconiin). Sd. 294 bis 296° (B. 37, 3633 C. 1904 [2] 1510).  
 3) 5-Äthyl-2-[ $\beta$ -Phenyläthyl]hexahydropyridin. Sd. 314,2°<sub>761</sub>. (2HCl, PtCl<sub>4</sub>) (B. 21, 3096; 22, 1058). — IV, 211.  
 4) 6-[ $\beta$ -Phenyläthyl]-2,4-Dimethylhexahydropyridin. Fl. HCl (B. 27, 83). — IV, 211.  
 5) Dehydropentacetonamin. HCl (A. 181, 83). — I, 983.  
 6) p-Triäthyl-1,2,3,4-Tetrahydrochinolin. Fl. Pikrat (B. 29, 2482). — IV, 210.  
 7) Hemisparteïlen. Sd. 135–155°<sub>18</sub> (C. r. 141, 261 C. 1905 [2] 772).
- $C_{15}H_{23}Cl$  1) Santalylchlorid. Sd. 147–155°<sub>10</sub> (B. 10, 1130 C. 1907 [1] 1327).  
 2) Hydrochlorid d. Kohlenwasserstoff  $C_{15}H_{22}$  (aus Calmusöl). Fl. (B. 35, 3194 C. 1902 [2] 1255).
- $C_{15}H_{24}O$  C 81,8 — H 10,9 — O 7,3 — M. G. 220.  
 1) 3-Oxy-6-Isoamyl-4-Isopropyl-1-Methylbenzol. Sm. 76,5°; Sd. 275°<sub>716</sub> (B. 24, 3892). — II, 777.  
 2) Isoamyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 242–243°<sub>746,5</sub> (Z. 1869, 43; G. 19, 496; A. ch. [7] 6, 141). — II, 770; \*II, 463.  
 3) act. Amyläther d. 2-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 250 bis 270° (A. ch. [7] 6, 141). — \*II, 459.  
 4) norm. Oktyläther d. 2-Oxy-1-Methylbenzol. Sm. 292,9° (A. 243, 40). — II, 737.  
 5) norm. Oktyläther d. 3-Oxy-1-Methylbenzol. Sd. 298,9° (A. 243, 43). — II, 744.  
 6) norm. Oktyläther d. 4-Oxy-1-Methylbenzol. Sd. 298° (A. 243, 46). — II, 748.  
 7) sec. Amylidencampher. Sd. 253–260°<sub>758</sub> (B. 36, 2631 C. 1903 [2] 625).  
 8)  $\alpha$ -Dimethyljonon. Sd. 150–155°<sub>20</sub> (D. R. P. 127424 C. 1902 [1] 235; D. R. P. 133758 C. 1902 [2] 613).  
 9)  $\beta$ -Dimethyljonon. Sd. 155–160°<sub>20</sub> (D. R. P. 127424 C. 1902 [1] 235; D. R. P. 133758 C. 1902 [2] 613).  
 10) Dimethylpseudojonon (D. R. P. 127424 C. 1902 [1] 235).  
 11) Äthylpseudojonon (D. R. P. 150771 C. 1904 [1] 1307).  
 12) Betulol. Sd. 284–288°<sub>748</sub> (B. 38, 1637 C. 1905 [1] 1556).  
 13) Coleresen =  $(C_{15}H_{24}O)_x$ . Sm. 75–77° (Ar. 242, 351 C. 1904 [2] 526).  
 14) Cynanchol (besteht aus Cynanchin Sm. 148–149° und Cynanchocerin Sm. 145–146°) (A. 180, 352; 182, 163; 192, 182). — II, 777.



- C<sub>15</sub>H<sub>24</sub>O**
- 15) Euphorbon. Sm. 113—114° (*J.* 1868, 809; 1886, 1821; *A.* 192, 193; *G.* 24 [2] 444). — III, 631.
  - 16)  $\beta$ -Guinafluavil. Sm. 78° (*Ar.* 243, 119 *C.* 1905 [1] 1472).
  - 17) Juniperol. Sm. 107° (*C.* 1909 [1] 1656).
  - 18) Laktucon (oder C<sub>28</sub>H<sub>44</sub>O<sub>2</sub>). Sm. 150—200° (210°) (*A.* 60, 83; 238, 220). — III, 634.
  - 19)  $\alpha$ -Paracotol. Sd. 220—222° (*A.* 199, 79; 271, 306). — II, 777.
  - 20) Phasol. Sm. 189—190° (*H.* 15, 433). — II, 1075.
  - 21) Pseudoeuphorbon. Sm. 116° (*Ar.* 245, 691 *C.* 1908 [1] 1315).
  - 22) Santalal. Sd. 301—306° (180°<sub>40</sub>) (*B.* 15, 1197; *C.* 1896 [2] 668; *Bl.* [3] 23, 221). — III, 549; \*III, 415.
  - 23)  $\alpha$ -Santalol (oder C<sub>15</sub>H<sub>26</sub>O). Sd. 301—302° (*C.* 1900 [2] 478). — \*III, 414.
  - 24)  $\beta$ -Santalol (oder C<sub>15</sub>H<sub>26</sub>O). Sd. 308—311° (*C.* 1900 [2] 478). — \*III, 414.
  - 25) Taceleresen = (C<sub>15</sub>H<sub>24</sub>O)<sub>x</sub>. Sm. 75° (*Ar.* 242, 363 *C.* 1904 [2] 527).
  - 26) Alkohol (aus Cascarillöl). Sd. 280—290° (*C.* 1900 [2] 574; 1901 [1] 259). — \*III, 409.
  - 27) Keton (aus Natriumacetat u. Natriumäthylat). Sd. 280—300° (*A.* 202, 312). — I, 1014.
  - 28) Verbindung (aus Phoron). Sd. 137—139°<sub>8-10</sub> (*A.* 296, 324).
  - 29) Verbindung (aus Polyporus officinalis). Sm. 75° (*J.* 1886, 1823). — III, 645.

- C<sub>15</sub>H<sub>24</sub>O<sub>2</sub>**
- C 76,3 — H 10,2 — O 13,5 — M. G. 236.
- 1) Monäthyläther d. 3,5-Dioxy-2,4,6-Triäthyl-1-Methylbenzol. Sd. 175—180°<sub>20</sub> (*M.* 11, 318). — II, 961.
  - 2) Isovalerylcampher. Sd. 141—148°<sub>11</sub> (*B.* 37, 762 *C.* 1904 [1] 1085).
  - 3) Santalsäure. Sd. 210—220°<sub>20</sub>. Ag (*Bl.* [3] 23, 221). — \*II, 1239.
  - 4) Aldehyd d. Ketosäure C<sub>15</sub>H<sub>24</sub>O<sub>3</sub> (aus Cedren). Sd. 165°<sub>10</sub> (*B.* 40, 3523 *C.* 1907 [2] 1694).
  - 5) Verbindung (aus Aceton). Sd. 120—121°<sub>11</sub> (*B.* 39, 3461 *C.* 1906 [2] 1560).
  - 6) Verbindung (aus Santelöl). Sm. 101—103° (*J. r.* 24, 688). — III, 549.

- C<sub>15</sub>H<sub>24</sub>O<sub>3</sub>**
- C 71,4 — H 9,5 — O 19,1 — M. G. 252.
- 1) Triisopropylphloroglucin? Sd. 180—188°<sub>15</sub> (*M.* 21, 1001).
  - 2)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[4-Isopropylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. Sd. 287—288° (*A.* 312, 304). — \*II, 448.
  - 3)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2,4,5-Trimethylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. Sd. 290° (*B.* 30, 1710). — \*II, 449.
  - 4) Barringtonenin. Sm. 179—180° (*C.* 1903 [2] 841).
  - 5) Digitogenin (oder C<sub>30</sub>H<sub>48</sub>O<sub>6</sub>). Sm. bei 250° (*B.* 23, 1555; 25 [2] 680; 32, 341, 2201; 34, 3562). — III, 581; \*III, 437.
  - 6) Cedrenketosäure. Sd. 215—222°<sub>11</sub> (*B.* 40, 3524 *C.* 1907 [2] 1694).
  - 7) Dihydroalantolsäure. Ba, Ag (*A.* 285, 374). — II, 1595.
  - 8) Dihydroisalantolsäure. Sm. 122—123° (*B.* 34, 779). — \*II, 940.
  - 9) Methylester d. Propylcamphocarbonsäure. Sm. 69—70° (*C. r.* 136, 790 *C.* 1903 [1] 1085).
  - 10) Methylester d. isom. Propylcamphocarbonsäure. Sm. 30° (*C. r.* 136, 790 *C.* 1903 [1] 1085).
  - 11) Äthylester d. Digitosäure. Sm. 160° (*B.* 27 [2] 882).
  - 12) Äthylester d. Äthylcamphocarbonsäure. Sd. 164—165°<sub>15</sub> (*J. pr.* [2] 50, 137, 142; *B.* 35, 3619 *C.* 1902 [2] 1467). — \*I, 268.
  - 13) Isobutylester d. Camphocarbonsäure. Sd. 177°<sub>19</sub> (*C. r.* 136, 240 *C.* 1903 [1] 584).
  - 14) d-Bornylester d.  $\beta$ -Acetylpropionsäure. Sd. 170—171°<sub>20-25</sub> (*P. Ch. S.* Nr. 230). — \*III, 338.
  - 15) Verbindung (aus Santoninphenylhydrazid). Sm. 152—153° (*G.* 19, 390). — II, 1673.

- C<sub>15</sub>H<sub>24</sub>O<sub>4</sub>**
- C 67,1 — H 8,9 — O 23,9 — M. G. 268.
- 1) 5-Methyläther d. 2,4-Diketo-5,6-Dioxy-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Sm. 168—169° (*B.* 26, 2036). — II, 1032.
  - 2)  $\beta\kappa$ -Dimethyl- $\delta\eta$ -Undekadien- $\sigma\eta$ -Dicarbonsäure (Diisovaleralglutarsäure). Sm. 220°; Zers. bei 240°. Ca, Ba, Ag<sub>2</sub> (*A.* 282, 357). — \*I, 350.
  - 3) Calameonsäure + H<sub>2</sub>O. Sm. 153° (138° wasserfrei). NH<sub>4</sub> + 1½ H<sub>2</sub>O, Ca + 6 H<sub>2</sub>O (*B.* 35, 3197 *C.* 1902 [2] 1256).

- C<sub>15</sub>H<sub>24</sub>O<sub>4</sub>** 4) Säure (aus Lemongrasöl u. Malonsäure). Sm. 122° (*Bl.* [3] 21, 417). — \*I, 350.
- 5) Säure (aus Vetiveröl). Ag<sub>2</sub> (*C. r.* 135, 1060 *C.* 1903 [1] 234).
- C<sub>15</sub>H<sub>24</sub>O<sub>5</sub>** 6) Verbindung (aus Hopfenbitter). Sm. 92,5° (*C.* 1904 [2] 1227).  
C 63,4 — H 8,4 — O 28,2 — M. G. 284.
- 1) Dimethylester d. Pulegonmalonsäure. Sm. 49° (51°); Sd. 187°<sub>15</sub> (*B.* 33, 3186 *Anm.*; *A.* 345, 174 *C.* 1906 [1] 1491). — \*III, 383.
- 2) Diäthylester d. δ-Acetyl-α-Hepten-δε-Dicarbonsäure. Sd. 245 bis 250° (*B.* 29, 931). — \*I, 388.
- C<sub>15</sub>H<sub>24</sub>O<sub>6</sub>** C 60,0 — H 8,0 — O 32,0 — M. G. 300.
- 1) α-Diterpolaktonsäure (Anhydrid d. α-Diterpoxylsäure). Sm. 158—160° (*A.* 256, 117). — I, 844.
- 2) β-Diterpolaktonsäure. Sm. 186—187° (*A.* 256, 119). — I, 844.
- 3) Dimethylester d. α-Ketononah-α-Carbonsäure-γ-Methylketocarbon-säure. Sd. 206°<sub>10</sub> (*Bl.* [4] 1, 92 *C.* 1907 [1] 1184).
- 4) Monoäthylester d. Hydrocampherylmalonsäure. Sm. 136—138° (*A.* 257, 302). — I, 822.
- 5) Diäthylester d. βγ-Diketo-δ-Methyloktan-γζ-Dicarbonsäure (*D.* d. Diacetylmethyladipinsäure). *Fl.* (*Soc.* 61, 74). — I, 822.
- 6) Diäthylester d. βζ-Diketo-δ-Äthylidenheptan-αη-Dicarbonsäure (*D.* d. Propylidendisacetessigsäure). Sm. 76—78° (*A.* 323, 145 *C.* 1902 [2] 842).
- 7) Triäthylester d. α-Hexen-δδε-Tricarbonsäure. Sd. 283—285° (*B.* 25, 490; 29, 977, 1868). — I, 821; \*I, 418.
- 8) Tripropylester d. Propen-αβγ-Tricarbonsäure (*Tr.* d. Akonitsäure). Sd. 195°<sub>13</sub> (*B.* 18, 1954). — I, 817.
- 9) Tripropylester d. Propen-αγγγ-Tricarbonsäure? (*Tr.* d. Isoakonit-säure). Sd. 195°<sub>13</sub> (*B.* 18, 1954). — I, 818.
- C<sub>15</sub>H<sub>24</sub>O<sub>7</sub>** C 56,9 — H 7,6 — O 35,4 — M. G. 316.
- 1) Triäthylester d. α-Oxypropenpropyläther-αβγ-Tricarbonsäure. Sd. 202—203°<sub>20</sub> (*C. r.* 147, 199 *C.* 1908 [2] 768).
- 2) Triäthylester d. γ-Keto-β-Methylpentan-αβδ-Tricarbonsäure. Sd. 191,5°<sub>18</sub> (*B.* 33, 3338).
- 3) Triäthylester d. β-Acetylbutan-αβδ-Tricarbonsäure. Sd. 200—201°<sub>14</sub> (*Soc.* 91, 188 *C.* 1907 [1] 1203).
- 4) Triäthylester d. Säure C<sub>9</sub>H<sub>12</sub>O<sub>7</sub> (aus Citronensäure). Sm. 173—174°<sub>28</sub> (*J. pr.* [2] 53, 354). — I, 846.
- C<sub>15</sub>H<sub>24</sub>O<sub>8</sub>** C 54,2 — H 7,2 — O 38,6 — M. G. 332.
- 1) Triäthylester d. Butan-ααγγ-Tricarbonsäure-β-Methylcarbonsäure. Sd. 190—195°<sub>14</sub> (*M.* 21, 910).
- 2) Tetraäthylester d. Propan-ααβγ-Tetracarbonsäure. Sd. 203—204°<sub>18</sub> (*B.* 23, 3759; *Soc.* 73, 1007; *J. pr.* [2] 45, 57; *A.* 341, 102 *C.* 1905 [2] 823). — I, 859; \*I, 440.
- 3) Tetraäthylester d. Propan-ααγγ-Tetracarbonsäure (*T.* d. Dicarboxy-glutarsäure). Sd. 300—310° u. Zers. Na<sub>2</sub> (*B.* 19, 1054; 21, 2234; 27, 2346; 30, 961; 31, 2585; *A.* 246, 109; *Soc.* 59, 992; *Soc.* 91, 1142 *C.* 1907 [2] 894; *Soc.* 93, 1784 *C.* 1909 [1] 153). — I, 859; \*I, 440.
- 4) Tetraäthylester d. Propan-αββγ-Tetracarbonsäure (*T.* d. Isoallylen-tetracarbonsäure). Sd. 295° u. Zers. (*B.* 13, 2164; 29, 969; 30, 960; *A.* 214, 62; *Ph. Ch.* 23, 311; *J. pr.* [2] 66, 118 *C.* 1902 [2] 733). — I, 859; \*I, 440.
- 5) Tetraacetat d. αγσε-Tetraoxy-ββ-Dimethylpentan. Sd. 83—90°<sub>12</sub> (*M.* 27, 1159 *C.* 1907 [1] 707).
- C<sub>15</sub>H<sub>24</sub>N<sub>2</sub>** C 77,6 — H 10,3 — N 12,1 — M. G. 232.
- 1) Dehydrospartein. Sd. 314—316°. 2HCl + 2½H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (2HCl, AuCl<sub>3</sub>), 2HBr + H<sub>2</sub>O, 2HJ + H<sub>2</sub>O (*B.* 26, 3037; 30, 196). — III, 933.
- 2) Spartyrin. Sm. 153—154°. 2HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (*B.* 38, 1776 *C.* 1905 [1] 1652).
- 3) Base (aus p-Terolditoly). 2HBr (*B.* 14, 936). — IV, 1035.
- C<sub>15</sub>H<sub>24</sub>Br<sub>2</sub>** 1) Atractylendibromid. *Fl.* (*Ar.* 241, 36 *C.* 1903 [1] 712).
- C<sub>15</sub>H<sub>24</sub>Br<sub>6</sub>** 1) Hexabromid d. Terpens C<sub>15</sub>H<sub>24</sub> (aus Piper Volkensii). Sm. 154° (*B.* 39, 657 *C.* 1906 [1] 1021).

- C<sub>15</sub>H<sub>25</sub>O** 1) Diäthylcamphoformenamin? (*Am.* 34, 247 *C.* 1905 [2] 1490).  
 2)  $\beta$ -Takoresen. Sm. 82° (*Ar.* 242, 398 *C.* 1904 [2] 528).
- C<sub>15</sub>H<sub>25</sub>O<sub>2</sub>** 1) Tacamaholsäure. Sm. 104–106° (*Ar.* 242, 397 *C.* 1904 [2] 528).
- C<sub>15</sub>H<sub>25</sub>O<sub>5</sub>** 1) Digitaliretin = (C<sub>15</sub>H<sub>25</sub>O<sub>5</sub>)<sub>x</sub> (*J.* 1875, 777). — III, 581.
- C<sub>15</sub>H<sub>25</sub>N** C 82,2 — H 11,4 — N 6,4 — M. G. 219.  
 1)  $\delta$ -[4-Dimethylamidophenyl]heptan. Sd. 164°<sub>24</sub> (*B.* 39, 2164 *C.* 1906 [2] 233).  
 2)  $\gamma$ -[4-Dimethylamidophenyl]- $\beta\delta$ -Dimethylpentan. Sd. 268°. Pikrat (*B.* 40, 4366 *C.* 1908 [1] 34).  
 3)  $\gamma$ -[4-Diäthylamidophenyl]pentan. Sd. 278°<sub>760.5</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 38, 524 *C.* 1905 [1] 738).  
 4) 2-Amido- $\beta$ -Oktyl-1-Methylbenzol. Sd. 324–326°. HCl, H<sub>2</sub>SO<sub>4</sub>, Oxalat (*B.* 18, 145). — II, 566.  
 5) 3,5-Diisopropyl-2-Isobutylpyridin (Valeritrin). Sd. 258–259°<sub>740</sub>. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, HgCl<sub>2</sub>), Pikrat (*J. r.* 5, 99, 339; *B.* 5, 1101; 6, 565; *C.* 1906 [1] 1439). — I, 951.  
 C 72,9 — H 10,1 — N 17,0 — M. G. 247.
- C<sub>15</sub>H<sub>25</sub>N<sub>3</sub>** 1)  $\alpha$ -Dipropylamido- $\beta$ -Phenylhydrazonpropan. Fl. (*B.* 29, 868). — IV, 767.
- C<sub>15</sub>H<sub>25</sub>Cl** 1) Ledenhydrochlorid (*B.* 28, 3088).  
 2) Chlorid d. Caryophyllenhydrat. Sm. 63° (64°); Sd. 293–294° (295°) (*A.* 271, 289; *B.* 36, 1038 *C.* 1903 [1] 1135). — III, 513.  
 3) Alkoholechlorid (aus Baldrianöl) (*Bl.* [3] 13, 917). — III, 545.
- C<sub>15</sub>H<sub>25</sub>Br** 1) Bromid d. Caryophyllenhydrat. Sm. 61–62° (*A.* 271, 290). — III, 513.
- C<sub>15</sub>H<sub>25</sub>J** 1) Atractyljodid. Fl. (*Ar.* 241, 29 *C.* 1903 [1] 712).  
 2) Guajyljodid (*Ar.* 241, 43 *C.* 1903 [1] 713).  
 3) Jodid d. Caryophyllenhydrat. Sm. 61° (*A.* 271, 290). — III, 513.  
 4) Jodsanton. Sd. 143–145° (*B.* 7, 1104). — I, 139.  
 C 81,1 — H 11,7 — O 7,2 — M. G. 222.
- C<sub>15</sub>H<sub>26</sub>O** 1)  $\epsilon$ -Keto- $\delta\zeta$ -Dimethyl- $\gamma\gamma$ -Diäthyl- $\gamma$ -Nonadien? Sd. 153–155°<sub>20</sub> (*M.* 28, 742 *C.* 1907 [2] 1155).  
 2)  $\beta$ -Keto- $\alpha\gamma$ -Di[Hexahydrophenyl]propan (*C.* 1907 [2] 53).  
 3) Amyrol. Sd. 299–301° (*C.* 1900 [1] 858). — \*III, 415.  
 4) Atractylol. Sm. 59°; Sd. 290–292°<sub>760</sub> (*Ar.* 241, 23 *C.* 1903 [1] 712).  
 5) Caparrapiol. Sd. 260°<sub>757</sub> (*Bl.* [3] 19, 642). — \*III, 386.  
 6) Caryophyllenhydrat. Sm. 95°; Sd. 287–289° (*A.* 271, 288; 279, 391). — III, 513.  
 7) Cederncampher (Cedrol). Sm. 74° (84°); Sd. 282° (*A.* 39, 247; 48, 35; *Bl.* [3] 17, 488). — III, 513; \*III, 386.  
 8) Isoecedrol. Sd. 148–151° (*Bl.* [3] 17, 487). — \*III, 403.  
 9) Cubebenampher. Sm. 68,7–70° (65°); Sd. 148° (*A.* 6, 294; 8, 203; *J.* 1875, 497; *Z.* 1870, 190; *B.* 10, 189). — III, 513.  
 10) Dihydroisocedrol. Sd. 148–151° (*B.* 40, 3526 *C.* 1907 [2] 1694).  
 11) Farnesol. Sd. 160°<sub>10</sub> (D.R.P. 149603 *C.* 1904 [1] 975; *B.* 37, 1095 *C.* 1904 [1] 1065).  
 12) Galipol. Sd. 264–265° (*Ar.* 235, 526; 236, 392, 408). — \*III, 386.  
 13) Gonystylol. Sm. 82° (76–78°); Sd. 164–166°<sub>17</sub> (*R.* 25, 45 *C.* 1906 [1] 842; *C.* 1907 [2] 164).  
 14) Guajol (Champakol). Sm. 91°; Sd. 288° (*A.* 279, 395; *Ar.* 241, 42 *C.* 1903 [1] 713; *B.* 41, 4359 *C.* 1909 [1] 291; *B.* 42, 1423 *C.* 1909 [1] 1760). — III, 513.  
 15) Gurjuresinol. Sm. 131–132° (*Ar.* 241, 385 *C.* 1903 [2] 724).  
 16) Ledumcampher. Sm. 104–105°; Sd. 282–283° (*B.* 8, 542; 15, 2501; 28, 3087; *J.* 1879, 909; *J. r.* 19, 318). — III, 514.  
 17) Maalialkohol. Sm. 105°. 2 + CrO<sub>3</sub> (*C.* 1909 [1] 23).  
 18) Matikocampher. Sm. 94° (*B.* 16, 2841; *C.* 1904 [2] 1125). — III, 513.  
 19) d-Nerolidol. Sd. 276–277° (*J. pr.* [2] 66, 503 *C.* 1903 [1] 517). — \*III, 387.  
 20) Patschoulicampher. Sm. 56° (54–55°); Sd. 296° (266–271°) (*Bl.* 28, 414; *A.* 279, 394; *Z.* 1869, 220; *Ar.* 241, 39 *C.* 1903 [1] 712). — III, 514.  
 21) d-Santalol (oder C<sub>15</sub>H<sub>24</sub>O). Sd. 300–301° (*Bl.* [3] 23, 543; *C.* 1900 [2] 478).



- C<sub>15</sub>H<sub>26</sub>O** 22)  $\beta$ -Santalol (oder C<sub>15</sub>H<sub>24</sub>O). Sd. 310° (309—310°) (*Bl.* 37, 303; [3] 23, 218, 543; *C.* 1895 [2] 605; 1898 [2] 137; 1899 [1] 1082; 1900 [2] 478). — III, 549.
- 23) Vetivenol. Sd. 169—170°<sub>15</sub> (*C. r.* 135, 1060 *C.* 1903 [2] 234).
- 24) Isoamylcampher. Sd. 277,5°<sub>738</sub> (*Z.* 1868, 299). — III, 513.
- 25) Alkohol (aus Baldrianöl). Sd. 190—195° (i. V.) (*Bl.* [3] 13, 917). — III, 545.
- 26) Alkohol (aus Cochenille) (*M.* 6, 893). — I, 258.
- 27) Alkohol (aus Jonon). Sd. 153°<sub>15</sub> (D.R.P. 160834 *C.* 1905 [2] 179).
- 28) Alkohol (aus Santalen). Sd. 160—165° (*C.* 1899 [1] 1082).
- 29) Alkohol (aus Santelholzöl). Sd. 183—197°<sub>37</sub> (*Bl.* [3] 23, 219).
- 30) Sesquiterpenalkohol (aus Copaivabalsam). Sm. 113,5—115° (*C.* 1904 [2] 1223; *Ar.* 242, 542 *C.* 1904 [2] 1500; *C.* 1906 [1] 1893; *Ar.* 244, 162 *C.* 1906 [2] 126).
- 31) Sesquiterpenalkohol (aus Eucalyptusöl). Sd. 247—248°<sub>748</sub> (*C.* 1904 [1] 1264).
- 32) Sesquiterpenalkohol (aus Leioscyphus Taylori). Sd. 260—265° (*H.* 45, 309 *C.* 1905 [2] 769).
- 33) Verbindung (aus Alicularia scalaris) (*H.* 45, 315 *C.* 1905 [2] 770).
- 34) Verbindung (aus Copaivasäure). Sm. 132° (*C.* 1901 [2] 1227).
- 35) Verbindung (aus Majoranöl). Sd. 200—220° (*B.* 15, 2855). — III, 543.
- C<sub>15</sub>H<sub>26</sub>O<sub>2</sub>** C 75,6 — H 10,9 — O 13,4 — M. G. 238.
- 1)  $\alpha$ -Oxy- $\alpha$ -Methylbutylcampher. Fl. (*B.* 36, 2631 *C.* 1903 [2] 625).
- 2) Äthylpseudojononhydrat. Sd. 198—205° (D.R.P. 150771 *C.* 1904 [1] 1307).
- 3) Calameon. Sm. 168° (165—166°). Na (*C.* 1901 [1] 893; *B.* 34, 1022; *B.* 35, 3190 *C.* 1902 [2] 1254; *B.* 35, 3195 *C.* 1902 [2] 1255). — \*III, 404.
- 4) Cedrenglykol. Sm. 160°; Sd. 186—187°<sub>12</sub> (*B.* 40, 3523 *C.* 1907 [2] 1694).
- 5) Daucol. Sm. 115—116° (*Ar.* 247, 406 *C.* 1909 [2] 2081).
- 6) Alkohol (aus Baldrianwurzelöl). Fl. (*Bl.* [3] 13, 925).
- 7) Diamenylvaleriansäure. Sd. 300—306° (*A.* 202, 304). — I, 534.
- 8)  $\alpha$ -Silvinolsäure. Sm. 85—90° (*C.* 1901 [1] 1228). — \*III, 427.
- 9) Methylester d. Säure C<sub>14</sub>H<sub>24</sub>O<sub>2</sub>. Sd. 195—200°<sub>20</sub> (*C. r.* 144, 853 *C.* 1907 [2] 36).
- 10) l-Menthylester d.  $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sd. 152—153,5°<sub>14</sub> (*A.* 327, 173 *C.* 1903 [1] 1396).
- 11) l-Menthylester d.  $\alpha$ -Buten- $\delta$ -Carbonsäure. Sd. 139—140°<sub>14</sub> (*A.* 327, 174 *C.* 1903 [1] 1396).
- 12) l-Menthylester d.  $\beta$ -Buten- $\alpha$ -Carbonsäure. Sd. 143—144,5°<sub>14</sub> (*A.* 327, 173 *C.* 1903 [1] 1396).
- 13) l-Menthylester d.  $\beta$ -Buten- $\beta$ -Carbonsäure. Sd. 140—141°<sub>10</sub> (*A.* 369, 337 *C.* 1909 [2] 2154).
- 14) l-Menthylester d.  $\beta$ -Methylpropen- $\alpha$ -Carbonsäure. Sd. 144—145°<sub>13</sub> (*A.* 369, 339 *C.* 1909 [2] 2154).
- 15) l-Menthylester d. R-Tetramethylencarbonsäure. Sd. 148°<sub>14</sub> (*A.* 327, 183 *C.* 1903 [1] 1396).
- 16) Acetat d. d-Propylcamphol. Sd. 120°<sub>10</sub> (*C. r.* 142, 1312 *C.* 1906 [2] 239).
- 17) Valerianat d. l-Borneol. Sd. 139°<sub>15</sub> (*B.* 31, 1775; *C. r.* 134, 609 *C.* 1902 [1] 872). — \*III, 339.
- 18) Valerianat d. Cyklogeraniol. Sd. 145—155°<sub>20</sub> (D.R.P. 138141 *C.* 1903 [1] 267).
- 19) Valerianat d. Geraniol. Sd. 130—132°<sub>30</sub> (*Bl.* [3] 19, 638).
- 20) Valerianat d. Isoborneol. Sd. 136°<sub>12</sub> (*C. r.* 136, 239 *C.* 1903 [1] 584).
- 21) Isovalerianat d. d-Borneol. Sd. 255—260° (*B.* 11, 456). — III, 470.
- 22) Isovalerianat d. Isoborneol. Sd. 132—133°<sub>13</sub> (*J. pr.* [2] 65, 226 *C.* 1902 [1] 1220). — \*III, 340.
- 23) Isovalerianat d. Geraniol (I. d. Rhodinol). Sd. 137—138° (*B.* 31, 357). — \*III, 345.
- 24) Isovalerianat d. Isofenchylalkohol. Sd. 142—145°<sub>19</sub> (*J. pr.* [2] 65, 229 *C.* 1902 [1] 1220). — \*III, 344.

- C<sub>15</sub>H<sub>26</sub>O<sub>3</sub>** C 70,9 — H 10,2 — O 18,9 — M. G. 254.  
 1) Dioxidihydrosantalol. *Sd.* 215–220°<sub>10</sub> (*B.* 40, 1133 *C.* 1907 [1] 1328).  
 2) Caparrapinsäure. *Sm.* 84,5°. Ca + 5H<sub>2</sub>O, Ag (*Bl.* [3] 19, 640). — \*II, 883.  
 3) Äthylester d. Propionylcampholsäure. *Sd.* 198°<sub>25</sub> (*C. r.* 144, 299 *C.* 1907 [1] 1126).  
 4) l-Bornylester d. r-α-Oxypropionäthyläthersäure. *Sd.* 135°<sub>10</sub> (*Soc.* 87, 1019 *C.* 1905 [2] 673).  
 5) l-Menthylester d. Lävulinsäure. *Sd.* 169°<sub>12</sub> (*Soc.* 89, 382 *C.* 1906 [1] 1614).  
 6) Verbindung (aus Pentaäthylphloroglucin). *Sd.* 275–285° (*M.* 13, 251). C 66,7 — H 9,6 — O 23,7 — M. G. 270.
- C<sub>15</sub>H<sub>26</sub>O<sub>4</sub>**  
 1) Diäthylester d. Oxycamphocarbonsäure. *Sd.* 208–218°<sub>35</sub> (*B.* 22 [2] 576). — I, 728.  
 2) Ortho-Monoamylester d. Camphersäure. *Sd.* oberhalb 250° (i. V.) (*B.* 26 [2] 87).  
 3) l-Diamylester d. Citrakonsäure. *Sd.* 179°<sub>25</sub> (*Ph. Ch.* 20, 382). — \*I, 325.  
 4) l-Diamylester d. Itakonsäure. *Sd.* 170–172°<sub>10</sub> (*Ph. Ch.* 20, 383). — \*I, 325.  
 5) l-Diamylester d. Mesakonsäure. *Sd.* 183–184°<sub>20</sub> (*Ph. Ch.* 20, 382, 577). — \*I, 326.
- C<sub>15</sub>H<sub>26</sub>O<sub>5</sub>** C 62,9 — H 9,1 — O 28,0 — M. G. 286.  
 1) Dimethylester d. δ-Keto-ββ<sub>55</sub>-Dimethylheptan-αη-Dicarbonsäure. *Sd.* 183–184°<sub>25</sub> (*A.* 304, 11). — \*I, 384.  
 2) Diäthylester d. 4-Methylhexahydrophenyloxymalonmethylether-säure. *Sd.* 168–173°<sub>30</sub> (*Soc.* 95, 1368 *C.* 1909 [2] 1055).  
 3) Diäthylester d. Hexahydrophenyloxymalonäthyläthersäure. *Sd.* 165°<sub>20</sub> (*Soc.* 95, 1366 *C.* 1909 [2] 1054).  
 4) Diäthylester d. δ-Ketononan-βγ-Dicarbonsäure. *Sd.* 187°<sub>24</sub> (*Bl.* [3] 33, 1101 *C.* 1905 [2] 1782).  
 5) Diäthylester d. ε-Ketononan-βδ-Dicarbonsäure. *Sd.* 185°<sub>18</sub> (*Bl.* [3] 33, 1103 *C.* 1905 [2] 1783).  
 6) Diäthylester d. δ-Keto-γ-Äthylheptan-γε-Dicarbonsäure (D. d. Triäthylacetondicarbonsäure). *Sd.* 223–224°<sub>130</sub> (*A.* 261, 179). — II, 772.  
 7) Diäthylester d. β-Keto-γ-Propylhexan-γδ-Dicarbonsäure. *Sd.* 275 bis 280° (*B.* 29, 979). — \*I, 384.  
 8) Diäthylester d. β-Keto-γ-Isopropylhexan-γδ-Dicarbonsäure. *Sd.* 270 bis 275° (*B.* 29, 981). — \*I, 384.  
 9) Diäthylester d. β-Keto-γ-Isobutylpentan-γδ-Dicarbonsäure. *Sd.* 265 bis 270° (*B.* 29, 981). — \*I, 384.  
 10) Diäthylester d. Phoronsäure. *Sm.* 125° (*B.* 14, 1079). — I, 772.
- C<sub>15</sub>H<sub>26</sub>O<sub>6</sub>** C 59,6 — H 8,6 — O 31,8 — M. G. 302.  
 1) Triacetonmannit (Triisopropylidenäther d. Mannit). *Sm.* 68–70° (*B.* 28, 1168; *C.* 1898 [2] 1081). — \*I, 497.  
 2) Triacetonsorbit. *Sm.* 36–45°; *Sd.* 170–175°<sub>25</sub> (*B.* 28, 2533). — \*I, 497.  
 3) Diäthylester d. l-Önanthyläpfelsäure. *Sd.* 191,6–192,2°<sub>15–16</sub> (*Ph. Ch.* 36, 142).  
 4) Triäthylester d. Hexan-αγγ-Tricarbonsäure. *Sd.* 180–185°<sub>32</sub> (*Soc.* 79, 129).  
 5) Triäthylester d. Hexan-αδδ-Tricarbonsäure. *Sd.* 205–208°<sub>35</sub> (*B.* 28 [2] 985; *G.* 26 [2] 284; *Soc.* 71, 1065; 79, 131). — \*I, 411.  
 6) Triäthylester d. Hexan-βγγ-Tricarbonsäure. *Sd.* 280–285° (276 bis 282°) (*B.* 29, 976; *C.* 1905 [1] 536). — \*I, 412.  
 7) Triäthylester d. Hexan-γγδ-Tricarbonsäure. *Sd.* 280–282° (285,3°) (*B.* 21, 2089; 23, 650). — I, 813.  
 8) Triäthylester d. β-Methylpentan-βεε-Tricarbonsäure. *Sd.* 175°<sub>12</sub> (*C. r.* 145, 682 *C.* 1907 [2] 2050).  
 9) Triäthylester d. γ-Methylpentan-ββδ-Tricarbonsäure. *Sd.* 161 bis 162° (*B.* 33, 3748).  
 10) Triäthylester d. β-Methylpentan-βγγ-Tricarbonsäure. *Sd.* 282,3 bis 294,3° (*B.* 23, 651). — I, 813.

- C<sub>15</sub>H<sub>26</sub>O<sub>6</sub>** 11) Triäthylester d.  $\beta$ -Methylpentan- $\beta\gamma\epsilon$ -Tricarbonsäure. *Sd.* 195°<sub>40</sub> (*Soc.* 85, 136 *C.* 1904 [1] 727).  
 12) Triäthylester d.  $\beta$ -Methylpentan- $\gamma\gamma\delta$ -Tricarbonsäure. *Sd.* 285 bis 290° (*B.* 29, 976). — \*I, 412.  
 13) Triäthylester d.  $\beta$ -Methylpentan- $\gamma\gamma\epsilon$ -Tricarbonsäure. *Sd.* 197°<sub>88</sub> (*A.* 292, 217; *Soc.* 69, 1507). — \*I, 411.  
 14) Triäthylester d.  $\beta$ -Methylpentan- $\gamma\delta\delta$ -Tricarbonsäure. *Sd.* 200 bis 210°<sub>80</sub> (*Soc.* 69, 274). — \*I, 412.  
 15) Triäthylester d.  $\beta$ -Methylpentan- $\gamma\epsilon\epsilon$ -Tricarbonsäure. *Sd.* 209°<sub>45</sub> (*C.* 1896 [2] 703; *Soc.* 69, 1491). — \*I, 411.  
 16) Triäthylester d.  $\beta$ -Methylpentan- $\delta\delta\epsilon$ -Tricarbonsäure. *Sd.* 170—180°<sub>25</sub> (*Soc.* 73, 63). — \*I, 412.  
 17) Triäthylester d.  $\beta$ -Methylpentan- $\delta\epsilon\epsilon$ -Tricarbonsäure. *Sd.* 176—177°<sub>19</sub> (*Am.* 30, 239 *C.* 1903 [2] 934).  
 18) Triäthylester d.  $\beta$ -Äthylbutan- $\alpha\alpha\beta$ -Tricarbonsäure. *Sd.* 289,3° (*B.* 23, 651). — I, 813.  
 19) Triäthylester d.  $\beta\beta$ -Dimethylbutan- $\alpha\alpha\delta$ -Tricarbonsäure. *Sd.* 150 bis 172°<sub>15</sub> (*C.* 1901 [2] 535).  
 20) Triäthylester d.  $\beta\beta$ -Dimethylbutan- $\alpha\gamma\delta$ -Tricarbonsäure. *Sd.* 303 bis 305° (*Soc.* 75, 902). — \*I, 411.  
 21) Triäthylester d. l-Camphoronsäure. *Sd.* 301° (295—300°) (*A.* 226, 256; *B.* 28, 2688; *A.* 292, 100). — I, 814; \*I, 409.  
 22) Triäthylester d. Isocamphoronsäure. *Sd.* 195—200°<sub>38</sub> (*B.* 29, 3020). — \*I, 411.  
 23) Triäthylester d. Säure C<sub>9</sub>H<sub>14</sub>O<sub>6</sub>. *Sd.* 195—205°<sub>10</sub> (*Bl.* [3] 29, 1045 *C.* 1903 [2] 1424).  
 24) Oktylester d.  $\alpha\beta$ -Di[Acetoxyl]propionsäure. *Sd.* 185—186°<sub>11,5</sub> (*Soc.* 65, 752). — \*I, 270.  
 25) Triacetat d.  $\delta\zeta\eta$ -Trioxy- $\beta\delta$ -Dimethylheptan. *Fl.* (*C.* 1904 [2] 185; *J. pr.* [2] 71, 261 *C.* 1905 [1] 1216).  
 26) Triacetat d.  $\delta\zeta\eta$ -Trioxy- $\gamma\delta$ -Dimethylheptan. *Fl.* (*J. pr.* [2] 64, 562).  
 27) Tributyrat d.  $\alpha\beta\gamma$ -Trioxypropan (Glycerintributyrin). *Sd.* 285° (184 bis 186°<sub>10</sub>) (*A. ch.* [3] 41, 267; *H.* 6, 150; *R.* 18, 189; *C.* 1900 [2] 216; 1903 [1] 134; 1908 [1] 1042). — I, 424; \*I, 152.  
 28) Triisobutyrat d.  $\alpha\beta\gamma$ -Trioxypropan. *Sd.* 282—284° (*C.* 1903 [1] 134).  
**C<sub>15</sub>H<sub>26</sub>O<sub>7</sub>** C 56,6 — H 8,2 — O 35,2 — M. G. 318.  
 1)  $\alpha$ -Diterpoxylsäure. Ca + 6H<sub>2</sub>O, Ba + 6H<sub>2</sub>O, Ag<sub>2</sub> (*A.* 256, 115). — I, 844.  
 2)  $\beta$ -Diterpoxylsäure. Ca, Ba + 3½H<sub>2</sub>O, Ag<sub>2</sub> (*A.* 256, 119). — I, 844.  
 3) Tripropylester d.  $\beta$ -Oxypropan- $\alpha\beta\gamma$ -Tricarbonsäure (Tr. d. Citronensäure). *Sd.* 198°<sub>13</sub> (*B.* 18, 1953). — I, 839.  
**C<sub>15</sub>H<sub>26</sub>N<sub>2</sub>** C 76,9 — H 11,1 — N 12,0 — M. G. 234.  
 1) Spartein (Lupinidin). *Sd.* 325°<sub>75,4</sub>. Lit. bedeutend. — II, 892, 932; \*III, 665, 691.  
 2) Isospartein. *Sd.* 177,5—179°<sub>15,5</sub>. 2HCl, (2HCl, PtCl<sub>4</sub> + 1½H<sub>2</sub>O), HJ, 2HJ + H<sub>2</sub>O, Pikrat (*C. r.* 145, 1184 *C.* 1908 [1] 472; *C. r.* 145, 1343 *C.* 1908 [1] 651; *C. r.* 146, 81 *C.* 1908 [1] 1068; *C. r.* 147, 127 *C.* 1908 [2] 801; *Bl.* [4] 3, 695 *C.* 1908 [2] 177; *Bl.* [4] 3, 699 *C.* 1908 [2] 177).  
 3) Base (aus Dicyklopentadiënnitrolpiperidin). *Fl.* 2HCl, (2HCl, PtCl<sub>4</sub>) (*Soc.* 89, 1344 *C.* 1906 [2] 1403).  
**C<sub>15</sub>H<sub>26</sub>Cl<sub>2</sub>** 1) Atractylendihydrochlorid. *Fl.* (*Ar.* 241, 28 *C.* 1903 [1] 712).  
 2) d-Cadinendihydrochlorid. *Sm.* 117—118° (*C. r.* 135, 1058 *C.* 1903 [1] 233).  
 3) i-Cadinendihydrochlorid. *Sm.* 117—118° (*G.* 5, 469; *Bl.* [3] 25, 931; *A.* 238, 83, 85; 252, 150; *C.* 1900 [1] 858; *Ar.* 244, 423 *C.* 1907 [1] 43). — III, 537.  
 4) Caryophylendihydrochlorid. *Sm.* 69—70° (*C.* 1899 [2] 1119; 1902 [1] 41). — \*III, 402.  
 5) Guajendihydrochlorid. *Fl.* (*Ar.* 241, 44 *C.* 1903 [1] 713).  
 6) Heerabolendihydrochlorid. *Sm.* 98—99° (*Ar.* 245, 442 *C.* 1907 [2] 1912).  
 7)  $\alpha$ -Santalendihydrochlorid. *Fl.* (*Bl.* [3] 23, 541). — \*III, 415.  
 8)  $\beta$ -Santalendihydrochlorid. *Fl.* (*Bl.* [3] 23, 541). — \*III, 415.



- C<sub>15</sub>H<sub>28</sub>Cl<sub>2</sub>** 9) Zingiberendihydrochlorid. Sm. 168° (C. 1901 [2] 1007; 1902 [1] 41). — \*III, 404.
- 10) Sesquiterpendihydrochlorid (aus Copaivabalsam). Sm. 116—117° (Ar. 242, 546 C. 1904 [2] 1500).
- 11) Sesquiterpendihydrochlorid (aus Oleum Cadinum). Sd. 160—164°<sub>12</sub> (C. 1908 [2] 598).
- 12) Dihydrochlorid d. Terpen C<sub>15</sub>H<sub>24</sub> (aus Myrrhenöl). Sm. 115—117° (Ar. 244, 429 C. 1907 [1] 43).
- 13) Dihydrochlorid d. Terpens C<sub>15</sub>H<sub>24</sub> (aus Ocotea usambarensis). Sm. 116 bis 117° (B. 39, 655 C. 1906 [1] 1021).
- C<sub>15</sub>H<sub>26</sub>Br<sub>2</sub>** 1) Atractylendihydrobromid. Fl. (Ar. 241, 28 C. 1903 [1] 712).
- 2) Cadinendihydrobromid. Sm. 124—125° (A. 238, 85; 252, 151). — III, 537.
- C<sub>15</sub>H<sub>26</sub>J<sub>2</sub>** 1) Cadinendihydrojodid. Sm. 105—106° u. Zers. (A. 238, 86; 252, 151). — III, 537.
- 2) Patschoulendihydrojodid. Fl. (Ar. 241, 40 C. 1903 [1] 712).
- C<sub>15</sub>H<sub>26</sub>Si** 1) Äthylidipropylbenzylsilicium. Sd. 280° (Soc. 93, 204 C. 1908 [1] 1266).
- C<sub>15</sub>H<sub>27</sub>N** C 81,4 — H 12,2 — N 6,3 — M. G. 221.
- 1) Camphylpiperidin. Sd. 134—135°<sub>10</sub>. Pikrat (B. 41, 2159 C. 1908 [2] 705).
- 2) Amin (aus Cedronoxim). Sd. 145—150°. (2HCl, PtCl<sub>4</sub>) (B. 40, 3527 C. 1907 [2] 1694).
- 3) Base (aus Isovaleraldehyd u. Ammoniak). Sd. 170—175°<sub>25</sub> (C. 1906 [1] 1439).
- C<sub>15</sub>H<sub>27</sub>N<sub>3</sub>** C 72,3 — H 10,8 — N 16,9 — M. G. 249.
- 1) 6-Amido-5-Isopropyl-2,4-Diisobutyl-1,3-Diazin (Kyanbutin). HCl, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 37, 407). — IV, 1135.
- C<sub>15</sub>H<sub>27</sub>Cl<sub>3</sub>** 1) Limentrihydrochlorid. Sm. 79—80° (Soc. 85, 416 C. 1904 [1] 1443; B. 39, 657 C. 1906 [1] 1021; A. 368, 19 C. 1909 [2] 1242).
- C<sub>15</sub>H<sub>27</sub>Br<sub>3</sub>** 1) Limentrihydrobromid. Sm. 84° (A. 368, 20 C. 1909 [2] 1242).
- C<sub>15</sub>H<sub>29</sub>O** C 80,4 — H 12,5 — O 7,1 — M. G. 224.
- 1) Isoamylmenthon. Sd. 138—143°<sub>10</sub> (C. r. 138, 1140 C. 1904 [2] 106).
- 2) Muskon (Keton) oder C<sub>16</sub>H<sub>30</sub>O. Sd. 327—330°<sub>752</sub> (C. 1906 [1] 1498; D.R.P. 180719 C. 1907 [2] 108).
- 3) γ-Chicalban. Sm. 86—87° (Ar. 243, 383 C. 1905 [2] 555).
- 4) Aldehyd d. Cimicinsäure. Sm. 71—72° (G. 12, 557). — I, 962.
- C<sub>15</sub>H<sub>28</sub>O<sub>2</sub>** C 75,0 — H 11,7 — O 13,3 — M. G. 240.
- 1) Cimicinsäure. Sm. 43,8—44,2°. Na, Ca, Ba, Mg, Pb (A. 114, 151; G. 12, 557). — I, 524.
- 2) Säure (aus Eriodiktyon glutinosum). Sm. 47—48° (A. 351, 238 C. 1907 [1] 1208).
- 3) Säure (aus Petroleum). Sd. 300—310° (B. 20, 598). — I, 524.
- 4) Isoamylester d. d-Campholsäure. Sd. 263—265° (Bl. [3] 11, 495). — \*I, 204.
- 5) Isoamylester d. Isocampholsäure. Sd. 167—168°<sub>25</sub> (Bl. [3] 13, 774). — \*I, 204.
- 6) Isoamylester d. Fencholsäure. Sd. 262—269° (A. 369, 75 C. 1909 [2] 2002).
- 7) l-Menthylester d. Butan-β-Carbonsäure. Sd. 130° (A. 369, 338 C. 1909 [2] 2154).
- 8) l-Menthylester d. Isovaleriansäure. Sd. 129° (A. 369, 339 C. 1909 [2] 2154).
- 9) Acetat d. 5-Oxy-3-Hexyl-1-Methylhexahydrobenzol. Sd. 154—156°<sub>12</sub> (A. 289, 152).
- 10) Valerianat d. d-Citronellol. Sd. 194—196°<sub>31</sub> (Bl. [3] 19, 638). — \*III, 332.
- 11) Valerianat d. l-Menthol. Sd. 141°<sub>15</sub> (D.R.P. 80711; B. 31, 364; Soc. 95, 1571 C. 1909 [2] 1986). — \*III, 333.
- 12) Verbindung (aus Isovaleraldehyd). Sd. 234—240° (B. 8, 373). — I, 950.
- C<sub>15</sub>H<sub>28</sub>O<sub>3</sub>** C 70,3 — H 10,9 — O 18,7 — M. G. 256.
- 1) Aristolin. Sm. 265° (B. 29 [2] 38). — III, 780.
- 2) Äthylester d. β-Methylundekan-αβ-Oxyd-α-Carbonsäure. Sd. 165 bis 170°<sub>18</sub> (C. r. 139, 1216 C. 1905 [1] 347; D.R.P. 174279 C. 1906 [2] 1298).

- $C_{15}H_{28}O_3$  3) l-Menthylester d. r- $\alpha$ -Oxypropionäthyläthersäure. Sd.  $140^{\circ}_{18}$  (Soc. 87, 1017 C. 1905 [2] 673).  
C 66,2 — H 10,3 — O 23,5 — M. G. 272.
- $C_{15}H_{28}O_4$  1)  $\beta\alpha$ -Dimethylundekan- $\delta\delta$ -Dicarbonsäure (Diisobutylpimelinsäure). Sm.  $82-84^{\circ}$  (Soc. 59, 842). — I, 689.  
2) Dimethylester d. Undekan- $\rho$ -Dicarbonsäure (D. d. Brassylsäure). Sm.  $36^{\circ}$ ; Sd.  $326-328^{\circ}$  (J. pr. [2] 48, 73; B. 34, 900 Anm.; C. 1899 [2] 1016; G. 34 [2] 54 C. 1904 [2] 693). — \*I, 314.  
3) Dimethylester d. Undekan- $\rho$ -Dicarbonsäure. Sd.  $319-321^{\circ}$  (C. 1899 [2] 1016; B. 34, 900).  
4) Diäthylester d. Nonan- $\gamma\eta$ -Dicarbonsäure (D. d. Diäthylpimelinsäure). Sd.  $209-211^{\circ}_{100}$  (Soc. 59, 838). — I, 688.  
5) Diäthylester d.  $\beta\zeta$ -Dimethylheptan- $\alpha\epsilon$ -Dicarbonsäure. Sd. 151 bis  $153^{\circ}$  (A. 357, 206 C. 1908 [1] 253).  
6) Diäthylester d.  $\beta\zeta$ -Dimethylheptan- $\gamma\gamma$ -Dicarbonsäure. Sd. 138 bis  $145^{\circ}_{14}$  (A. 318, 159).  
7) Diäthylester d.  $\beta\zeta$ -Dimethylheptan- $\delta\delta$ -Dicarbonsäure. Sd. 245 bis  $255^{\circ}$  (Soc. 73, 61). — \*I, 314.  
8) Diisobutylester d. d- $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sd. 195 bis  $196^{\circ}_{30}$  (Bl. [3] 13, 824; C. r. 140, 1207 C. 1905 [2] 31). — \*I, 300.  
9) Monoisoamylester d. Oktan- $\alpha\delta$ -Dicarbonsäure (M. d. Sebacinsäure). Fl. Zers. bei  $325^{\circ}$ . Na (J. 1876, 577).  
10) l-Diamylester d. Propan- $\alpha\alpha$ -Dicarbonsäure (C. 1899 [1] 327). — \*I, 293.  
11) l-Diamylester d. Propan- $\alpha\beta$ -Dicarbonsäure. Sd.  $180^{\circ}_{23}$  (B. 32, 2705; Ph. Ch. 20, 577). — \*I, 291.  
12) l-Diamylester d. Propan- $\alpha\gamma$ -Dicarbonsäure (C. 1899 [1] 327). — \*I, 292.  
13) Diacetat d.  $\beta\theta$ -Dioxy- $\gamma\eta$ -Dimethylnonan. Sd.  $217-219^{\circ}_{110}$  (Soc. 63, 120). — \*I, 147.  
C 56,3 — H 8,7 — O 35,0 — M. G. 320.
- $C_{15}H_{28}O_7$  1) Cardolsäure. Sm.  $120^{\circ}$ .  $Ag_2$  (C. 1896 [1] 112). — \*III, 462.
- $C_{15}H_{28}N_2$  C 76,3 — H 11,8 — N 11,8 — M. G. 236.  
1) Dihydrospartein. Sd.  $281-284^{\circ}$ . (2HCl, PtCl<sub>4</sub>), Pikrat (B. 20, 2218; C. r. 137, 196 C. 1903 [2] 671). — III, 932.
- $C_{15}H_{28}Br_2$  1) Benylenbromid (A. 147, 255). — I, 137.
- $C_{15}H_{28}S_4$  1) Tetrathiopenton. Sm.  $171^{\circ}$  (B. 22, 1044). — I, 994.
- $C_{15}H_{29}N_8$  C 71,7 — H 11,6 — N 16,7 — M. G. 251.  
1)  $\alpha$ -Butylecyanamido- $\epsilon$ -[1-Piperidyl]pentan. Sd.  $206-207^{\circ}_{12}$  (B. 40, 3931 C. 1907 [2] 1525).  
2) Verbindung (aus Propionaldehydammoniak). Sm.  $74^{\circ}$  (M. 3, 694; 4, 712). — I, 941.
- $C_{15}H_{29}Cl$  1) Chlorpentadekanaphten. Sd.  $170-175^{\circ}_{14}$  (Am. 25, 296).  
2) Chlorpentadeken (aus Petroleum). Sd.  $190^{\circ}_{15}$  (Am. 33, 268 C. 1905 [1] 1349).
- $C_{16}H_{30}O$  C 79,6 — H 13,2 — O 7,1 — M. G. 226.  
1) 4-Oxy-1-Methyl-4-Oktylhexahydrobenzol. Sd.  $150^{\circ}_8$  (C. r. 142, 440 C. 1906 [1] 1096).  
2) Alkohol (aus Wachs). Sm.  $73^{\circ}$  (B. 11, 2114). — I, 256.  
3)  $\beta$ -Ketopentadekan (Methyltridekylketon). Sm.  $39^{\circ}$ ; Sd.  $294^{\circ}$  (B. 12, 1669; 15, 1708, 1724). — I, 1005.  
4)  $\theta$ -Ketopentadekan (Diheptylketon; Caprylon). Sm.  $40^{\circ}$ ; Sd.  $178^{\circ}$  (A. 69, 201; Soc. 63, 453). — I, 1005; \*I, 513.  
5)  $\iota$ -Keto- $\gamma$ -Methyltetradekan. Sd.  $143-144^{\circ}_9$  (Bl. [3] 31, 1159 C. 1904 [2] 1708).  
6) Keton (aus Isovaleriansäure). Sd.  $163-168^{\circ}$  (A. 202, 327). — I, 1005.  
7) Manleresen. Sm.  $63-65^{\circ}$  (Ar. 240, 311 C. 1902 [2] 135). — \*III, 422.  
8) Aldehyd d. Tetradekan- $\alpha$ -Carbonsäure. Sm.  $24-25^{\circ}$ ; Sd.  $185^{\circ}_{25}$  (C. r. 138, 699 C. 1904 [1] 1066; Soc. 89, 1896 C. 1906 [1] 652).  
C 74,4 — H 12,4 — O 13,2 — M. G. 242.  
1) Lyceostearon. Sm.  $75-76^{\circ}$  (A. 100, 302). — III, 637.  
2) Tetradekan- $\alpha$ -Carbonsäure. Sm.  $51^{\circ}$  ( $53^{\circ}$ ); Sd.  $257^{\circ}_{100}$ . Ba, Ag (B. 12, 1671; M. 15, 14; Soc. 87, 1898 C. 1906 [1] 652). — I, 442; \*I, 159.
- $C_{15}H_{30}O_2$

- C<sub>15</sub>H<sub>30</sub>O<sub>2</sub>**
- 3) isom. Tetradekan- $\beta$ -Carbonsäure. Sm. 59—60°. Ca, Ba (B. 20, 964). — I, 442.
  - 4)  $\gamma$ -Methyltridekan- $\nu$ -Carbonsäure. Sm. 48°; Sd. 206°<sub>14</sub>. Ag (R. 13, 209). — \*I, 159.
  - 5) Isocetinsäure. Sm. 55° (57—59°) (J. 1854, 463; C. 1909 [1] 304). — I, 442.
  - 6) Laktarsäure. Sm. 69,5—70°. NH<sub>4</sub>, Na, K, Ba, Pb (B. 12, 1636; Bl. [3] 2, 153). — I, 442.
  - 7) Säure (aus Hefefett). Sm. 56° (H. 38, 5 C. 1903 [1] 1428).
  - 8) Säure (aus Quittensamenöl). Sm. 42° (Ar. 237, 368).
  - 9) Methylester d. Myristinsäure. Sm. 18°; Sd. 295°<sub>751</sub> (167—168°<sub>15</sub>) (B. 26, 2677; C. r. 143, 805 C. 1907 [1] 421; B. 39, 3572 C. 1907 [1] 54). — \*I, 158.
  - 10) Isoamylester d. Caprinsäure. Sd. 275—290° u. Zers. (A. 157, 269). — I, 439.
  - 11) norm. Heptylester d. norm. Caprylsäure. Sm. — 6°; Sd. 289,8 (A. 233, 288). — I, 437.
  - 12) norm. Oktylester d. norm. Heptylsäure. Sd. 290,4° (A. 233, 285). — I, 435.
  - 13) Isovalerianat d.  $\gamma$ -Oxymethyl- $\beta$ - $\zeta$ -Dimethylheptan (aus i-Amylalkohol). Sd. 258—259° (C. 1899 [1] 728; Bl. [3] 21, 489). — \*I, 154.  
C 69,8 — H 11,6 — O 18,6 — M. G. 258.
- C<sub>15</sub>H<sub>30</sub>O<sub>3</sub>**
- 1)  $\alpha$ -Oxytetradekan- $\alpha$ -Carbonsäure. Sm. 84,5°. Ag (Soc. 87, 1899 C. 1906 [1] 653).
  - 2)  $\beta$ -Oxytetradekan- $\beta$ -Carbonsäure. Sm. 84°. Ba (B. 29, 1814). — \*I, 233.
  - 3)  $\delta$ -Oxy- $\gamma$ -Methyltridekan- $\nu$ -Carbonsäure. Sm. 50,5° (51,5°) (R. 13, 202; C. 1897 [1] 419). — \*I, 233.
  - 4) trim. Aldehyd d. Butan- $\beta$ -Carbonsäure. Sm. 20°; Sd. 133°<sub>20</sub> (M. 27, 898 C. 1906 [2] 1816).
  - 5)  $\gamma$ -[ $\alpha$ -Methylbutyrat] d.  $\delta$ -Oxy- $\gamma$ -Oxymethyl- $\gamma$ - $\varepsilon$ -Dimethylheptan. Sd. 272—274° (M. 27, 912 C. 1906 [2] 1816).
  - 6)  $\gamma$ -Isovalerat d.  $\delta$ -Oxy- $\gamma$ -Oxymethyl- $\beta$ - $\zeta$ -Dimethylheptan. Sd. 140 bis 146°<sub>18</sub> (258°) (M. 17, 146; 18, 197; 22, 546; A. 318, 165; Bl. [3] 15, 971; A. 322, 131 C. 1902 [2] 104).
  - 7) Methyl- $\alpha$ -Äthylpropylcarbinolester d. Kohlensäure (Carbonat d.  $\beta$ -Oxy- $\gamma$ -Äthylpentan). Sd. 249—250° (C. 1901 [1] 1303).
  - 8) Äthylisobutylcarbinolester d. Kohlensäure (Carbonat d.  $\delta$ -Oxy- $\beta$ -Methylhexan). Sd. 250—255° (C. 1901 [1] 1303).
  - 9) Di[Dipropylcarbinolester] d. Kohlensäure. Sd. 260—265° (C. 1901 [1] 1302).
  - 10) Verbindung (aus Salpetrigsäureisoamylester). Sd. 195—201°<sub>35</sub> (J. r. 28, 889; C. 1900 [2] 722). — \*I, 119.  
C 65,7 — H 11,9 — O 23,3 — M. G. 274.
- C<sub>15</sub>H<sub>30</sub>O<sub>4</sub>**
- 1) Methylester d. Ipurolsäure. Sm. 68—69° (C. 1908 [2] 887).
  - 2) Äthylester d.  $\beta$ -Dioxyoktandiäthyläther- $\alpha$ -Carbonsäure. Sd. 158 bis 160°<sub>14</sub> (B. 39, 3734 C. 1907 [1] 24).
  - 3)  $\alpha$ -Laurat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 59° (52°); Sd. 142° (B. 36, 4341 C. 1904 [1] 434; B. 42, 3755 C. 1909 [2] 1794).  
C 75,6 — H 12,6 — N 11,8 — M. G. 238.
- C<sub>15</sub>H<sub>30</sub>N<sub>2</sub>**
- 1) Methylpropylketonammoniak. Fl. (Ar. 244, 664 C. 1907 [1] 810).
  - 2) Diäthylketonammoniak. Fl. (Ar. 243, 393 C. 1905 [2] 540).
  - 3)  $\alpha\gamma$ -Di[1-Methylpiperidyl]methan. (2HCl, 2AuCl<sub>3</sub>) (B. 21, 3102). — IV, 493.  
C 61,2 — H 10,2 — N 28,6 — M. G. 294.
- C<sub>15</sub>H<sub>30</sub>N<sub>6</sub>**
- 1) Hexaäthylmelamin. Fl. (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>) (B. 18, 2778). — I, 1445.
- C<sub>15</sub>H<sub>30</sub>Cl<sub>2</sub>**
- 1) Dichlorpentadekan. Sd. 175—180°<sub>13</sub> (Am. 28, 174 C. 1902 [2] 1081).
- C<sub>15</sub>H<sub>30</sub>Br<sub>2</sub>**
- 1) Dibrompentadekan (Triamylenbromid) (A. 137, 249; 147, 254). — I, 124.
  - 2) Spilanthen dibromid. Fl. (Ar. 241, 279 C. 1903 [2] 451).  
C 80,0 — H 13,8 — N 6,2 — M. G. 225.
- C<sub>15</sub>H<sub>31</sub>N**
- 1) 3,5-Diisopropyl-2-Isobutylhexahydropyridin (Hydrovaleritrin). Sd. 265°. HCl, (2HCl, PtCl<sub>4</sub>), Oxalat (J. r. 5, 340; B. 5, 1101; C. 1906 [1] 1439). — I, 951.



- C<sub>15</sub>H<sub>31</sub>Cl** 1) Chlorpentadekan (Pentadekylchlorid) (*J.* 1863, 530).
- C<sub>15</sub>H<sub>31</sub>Br** 1)  $\alpha$ -Brompentadekan (Pentadekylbromid). Sm. 14—15° (*M.* 15, 12). — \*I, 48.
- C<sub>15</sub>H<sub>32</sub>O** C 79,0 — H 14,0 — O 7,0 — M. G. 228.
- 1)  $\alpha$ -Oxypentadekan (Pentadekylalkohol). Sm. 43—44° (45—46°) (*M.* 14, 85; 15, 11; *Am.* 22, 28). — \*I, 77.
- 2)  $\beta$ -Oxypentadekan (Diheptylcarbinol; Dicaprylcarbinol). Sm. 49,5—50° (*Soc.* 63, 455). — \*I, 77.
- 3) norm. Heptyläther d.  $\alpha$ -Oxyoktan (norm. Heptyl-norm. Oktyläther). Sd. 278,8° (*A.* 243, 10). — I, 300.
- C<sub>15</sub>H<sub>32</sub>O<sub>2</sub>** C 73,8 — H 13,1 — O 13,1 — M. G. 244.
- 1)  $\alpha$ -Äthyläther d.  $\alpha\beta$ -Dioxy- $\beta$ -Methyl-dodekan. Sd. 160—162°<sub>15</sub> (*D.R.P.* 180202 *C.* 1907 [1] 681).
- 2) Diamyläther d.  $\alpha\epsilon$ -Dioxypentan. Sd. 276—277° (*C. r.* 138, 977 *C.* 1904 [1] 1401; *C. r.* 138, 1610 *C.* 1904 [2] 429).
- 3) Diisoamyläther d.  $\delta\delta$ -Dioxy- $\beta$ -Methylbutan (Amylidendiisoamyläther). Sd. 240—255° (137—141°<sub>20</sub>) (*J.* 1864, 486; *Bl.* [3] 15, 973). — I, 952.
- C<sub>15</sub>H<sub>32</sub>O<sub>3</sub>** C 69,2 — H 12,3 — O 18,5 — M. G. 260.
- 1)  $\alpha\beta'$ -Diäthyläther d.  $\alpha\beta$ -Dioxy- $\beta'$ -Oxymethyl-dodekan. Sd. 160°<sub>15</sub> (*C.* 1907 [1] 873).
- 2)  $\delta\epsilon$ -Diisobutyläther d.  $\delta\epsilon$ -Dioxy- $\delta'$ -Oxymethyl- $\beta$ -Methylpentan. Sd. 145—147°<sub>15</sub> (*C.* 1907 [1] 873).
- 3)  $\alpha\gamma$ -Dihexyläther d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 180° (*C.* 1900 [2] 32).
- C<sub>15</sub>H<sub>32</sub>O<sub>4</sub>** C 65,1 — H 11,6 — O 23,2 — M. G. 276.
- 1)  $\epsilon$ -Oxy- $\beta\theta$ -Dimethyl- $\epsilon$ -Isobutylundekan. Sd. 126—129°<sub>15</sub> (*C. r.* 138, 154 *C.* 1904 [1] 577).
- 2) Triamylenglykol? (*J.* 1861, 661).
- C<sub>15</sub>H<sub>32</sub>N<sub>2</sub>** C 75,0 — H 13,3 — N 11,7 — M. G. 240.
- 1)  $\alpha$ -Isoamylamido- $\epsilon$ -[1-Piperidyl]pentan. Sd. 170—172°<sub>9</sub>. 2 Pikrat (*B.* 40, 3929 *C.* 1907 [2] 1525).
- C<sub>15</sub>H<sub>33</sub>N** C 79,3 — H 14,5 — N 6,2 — M. G. 227.
- 1)  $\alpha$ -Amidopentadekan. Sm. 36,5° (34°); Sd. 298—301°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 30, 901; *Am.* 22, 21; *J. pr.* [2] 64, 435 *C.* 1902 [1] 25). — \*I, 614.
- 2) Triisoamylamin. Sd. 233—236° (257°; 205°). Salze, siehe (*A.* 79, 22; *Z.* 1867, 458; *A. ch.* [6] 13, 504; *C. r.* 135, 903 *C.* 1903 [1] 132; *A.* 343, 68 *C.* 1906 [1] 357). — I, 1135.
- 3) inact. Triisoamylamin. Sd. 237°. HCl (*Soc.* 39, 332). — I, 1135.
- 4) act. Triisoamylamin. Sd. 230—237°. HCl (*Soc.* 39, 332; *C. r.* 92, 882). — I, 1136.
- C<sub>15</sub>H<sub>33</sub>N<sub>3</sub>** C 70,6 — H 12,9 — N 16,4 — M. G. 255.
- 1) trim. Isoamylidenamin. + AgNO<sub>3</sub> (*J.* 1878, 438). — I, 951.
- C<sub>15</sub>H<sub>33</sub>P** 1) Triisoamylphosphin. Sd. 300° (*B.* 6, 298). — I, 1505.
- C<sub>15</sub>H<sub>33</sub>Al** 1) Aluminiumtriisoamyl. Sd. 250°<sub>80-100</sub> (*Bl.* 50, 515). — I, 1527.
- C<sub>15</sub>H<sub>33</sub>Bi** 1) Wismuthtriisoamyl. Sd. 190—200°<sub>70</sub> (in CO<sub>2</sub>) (*B.* 21, 2041). — I, 1517.
- C<sub>15</sub>H<sub>33</sub>Sb** 1) Antimontriisoamyl. Fl. (*A.* 97, 316; *J.* 1855, 590). — I, 1516.
- C<sub>15</sub>H<sub>34</sub>O<sub>2</sub>** C 73,2 — H 13,8 — O 13,0 — M. G. 240.
- 1) Verbindung (aus Cardol). Sm. 59° (*C.* 1896 [1] 112).
- C<sub>15</sub>H<sub>34</sub>Si** 1) Siliciumtriisoamylhydrür. Sd. 245° (*B.* 38, 1664 *C.* 1905 [1] 1527).

### C<sub>15</sub>-Gruppe mit drei Elementen.

- C<sub>15</sub>H<sub>2</sub>O<sub>20</sub>Hg<sub>8</sub>** 1) Verbindung + 16 H<sub>2</sub>O (aus Malonsäure) (*B.* 35, 2583 *C.* 1902 [2] 571).
- C<sub>15</sub>H<sub>6</sub>O<sub>2</sub>Cl<sub>4</sub>** 1) Lakton d. 1-[ $\alpha$ -Oxy- $\beta$ -Phenyläthenyl]benzol-2-Carbonsäure. Sm. oberhalb 360° (*B.* 20, 2871). — II, 1711.
- C<sub>15</sub>H<sub>6</sub>O<sub>2</sub>Br<sub>4</sub>** 1) Methyläther d. Tetrabrommorphenol. Sm. 290° (*B.* 29, 68; 30, 2439). — III, 443.
- C<sub>15</sub>H<sub>6</sub>O<sub>3</sub>Br<sub>8</sub>** 1) Di[2,3,5,6-Tetrabrom-4-Methylphenylester] d. Kohlensäure. Sm. noch nicht bei 330° (*B.* 39, 4151 *C.* 1907 [1] 240).
- C<sub>15</sub>H<sub>6</sub>O<sub>4</sub>Br<sub>8</sub>** 1) Tetrabromchrysophansäure (*J.* 1874, 899). — III, 452.
- C<sub>15</sub>H<sub>6</sub>O<sub>5</sub>Cl<sub>4</sub>** 1) 3,5,6,8-Tetrachlor-1,4,7-Trioxy-2-Methyl-9,10-Anthrachinon? Sm. 229—231° (*C. r.* 134, 1112 *C.* 1902 [2] 62). — \*III, 326.

- $C_{15}H_6O_5Br_4$  1) 3,5,6,8-Tetrabrom-1,4,7-Trioxy-2-Methyl-9,10-Anthrachinon? Sm. 264–266° (*C. r.* 134, 1112 *C.* 1902 [2] 62). — \*III, 326.
- $C_{15}H_6O_6Cl_6$  1) Hexachlor-1,2-Chinomonomethylacetacetalbrenzcatechinäther. Sm. 215° (220°) (*Am.* 38, 153 *C.* 1907 [2] 1162; *Am.* 39, 501 *C.* 1908 [1] 1836).
- $C_{15}H_6O_6Br_8$  1) Acetat d. Verbindung  $C_{15}H_6O_6Br_8$ . Sm. 249° (*B.* 36, 455 *C.* 1903 [1] 574; *Am.* 31, 100 *C.* 1904 [1] 802).
- $C_{15}H_6O_7Br_4$  1)  $\beta$ -Tetrabrom-3,5,7-Trioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron +  $2\frac{1}{2}H_2O$  (Tetrabrommorin). Sm. 258°. K,  $K_2$  (*M.* 5, 667; 18, 707; *Soc.* 69, 794; 75, 437; *J.* 1864, 557). — III, 683; \*III, 496.
- $C_{15}H_6O_8N_2$  1) C 52,6 — H 1,8 — O 37,4 — N 8,2 — M. G. 342.
- 1)  $\beta$ -Dinitro-9,10-Anthrachinon-2-Carbonsäure. Sm. 315° (*A.* 309, 123). — \*II, 1102.
- $C_{15}H_6O_8Br_4$  1) 2<sup>2</sup>, 2<sup>6</sup>, 6, 8-Tetrabrom-3,5,7-Trioxy-2-[3,4,5-Trioxyphenyl]-1,4-Benzpyron (Tetrabrommyricetin). Sm. 235–240° u. Zers. (211–212°) (*Soc.* 69, 1293; *Soc.* 81, 205 *C.* 1902 [1] 528; *Soc.* 85, 62 *C.* 1904 [1] 381, 729). — III, 606; \*III, 448.
- 2) Verbindung (aus Eichenrot) (*A.* 240, 345). — III, 589.
- $C_{15}H_6O_{12}N_4$  1) C 41,5 — H 1,4 — O 44,2 — N 12,9 — M. G. 434.
- 1) Tetranitrochrysophansäure.  $K_2 + xH_2O$ ,  $Mg + xH_2O$ ,  $Ca + xH_2O$  (*A.* 183, 175; 212, 40; *B.* 35, 1497). — III, 452; \*III, 323.
- $C_{15}H_6O_{13}N_4$  1) C 40,0 — H 1,3 — O 46,2 — N 12,4 — M. G. 450.
- 1)  $\beta$ -Tetranitro-5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Tetranitroapigenin). Sm. 243–244°. + Nitrobenzol (*Soc.* 73, 1025; 77, 419). — \*III, 493, 565.
- $C_{15}H_7O_2N$  1) C 77,3 — H 3,0 — O 13,7 — N 6,0 — M. G. 233.
- 1) Nitril d. 9,10-Anthrachinon-1-Carbonsäure. Sm. 216–217° (*B.* 39, 932 *C.* 1906 [1] 1256).
- 2) Nitril d. 9,10-Phenanthrenchinon-2-Carbonsäure. Sm. 290° (*A.* 321, 356 *C.* 1902 [2] 62).
- 3) Nitril d. 9,10-Phenanthrenchinon-3-Carbonsäure. Sm. 282–283° (*A.* 321, 353 *C.* 1902 [2] 61).
- $C_{15}H_7O_2N_3$  1) C 69,0 — H 2,7 — O 12,2 — N 16,1 — M. G. 261.
- 1) 7,8-Diketo-7,8-Dihydrochinolin-5,6-Phenazin +  $H_2O$ . Zers. oberhalb 270° (*A.* 290, 381). — IV, 558.
- $C_{15}H_7O_3N$  1) C 72,3 — H 2,8 — O 19,3 — N 5,6 — M. G. 249.
- 1) Imid d. Pyrensäure (*A.* 240, 175). — II, 1980.
- $C_{15}H_7O_3Cl$  1) Aldehyd d. 1-Chlor-9,10-Anthrachinon-2-Carbonsäure (D.R.P. 174984 *C.* 1906 [2] 1371).
- 2) Chlorid d. 9,10-Anthrachinon-2-Carbonsäure ( $\beta$ -Säure). Sm. 147° (*B.* 17, 889). — II, 1904.
- $C_{15}H_7O_3Br$  1) Aldehyd d. 1-Brom-9,10-Anthrachinon-2-Carbonsäure (D.R.P. 174984 *C.* 1906 [2] 1371).
- $C_{15}H_7O_4Cl$  1) 2-Chlor-9,10-Anthrachinon-1-Carbonsäure (oder 3-Chlor-9,10-Anthrachinon-2-Carbonsäure). Sm. 280° (*B.* 41, 3638 *C.* 1908 [2] 1929).
- 2) 4-Chlor-9,10-Anthrachinon-1-Carbonsäure. Sm. 228–229° (*B.* 41, 3636 *C.* 1908 [2] 1928).
- $C_{15}H_7O_4Br$  1) Aldehyd d. 4-Brom-1-Oxy-9,10-Anthrachinon-2-Carbonsäure (D.R.P. 174984 *C.* 1906 [2] 1371).
- $C_{15}H_7O_6N$  1) C 60,6 — H 2,4 — O 32,3 — N 4,7 — M. G. 297.
- 1)  $\beta$ -Nitro-9,10-Anthrachinon-2-Carbonsäure ( $\beta$ -Säure). Sm. oberhalb 300° (*B.* 17, 891). — II, 1904.
- $C_{15}H_7O_6N_3$  1) C 55,4 — H 2,1 — O 29,5 — N 12,9 — M. G. 325.
- 1) Trinitroidryl (*A.* 193, 148). — II, 279.
- $C_{15}H_7O_6N_5$  1) C 51,0 — H 2,0 — O 27,2 — N 19,8 — M. G. 353.
- 1) Verbindung (aus 1,2,3,4,5-Pentaamido-R-Penten). Zers. bei 100° (*B.* 22, 922). — IV, 1315.
- $C_{15}H_7O_6Br_3$  1)  $\beta$ -Tribrom-3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Tribromkämpferol). Sm. 275–277° (*Soc.* 81, 587 *C.* 1902 [1] 1356). — \*III, 464.
- $C_{15}H_7O_8N$  1) C 54,7 — H 2,1 — O 38,9 — N 4,3 — M. G. 329.
- 1)  $\beta$ -Nitro-1,2-Dioxy-9,10-Anthrachinon- $\beta$ -Carbonsäure (Nitroalizarin- $\beta$ -Carbonsäure). Sm. 288° (*Soc.* 65, 848). — II, 2027.
- $C_{15}H_7O_{11}N_3$  1) C 44,4 — H 1,7 — O 43,5 — N 10,4 — M. G. 405.
- 1)  $\beta$ -Trinitro-5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron ( $\alpha$ -Trinitroapigenin). Sm. 296° (*Soc.* 77, 418). — \*III, 565.

- $C_{15}H_7O_{11}N_3$  2) isom.  $\beta$ -Trinitro-5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron ( $\beta$ -Trinitroapigenin). Sm. 245—246° (*Soc.* 77, 419). — \*III, 565.
- $C_{15}H_7N_3Cl_2$  1) 7,8-Dichlorchinolin-5,6-Phenazin. Sm. 239—240° (*A.* 290, 379). — IV, 557.
- $C_{15}H_8ON_2$  C 77,6 — H 3,4 — O 6,9 — N 12,1 — M. G. 232.  
 1) Ketoindenophenazin. Sm. 187° (*B.* 39, 2242 *C.* 1906 [2] 442).  
 2) Nitril d. Diphenylketon-4,4'-Dicarbonsäure. Sm. 204,5° (*B.* 20, 521). — III, 180.
- $C_{15}H_8O_2N_2$  C 72,6 — H 3,2 — O 12,9 — N 11,3 — M. G. 248.  
 1) 1-Anthrapyrimidon. Sm. noch nicht bei 280° (*D.R.P.* 205035 *C.* 1909 [1] 327; *D.R.P.* 205914 *C.* 1909 [1] 704).  
 2) Lakton d. 3-Oxy-2-Phenyl-1,4-Benzdiazin-2'-Carbonsäure. Sm. 201—203° (207—208°) (*G.* 34 [1] 498 *C.* 1904 [2] 458; *B.* 39, 2240 *C.* 1906 [2] 442).  
 3) Verbindung (aus Indigotin). Sm. 258—259° (*C.* 1906 [2] 1434).
- $C_{15}H_8O_2Cl_2$  1) 2-Dichlormethyl-9,10-Anthrachinon. Sm. 200° (*D.R.P.* 174984 *C.* 1906 [2] 1371; *D.R.P.* 199756 *C.* 1908 [2] 460).  
 2) 2-Chlor-1-Chlormethyl-9,10-Anthrachinon? Sm. 205° (*D.R.P.* 211967 *C.* 1909 [2] 397).  
 3) Lakton d.  $\beta$ -Dichlor-1- $[\alpha$ -Oxy- $\beta$ -Phenyläthenyl]benzol-2-Carbonsäure (Benzaldichlorphthalid). Sm. 210° (*B.* 20, 2872). — II, 1710.
- $C_{15}H_8O_2Cl_4$  1) Chlorid d.  $\alpha\alpha$ -Dichlordiphenylmethan-2,4'-Dicarbonsäure. Sm. 198° (*A.* 309, 102). — \*II, 1147.
- $C_{15}H_8O_2Br_2$  1) 2-Dibrommethyl-9,10-Anthrachinon. Sm. 216—219° (119—220°) (*D.R.P.* 199756 *C.* 1908 [2] 461; *J. pr.* [2] 79, 560 *C.* 1909 [2] 446).  
 2)  $\beta$ -Dibrom-2-Methyl-9,10-Anthrachinon. Sm. 120—125° (*D.R.P.* 205218 *C.* 1909 [1] 603).  
 3)  $\beta$ -Dibrom-2-Methyl-9,10-Anthrachinon (*B.* 11, 1606). — III, 450.  
 4) Methyläther d. Dibrommorphenol. Sm. 203° (*B.* 38, 1856 *C.* 1905 [2] 52).  
 5) Methyläther d. isom. Dibrommorphenol. Sm. 200° (*B.* 38, 1857 *C.* 1905 [2] 52).
- $C_{15}H_8O_3N_2$  C 68,2 — H 3,0 — O 18,2 — N 10,6 — M. G. 264.  
 1) Di[2-Cyanphenylester] d. Kohlensäure. Sm. 116° (*B.* 38, 3629 *C.* 1905 [2] 1728).
- $C_{15}H_8O_3Cl_2$  1) Chlorid d. Diphenylketon-2,4'-Dicarbonsäure. Sm. 110° (102°) (*B.* 28, 1135; *A.* 309, 101). — II, 1976; \*II, 1147.  
 2) Chlorid d. Diphenylketon-4,4'-Dicarbonsäure. Sm. 133° (*A.* 312, 98). — \*II, 1148.
- $C_{15}H_8O_3Cl_4$  1)  $\alpha$ -[3,4,5,6-Tetrachlorphenyl]- $\beta$ -Phenyl- $\alpha$ -Ketoäthan- $\alpha^2$ -Carbonsäure + xH<sub>2</sub>O (Tetrachlordesoxybenzoïncarbonsäure). Sm. 175° (wasserfrei). *Ba* (*B.* 20, 2871). — II, 1711.  
 2) Methylester d. 3,4,5,6-Tetrachlordiphenylketon-2-Carbonsäure. Sm. 92° (*A.* 238, 341). — II, 1704.  
 3) isom. Methylester d. 3,4,5,6-Tetrachlordiphenylketon-2-Carbonsäure. Sm. 154° (*M.* 25, 1191 *C.* 1905 [1] 365).
- $C_{15}H_8O_3Br_2$  1) Methyläther d.  $\beta$ -Dibrom-4-Oxy-9,10-Phenanthrenchinon. Sm. 160° (*B.* 33, 1828). — \*III, 318.
- $C_{15}H_8O_4N_4$  C 58,4 — H 2,6 — O 20,8 — N 18,2 — M. G. 308.  
 1) 2,2'-Bisazodiphenylmethan-4,4'-Dicarbonsäure. Sm. oberhalb 300° (*C. r.* 146, 1408 *C.* 1908 [2] 511).  
 2) Nitril d. 2,2'-Dinitrodiphenylmethan-4,4'-Dicarbonsäure. Sm. 195° (*C. r.* 146, 1325 *C.* 1908 [2] 416).
- $C_{15}H_8O_4Cl_2$  1) 5,6-Dioxy-2-Keto-1-[ $\beta$ -Dichlorbenzyliden]-1,2-Dihydrobenzofuran. Sm. 210° u. Zers. (*B.* 29, 2434). — \*III, 532.
- $C_{15}H_8O_4Cl_4$  1) Monobenzylester d. 3,4,5,6-Tetrachlorbenzol-1,2-Dicarbonsäure. Sm. 130—131° (*B.* 30, 785). — \*II, 1059.
- $C_{15}H_8O_4Br_2$  1)  $\beta$ -Dibrom-5,7-Dioxy-2-Phenyl-1,4-Benzpyron (Dibromchrysin) (*B.* 6, 886). — III, 628.
- $C_{15}H_8O_4Br_6$  1)  $\alpha$ -Acetat d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan. Sm. 208° (u. 225—226°) (*A.* 330, 79 *C.* 1904 [1] 1148).
- $C_{15}H_8O_4J_2$  1)  $\beta$ -Dijod-5,7-Dioxy-2-Phenyl-1,4-Benzpyron (Dijodchrysin) (*B.* 6, 887). — III, 628.



- C<sub>15</sub>H<sub>8</sub>O<sub>5</sub>Br<sub>2</sub>** 1)  $\beta$ -Dibrom-5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Dibromapi-  
genin). Sm. oberhalb 290° (*Soc.* 71, 808). — \*III, 564.  
2)  $\beta$ -Dibrom-3,5,7-Trioxo-2-Phenyl-1,4-Benzpyron (Dibromgalangin)  
(*B.* 14, 2809). — III, 632.  
3) Dibromemodin. Sm. 246—248° (*B.* 21 [2] 842). — III, 454.
- C<sub>15</sub>H<sub>8</sub>O<sub>5</sub>Br<sub>3</sub>** 1)  $\alpha$ -Verbindung (aus Propylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon).  
Sm. 180° u. Zers. (*Am.* 34, 431 *C.* 1906 [1] 29).  
2)  $\beta$ -Verbindung (aus Propylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon).  
Sm. 176° (*Am.* 34, 431 *C.* 1906 [1] 29).
- C<sub>15</sub>H<sub>8</sub>O<sub>6</sub>N<sub>2</sub>** C 57,7 — H 2,5 — O 30,8 — N 9,0 — M. G. 312.  
1)  $\beta$ -Dinitro-1,3-Diketo-2-Phenyl-2,3-Dihydroinden. Sm. 128—131° (*B.*  
26, 2581). — III, 302.  
2) 3-[2,4-Dinitrophenyl]-1,2-Benzpyron. Sm. 249—250° (*B.* 42, 1317 *C.*  
1909 [1] 1560).
- C<sub>15</sub>H<sub>8</sub>O<sub>6</sub>N<sub>4</sub>** C 52,9 — H 2,3 — O 28,2 — N 16,5 — M. G. 340.  
1) N-Dinitro-9,10-Anthrachinonmonourein (*G.* 27 [1] 244). — \*III, 294.  
2) N-Dinitrophenanthrenchinonmonourein (*G.* 27 [1] 231). — \*III, 321.
- C<sub>15</sub>H<sub>8</sub>O<sub>6</sub>Br<sub>2</sub>** 1) Dibromluteolin. Sm. 303° (*Soc.* 69, 209). — III, 585.
- C<sub>15</sub>H<sub>8</sub>O<sub>7</sub>N<sub>2</sub>** C 54,9 — H 2,4 — O 34,1 — N 8,5 — M. G. 328.  
1)  $\beta$ -Dinitro-9-Oxyanthracen-2-Carbonsäure. Sm. 206° (*A.* 309, 123).  
— \*II, 1015.
- C<sub>15</sub>H<sub>8</sub>O<sub>7</sub>N<sub>4</sub>** C 50,6 — H 2,2 — O 31,5 — N 15,7 — M. G. 356.  
1) 2,4,5-Triketo-1,3-Di[ $\beta$ -Nitrophenyl]tetrahydroimidazol (Oxalydi-  
nitrodiphenylharnstoff) (*J. pr.* [2] 32, 11). — II, 411.
- C<sub>15</sub>H<sub>8</sub>O<sub>7</sub>Br<sub>2</sub>** 1)  $\beta$ -Dibrom-3,5,7-Trioxo-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Dibrom-  
quercetin). Sm. 233—235°. K (*M.* 6, 866; 15, 685; *B.* 17, 1683; *Soc.*  
75, 438). — III, 605; \*III, 448.
- C<sub>15</sub>H<sub>8</sub>O<sub>7</sub>S** 1) 9,10-Anthrachinon-2-Carbonsäure- $\beta$ -Sulfonsäure. Na<sub>2</sub>, Ba, Anilin-  
salz (*Soc.* 65, 844). — II, 1904.
- C<sub>15</sub>H<sub>8</sub>O<sub>8</sub>N<sub>2</sub>** C 52,3 — H 2,3 — O 37,2 — N 8,1 — M. G. 344.  
1)  $\beta$ -Dinitro-5,7-Dioxy-2-Phenyl-1,4-Benzpyron (Dinitrochrysin). Sm.  
272°. K<sub>2</sub> + 2H<sub>2</sub>O, Ca (*B.* 27, 22, 1045). — III, 628.  
2)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\alpha$ -Di[ $\beta$ -Nitrophenyl]methan-2,2'-Dicarbon-  
säure (L. d. Dinitrobenzhydroldicarbonsäure). Sm. 270—280° (*A.* 242,  
242). — II, 1973.
- C<sub>15</sub>H<sub>8</sub>O<sub>10</sub>N<sub>4</sub>** C 44,5 — H 2,0 — O 39,6 — N 13,8 — M. G. 404.  
1) Tetranitropyrokresoloxyd (3 Modif.) (*B.* 16, 2142). — III, 646.
- C<sub>15</sub>H<sub>8</sub>N<sub>2</sub>Br<sub>4</sub>** 1) 4,5,6,7-Tetrabrom-2-[ $\beta$ -Phenyläthenyl]benzimidazol + H<sub>2</sub>O. Sm.  
240—246° (wasserfrei) (*C.* 1902 [2] 942). — \*IV, 688.
- C<sub>15</sub>H<sub>9</sub>ON** C 82,2 — H 4,1 — O 7,3 — N 6,4 — M. G. 219.  
1) 9,10-Phenanthrenoxazol. Sm. 145—146° (*B.* 35, 2744 *C.* 1902 [2]  
646). — \*IV, 271.  
2) Laktam d. 8-Amidophenanthren-9-Carbonsäure. Sm. 231° (*B.* 39,  
3121 *C.* 1906 [2] 1331).  
3) Laktam d. 10-Amidophenanthren-9-Carbonsäure (Phenanthranil).  
Sm. 241° (*Soc.* 51, 33; *Soc.* 87, 690 *C.* 1905 [2] 244). — III, 444.
- C<sub>15</sub>H<sub>9</sub>ON<sub>3</sub>** C 72,9 — H 3,6 — O 6,5 — N 17,0 — M. G. 247.  
1) Azid d. Phenanthren-9-Carbonsäure. Zers. bei 94° (*B.* 35, 2727 *C.*  
1902 [2] 643).  
2) Verbindung (aus d. Phtalonimid). Sm. 266° (267—268°). (2HCl, PtCl<sub>4</sub>)  
(*G.* 34 [1] 499 *C.* 1904 [2] 458; *B.* 37, 4316 *C.* 1905 [1] 87).
- C<sub>15</sub>H<sub>9</sub>OC1** 1) Chlorid d. Anthracen-1-Carbonsäure. Fl. (*B.* 39, 932 *C.* 1906 [1]  
1256).  
2) Chlorid d. Anthracen-2-Carbonsäure ( $\gamma$ -Säure) (*B.* 16, 2611). — II,  
1478.
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>N** C 76,6 — H 3,8 — O 13,6 — N 6,0 — M. G. 235.  
1) Acetylcarbazoakridon. Sm. 152° (*G.* 23 [1] 4). — III, 241.
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>N<sub>3</sub>** C 68,4 — H 3,4 — O 12,2 — N 16,0 — M. G. 263.  
1) Nitrochinindolin. Sm. noch nicht bei 290° (*B.* 30, 3021). — IV, 1037.  
2) Indophenazincarbonsäure. Sm. oberhalb 300° (*B.* 34, 4013 *C.* 1902  
[1] 205). — \*IV, 855.  
3) Phenylimid d. Benzimidazol-4,5-Dicarbonsäure (*B.* 32, 1314). —  
\*IV, 596.

- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>N<sub>5</sub>** C 61,9 — H 3,1 — O 11,0 — N 24,0 — M. G. 291.  
 1) 5-Nitro-1-[5-Chinolyl]-1,2,3-Benztriazol. Sm. 227° (*J. pr.* [2] 77, 487 *C.* 1908 [2] 75).  
 2) 5-Nitro-1-[6-Chinolyl]-1,2,3-Benztriazol. Sm. 274° (*J. pr.* [2] 77, 483 *C.* 1908 [2] 75).  
 3) 5-Nitro-1-[7-Chinolyl]-1,2,3-Benztriazol. Sm. 290° (*J. pr.* [2] 77, 481 *C.* 1908 [2] 74).  
 4) 5-Nitro-1-[8-Chinolyl]-1,2,3-Benztriazol. Sm. 274° (*J. pr.* [2] 77, 478 *C.* 1908 [2] 73).
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>Cl** 1) 2-Chlor-1,3-Diketo-2-Phenyl-2,3-Dihydroinden. Sm. 114—116° (*B.* 26, 2580). — III, 302.  
 2) 2-Chlormethyl-9,10-Anthrachinon (D.R.P. 199756 *C.* 1908 [2] 460).  
 3) 2-Chlor-1-Methyl-9,10-Anthrachinon (oder 3-Chlor-2-Methyl-9,10-Anthrachinon). Sm. 213° (215°) (*B.* 41, 3637 *C.* 1908 [2] 1928; D.R.P. 211967 *C.* 1909 [2] 397).  
 4) 4-Chlor-1-Methyl-9,10-Anthrachinon. Sm. 164° (*B.* 41, 3635 *C.* 1908 [2] 1928).  
 5) 3-Chlor-2-Methyl-9,10-Anthrachinon. Sm. 215° (D.R.P. 205218 *C.* 1909 [1] 603; D.R.P. 213506 *C.* 1909 [2] 1027).  
 6) 6-Chlor-2-Methyl-9,10-Anthrachinon (D.R.P. 211927 *C.* 1909 [2] 396).  
 7) 7-Chlor-2-Methyl-9,10-Anthrachinon (D.R.P. 211927 *C.* 1909 [2] 396).  
 8) 8-Chlor-2-Methyl-9,10-Anthrachinon. Sm. 165° (D.R.P. 205218 *C.* 1909 [1] 603; D.R.P. 211967 *C.* 1909 [2] 397).  
 9) 3-[4-Chlorphenyl]-1,2-Benzpyron. Sm. 184° (*J. pr.* [2] 61, 197). — \*II, 1002.
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>Br** 1) 10-Chloranthracen-9-Carbonsäure. Sm. 258—259° u. Zers. K, Ba, Ag (B. 20, 704). — II, 1477.  
 2) 2-Brom-1,3-Diketo-2-Phenyl-2,3-Dihydroinden. Sm. 105° (*B.* 26, 2579). — III, 302.  
 3) 2-Brommethyl-9,10-Anthrachinon. Sm. 200—202° (D.R.P. 199756 *C.* 1908 [2] 460).  
 4) 4-Brom-1-Benzoylbenzfuran (Brom- $\alpha$ -Cumarylphenylketon). Sm. 136 bis 138° (*B.* 29, 248). — III, 248; \*III, 530.  
 5) 6-Brom-2-Phenyl-1,4-Benzpyron. Sm. 189—190° (*B.* 31, 2952). — \*III, 560.  
 6) Methyläther d. Brommorphenol (Brommorphol). Sm. 123° (*B.* 15, 1485, 2179; 30, 2440). — III, 443; \*III, 321.  
 7) Methyläther d. isom. Brommorphenol. Sm. 124° (*B.* 38, 1855 *C.* 1905 [2] 52).  
 8) 3-Bromphenanthren-9-Carbonsäure. Sm. 290—291° (*B.* 39, 3118 *C.* 1906 [2] 1330).  
 9) 10-Bromanthracen-9-Carbonsäure. Sm. bei 266° u. Zers. K, Ba, Ag (*B.* 20, 704). — II, 1478.  
 10) Lakton d. 1-[ $\beta$ -Brom- $\alpha$ -Oxy- $\beta$ -Phenyläthenyl]benzol-2-Carbonsäure (Brombenzylidenphthalid). Sm. bei 160° (*B.* 18, 2444). — II, 1708.
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>J** 1) 1-Jod-2-Methyl-9,10-Anthrachinon. Sm. 169—169,5° (*B.* 40, 1696 *C.* 1907 [1] 1799).
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>N** C 71,7 — H 3,6 — O 19,1 — N 5,6 — M. G. 251.  
 1) 4-Nitro-1-Keto-2-Phenylinden. Sm. 139° (*G.* 30 [2] 350). — \*III, 187.  
 2) 5-[oder 7]-Nitro-1-Keto-2-Phenylinden. Sm. 218° (*G.* 30 [2] 347; 31 [2] 83). — \*III, 187.  
 3) 6-Nitro-1-Keto-2-Phenylinden. Sm. 215—217° (218°) (*G.* 30 [2] 345; 31 [2] 83). — \*III, 187.  
 4) 1-Benzoyl-2,3-Diketo-2,3-Dihydroindol (Benzoylpseudoisatin). Sm. 206° u. Zers. (*B.* 24, 774; *B.* 36, 2764 *C.* 1903 [2] 835; *B.* 40, 1295 *C.* 1907 [1] 1426; *B.* 40, 2502 *C.* 1907 [2] 704). — II, 1604.  
 5) Anhydrid d. Phenylbenzylidenamin-2,2'-Dicarbonsäure. Sm. 215° (*G.* 37 [2] 153 *C.* 1907 [2] 1240).  
 6) Amid d. 9,10-Anthrachinon-1-Carbonsäure. Sm. bei 280° (*B.* 30, 1116; *B.* 39, 933 *C.* 1906 [1] 1256). — \*II, 1103.  
 7) Amid d. 9,10-Anthrachinon-2-Carbonsäure ( $\beta$ -Säure). Sm. noch nicht bei 280° (*B.* 17, 890). — II, 1904.  
 8) Amid d. 9,10-Phenanthrenchinon-3-Carbonsäure. Sm. 289—290° (*A.* 321, 354 *C.* 1902 [2] 61).

- $C_{15}H_9O_3N$  9) Imid d. Diphenylketon-2,2'-Dicarbonsäure. Sm. 251—252° (A. 242, 248). — II, 1976.
- 10) Imid d. Diphenylketon-2,4'-Dicarbonsäure. Sm. 251°. Ba (A. 309, 105). — \*II, 1147.
- 11) Benzoylimid d. Benzol-1,2-Dicarbonsäure. Sm. 168° (Soc. 89, 709 C. 1906 [2] 116).
- $C_{15}H_9O_3N_3$  C 64,5 — H 3,2 — O 17,2 — N 15,0 — M. G. 279.
- 1) Nitrooxychindolin (B. 39, 3939 C. 1907 [1] 119).
- 2) Verbindung (aus d. Nitril d.  $\alpha\beta$ -Di[2-Nitrophenyl]propionsäure). Sm. 235—236° (B. 19, 2640). — II, 1318.
- $C_{15}H_9O_3Cl$  1) 3-Oxyphenyläther d. 3-Chlor-2-Oxy-1-Ketoinden? Sm. 163—164° (B. 32, 922). — \*III, 136.
- 2) Methyläther d. 1-Chlor-2-Oxy-9,10-Anthrachinon. Sm. 223—224° (B. 39, 114 C. 1906 [1] 676).
- $C_{15}H_9O_3Br$  1) 4-Brom-3-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 205° (A. 202, 165). — III, 451.
- 2) 2-Brom-2-Oxy-2-Methyl-9,10-Anthrachinon (D.R.P. 131405 C. 1902 [1] 1288).
- 3) Methyläther d. 4-Brom-1-Oxy-9,10-Anthrachinon (D.R.P. 205881 C. 1909 [1] 882).
- 4) 3-Oxyphenyläther d. 2-Brom-3-Oxy-1-Ketoinden. Sm. 171° (B. 33, 2421). — \*III, 137.
- $C_{15}H_9O_3Br_3$  1) Aldehyd d. 3,4,6-Tribrom-5-Benzoyl-1-Methylbenzol-2-Carbonsäure. Sm. 167—168° (B. 32, 3039). — \*III, 64.
- $C_{15}H_9O_4N$  C 67,4 — H 3,4 — O 24,0 — N 5,2 — M. G. 267.
- 1) 1-Nitro-2-Methyl-9,10-Anthrachinon. Sm. 269—270° (264°) (B. 16, 696; B. 39, 1257 C. 1906 [1] 1823). — III, 450.
- 2) 2-Keto-1-[2-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. 195 bis 196° (B. 35, 3563 C. 1902 [2] 1312).
- 3) 3-[2-Nitrophenyl]-1,2-Benzpyron. Sm. 215° (B. 42, 3601 C. 1909 [2] 1805).
- 4) 3-[4-Nitrophenyl]-1,2-Benzpyron. Sm. 262° (J. pr. [2] 61, 186; B. 42, 3598 C. 1909 [2] 1804). — \*II, 1002.
- 5) 3-[3-Nitrophenyl]-1,2-Isobenzpyron (3-m-Nitrophenylisocumarin). Sm. 232—233° (B. 29, 2544). — \*II, 1004.
- 6) 2,4-Diketo-3-Benzoyl-3,4-Dihydro-1,3-Benzoxazin. Sm. 172° (B. 35, 3651 C. 1902 [2] 1457).
- 7) 2-[1,2-Phtalyl]amidobenzol-1-Carbonsäure. Sm. 217° (241—242° u. Zers.). Ag (B. 11, 2261; 29, 2679; G. 37 [2] 154 C. 1907 [2] 1240). — II, 1813; \*II, 1057.
- 8) 3-[1,2-Phtalyl]amidobenzol-1-Carbonsäure. Sm. 282—284° (275,5 bis 276°). Ag (B. 11, 2262; 16, 1320; A. 218, 194). — II, 1813.
- 9) 1-Keto-4-Phenyl-2,3-Benzoxazin-4'-Carbonsäure. Sm. 300° (A. 309, 107). — \*II, 1148.
- 10)  $\alpha$ -Naphtochinolin-2,4-Dicarbonsäure. Sm. 278° u. Zers. Cu + 2H<sub>2</sub>O, Ag<sub>2</sub> (B. 23, 1234). — IV, 423.
- 11)  $\beta$ -Naphtochinolin-1,3-Dicarbonsäure. Sm. 288°. Ba + H<sub>2</sub>O, Ag<sub>2</sub> (B. 23, 1240; A. 317, 153). — IV, 424; \*IV, 256.
- 12) Lakton d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthen- $\alpha^2$ -Carbonsäure. Sm. 195° u. Zers. (191—193°) (B. 18, 1256, 3471; 20, 2867; 34, 2830). — II, 1708.
- 13) Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[4-Nitrophenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 222° (B. 34, 2837).
- 14) Lakton d.  $\alpha$ -Oxy- $\alpha$ -[4-Nitrophenyl]- $\beta$ -Phenyläthen- $\alpha^2$ -Carbonsäure? Sm. 232—233° (B. 34, 2836).
- 15) Lakton d.  $\alpha$ -Oxy- $\alpha$ -[5-Nitrophenyl]- $\beta$ -Phenyläthen- $\alpha^2$ -Carbonsäure? Sm. 277° (B. 34, 2836).
- 16)  $\alpha,2$ -Lakton d.  $\alpha$ -Oximido- $\alpha\alpha$ -Diphenylmethan-2,2'-Dicarbonsäure. Sm. 213—214°. Ca (A. 242, 250). — II, 1976.
- 17) Benzoat d. 1,2-Phtalylhydroxylamin (C. 1899 [2] 245). — \*II, 1058.
- $C_{15}H_9O_4N_3$  C 61,0 — H 3,0 — O 21,7 — N 14,2 — M. G. 295.
- 1) 6-[2-Nitrophenyl]azo-1,2-Benzpyron. Sm. 230° (Soc. 87, 1231 C. 1905 [2] 1337).



- C<sub>15</sub>H<sub>9</sub>O<sub>4</sub>N<sub>8</sub>** 2) 6-[3-Nitrophenyl]azo-1,2-Benzpyron. Sm. 225° (Soc. 87, 1231 C. 1905 [2] 1337).
- 3) 6-[4-Nitrophenyl]azo-1,2-Benzpyron. Sm. 261° (Soc. 87, 1231 C. 1905 [2] 1337).
- 4) P-Dinitro-6-Phenylchinolin. Sm. 208° (A. 230, 30). — IV, 430.
- 5) Nitril d.  $\alpha\beta$ -Di[2-Nitrophenyl]akrylsäure. Sm. 169—171° (B. 34, 3107).
- 6) Nitril d.  $\alpha\beta$ -Di[3-Nitrophenyl]akrylsäure. Sm. 204° (B. 34, 3106).
- 7) Nitril d.  $\alpha\beta$ -Di[4-Nitrophenyl]akrylsäure. Sm. 215° (B. 34, 3105).
- 8) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 184 bis 185° (B. 23, 3134; 34, 3107). — II, 1475.
- 9) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[3-Nitrophenyl]akrylsäure. Sm. 195° (B. 23, 3135). — II, 1475.
- 10) Nitril d.  $\alpha$ -Benzoximido- $\alpha$ -[4-Nitrophenyl]essigsäure. Sm. 154° (J. pr. [2] 66, 372 C. 1902 [2] 1502).
- C<sub>15</sub>H<sub>9</sub>O<sub>4</sub>Cl** 1) 2-Keto-5,6-Dioxy-1-[2-Chlorbenzyliden]-1,2-Dihydrobenzofuran. Sm. 253° (B. 37, 825 C. 1904 [1] 1152).
- C<sub>15</sub>H<sub>9</sub>O<sub>4</sub>Br** 1) 2-Methyläther d. 4-Brom-1,2-Dioxy-9,10-Anthrachinon. Sm. 234 bis 235° (D.R.P. 158257 C. 1905 [1] 786).
- C<sub>15</sub>H<sub>9</sub>O<sub>4</sub>Br<sub>3</sub>** 1) 4-Bromphenylester d. 3,5-Dibrom-2-Acetoxybenzol-1-Carbonsäure. Sm. 108—109° (C. 1898 [1] 1251).
- C<sub>15</sub>H<sub>9</sub>O<sub>5</sub>N** C 63,6 — H 3,2 — O 28,3 — N 4,9 — M. G. 283.
- 1)  $\alpha\beta\gamma$ -Triketo- $\alpha$ -Phenyl- $\gamma$ -[4-Nitrophenyl]propan. Sm. 98—99° (B. 37, 1532 C. 1904 [1] 1609).
- 2) P-Nitro-2-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 167—168° (Soc. 91, 1632 C. 1907 [2] 2058).
- 3) Methyläther d. 4-Nitro-1-Oxy-9,10-Anthrachinon (D.R.P. 205881 C. 1909 [1] 882).
- 4) Methyläther d. 5-Nitro-2-Oxy-9,10-Anthrachinon (D.R.P. 167699 C. 1906 [1] 1070).
- 5) Methyläther d. 8-Nitro-2-Oxy-9,10-Anthrachinon. Sm. 238° (D.R.P. 167699 C. 1906 [1] 1070).
- 6) 3-Formylamido-1,2-Dioxy-9,10-Anthrachinon (Bl. [3] 9, 132). — III, 424.
- 7) 9-Oximidofluoren-1,7-Dicarbonsäure (A. 229, 155). — II, 1980.
- 8) 4-Oxy-3-Carboxylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 274—275° (G. 36 [2] 737 C. 1907 [1] 1122).
- C<sub>15</sub>H<sub>9</sub>O<sub>5</sub>N<sub>8</sub>** C 57,9 — H 2,9 — O 25,7 — N 13,5 — M. G. 311.
- 1) 4-Nitro-5-Phenyl-3-[4-Nitrophenyl]isoxazol. Sm. 199° (A. 328, 224 C. 1903 [2] 998).
- 2) 2-Keto-3-[2,4-Dinitrophenyl]-1,2-Dihydrochinolin (B. 42, 1318 C. 1909 [1] 1560).
- 3) 5-[ $\alpha$ -Cyan-4-Nitrobenzyliden]imido-2-Oxybenzol-1-Carbonsäure. Sm. 231—236° (B. 42, 2759 C. 1909 [2] 818).
- C<sub>15</sub>H<sub>9</sub>O<sub>5</sub>N<sub>5</sub>** C 53,1 — H 2,7 — O 23,6 — N 20,6 — M. G. 339.
- 1) 6-Oxy-2,4-Di[3-Nitrophenyl]-1,3,5-Triazin. Sm. 238—240° (B. 28, 483). — IV, 1190.
- 2) 6-Oxy-2,4-Di[4-Nitrophenyl]-1,3,5-Triazin. Sm. noch nicht bei 305° (B. 34, 1991). — \*IV, 850.
- 3) 3-Nitrobenzoat d. 4-Oximido-5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol. Sm. 153° (B. 41, 4064 C. 1909 [1] 187).
- C<sub>15</sub>H<sub>9</sub>O<sub>6</sub>Cl** 1) 3'-Chlordiphenylketon-2,2'-(oder 4,4')-Dicarbonsäure + H<sub>2</sub>O. Sm. 188° (wasserfrei) (B. 41, 3637 C. 1908 [2] 1928).
- 2) 6'-Chlordiphenylketon-2,3'-Dicarbonsäure (oder 5'-Chlordiphenylketon-2,2'-Dicarbonsäure). Sm. 234—236° (B. 41, 3635 C. 1908 [2] 1928).
- C<sub>15</sub>H<sub>9</sub>O<sub>5</sub>Br** 1) Bromemodin. Sm. 274—275° (B. 21 [2] 842). — III, 455.
- C<sub>15</sub>H<sub>9</sub>O<sub>6</sub>N** C 60,2 — H 3,0 — O 32,1 — N 4,7 — M. G. 299.
- 1) 2-Methyläther d. 4-Nitro-1,2-Dioxy-9,10-Anthrachinon. Sm. 280 bis 282° (D.R.P. 150322 C. 1904 [1] 1043).
- 2) 2-Keto-5,6-Dioxy-1-[2-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. 278° (B. 37, 824 C. 1904 [1] 1152).
- 3) 2-Keto-5,6-Dioxy-1-[3-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. 274° (219—221°) (B. 29, 2434; B. 37, 824 C. 1904 [1] 1151). — \*III, 532.
- 4) 2-Keto-5,6-Dioxy-1-[4-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. noch nicht bei 360° (B. 37, 823 C. 1904 [1] 1151).

- $C_{15}H_9O_8N_3$  C 55,1 — H 2,7 — O 29,3 — N 12,8 — M. G. 327.  
 1) 2,4-Dinitro-1-Methylamido-9,10-Anthrachinon (D.R.P. 156759 C. 1905 [1] 312).  
 2) 4,5-Dinitro-1-Methylamido-9,10-Anthrachinon (D.R.P. 156759 C. 1905 [1] 311).  
 3) Methylester d. 4,4'-Dinitro-2'-Cyanbiphenyl-2-Carbonsäure. Sm. 149—150° (B. 37, 4314 C. 1905 [1] 178).
- $C_{15}H_9O_7N$  C 57,1 — H 2,9 — O 35,6 — N 4,4 — M. G. 315.  
 1) p-Nitro-5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Nitroapigenin). Sm. bei 302° u. Zers. (Soc. 77, 417). — \*III, 565.  
 2) 3'-Nitrodiphenylketon-2,4'-Dicarbonsäure. Sm. 230°. Ag<sub>2</sub> (A. 309, 113). — \*II, 1148.
- $C_{15}H_9O_7N_3$  C 52,5 — H 2,6 — O 32,6 — N 12,2 — M. G. 343.  
 1) γ-Keto-γ-[3,5-Dinitrophenyl]-α-[3-Nitrophenyl]propen. Sm. 226° (J. pr. [2] 69, 470 C. 1904 [2] 596).
- $C_{15}H_9O_7Br_3$  1) Säure (aus Anhydrodipyrrogallussäure) (B. 16, 2411).  
 $C_{15}H_9O_8N$  C 54,4 — H 2,7 — O 38,7 — N 4,2 — M. G. 331.  
 1) 4-Phenylpyridin-2,3,5,6-Tetracarbonsäure + 3H<sub>2</sub>O. Sm. 205—207° (wasserfrei). K<sub>2</sub> + H<sub>2</sub>O, (NH<sub>4</sub>)<sub>2</sub>, Ba<sub>3</sub> + 6H<sub>2</sub>O, Cu<sub>2</sub> + 7H<sub>2</sub>O (B. 17, 1515). — IV, 387.
- $C_{15}H_9O_8N_3$  C 50,1 — H 2,5 — O 35,7 — N 11,7 — M. G. 359.  
 1) Lakton d. α-Oxy-p-Trinitro-4-Methyldiphenylmethan-2'-Carbon-säure. Sm. 215° (A. 314, 246, 258). — \*II, 997.
- $C_{15}H_9O_8N_7$  C 43,4 — H 2,2 — O 30,8 — N 23,6 — M. G. 415.  
 1) p-Tetranitro-3-Methyl-1,4-Diphenyl-1,2,5-Triazol. Sm. 172° (G. 30, [2] 456). — \*IV, 813.
- $C_{15}H_9O_8Br_5$  1) p-Pentabrom-α-Di[2,3,4(p)-Trioxyphenyl]propionsäure (B. 16, 2409). — II, 2078.
- $C_{15}H_9O_9N_3$  C 48,0 — H 2,4 — O 38,4 — N 11,2 — M. G. 375.  
 1) 3,5,p-Trinitro-4-Methyldiphenylketon-2'-Carbonsäure. Sm. 215° (217—218°). Ba + 3H<sub>2</sub>O (A. 299, 314; 314, 247; D.R.P. 205036 C. 1909 [1] 475). — \*II, 1005.
- $C_{15}H_9O_{10}N_3$  C 46,0 — H 2,3 — O 40,9 — N 10,7 — M. G. 391.  
 1) 4-Nitrophenylester d. 3,5-Dinitro-2-Acetoxybenzol-1-Carbonsäure. Sm. 156° (J. pr. [2] 43, 388). — II, 1511.
- $C_{15}H_9O_{10}P$  1) Trisopropylmucylphosphat. Sm. 138° (C. r. 134, 1440 C. 1902 [2] 263). — \*III, 506.
- $C_{15}H_9O_{14}N_7$  C 35,2 — H 1,8 — O 43,8 — N 19,2 — M. G. 511.  
 1) Äthyläther-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenyl-imidodioxymethan. Sm. 222° (Soc. 85, 651 C. 1904 [2] 310).
- $C_{15}H_9NCl_2$  1) 1,4-Dichlor-3-Phenylisochinolin. Sm. 162—163° (B. 18, 2450, 3473). — IV, 431.
- $C_{15}H_{10}ON_2$  C 76,9 — H 4,3 — O 6,8 — N 12,0 — M. G. 234.  
 1) 1-Benzoyl-2,3-Benzdiazin. Sm. 123—124°. (2HCl, PtCl<sub>4</sub>) (B. 38, 3920 C. 1906 [1] 246).  
 2) Methyleumarophenazin. Sm. 133—134° (B. 34, 1111). — \*IV, 687.  
 3) 1,2-Naphtho-β-Ketopentamethylenazin. H<sub>2</sub>SO<sub>4</sub> (Bl. [3] 23, 443). — \*IV, 688.  
 4) Oxychindolin. Sm. noch nicht bei 300°. HCl, Pikrat (B. 39, 3939 C. 1907 [1] 119).  
 5) Azin (aus 1,2-Diamidobenzol u. 3-Keto-3,4-Dihydro-1,2-Benzpyron). Sm. 230° (A. 337, 293 C. 1905 [1] 379).  
 6) 1,2-Anhydrid d. 5 oder 6-Methyl-2-Phenylbenzimidazol-2'-Carbon-säure (Tolnylenphthalamidon). Sm. 188°. + C<sub>2</sub>H<sub>6</sub>O (B. 25, 1985). — IV, 618.
- $C_{15}H_{10}ON_4$  C 68,7 — H 3,8 — O 6,1 — N 21,4 — M. G. 262.  
 1) s-Di[3-Cyanphenyl]harnstoff. Sm. 198—199° (C. 1904 [2] 102).  
 2) 3-Phenyleyanhydrazon-2-Oxypseudoindol. Sm. 191° (G. 37 [1] 627 C. 1907 [2] 804).  
 3) Nitril d. 3-[4-Oxyphenyl]-1-Phenyl-1,2,4-Triazol-5-Carbonsäure (C. 1897 [2] 568).
- $C_{15}H_{10}ON_6$  C 62,1 — H 3,4 — O 5,5 — N 29,0 — M. G. 290.  
 1) Azid d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 111—112° (B. 39, 3924 C. 1907 [1] 115).

- $C_{15}H_{10}OCl_2$  1)  $\gamma$ -Keto- $\alpha\gamma$ -Di[4-Chlorphenyl]propen. Sm. 156—157° (B. 42, 1812 C. 1909 [2] 131).
- $C_{15}H_{10}OBr_2$  1) Methyläther d.  $\beta$ -Dibrom-3-Oxyphenanthren. Sm. 150° (B. 34, 4007 C. 1902 [1] 203).  
2) Methyläther d.  $\beta$ -Dibrom-4-Oxyphenanthren. Sm. 152° (B. 33, 1828). — \*II, 542.
- $C_{15}H_{10}OBr_4$  1)  $\alpha\alpha\gamma\gamma$ -Tetrabrom- $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 84—85° (B. 22, 1369). — III, 229.
- $C_{15}H_{10}OS$  1)  $\beta$ -Thiocarbonyl- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (Desaurin; Thiocarbonyl-desoxybenzoin). Sm. 285—286° (B. 21, 350; 24, 3536; 25, 1728). — III, 221.  
2) 2-Keto-1-Benzyliden-1,2-Dihydrobenzthiofuran. Sm. 131,5° (127°) (B. 42, 543 C. 1909 [1] 759; M. 30, 349 C. 1909 [2] 281).  
C 72,0 — H 4,0 — O 12,8 — N 11,2 — M. G. 250.
- $C_{15}H_{10}O_3N_2$  1) 2-Phenylhydrazon-1,3-Diketo-2,3-Dihydroinden. Sm. 190°. Na (A. 277, 363). — IV, 788.  
2) 9,10-Anthrachinonmonourein. Sm. oberhalb 320° u. Zers. (G. 27 [1] 242). — \*III, 294.  
3) Phenanthrenchinonmonourein. Sm. 299° (B. 27 [2] 270; G. 27 [1] 229). — \*III, 321.  
4) 6-Phenylazo-1,2-Benzpyron. Sm. 158° (163°) (B. 37, 348 C. 1904 [1] 662; Soc. 87, 1230 C. 1905 [2] 1337).  
5) 4,5-Diketo-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 165°. +  $C_2H_5O$ , +  $NaHSO_3$  (B. 36, 1134 C. 1903 [1] 1253). — \*IV, 603.  
6) 4-Benzoyl-5-Phenyl-1,2,3-Oxiazol. Sm. 114° u. Zers. (B. 37, 2526 C. 1904 [2] 335; B. 39, 1491 C. 1906 [1] 1746).  
7) 2-[3-Nitrophenyl]chinolin. Sm. 124°. (2HCl,  $PtCl_4$ ) (B. 18, 1902). — IV, 425.  
8)  $\beta$ -[4-Nitrophenyl]chinolin. Sm. 158—160° (B. 29, 168). — IV, 429.  
9)  $\beta$ -Nitro-4-Phenylchinolin. Sm. 187° (B. 20, 625). — IV, 429.  
10)  $\beta$ -Nitro-4-Phenylchinolin. Sm. 135°. Sulfat (B. 20, 626). — IV, 429.  
11)  $\beta$ -Nitro-4-Phenylchinolin. Sm. 117—118°. Nitrat, Sulfat (B. 20, 626). — IV, 429.  
12)  $\beta$ -Nitro-6-Phenylchinolin. Sm. 173°. (2HCl,  $PtCl_4$ ) (A. 230, 28). — IV, 430.  
13)  $\beta$ -Phenylamido-5,8-Diketo-5,8-Dihydrochinolin. Sm. oberhalb. 190° (B. 17, 1644). — IV, 291.  
14) Dioxychindolin. Sm. noch nicht bei 300° (B. 39, 3937 C. 1907 [1] 119).  
15) 7-[2-Pyridyl]chinolin-7<sup>c</sup>-Carbonsäure. Sm. 271—273° u. Zers. Ag (B. 19, 2474). — IV, 1035.  
16) 4-Phenyl-1,3-Benzdiazin-2-Carbonsäure. Zers. bei 102° (B. 25, 3092). — IV, 1035.  
17) 2-Phenyl-1,4-Benzdiazin-3-Carbonsäure. Sm. 166—167° (Bl. [4] 1, 468 C. 1907 [2] 233).  
18) 2-Phenyl-1,4-Benzdiazin-2<sup>c</sup>-Carbonsäure. Zers. bei 275° (B. 39, 2242 C. 1906 [2] 442).  
19) Nitril d. 4-Nitro- $\alpha\beta$ -Diphenyläthen-2-Carbonsäure. Sm. 142° (B. 41, 2296 C. 1908 [2] 599).  
20) Nitril d. 2-Nitro- $\alpha\beta$ -Diphenyläthen-4-Carbonsäure. Sm. 170° (B. 41, 2294 C. 1908 [2] 599).  
21) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 127—128° (A. 250, 160; B. 32, 3402). — II, 1474; \*II, 873.  
22) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]akrylsäure. Sm. 133—134° (A. 250, 160). — II, 1474.  
23) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 117—118° (A. 250, 161). — II, 1475.  
24) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -Phenylakrylsäure. Sm. 175—176° (B. 23, 3134). — II, 1475.  
25) Nitril d.  $\alpha$ -Benzoximido- $\alpha$ -Phenylelessigsäure. Sm. 138° (J. pr. [2] 66, 363 C. 1902 [2] 1501).  
26) Imid d. Phenylbenzylidenamin-2,2'-Dicarbonsäure. Sm. 240° (G. 37 [2] 154 C. 1907 [2] 1240).  
27) Benzylidenamidoisimid d. Benzol-1,2-Dicarbonsäure. Sm. noch nicht bei 250° (B. 27, 691). — III, 41.



- $C_{15}H_{10}O_2N_2$  28) Verbindung (aus d. Verbindung  $C_{15}H_9O_3N$ ). Sm. 284—286° (A. 242, 249). — II, 1976.
- $C_{15}H_{10}O_2N_4$  C 64,7 — H 3,6 — O 11,5 — N 20,1 — M. G. 278.
- $C_{15}H_{10}O_2Cl_2$  1) Chlorid d. Diphenylmethan-2,4'-Dicarbonsäure. Sm. 180° (A. 309, 118). — \*II, 1096.
- $C_{15}H_{10}O_2Br_2$  1)  $\beta\beta$ -Dibrom- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 95° (B. 23, 3378; C. 1899 [2] 1118; A. 308, 248). — III, 297; \*III, 226.
- 2) Lakton d. 1- $[\alpha\beta$ -Dibrom- $\alpha$ -Oxy- $\beta$ -Phenyläthyl]benzol-2-Carbonsäure (B. 17, 2527; 18, 2444). — II, 1708.
- $C_{15}H_{10}O_2Br_4$  1)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[ $\beta$ -Dibrom-2-Oxyphenyl]- $\alpha$ -Phenylpropan. Sm. 167—168° (B. 29, 379). — III, 229.
- $C_{15}H_{10}O_2Br_6$  1) Di[2,5,6-Tribrom-3-Oxy-4-Methylphenyl]methan. Sm. 251° (A. 344, 189 C. 1906 [1] 1160).
- $C_{15}H_{10}O_2J_6$  1) Methylendisalicylsäurejodid (Formidin) (C. 1907 [1] 1450).
- $C_{15}H_{10}O_2S$  1) 2-Keto-1-[2-Oxybenzyliden]-1,2-Dihydrobenzthiofuran. Sm. 209° (M. 30, 350 C. 1909 [2] 282).
- 2) 2-Keto-1-[3-Oxybenzyliden]-1,2-Dihydrobenzthiofuran. Sm. 212° (M. 30, 351 C. 1909 [2] 282).
- 3) 2-Keto-1-[4-Oxybenzyliden]-1,2-Dihydrobenzthiofuran. Sm. 262° (M. 30, 351 C. 1909 [2] 282).
- $C_{15}H_{10}O_3N_2$  C 67,7 — H 3,8 — O 18,0 — N 10,5 — M. G. 266.
- 1) 1-Oximido-4-Nitro-2-Phenylinden. Sm. 246—248° (G. 36 [2] 281 C. 1906 [2] 1500).
- 2) 4-Phenylhydrazon-3-Keto-3,4-Dihydro-2,1-Benzpyron. Sm. 199° (B. 41, 3259 C. 1908 [2] 1432).
- 3)  $\beta$ -Nitro-2,5-Diphenyloxazol. Sm. 185° u. Zers. (B. 29, 2106). — IV, 433.
- 4) 2,4,5-Triketo-1,3-Diphenyltetrahydroimidazol (Oxalyldiphenylharnstoff; Diphenylparabansäure). Sm. 204° (J. 1861, 529; B. 2, 688; 3, 764; 20, 785; 31, 138; J. pr. [2] 32, 9; [2] 41, 81; B. 38, 2985 C. 1905 [2] 1421). — II, 411; \*II, 209.
- 5) 3-[4-Nitrophenyl]-5-Phenylisoxazol. Sm. 221° (B. 37, 1151 C. 1904 [1] 1267).
- 6)  $\beta$ -Nitroso-3-Oxy-1-Benzoylindol. Sm. 104° (D.R.P. 131400 C. 1902 [1] 1344).
- 7) 3-Keto-2-[4-Nitrobenzyliden]-2,3-Dihydroindol (4-Nitrobenzaldehyd-indogenid). Sm. 273° (B. 16, 2199; Soc. 95, 795 C. 1909 [2] 30). — II, 1615.
- 8) 2-Keto-3-[3-Nitrobenzyliden]-2,3-Dihydroindol. Sm. 255—257° (C. r. 149, 133 C. 1909 [2] 832).
- 9) 3-Keto-1-[ $\alpha$ -Nitrobenzyliden]-1,3-Dihydroisindol (Nitrobenzalphtalamidin). Sm. 199° (B. 18, 2439; 29, 2743). — II, 1709; \*II, 1004.
- 10)  $\beta$ -Nitro-2-[4-Oxyphenyl]chinolin. Sm. 151° (M. 8, 138). — IV, 426.
- 11) 2-Keto-3-[4-Nitrophenyl]-1,2-Dihydrochinolin. Sm. 326° (corr.) (B. 31, 1293). — \*IV, 257.
- 12) 4-Nitro-1-Oxy-3-Phenylisochinolin. Sm. 245° u. Zers. (240°) (B. 19, 831; B. 38, 3850 C. 1906 [1] 38). — II, 1711.
- 13) 1-Keto-3-[3-Nitrophenyl]-1,2-Dihydroisochinolin (3-m-Nitrophenylisocarbostyryl). Sm. 298—300° (B. 29, 2545). — IV, 432.
- 14) 3,5-Diphenyl-1,2,4-Oxdiazol-3<sup>s</sup>-Carbonsäure. Sm. 218° (B. 19, 1497). — II, 1229.
- 15) 3,5-Diphenyl-1,2,4-Oxdiazol-5<sup>s</sup>-Carbonsäure. Sm. 151°. Ca, Ba + 4H<sub>2</sub>O, PbOH, Cu, Ag (B. 18, 2463). — II, 1815.
- 16) 6-Oxy-2-[2-Naphtyl]-1,3-Diazin-4-Carbonsäure. Sm. 167—168° u. Zers. (B. 25, 1423). — IV, 1036.
- 17) 3-Phenylimido-2-Keto-2,3-Dihydroindol-3<sup>s</sup>-Carbonsäure. Sm. 251 bis 253° (A. 210, 121). — II, 1605.
- 18) 3-Oxy-2-Phenyl-1,4-Benzdiazin-2<sup>s</sup>-Carbonsäure. Sm. 232° u. Zers. (237°). NH<sub>4</sub>, Ba + 10H<sub>2</sub>O, o-Phenylendiaminsalz (G. 34 [1] 494 C. 1904 [2] 453; B. 39, 2239 C. 1906 [2] 442).
- 19) 4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-3<sup>s</sup>-Carbonsäure. Sm. 280—281° u. Zers. (B. 35, 3476 C. 1902 [2] 1317). — \*IV, 598.
- 20) 4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-3<sup>s</sup>-Carbonsäure. Sm. oberhalb 320° (B. 22, 2697). — IV, 875.

- C<sub>15</sub>H<sub>10</sub>O<sub>3</sub>N<sub>2</sub>** 21) **2-Keto-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin-3-Carbonsäure**. Ba (B. 39, 1320 C. 1906 [1] 1738).
- 22) **1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-4-Carbonsäure** (Phenylphtalazoncarbonsäure). Sm. 221—222° (214—215°) (B. 21, 1610; 26, 1124; 31, 1165). — IV, 717.
- 23) **Phenylamidoformiat d. 2-Oxy-3-Ketopseudoindol** (Carbanilidoisatin). Sm. 180—185° u. Zers. (J. pr. [2] 32, 283). — II, 1604.
- 24) **Amid d. 3-[1,2-Phtalyl]amidobenzol-1-Carbonsäure**. Sm. 240—241° (A. 218, 194). — II, 1813.
- C<sub>15</sub>H<sub>10</sub>O<sub>3</sub>N<sub>4</sub>** C 61,2 — H 3,4 — O 16,3 — N 19,1 — M. G. 294.
- 1) **Benzoat d. 4-Oximido-5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol**. Sm. 132—133° (B. 41, 4063 C. 1909 [1] 187).
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>Cl<sub>2</sub>** 1) **2-Dichlor-4-Methyldiphenylketon-2'-Carbonsäure**. Sm. 156° (A. 238, 357). — II, 1712.
- 2) **α-Keto-α-[2-Dichlorphenyl]-β-Phenyläthan-α<sup>2</sup>-Carbonsäure** + x H<sub>2</sub>O (α-Dichlor-ο-Desoxybenzoïncarbonsäure). Sm. 117° (wasserfrei) (B. 20, 2872). — II, 1710.
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>Br<sub>2</sub>** 1) **γ-Keto-γ-[3,5-Dibrom-2,4-Dioxyphenyl]-α-Phenylpropen**. Sm. 165° (B. 41, 1622 C. 1908 [2] 69).
- 2) **2-Keto-1,3-Di[Bromfural]-R-Pentamethylen** (Dibrompyroxanthin). Sm. 180° u. Zers. (B. 11, 458; 29, 1839). — III, 736.
- 3) **1,2-Dibrom-2-Acetyl-3,4-β-Naphtopyran**. Sm. 213° (B. 36, 1974 C. 1903 [2] 377).
- 4) **2-Dibrom-4-Methyldiphenylketon-2'-Carbonsäure**. Sm. 134—135° (D.R.P. 205218 C. 1909 [1] 603).
- 5) **α,6-Lakton d. 2-Dibrom-4,6-Dioxy-2-Methyldiphenylelessigsäure**. Sm. 205° (B. 31, 2830). — \*II, 1091.
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>Br<sub>3</sub>** 1) **α-Äthyläther d. 2,3,5,2',3',5'-Hexabrom-α,4,4'-Trioxydiphenylmethan**. Sm. 189—190° (A. 330, 78 C. 1904 [1] 1148).
- 2) **1,3-Dibrom-2-Keto-1,3-Di[Bromfuranylbrommethyl]-R-Pentamethylen** (Dibrompyroxanthintetrabromid). Sm. 150° u. Zers. (B. 11, 457; 29, 1839; J. 1880, 703; Am. 3, 332). — III, 736.
- C<sub>15</sub>H<sub>10</sub>O<sub>3</sub>S** 1) **2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzthiofuran**. Sm. oberhalb 280° (M. 30, 351 C. 1909 [2] 282).
- C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>N<sub>2</sub>** C 63,8 — H 3,5 — O 22,7 — N 9,9 — M. G. 282.
- 1) **2-Nitro-1-Methylamido-9,10-Anthrachinon** (D.R.P. 156759 C. 1905 [1] 311).
- 2) **4-Nitro-1-Methylamido-9,10-Anthrachinon**. Sm. 250° (D.R.P. 156759 C. 1905 [1] 311).
- 3) **5-Nitro-1-Methylamido-9,10-Anthrachinon** (D.R.P. 144634 C. 1903 [2] 750).
- 4) **8-Nitro-1-Methylamido-9,10-Anthrachinon** (D.R.P. 144634 C. 1903 [2] 750).
- 5) **2,2'-Azodiphenylmethan-4,4'-Dicarbonsäure** (C. r. 149, 402 C. 1909 [2] 1451).
- 6) **Methylester d. 4[oder 4']-Nitro-2'-Cyanbiphenyl-2-Carbonsäure**. Sm. 123—124° (B. 37, 4313 C. 1905 [1] 177).
- 7) **Nitril d. α-[3-Nitrobenzoxyl]phenylelessigsäure**. Sm. 83—84° (Soc. 95, 1408 C. 1909 [2] 1228).
- 8) **Nitril d. α-Benzoxyl-2-Nitrophenylelessigsäure**. Sm. 90—91° (B. 39, 2336 C. 1906 [2] 512).
- 9) **2-Methylphenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 145° (C. 1901 [2] 1159).
- 10) **2-Methylphenylimid d. 4-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 160° (C. 1901 [2] 1160).
- 11) **3-Methylphenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 129° (C. 1901 [2] 1159).
- 12) **3-Methylphenylimid d. 4-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 197° (C. 1901 [2] 1160).
- 13) **4-Methylphenylimid d. 3-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 154° (152—153°) (C. 1901 [2] 1159; 1903 [2] 431).
- 14) **4-Methylphenylimid d. 4-Nitrobenzol-1,2-Dicarbonsäure**. Sm. 165° (C. 1901 [2] 1160).

- C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>N<sub>2</sub>** 15) **3-Nitro-4-Methylphenylimid d. Benzolcarbonsäure.** Sm. 225° (D.R.P. 141893 C. 1903 [1] 1325).
- 16) **2-Nitrobenzylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 217,5—219° (B. 20, 2227; 25, 3031; J. pr. [2] 47, 398; B. 36, 807 Anm. C. 1903 [1] 978). — II, 1805.
- 17) **3-Nitrobenzylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 155° (B. 20, 2869; D. R. P. 134979 C. 1902 [2] 1084). — II, 1805.
- 18) **4-Nitrobenzylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 174—175° (B. 22, 2142). — II, 1805.
- 19) **Verbindung (aus d. Diphenylketon-2,4'-Dicarbonsäurechlorid).** Sm. 213° (A. 309, 108). — \*II, 1148.
- C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>N<sub>4</sub>** C 58,1 — H 3,2 — O 20,6 — N 18,1 — M. G. 310.
- 1) **Monosemicarbazon d. 3-Nitro-9,10-Phenanthrenchinon.** Sm. 254° u. Zers. (B. 41, 3686 C. 1908 [2] 1869).
- 2) **6-[4-Nitrophenylazo]amido-1,2-Benzpyron.** Zers. 218—225° (Soc. 85, 1234 C. 1904 [2] 1124).
- 3) **5-[2,4-Dinitrophenyl]amidochinolin.** Sm. 211°. HCl, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 77, 484 C. 1908 [2] 75).
- 4) **6-[2,4-Dinitrophenyl]amidochinolin.** Sm. 217°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 77, 481 C. 1908 [2] 74).
- 5) **7-[2,4-Dinitrophenyl]amidochinolin.** Sm. 204° (J. pr. [2] 77, 480 C. 1908 [2] 74).
- 6) **8-[2,4-Dinitrophenyl]amidochinolin.** Sm. 266°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 77, 476 C. 1908 [2] 73).
- C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>Cl<sub>4</sub>** 1)  **$\alpha$ -Methyläther d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]-äthan.** Sm. 155—156° (A. 325, 59 C. 1903 [1] 462).
- 2)  **$\alpha$ -Acetat d.  $\alpha$ -Oxydi[3,5-Dichlor-4-Oxyphenyl]methan.** Sm. 171° u. Zers. (A. 362, 237 C. 1908 [2] 944).
- C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>Br<sub>2</sub>** 1) **Monäthyläther d.  $p$ -Dibrom-1,7-Dioxyxanthon.** Sm. 205—207° (M. 16, 319). — III, 206.
- 2) **Aldehyd d. Di[5-Brom-4-Oxybenzyl]amin-3,3'-Dicarbonsäure.** Sm. 187° (A. 344, 261 C. 1906 [1] 1609).
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>N<sub>2</sub>** C 60,4 — H 3,4 — O 26,8 — N 9,4 — M. G. 298.
- 1) **Methyläther d.  $p$ -Nitro-9-Nitroso-10-Keto-2-Oxy-9,10-Dihydroanthracen** (B. 15, 1430). — II, 901.
- 2)  **$\gamma$ -Keto- $\alpha\gamma$ -Di[3-Nitrophenyl]propen.** Sm. 210° (B. 34, 3527). — \*III, 180.
- 3)  **$\alpha$ -Nitro- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen.** Sm. 164° (A. 328, 233 C. 1903 [2] 999).
- 4)  **$\beta$ -Oximido- $\alpha\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[4-Nitrophenyl]propan.** Sm. 135° (B. 37, 1534 C. 1904 [1] 1609).
- 5) **Azoxydiphenylmethandicarbonsäure** (C. r. 144, 1223 C. 1907 [2] 407).
- 6)  **$p$ -Nitrooxybenzylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 233—234° (D. R. P. 134979 C. 1902 [2] 1084).
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>N<sub>4</sub>** C 55,2 — H 3,1 — O 24,5 — N 17,2 — M. G. 326.
- 1) **5-Keto-1-Phenyl-3-[3,5-Dinitrophenyl]-4,5-Dihydropyrazol.** Sm. 227° (J. pr. [2] 69, 464 C. 1904 [2] 595).
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>N<sub>6</sub>** C 50,8 — H 2,8 — O 22,6 — N 23,7 — M. G. 354.
- 1) **Verbindung (aus d. Verb. C<sub>15</sub>H<sub>12</sub>N<sub>4</sub>).** Sm. 234—235° u. Zers. (A. 252, 348). — IV, 766.
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>Br<sub>4</sub>** 1) **Tetrabromphlorethin.** Sm. 205—210° u. Zers. (A. 119, 104). — III, 230.
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>S** 1) **Anthracen-9-Carbonsäure- $p$ -Sulfonsäure.** Ba (B. 20, 706). — II, 1478.
- 2) **3-Phenyl-1,2-Benzpyron- $p$ -Sulfonsäure + 2 $\frac{1}{2}$ H<sub>2</sub>O (Phenylcumarinsulfonsäure).** Sm. 262—263° u. Zers. Ba, Pb + 4H<sub>2</sub>O (G. 14, 257). — II, 1707.
- 3) **Methylester d. 9,10-Anthrachinon-2-Sulfonsäure.** Sm. 123° (B. 28, 2261). — III, 415.
- 4) **Methylester d. 9,10-Phenanthrenchinon-3-Sulfonsäure.** Sm. 235° (A. 321, 352 C. 1902 [2] 61). — \*III, 319.
- C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>N<sub>2</sub>** C 57,3 — H 3,2 — O 30,6 — N 8,9 — M. G. 314.
- 1)  **$\alpha$ -Dinitropyrokresoloxyd.** Sm. bei 235° u. ger. Zers. (Soc. 55, 53). — III, 646.



- C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>N<sub>2</sub>** 2)  $\alpha\beta$ -Di[2-Nitrophenyl]akrylsäure. Sm. 207° (B. 39, 3120 C. 1906 [2] 1331).
- 3)  $\alpha\beta$ -Di[4-Nitrophenyl]akrylsäure. Sm. 264° u. Zers. (B. 42, 3598 C. 1909 [2] 1804).
- 4) Lakton d. 1-[ $\alpha\beta$ -Dinitro- $\alpha$ -Oxy- $\beta$ -Phenyläthyl]benzol-2-Carbonsäure. Sm. 110–113° (B. 18, 1251, 3471). — II, 1708.
- 5) Acetat d. 2,7-Dinitro-9-Oxyfluoren. Sm. 244° (B. 38, 3745 C. 1906 [1] 41).
- 6) Acetat d. 4,5-Dinitro-9-Oxyfluoren. Sm. 220–221° (B. 38, 3748 C. 1906 [1] 42).
- 7) Verbindung (Base aus Harn) (B. 25 [2] 755).
- C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>N<sub>4</sub>** C 52,6 — H 2,9 — O 28,1 — N 16,4 — M. G. 342.
- 1) Methylester d. 6,9-Dinitro-1-Phenylisindazol-3-Carbonsäure. Sm. 281° (B. 23, 716). — IV, 1465.
- C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>Br<sub>2</sub>** 1) 4,6-Dibrom-7,8-Di[Acetoxyl]naphtalin-2-Carbonsäure. Sm. 239° (A. 293, 136).
- C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>S** 1) 1-Oxy-9,10-Anthrachinon-1-Methyläther-5-Sulfonsäure (D. R. P. 205881 C. 1909 [1] 882).
- 2) 1-Oxy-9,10-Anthrachinon-1-Methyläther-6-Sulfonsäure. Na (D. R. P. 145188 C. 1903 [2] 1037).
- 3) 1-Oxy-9,10-Anthrachinon-1-Methyläther-7-Sulfonsäure (D. R. P. 145188 C. 1903 [2] 1038).
- C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>S<sub>2</sub>** 1) Idryldisulfonsäure. K<sub>2</sub> + H<sub>2</sub>O, Ca + 4H<sub>2</sub>O, Ba + 2½H<sub>2</sub>O, Cd + 2½H<sub>2</sub>O (M. 1, 227). — II, 279.
- C<sub>15</sub>H<sub>10</sub>O<sub>7</sub>N<sub>2</sub>** C 54,5 — H 3,9 — O 33,9 — N 8,5 — M. G. 330.
- 1) 2-[2-Pyridoyl]amidobenzol-1,2<sup>5</sup>,2<sup>6</sup>-Tricarbonsäure (Pyridanthrilsäure). Sm. 265–266° u. Zers. (M. 7, 289). — IV, 997.
- 2) Methylester d. 9-Dinitrodiphenylketon-2-Carbonsäure. Sm. 136° u. Zers. (M. 26, 975 C. 1905 [2] 1492).
- C<sub>15</sub>H<sub>10</sub>O<sub>7</sub>N<sub>4</sub>** C 50,3 — H 2,8 — O 31,3 — N 15,6 — M. G. 358.
- 1) 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol-1<sup>2</sup>-Carbonsäure. Sm. 253°. Ag<sub>2</sub> (Soc. 95, 1041 C. 1909 [2] 518).
- 2) 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol-1<sup>3</sup>-Carbonsäure. Sm. 273°. Ag<sub>2</sub> (Soc. 95, 1042 C. 1909 [2] 518).
- 3) 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol-1<sup>4</sup>-Carbonsäure. Zers. bei 283–284°. Ag<sub>2</sub> (Soc. 95, 1042 C. 1909 [2] 518).
- C<sub>15</sub>H<sub>10</sub>O<sub>8</sub>N<sub>2</sub>** C 52,0 — H 2,9 — O 37,0 — N 8,0 — M. G. 346.
- 1) 3',5'-Dinitro-4'-Oxydiphenylketon-4'-Methyläther-2-Carbonsäure. Sm. 205–215° (D. R. P. 205036 C. 1909 [1] 476).
- 2) 9-Dinitrodiphenylmethan-2,4'-Dicarbonsäure. Sm. 215° (A. 309, 123). — II, 1096.
- 3) 2,2'-Dinitrodiphenylmethan-4,4'-Dicarbonsäure (C. r. 146, 343 C. 1908 [1] 1393; C. r. 146, 1324 C. 1908 [2] 416).
- 4) 9-Dinitrodiphenylmethan-4,4'-Dicarbonsäure. Sm. 278° (C. r. 141, 198 C. 1905 [2] 770).
- 5) Phenylester d. 3,5-Dinitro-2-Acetoxybenzol-1-Carbonsäure. Sm. 118° (J. pr. [2] 43, 384). — II, 1511.
- C<sub>15</sub>H<sub>10</sub>O<sub>8</sub>S<sub>2</sub>** 1) Anthracen-9-Carbonsäure-9-Disulfonsäure. Ba<sub>3</sub> (B. 20, 707). — II, 1478.
- 2) 2-Methyl-9,10-Anthrachinon-9-Disulfonsäure. Ca, Ba (B. 8, 676). — III, 450.
- 3) 3-Phenyl-1,2-Benzpyron-9-Disulfonsäure + 6H<sub>2</sub>O (Phenylcumarindisulfonsäure). Sm. 88–89°. Ba + 4H<sub>2</sub>O, Pb + 5H<sub>2</sub>O (G. 14, 260). — II, 1707.
- C<sub>15</sub>H<sub>10</sub>O<sub>9</sub>N<sub>4</sub>** C 46,1 — H 2,6 — O 36,9 — N 14,4 — M. G. 390.
- 1)  $\beta$ -Keto- $\alpha\alpha$ -Di[2,4-Dinitrophenyl]propan. Zers. bei 183° (B. 42, 1316 C. 1909 [1] 1560).
- 2) Benzoylalloxantin + 1½H<sub>2</sub>O. Sm. 253–255° (A. 344, 13 C. 1906 [1] 1006).
- C<sub>15</sub>H<sub>10</sub>O<sub>9</sub>S** 1) 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron-9-Sulfonsäure (Fietsinsulfonsäure). Sm. noch nicht bei 300° (M. 17, 425). — III, 584.
- C<sub>15</sub>H<sub>10</sub>O<sub>10</sub>N<sub>2</sub>** C 47,6 — H 2,6 — O 42,3 — N 7,4 — M. G. 378.
- 1) Dioxymalondi[4-Nitrophenyläther]säure. Na<sub>2</sub> (B. 40, 3170 C. 1907 [2] 981).

- C<sub>15</sub>H<sub>10</sub>O<sub>10</sub>N<sub>4</sub>** C 44,3 — H 2,5 — O 39,4 — N 13,8 — M. G. 406.  
 1) **2,5-Dinitro-4-[4-Nitrobenzoyl]amidophenoxylessigsäure.** Sm. 206° (B. 42, 4114 C. 1909 [2] 2074).  
 2) **Methylester d. Di[2,4-Dinitrophenyl]essigsäure.** Sm. 159° (B. 42, 1315 C. 1909 [1] 1560).
- C<sub>15</sub>H<sub>10</sub>O<sub>10</sub>S** 1) **3,5,7-Trioxo-2-[2,4-Dioxyphenyl]-1,4-Benzpyron-*p*-Sulfonsäure + 2H<sub>2</sub>O** (Morinsulfonsäure). K<sub>2</sub> +  $\frac{1}{2}$ H<sub>2</sub>O, Ba (M. 5, 670). — III, 684.
- C<sub>15</sub>H<sub>10</sub>O<sub>13</sub>N<sub>8</sub>** C 35,3 — H 2,0 — O 40,8 — N 21,9 — M. G. 510.  
 1) **3,5,3',5'-Tetranitro-4,4'-Di[Methylnitramido]diphenylketon.** Zers. bei 210° (R. 6, 367; 7, 231; B. 20, 1734, 3296). — III, 185.
- C<sub>15</sub>H<sub>10</sub>NCl** 1) **4-Chlor-2-Phenylchinolin.** Sm. 63–64° (B. 30, 938). — IV, 425.  
 2) **1-Chlor-3-Phenylisochinolin.** Sm. 77–78° (B. 18, 3473). — IV, 431.  
 3) **4-Chlor-3-Phenylisochinolin.** Sm. 68–70°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 18, 3475). — IV, 431.  
 4) **Nitril d.  $\alpha$ -Phenyl- $\beta$ -[4-Chlorphenyl]akrylsäure.** Sm. 108° (J. pr. [2] 65, 281 C. 1902 [1] 1216).  
 5) **Nitril d.  $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylakrylsäure.** Sm. 112,5° (J. pr. [2] 61, 189). — II, 872.
- C<sub>15</sub>H<sub>10</sub>NBr** 1) **3[oder 4]-Brom-2-Phenylchinolin.** Sm. 120–121° (B. 37, 4671 C. 1905 [1] 383).  
 2) **Nitril d.  $\alpha$ -[4-Bromphenyl]- $\beta$ -Phenylakrylsäure.** Sm. 111–112° (A. 250, 161). — II, 1474.
- C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>Cl<sub>4</sub>** 1) **4,5,6,7-Tetrachlor-2-Methyl-1-Benzylbenzimidazol.** Sm. 176–177° (D. R. P. 178299 C. 1907 [1] 197).
- C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>Br<sub>2</sub>** 1) **4,6-Dibrom-2-[ $\beta$ -Phenyläthenyl]benzimidazol +  $\frac{1}{2}$ H<sub>2</sub>O.** Sm. 182 bis 186° (C. 1902 [2] 942). — \*IV, 688.
- C<sub>15</sub>H<sub>10</sub>N<sub>3</sub>Cl** 1) **6-Chlor-2,4-Diphenyl-1,3,5-Triazin.** Sm. 138–139° (B. 26, 2226). — IV, 1190.
- C<sub>15</sub>H<sub>10</sub>N<sub>3</sub>Cl<sub>3</sub>** 1) ***p*-Trichlor-4-Phenylamido-2-Methyl-1,3-Benzdiazin.** + C<sub>2</sub>H<sub>6</sub>O (Sm. 151–153°) (J. pr. [2] 42, 357). — IV, 1161.
- C<sub>15</sub>H<sub>10</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) **3,5-Dichlor-4-Phenylazo-1-Phenylpyrazol.** Sm. 115° (A. 338, 218 C. 1905 [1] 1158).
- C<sub>15</sub>H<sub>10</sub>N<sub>4</sub>S** 1)  **$\alpha\beta$ -Di[2-Cyanphenyl]thioharnstoff.** Sm. noch nicht bei 300° (B. 29, 632). — \*II, 784.
- C<sub>15</sub>H<sub>10</sub>J<sub>2</sub>S<sub>2</sub>** 1) **Di[2-Jodthiänyl]phenylmethan.** Sm. 89° (B. 30, 2037). — \*III, 596.
- C<sub>15</sub>H<sub>11</sub>ON** C 81,4 — H 5,0 — O 7,2 — N 6,3 — M. G. 221.  
 1) **3-Phenylamido-1-Ketoiden.** Sm. 204–205° u. Zers. (B. 33, 2427). — \*III, 135.  
 2) ***p*-Formylamidoanthracen.** Sm. 242° (B. 16, 1640). — II, 640.  
 3) **Phenanthrenchinonmethyylimid** (B. 12, 1644). — III, 445.  
 4) **2-[2-Fural]amidonaphtalin** (Furfurol- $\beta$ -Naphtylamin). Sm. 85°. HCl (A. 239, 350). — III, 724.  
 5) **2,4-Diphenyloxazol.** Sm. 102,5–103,5°; Sd. 338–340°. HCl (B. 17, 2580; 20, 2579). — IV, 432.  
 6) **2,5-Diphenyloxazol.** Sm. 74°; Sd. oberhalb 360°. HCl (B. 29, 207, 213). — IV, 432.  
 7) **4,5-Diphenyloxazol.** Sm. 44°. (2HCl, PtCl<sub>4</sub>) (Soc. 63, 470). — IV, 432.  
 8) **3,5-Diphenylisoxazol.** Sm. 141° (142°). HCl (B. 28, 2540; J. pr. [2] 54, 411; A. 308, 249, 258; B. 34, 3985 C. 1902 [1] 193; C. r. 137, 796 C. 1904 [1] 43). — III, 229; \*III, 168.  
 9) **2-Keto-3-Benzyliden-2,3-Dihydroindol.** Sm. 175–176° (C. r. 149, 133 C. 1909 [2] 832; Bl. [4] 5, 1036 C. 1909 [2] 2173).  
 10) **3-Keto-2-Benzyliden-2,3-Dihydroindol** (Benzaldehydindogenid). Sm. 175–176° (B. 16, 2197). — II, 1615.  
 11) **3-Keto-2-Phenyl-1-Methylen-1,3-Dihydroisindol** (Methylenphtalphenylimidin). Sm. 100° (B. 19, 2373). — II, 1873.  
 12) **3-Keto-1-Benzyliden-1,3-Dihydroisindol** (Benzalphtalimidin). Sm. 182–183° (B. 11, 1682; 18, 1257, 2435). — II, 1709.  
 13) **4-Oxy-2-Phenylchinolin + H<sub>2</sub>O.** Sm. 253° (250°). HCl +  $\frac{1}{2}$ H<sub>2</sub>O (B. 19, 1464; 21, 521; 27, 1396; C. 1901 [2] 1228; A. 245, 376; D. R. P. 33497; B. 38, 2050 C. 1905 [2] 261). — IV, 426; \*IV, 256.  
 14) **6-Oxy-2-Phenylchinolin.** Sm. 218°. (2HCl, PtCl<sub>4</sub>), Pikrat (A. 281, 14). — IV, 427.

- $C_{15}H_{11}ON$  15) 7-Oxy-2-Phenylchinolin. Sm. 229—230° (B. 41, 3890 C. 1909 [1] 298).
- 16) 8-Oxy-2-Phenylchinolin. Sm. 59°. HCl, (2HCl,  $PtCl_4$ ), Pikrat (A. 281, 8). — IV, 427.
- 17) 4-Oxy-3-Phenylchinolin. Sm. 255—257° (C. 1900 [1] 123). — \*IV, 257.
- 18) 2-Oxy-4-Phenylchinolin. Sm. 259° (C. 1900 [1] 427). — \*IV, 258.
- 19) 6[oder 7]-Oxy-3-Phenylisochinolin. Sm. 196—197°. HCl, (2HCl,  $PtCl_4$ ), HJ, Pikrat (B. 34, 3745 C. 1902 [1] 40). — \*IV, 258.
- 20) 2-[2-Oxyphenyl]chinolin. Sm. 115°; Sd. oberhalb 360°. (2HCl,  $PtCl_4$ ), Pikrat (A. 249, 101). — IV, 426.
- 21) 2-[3-Oxyphenyl]chinolin. Sm. 156°. HCl +  $1\frac{1}{2}H_2O$  (B. 18, 1908; M. 13, 67). — IV, 426.
- 22) 2-[4-Oxyphenyl]chinolin. Sm. 237—238°. HCl +  $2H_2O$ , (2HCl,  $PtCl_4$ ) (M. 8, 127; 13, 63). — IV, 426.
- 23) 4-[2-Oxyphenyl]chinolin. Sm. 208°. HCl, (2HCl,  $PtCl_4$ ), HBr (B. 26, 719; 27, 3040; D. R. P. 79173; J. pr. [2] 61, 40). — IV, 429; \*IV, 258.
- 24) 4-[3-Oxyphenyl]chinolin. Sm. 235° (B. 20, 630; 27, 3041). — IV, 429.
- 25) 4-[4-Oxyphenyl]chinolin. Sm. 243° (B. 20, 629; 27, 913; D. R. P. 79173). — IV, 429; \*IV, 258.
- 26) Phenyläther d. 2-Oxychinolin. Sm. 68—69° (B. 15, 336). — IV, 269.
- 27) 2-Keto-3-Phenyl-1,2-Dihydrochinolin. Sm. 234—235° (B. 28, 292; 31, 1294; B. 41, 485 C. 1908 [1] 1065). — IV, 428; \*IV, 257.
- 28) 1-Keto-2-Phenyl-1,2-Dihydroisochinolin. Sm. 117,5° (B. 27, 203). — IV, 303.
- 29) 1-Keto-3-Phenyl-1,2-Dihydroisochinolin (Isobenzalptalimidin). Sm. 197° (B. 18, 2449, 3472; B. 38, 3848 C. 1906 [1] 38). — II, 1711.
- 30) 2-Furalmethylchinolin. HCl, (2HCl,  $PtCl_4$  +  $2H_2O$ ),  $HNO_3$ ,  $H_2SO_4$  +  $H_2O$ , Pikrat (B. 20, 2044). — IV, 432.
- 31) Nitril d. Benzoylphenylelessigsäure. Sm. 87—90° (J. pr. [2] 52, 115; [2] 55, 308; Soc. 91, 592 C. 1907 [2] 69). — \*II, 1003.
- 32) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]akrylsäure. Sm. 104° (B. 37, 3165 C. 1904 [2] 983).
- 33) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 106—107° (B. 34, 3085).
- 34) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]akrylsäure. Sm. 192° (B. 34, 3084).
- 35) Nitril d. isom.  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]akrylsäure. Sm. 190—191° (B. 34, 3085).
- 36) Nitril d.  $\beta$ -Oxy- $\beta$ -Phenylakrylphenyläthersäure. Sm. 85—86° (C. r. 142, 451 C. 1906 [1] 1095; Bl. [3] 35, 533 C. 1906 [2] 760).
- 37) Nitril d. Xanthen-9-Methylcarbonsäure. Sm. 140° (Bl. [3] 35, 1008 C. 1907 [1] 116).
- 38) Amid d. Anthracen-1-Carbonsäure. Sm. 260° (256°) (B. 30, 1119; B. 39, 932 C. 1906 [1] 1256). — \*II, 877.
- 39) Amid d. Anthracen-2-Carbonsäure ( $\gamma$ -Säure). Sm. 293—295° (B. 16, 2611). — II, 1478.
- 40) Amid d. Phenanthren-3-Carbonsäure. Sm. 227—228° (A. 321, 324 C. 1902 [2] 60).
- 41) Amid d. Phenanthren-9-Carbonsäure. Sm. 226° (A. 321, 328 C. 1902 [2] 60).
- 42) Phenylamid d. Phenylpropionsäure. Sm. 125—126° (B. 25, 3538). — II, 1439.
- 43) Verbindung (aus 2-Acetylbenzol-1-Carbonsäurephenylamid). Sm. 265° (B. 19, 2373). — II, 1873.
- 44) Verbindung (aus Chloressigsäure u. Diazobenzolechlorid). Sm. 177 bis 178° (B. 30, 2996). — IV, 1516.
- 45) Verbindung (aus Bromessigsäure u. Diazobenzolechlorid). Sm. 198—200° (B. 30, 2996). — IV, 1516.
- $C_{15}H_{11}ON_3$  C 72,3 — H 4,4 — O 6,4 — N 16,9 — M. G. 249.
- 1) 4-Keto-3-Benzyliden-1-Phenyl-3,4-Dihydro-1,2,5-Triazol (Cinnamylphenylazimid). Sm. 172° (Soc. 61, 282). — IV, 671.
- 2) Methyläther d. 3-Oxy-1,5,2,3-Diphenylen-2,3-Dihydro-1,2,4-Triazol. Sm. 214° (B. 28, 154). — IV, 1292.



- C<sub>15</sub>H<sub>11</sub>ON<sub>3</sub>** 3) 6-Oxy-2-Phenyl-4-[2-Pyridyl]-1,3-Diazin. Sm. 268°. (2HCl, PtCl<sub>4</sub>) (B. 34, 4245 C. 1902 [1] 209). — \*IV, 851.
- 4) 3-Oxy-5,6-Diphenyl-1,2,4-Triazin. Sm. 218° (221°; 224—225°. Na, HBr, HNO<sub>3</sub> (A. 283, 27; 302, 310; B. 34, 3979 C. 1902 [1] 192; B. 35, 346 C. 1902 [1] 584; B. 36, 3190 C. 1903 [2] 939; A. 339, 252, 279 C. 1905 [2] 46; B. 38, 1418 C. 1905 [1] 1412). — IV, 1190; \*IV, 850.
- 5) 6-Oxy-2,4-Diphenyl-1,3,5-Triazin. Sm. 289° (B. 23, 163, 2920). — IV, 1190.
- 6) p-Phenylazo-6-Oxychinolin (B. 21, 1642). — IV, 1486.
- 7) p-Phenylazo-8-Oxychinolin (B. 21, 1644). — IV, 1486.
- 8) Carbonyl-β-o-Amidophenyl-m[oder p]-Tolimidazol. Sm. 343° (B. 32, 1488). — \*IV, 851.
- 9) 3-Benzylidenamido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 129° (J. pr. [2] 69, 101 C. 1904 [1] 730).
- 10) 1-[α-Oximidobenzyl]-2,3-Benzdiazin. Sm. 243—244° (B. 38, 3920 C. 1906 [1] 247).
- 11) Amidooxychindolin. HCl (B. 39, 3940 C. 1907 [1] 119).
- 12) Nitril d. Phenylazobenzoylessigsäure. Sm. 135,7° (J. 1890, 1435; J. pr. [2] 52, 107; B. 37, 2207 C. 1904 [2] 323). — IV, 1478. C 65,0 — H 4,0 — O 5,7 — N 25,3 — M. G. 277.
- C<sub>15</sub>H<sub>11</sub>ON<sub>5</sub>** 1) Benzolazoglyoxylylcyanidhydrazon. Sm. 162—163° (B. 21, 3000). — IV, 1475.
- C<sub>15</sub>H<sub>11</sub>OCl** 1) β-Keto-γ-Phenyl-α-[4-Chlorphenyl]propen (4-Chlorbenzylidenacetophenon). Sm. 103—104° (J. pr. [2] 65, 280 C. 1902 [1] 1215). — \*III, 179.
- 2) 1-Chlor-4-Methyl-2-Phenylbenzfuran. Sm. 66,5°; Sd. 194°<sub>16</sub> (B. 36, 4001 C. 1904 [1] 174).
- 3) Oxoniumchlorid d. 2-Phenylbenzpyran. Sm. 69—70°. HCl, 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub>, + FeCl<sub>3</sub> (A. 356, 302 C. 1907 [2] 1919; Soc. 93, 1110 C. 1908 [2] 608; A. 364, 32 C. 1909 [1] 542).
- C<sub>15</sub>H<sub>11</sub>OCl<sub>3</sub>** 1) γ-Chlor-γ-Oxy-αγ-Di[4-Chlorphenyl]propen. Sm. 67—68° (B. 42, 1818 C. 1909 [2] 132).
- 2) Trichlor-α-Pyrokresol. Sm. bei 225° (Soc. 55, 52) — III, 646.
- C<sub>15</sub>H<sub>11</sub>OBr** 1) Methyläther d. p-Brom-2-Oxyphenanthren. Sm. 176° (B. 34, 4006 C. 1902 [1] 202).
- 2) α-Brom-γ-Keto-αγ-Diphenylpropan. Sm. 43—44°; Sd. 232—234°<sub>12</sub> (A. 308, 227). — \*III, 179.
- 3) 2-Phenylbenzpyranbromid. Sm. 192°. + Br<sub>2</sub>, + CdBr<sub>2</sub> (A. 356, 304 C. 1907 [2] 1919).
- C<sub>15</sub>H<sub>11</sub>OBr<sub>3</sub>** 1) ααγ-Tribrom-β-Keto-αγ-Diphenylpropan. Sm. 81° (B. 22, 1369). — III, 229.
- C<sub>15</sub>H<sub>11</sub>OJ<sub>3</sub>** 1) 2-Phenylbenzpyrantrijodid. Sm. 147—148° (A. 356, 304 C. 1907 [2] 1919).
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>N** C 75,9 — H 4,6 — O 13,5 — N 5,9 — M. G. 237.
- 1) 1-Amido-2-Methyl-9,10-Anthrachinon. Sm. 202°. HCl (B. 16, 698; B. 40, 1696 C. 1907 [1] 1798). — III, 450.
- 2) 1-Methylamido-9,10-Anthrachinon. Sm. 167° (D.R.P. 144634 C. 1903 [2] 750; D.R.P. 156056 C. 1904 [2] 1631; D.R.P. 165728 C. 1906 [1] 516; D.R.P. 175024 C. 1906 [2] 1465; D.R.P. 205881 C. 1909 [1] 882).
- 3) 2-Methylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
- 4) Methyläther d. 2-Oximido-1-Keto-1,2-Dihydroanthracen. Sm. 134° (B. 39, 929 C. 1906 [1] 1256).
- 5) Methyläther d. 1-Oximido-2-Keto-1,2-Dihydroanthracen. Sm. 129 bis 130° (A. 342, 73 C. 1905 [2] 1593).
- 6) Methyläther d. 9-Oximido-10-Keto-9,10-Dihydroanthracen. Sm. 147° (Soc. 69, 73). — III, 409.
- 7) 1-[α-Oximidobenzyl]benzfuran. Sm. 125—128° (G. 25 [2] 288). — III, 733.
- 8) 4-Phenylamido-1,2-Benzpyron. Sm. 259—260° (A. 367, 204 C. 1909 [2] 704).
- 9) 2-Keto-3,5-Diphenyl-2,3-Dihydrooxazol. Sm. 171° (G. 35 [2] 91 C. 1905 [2] 895).
- 10) 3-Oxy-1-Benzoylindol. Sm. 123° (D.R.P. 131400 C. 1902 [1] 1344).

- $C_{15}H_{11}O_2N$  11) isom. 3-Oxy-1-Benzoylindol? Sm. 101° (D.R.P. 131400 C. 1902 [1] 1344).  
 12) 3-Keto-2-[4-Oxybenzyliden]-2,3-Dihydroindol (4-Oxybenzaldehyd-indogenid). Sm. 267—269° (Soc. 95, 799 C. 1909 [2] 31).  
 13) 2-Keto-3-[2-Oxybenzyliden]-2,3-Dihydroindol. Sm. 195° (C. r. 149, 134 C. 1909 [2] 832).  
 14) 2-Keto-3-[3-Oxybenzyliden]-2,3-Dihydroindol. Sm. 280° (C. r. 149, 134 C. 1909 [2] 832).  
 15) 2-Keto-3-[4-Oxybenzyliden]-2,3-Dihydroindol. Sm. oberhalb 300° (C. r. 149, 134 C. 1909 [2] 832).  
 16) 2,3-Diketo-1-Benzyl-2,3-Dihydroindol (Benzylpseudoisatin). Sm. 131° (A. 227, 364). — II, 1604.  
 17) 6-Oxy-2-[4-Oxyphenyl]chinolin. Sm. 247° (M. 9, 150). — IV, 427.  
 18) 2-Oxy-2-[4-Oxyphenyl]chinolin. Sm. 114° (M. 8, 127). — IV, 427.  
 19) 2-Oxy-4-[2-Oxyphenyl]chinolin ( $\beta$ -Phenoloxychinolin). Sm. 305° (B. 20, 632). — IV, 429.  
 20) 4-Oxy-1-Keto-3-Phenyl-1,2-Dihydroisochinolin. Sm. 255—257° (262 bis 263°) (B. 20, 2367; 29, 2746; B. 37, 1689 C. 1904 [1] 1524). — II, 1708; \*II, 1003.  
 21)  $\alpha'$ -Methyl- $\alpha$ -Pyrophtalon. Sm. 210—211°. HCl, (2HCl, PtCl<sub>4</sub>), (2HCl, HgCl<sub>2</sub>), HBr, Na (B. 38, 2806 C. 1905 [2] 1257; B. 38, 4022 C. 1906 [1] 194; B. 38, 3353 C. 1905 [2] 1494).  
 22) Phtalon (aus 2,4-Dimethylpyridin u. Phtalsäureanhydrid). Sm. 262° (B. 38, 3708 C. 1906 [1] 52).  
 23) 1-Phenylindol-2-Carbonsäure. Sm. 173—176° (B. 17, 567). — IV, 236.  
 24) 3-Methyl- $\beta$ -Naphtochinolin-1-Carbonsäure + H<sub>2</sub>O. Sm. 310° (290° u. Zers.). Ca (B. 27, 353, 2020; M. 17, 115). — IV, 422.  
 25) Säure (aus d. Verb. C<sub>15</sub>H<sub>9</sub>ON). Na + 4H<sub>2</sub>O, Ba + 7H<sub>2</sub>O (Soc. 51, 33). — III, 444.  
 26) Laktone d. 1-[ $\alpha$ -Oximido- $\beta$ -Phenyläthyl]benzol-2-Carbonsäure. Sm. 116—117° (B. 18, 1260). — II, 1710.  
 27) Laktone d.  $\beta$ -Oximido- $\alpha$ - $\beta$ -Diphenylpropionsäure. Sm. 159,5° (A. 266, 22). — II, 1707.  
 28) Inn. Anhydrid d.  $\alpha$ -Oximido- $\alpha$ - $\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure. Sm. 137—139° (B. 18, 2448). — II, 1712.  
 29) Inn. Anhydrid d. Benzoylamidoessigsäurephenylester. Sm. 42° (H. 20, 413; B. 26, 1700). — II, 1184; \*II, 744.  
 30) Laktam d. 10-Amido-9-Oxy-9,10-Dihydrophenanthren-9-Carbonsäure. Sm. 183° (Soc. 51, 34; Soc. 87, 690 C. 1905 [2] 244). — III, 444.  
 31) Methylester d. 2'-Cyanbiphenyl-2-Carbonsäure. Sm. 79—80° (B. 37, 4311 C. 1905 [1] 177).  
 32) Acetat d. 9-Oximidofluoren. Sm. 76° (79°) (A. 252, 36; B. 40, 4260 C. 1907 [2] 1847). — III, 240.  
 33) Nitril d.  $\alpha$ -Benzoxylphenylelessigsäure. Sm. 63—64° (Soc. 95, 1404 C. 1909 [2] 1227).  
 34) Nitril d. 2-Benzoxylphenylelessigsäure. Sm. 50° (B. 40, 3513 C. 1907 [2] 1409).  
 35) Nitril d. 1-Benzoxylmethylbenzol-4-Carbonsäure. Sm. 123° (B. 27, 2171). — II, 1561.  
 36) Phenylamid d. Benzfuran-1-Carbonsäure. Sm. 159° (B. 34, 773). — \*II, 980.  
 37) Methylimid d. Biphenyl-2,2'-Dicarbonsäure. Fl. (A. 252, 19). — II, 1884.  
 38) 2-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 182° (179°) (B. 17, 2679; A. 227, 206; Am. 9, 52). — II, 1805.  
 39) 2-Methylphenylisimid d. Benzol-1,2-Dicarbonsäure. Sm. 201° (Am. 26, 458; R. 21, 339). — \*II, 1054.  
 40) 3-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 153° (170 bis 172°) (B. 17, 2679; C. 1909 [1] 653). — II, 1805.  
 41) 4-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 204° (201 bis 202°; 194—195°) (B. 10, 579; 16, 1320; 17, 2679; 32, 2021; C. 1907 [1] 246). — II, 1805; \*II, 1054.  
 42) Benzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 115—116° (B. 20, 2227; D.R.P. 134979 C. 1902 [2] 1084; C. 1905 [1] 933; Am. 38, 650 C. 1908 [1] 360). — II, 1805.

- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>N** 43) Benzylisoimid d. Benzol-1,2-Dicarbonsäure. Sm. 81—82,5° (*R.* 13, 99; *C.* 1905 [1] 933). — *II*, 1805.
- 44) 1-Naphtylimid d. Citrakonsäure. Sm. 142—143°; Sd. oberhalb 360° (*M.* 9, 287). — *II*, 612.
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>N<sub>8</sub>** 45) 2-Naphtylimid d. Citrakonsäure. Sm. 110° (*M.* 9, 289). — *II*, 620.  
 C 67,9 — H 4,1 — O 12,1 — N 15,9 — *M.* G. 265.  
 1) Oxim d. Anthrachininmonourein (*G.* 27 [1] 243). — \**III*, 294.  
 2) Oxim d. Phenanthrenchinonmonourein. Sm. 200—202° (*G.* 27 [1] 230). — \**III*, 322.  
 3) 4-Phenylazo-5-Keto-3-Phenyl-4,5-Dihydroisoxazol. Sm. 166° (*B.* 24, 142; *A.* 312, 162). — *IV*, 1486.  
 4) 3-[4-Nitrophenyl]-5-Phenylpyrazol. Sm. oberhalb 250°. (*B.* 37, 1152 *C.* 1904 [1] 1267).  
 5) 4-Oximido-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 197 bis 200°. Ag (*B.* 20, 2547; 27, 784; D.R.P. 42726; *B.* 36, 1135 *C.* 1903 [1] 1254). — *IV*, 906; \**IV*, 603.  
 6) 5-Imido-2,4-Diketo-1,3-Diphenyltetrahydroimidazol (Monoimid d. Diphenylparabansäure)? Sm. 137° (*B.* 38, 2984 *C.* 1905 [2] 1421).  
 7) 2-Imido-4,5-Diketo-1,3-Diphenyltetrahydroimidazol (Melanoximid). Sm. 225° (*A.* 74, 4, 6; *B.* 2, 688; *B.* 40, 3740 *C.* 1907 [2] 1608). — *II*, 349.  
 8) 2-Phenylimido-4,5-Diketo-1-Phenyltetrahydroimidazol. Sm. 225° (*B.* 40, 3739 *C.* 1907 [2] 1608).  
 9) 4-Benzoyl-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 183°. — *IV*, 1101.  
 10) 6-Benzoyl-2-Phenyl-1,2,3,5-Oxtriazin. Sm. 205° (*R.* 11, 261; 16, 339). — *III*, 298; *IV*, 1119.  
 11) 5-Benzoyl-2-Phenyl-1,2,3,6-Oxtriazin. Zers. bei 97° (*R.* 11, 261; 16, 314). — \**IV*, 770.  
 12) 2-[ $\beta$ -2-Nitrophenyläthenyl]benzimidazol. Sm. 215° (*C.* 1904 [1] 102).  
 13) 2-[ $\beta$ -3-Nitrophenyläthenyl]benzimidazol. Zers. bei 220°. HCl (*C.* 1904 [1] 103).  
 14) 2-[ $\beta$ -4-Nitrophenyläthenyl]benzimidazol. Sm. 269—270° u. Zers. (*C.* 1904 [1] 103).  
 15) 3-Benzoylhydrazon-2-Oxypseudindol (Isatinbenzoylhydrazin). Sm. 279° (*J. pr.* [2] 50, 307). — *II*, 1611.  
 16) 2-Amido-3-4-Nitrophenylchinolin. Sm. 258°. HCl, Pikrat (*B.* 31, 1292; 32, 3403). — *IV*, 1025; \**IV*, 687.  
 17) 3-[2-Oxybenzyliden]amido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 205° (*J. pr.* [2] 69, 101 *C.* 1904 [1] 730).  
 18) 5-Benzoylamido-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 263—264° (*C.* 1906 [1] 1361).  
 19) 1,4-Diphenyl-1,2,3-Triazol-5-Carbonsäure. Sm. 183°. Cu, Ag (*Am.* 20, 394; *B.* 35, 4048). — *IV*, 1165; \**IV*, 816.  
 20) 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 178°. Na + 3½H<sub>2</sub>O, Ba + 5H<sub>2</sub>O, Cu + 1½H<sub>2</sub>O (*B.* 35, 4047 *C.* 1903 [1] 169; *B.* 39, 3924 *C.* 1907 [1] 115). — \**I*, 816.  
 21) 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 176° (172—182° u. Zers.). + C<sub>2</sub>H<sub>5</sub>O, Cu, Ag (*Soc.* 67, 1069; *B.* 22, 798). — *IV*, 1164.  
 22) N-Anhydrid d.  $\alpha$ -Nitrosohydrazon- $\alpha$ - $\beta$ -Diphenyläthan- $\beta$ -Carbon-säure? Sm. 110° u. Zers. (*B.* 38, 3848 *C.* 1906 [1] 38).  
 23) Anhydrid d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3,4<sup>2</sup>-Dicarbonsäure. Sm. 258°. HCl (*A.* 366, 366 *C.* 1909 [2] 287).  
 24) Benzoat d. 5-Oxy-1-Phenyl-1,2,3-Triazol. Sm. 141—142° (*A.* 335, 83 *C.* 1904 [2] 1231).  
 25) Phenylamidoformiat d.  $\alpha$ -Oximido- $\alpha$ -Phenylessigsäurenitril. Sm. 134° (*J. pr.* [2] 66, 368 *C.* 1902 [2] 1501).  
 26) Nitril d.  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[4-Nitrophenyl]essigsäure. Sm. 121—122° (*B.* 34, 501).  
 27) Nitril d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[4-Nitrophenyl]essigsäure. Sm. 121—122° (*B.* 34, 501).  
 28) Nitril d. 2-Keto-6-Oxy-4-[ $\beta$ -Phenyläthyl]-2,5-Dihydropyridin-3,5-Dicarbonsäure (Hydrocinnamyldicyanglutakonimid). NH<sub>4</sub> (*C.* 1903 [2] 714).



- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>** 29) Amid d. 3,5-Diphenyl-1,2,4-Oxiazol-5<sup>2</sup>-Carbonsäure. Sm. 160° (B. 18, 2467). — II, 1815.
- 30) Amid d. 3-Phenylimido-2-Keto-2,3-Dihydroindol-3<sup>3</sup>-Carbonsäure (Amid d. Isatamidobenzol-3-Carbonsäure). Sm. 280° u. Zers. (A. 218, 192). — II, 1605.
- 31) Phenylamid d. 2-Cyanphenyloxaminsäure. Sm. 197,5° (B. 42, 3714 C. 1909 [2] 1806).
- 32) s-Phenyl-3-Cyanphenylamid d. Oxalsäure. Sm. 205–206° (C. 1904 [2] 102).
- 33) Phenylazohomophtalimid. Sm. 258–260° (B. 20, 1205). — IV, 1578.
- 34) Verbindung (aus α-Oximido-α-Phenylelessigsäurenitril). Sm. 90° (J. pr. [2] 66, 366 C. 1902 [2] 1501).
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>N<sub>5</sub>** C 61,4 — H 3,7 — O 10,9 — N 23,9 — M. G. 293.
- 1) 4-Phenylazo-1-Phenyl-1,2,5-Triazol-3-Carbonsäure. Sm. 195–196°. Ag (B. 27, 153; J. pr. [2] 64, 211). — IV, 1491.
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>Cl** 1) Oxoniumchlorid d. 7-Oxy-2-Phenylbenzpyran + 2H<sub>2</sub>O. 2 + PtCl<sub>4</sub> + 2H<sub>2</sub>O, + FeCl<sub>3</sub> + C<sub>2</sub>H<sub>4</sub>O<sub>3</sub> (B. 40, 3817 C. 1907 [2] 1749; Soc. 93, 1098 C. 1908 [2] 607; A. 364, 37 C. 1909 [1] 542).
- 2) Chlorid d. 4-Methyldiphenylketon-2'-Carbonsäure. Fl. (A. 299, 306; 311, 188). — \*II, 1005.
- 3) Chlorid d. 4-Methyldiphenylketon-4'-Carbonsäure. Sm. 110° (A. 312, 94). — \*II, 1006.
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>Cl<sub>3</sub>** 1) Benzoat d. βββ-Trichlor-α-Oxy-α-Phenyläthan. Sm. 97–98° (C. r. 141, 202 C. 1905 [2] 753).
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>Br** 1) γ-Keto-γ-Phenyl-α-[5-Brom-2-Oxyphenyl]propen. Sm. 168° u. Zers. (B. 29, 245). — III, 247.
- 2) γ-Keto-γ-[5-Brom-2-Oxyphenyl]-α-Phenylpropen. Sm. 107–108° (B. 31, 717). — \*III, 181.
- 3) β-Brom-αγ-Diketo-αγ-Diphenylpropan. Sm. 93° (B. 23, 3377; A. 308, 247). — III, 297; \*III, 226.
- 4) 4-[p-Bromphenyl]-3,4-Dihydro-1,2-Benzpyron (Bromphenylhydrocumarin). Sm. 117° (B. 25, 958). — II, 1700.
- 5) Lakton d. α-Brom-β-Oxy-αβ-Diphenyläthan-α<sup>2</sup>-Carbonsäure. Sm. 137° (B. 34, 2831).
- 6) Lakton d. α-Brom-6-Oxy-3-Methyldiphenylelessigsäure. Sm. 94 bis 96° (B. 30, 130; 31, 2818). — \*II, 996.
- 7) Lakton d. α-Brom-2-Oxy-4-Methyldiphenylelessigsäure. Sm. 96 bis 97° (B. 31, 2820). — \*II, 997.
- 8) Acetat d. 2-Brom-9-Oxyfluoren. Sm. 70–72° (B. 38, 3751 C. 1906 [1] 42).
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>Br<sub>3</sub>** 1) β-Bromäthyläther d. 3,5-Dibrom-4-Oxydiphenylketon. Sm. 106 bis 107° (B. 40, 3663 C. 1907 [2] 1419).
- 2) Acetat d. 3,5,4'-Tribrom-4-Oxydiphenylmethan. Sm. 105° (A. 334, 376 C. 1904 [2] 1051).
- 3) Benzoat d. 3,5,6-Tribrom-2-Oxy-1,4-Dimethylbenzol. Sm. 126–127° (A. 302, 115; B. 32, 21). — \*II, 718.
- C<sub>15</sub>H<sub>11</sub>O<sub>3</sub>N** C 71,2 — H 4,3 — O 19,0 — N 5,5 — M. G. 253.
- 1) Methyläther d. 10-Nitro-9-Oxyanthracen. Sm. 156° (A. 323, 239 C. 1902 [2] 803).
- 2) Methyläther d. 10-Isonitro-9-Oxy-9,10-Dihydroanthracen? Sm. 125° u. Zers. (A. 323, 237 C. 1902 [2] 803).
- 3) Methyläther d. p-Nitro-2-Oxyphenanthren. Sm. 190–191° (A. 321, 307 C. 1902 [2] 59).
- 4) Methyläther d. 9[oder 10]-Nitro-3-Oxyphenanthren. Sm. 136,5 bis 137° (A. 321, 285 C. 1902 [2] 58).
- 5) β-Nitro-γ-Keto-αγ-Diphenylpropen. Sm. 90° (A. 328, 236 C. 1903 [2] 999).
- 6) γ-Keto-γ-[2-Nitrophenyl]-α-Phenylpropen. Sm. 124° (B. 28, 2498). — III, 246.
- 7) γ-Keto-γ-Phenyl-α-[2-Nitrophenyl]propen. Sm. 124° (B. 35, 1067 C. 1902 [1] 929). — \*III, 179.
- 8) γ-Keto-γ-Phenyl-α-[3-Nitrophenyl]propen. Sm. 145–146° (B. 35, 1068 C. 1902 [1] 929; Soc. 83, 1377 C. 1904 [1] 164, 450; C. 1906 [2] 1761). — \*III, 179.

- C<sub>15</sub>H<sub>11</sub>O<sub>3</sub>N** 9)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 164° (162,5°) (B. 35, 1068 C. 1902 [1] 929; B. 37, 1149 C. 1904 [1] 1267). — \*III, 179.
- 10)  $\beta$ -Oximido- $\alpha$ -Diketo- $\alpha$ -Diphenylpropan. Sm. 146° (143—144°) (B. 23, 3378; B. 37, 1531 C. 1904 [1] 1608). — III, 297.
- 11) 4-Methylamido-1-Oxy-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750; D.R.P. 154353 C. 1904 [2] 1013).
- 12) Amidooxymethyl-9,10-Anthrachinon (Amidochrysophansäure) (A. 183, 218; 309, 41). — III, 452; \*III, 323.
- 13) Methyläther d. 5-Amido-2-Oxy-9,10-Anthrachinon (D. R. P. 167699 C. 1906 [1] 1070).
- 14) Methyläther d. 8-Amido-2-Oxy-9,10-Anthrachinon (D. R. P. 167699 C. 1906 [1] 1070).
- 15) 3-Oximido-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 158—159° u. Zers. (B. 37, 2819 C. 1904 [2] 712).
- 16) 2,4-Diketo-3,5-Diphenyltetrahydrooxazol. Sm. 121° (Bl. [3] 19, 784). — \*II, 923.
- 17) 3-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroindol. Sm. 264—265° (C. 1903 [1] 34; Soc. 95, 798 C. 1909 [2] 31). — \*IV, 253.
- 18) 2-Keto-3-[2,4-Dioxybenzyliden]-2,3-Dihydroindol. Sm. oberhalb 300° (C. r. 149, 134 C. 1909 [2] 832).
- 19) 2-Keto-3-[3,4-Dioxybenzyliden]-2,3-Dihydroindol. Sm. 246° (C. r. 149, 134 C. 1909 [2] 832).
- 20) 5,7-Dioxy-1-Keto-4-Phenyl-1,2-Dihydroisochinolin. Sm. oberhalb 300° (D.R.P. 73700). — \*IV, 259.
- 21) 4-Benzoyl-3-Keto-3,4-Dihydro-1,4-Benzoxazin. Sm. 93° (Am. 20, 565). — \*II, 739.
- 22) Methyläther d. 4-Oxybenzol-2-Indolindigo. Sm. 162° (M. 29, 388 C. 1908 [2] 517).
- 23)  $\alpha$ -Oxymethylnaphtocinchoninsäure. Sm. 255° (C. 1907 [2] 1239).
- 24) Anhydrid d. Benzoylamidoessigsäure-2-Oxyphenylester. Sm. 232 bis 233° (corr.) (B. 38, 2928 C. 1905 [2] 1336).
- 25)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxydiphenylmethan-2,2'-Dicarbonsäure-2'-Amid (L. d. Benzhydroldicarbonsäuremonamid). Sm. 158—160° (A. 242, 241). — II, 1973.
- 26) Methylester d. 1-Phenylbenzoxazol-4-Carbonsäure. Sm. 157—158° (A. 311, 72). — \*II, 914.
- 27) Methylester d. 5-Keto-5,10-Dihydroakridin-1-Carbonsäure. Sm. 172° (A. 355, 355 C. 1907 [2] 1509).
- 28) Methylester d. 5-Keto-5,10-Dihydroakridin-3-Carbonsäure. Sm. 339° (A. 355, 357 C. 1907 [2] 1509).
- 29) Benzoat d. 1-Oxy-2-Keto-2,3-Dihydroindol. Sm. 124—125° (B. 41, 3927 C. 1909 [1] 295).
- 30) Benzoat d. 3-Oxy-2-Keto-2,3-Dihydroindol. Sm. 134° (B. 37, 947 C. 1904 [1] 1217; B. 39, 2338 C. 1906 [2] 512).
- 31) Benzoat d. 5-Oxy-3-Methylbenzoxazol (M. 19, 516). — \*II, 720.
- 32) Phenylimid d. 3-Oxybenzolzomethyläther-1,2-Dicarbonsäure. Sm. 188,5—190° (Soc. 91, 111 C. 1907 [1] 1121).
- 33) Phenylimid d. 4-Oxybenzolzomethyläther-1,2-Dicarbonsäure. Sm. 179° (Soc. 91, 104 C. 1907 [1] 1120).
- 34) 2-Oxyphenylimid d. 1-Methylbenzol-3,4-Dicarbonsäure. Sm. 205° (M. 12, 631). — II, 1846.
- 35) 4-Methoxyphenylimid d. Benzol-1,2-Dicarbonsäure (2 isom. Formen). Sm. 162° (B. 36, 1000 C. 1903 [1] 1131).
- 36)  $\beta$ -Oxybenzylimid d. Benzol-1,2-Carbonsäure. Sm. 205° (105°?) (D.R.P. 134979 C. 1902 [2] 1084; D.R.P. 134980 C. 1902 [2] 1164).
- 37) isom.  $\beta$ -Oxybenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 150° (D.R.P. 134979 C. 1902 [2] 1084; D.R.P. 134980 C. 1902 [2] 1164).
- 38) Benzoylamid d. Benzolketocarbonsäure. Sm. 146° (corr.) (B. 29, 209, 2105). — \*II, 941.
- 39) Verbindung (aus 2-Nitrobenzol-1-Carbonsäureäthylester u. Benzylcyanid). Sm. 225—230° u. Zers. (J. pr. [2] 55, 326).  
C 64,0 — H 3,9 — O 17,1 — N 14,9 — M. G. 281.
- C<sub>15</sub>H<sub>11</sub>O<sub>3</sub>N<sub>3</sub>** 1) 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]pyrazol. Na (A. 358, 167 C. 1908 [1] 856).

- C<sub>15</sub>H<sub>11</sub>O<sub>8</sub>N<sub>3</sub>** 2) **3-Keto-5-Phenyl-1-[3-Nitrophenyl]-2,3-Dihydropyrazol.** Sm. 264° (A. 358, 167 C. 1908 [1] 856).  
 3) **5-Keto-3-Phenyl-1-[3-Nitrophenyl]-4,5-Dihydropyrazol.** Sm. 174° (A. 358, 177 C. 1908 [1] 857).  
 4) **6-Nitro-3-Acetyl-1-Phenylisindazol.** Sm. 183—184° (B. 42, 609 C. 1909 [1] 999).  
 5) **5-Nitro-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin.** Sm. 233—234° (C. 1905 [2] 338).  
 6) **6-Nitro-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin.** Sm. 219—220° (C. 1906 [2] 1767).  
 7) **7-Nitro-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin.** Sm. 209° (C. 1908 [2] 180).  
 8) **8-Nitro-4-Keto-3-Methyl-2-Phenyl-3,4-Dihydro-1,3-Benzdiazin.** Sm. 138° (J. pr. [2] 43, 445). — II, 1282.  
 9) **4-Keto-7-Methyl-2-[3-Nitrophenyl]-3,4-Dihydro-1,3-Benzdiazin.** Sm. oberhalb 370° (C. 1905 [2] 1787).  
 10) **4-Keto-7-Methyl-2-[4-Nitrophenyl]-3,4-Dihydro-1,3-Benzdiazin.** Sm. oberhalb 370° (C. 1905 [2] 1787).  
 11) **3-Oxy-6[oder 7]-Methyl-2-[2-Nitrophenyl]-1,4-Benzdiazin.** Sm. 293 bis 294° (B. 34, 4009 C. 1902 [1] 204). — \*IV, 687.  
 12) **2-Phenylamido-4-Keto-1,4-Dihydro-1,3-Benzdiazin-2<sup>2</sup>-Carbonsäure.** Ba + 10H<sub>2</sub>O, Ag (B. 18, 2420). — II, 1255.  
 13) **Diphenyl-o-Isocyanursäure.** Sm. 261°. Ag (B. 18, 3230). — II, 375.  
 14) **Imid d. s-Diphenylharnstoff-2,3-Dicarbonsäure.** Sm. 335° (C. 1909 [1] 1758).  
 15) **Nitril d. 3-[3-Nitrobenzoyl]amido-1-Methylbenzol-4-Carbonsäure.** Sm. 218° (C. 1905 [2] 1786).  
 16) **Nitril d. 3-[4-Nitrobenzoyl]amido-1-Methylbenzol-4-Carbonsäure.** Sm. 223° (C. 1905 [2] 1786).
- C<sub>15</sub>H<sub>11</sub>O<sub>8</sub>N<sub>5</sub>** C 58,2 — H 3,6 — O 15,5 — N 22,6 — M. G. 309.  
 1) **Phenylamidoformiat d. 4-Oximido-5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol.** Sm. 101—106° (B. 41, 4065 C. 1909 [1] 187).
- C<sub>15</sub>H<sub>11</sub>O<sub>8</sub>Cl** 1) **p-Chlor-p-Methyldiphenylketon-2-Carbonsäure.** Sm. 182—183° (173°) (B. 41, 3636 C. 1908 [2] 1928; D. R. P. 211967 C. 1909 [2] 397).  
 2) **p-Chlor-3-Methyldiphenylketon-2'-Carbonsäure (oder 5-Chlor-2-Methyldiphenylketon-2'-Carbonsäure).** Sm. 164—165° (B. 41, 3634 C. 1908 [2] 1928).  
 3) **3-Chlor-4-Methyldiphenylketon-2'-Carbonsäure.** Sm. 173° (D. R. P. 205218 C. 1909 [1] 603).  
 4) **Acetat d. 3'-Chlor-4-Oxydiphenylketon.** Sm. 108° (B. 39, 1935 C. 1906 [2] 114).
- C<sub>15</sub>H<sub>11</sub>O<sub>8</sub>Br** 1) **p-Brom-8-Oxy-5,7-Dimethylfluoron.** Zers. bei 170—180° (M. 25, 328 C. 1904 [1] 1495).  
 2) **α-Oxy-β-Phenylakryl-4-Bromphenyläthersäure.** Sm. 191° (C. 1899 [2] 92). — \*II, 953.  
 3) **α,6-Lakton d. p-Brom-4,6-Dioxy-2-Methyldiphenylessigsäure?** Sm. 185° (B. 31, 2829). — \*II, 1091.
- C<sub>15</sub>H<sub>11</sub>O<sub>8</sub>Br<sub>3</sub>** 1) **Äthylester d. p-Tribrom-2-Oxybenzolphenyläther-1-Carbonsäure.** Sm. 67° (A. 257, 86). — II, 1495.
- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>N** C 66,9 — H 4,1 — O 23,8 — N 5,2 — M. G. 269.  
 1) **Methylenäther d. α-Nitro-α-Phenyl-β-[3,4-Dioxyphenyl]äthen.** Sm. 124° (B. 37, 4509 C. 1905 [1] 252).  
 2) **4-Nitrodibenzoylmethan.** Sm. 160° (B. 37, 1151 C. 1904 [1] 1267).  
 3) **2-Methyläther d. 4-Amido-1,2-Dioxy-9,10-Anthrachinon** (D. R. P. 150322 C. 1904 [1] 1043).  
 4) **N-Benzoat d. Benzoylformhydroxamsäure.** Sm. 109—111° (Am. 20, 32). — \*II, 757.  
 5) **2-Nitro-αβ-Diphenyläthen-4-Carbonsäure.** Sm. 236° (B. 41, 2295 C. 1908 [2] 599).  
 6) **α-Phenyl-β-[2-Nitrophenyl]akrylsäure.** Sm. 195—196°. Na + 5H<sub>2</sub>O, Ba + 5H<sub>2</sub>O, Ag, Phenylhydrazinsalz (G. 20, 396; 25 [1] 138, 310; 31 [2] 80; B. 29, 497; G. 36 [2] 276 C. 1906 [2] 1500). — II, 1474; \*II, 873.



- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>N** 7) **Allo- $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]akrylsäure.** Sm. 146—147°. Anilinsalz, p-Toluidinsalz (*G.* 25 [1] 138, 311; 27 [2] 41; *Soc.* 73, 92). — II, 1474; \*II, 873.
- 8)  **$\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]akrylsäure.** Sm. 181—182°. Na + 6 H<sub>2</sub>O, Ba + 2 H<sub>2</sub>O, Ag (*G.* 25 [1] 142, 313; 31 [2] 82). — II, 1474; \*II, 873.
- 9) **Allo- $\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]akrylsäure.** Sm. 195—196°. Ba + 4½ H<sub>2</sub>O, Anilinsalz, p-Toluidinsalz (*G.* 25 [1] 145, 315; 27 [2] 41; 31 [2] 82). — II, 1474; \*II, 873.
- 10)  **$\alpha$ -Phenyl- $\beta$ -[4-Nitrophenyl]akrylsäure.** Sm. 213—214°. Na + 4 H<sub>2</sub>O, Ba + H<sub>2</sub>O, Ag + H<sub>2</sub>O (*G.* 25 [1] 146, 321; 31 [2] 83). — II, 1475; \*II, 873.
- 11) **Allo- $\alpha$ -Phenyl- $\beta$ -[4-Nitrophenyl]akrylsäure + H<sub>2</sub>O.** Sm. 138—142° (wasserfrei). Na + 3½ H<sub>2</sub>O, Ba + 2 H<sub>2</sub>O, Ag, Anilinsalz, p-Toluidinsalz (*G.* 25 [1] 149, 326; 27 [2] 42; 31 [2] 84). — II, 1475; \*II, 873.
- 12)  **$\alpha$ -[2-Nitrophenyl]- $\beta$ -Phenylakrylsäure.** Sm. 193° (*B.* 42, 3601 *C.* 1909 [2] 1805).
- 13)  **$\alpha$ -[4-Nitrophenyl]- $\beta$ -Phenylakrylsäure.** Sm. 224,5°. Ag (*J. pr.* [2] 61, 181; *B.* 42, 3598 *C.* 1909 [2] 1804). — \*II, 873.
- 14) **2-[3,4-Dioxybenzyliden]amidobenzol-3,4-Methylenäther-1-Carbonsäure.** Sm. 192—193° (*B.* 38, 1684 *C.* 1905 [1] 1540).
- 15) **2-Benzoylamidobenzol-1-Ketocarbonsäure (Benzoylisatinsäure).** Sm. 188°. Ba + 3(4) H<sub>2</sub>O (*B.* 24, 773). — II, 1601.
- 16)  **$\alpha$ -Oximido- $\beta$ -Keto- $\alpha$ - $\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure?** Sm. 166° (*B.* 23, 1345). — \*II, 1098.
- 17)  **$\alpha$ -Phenylimido-2-Carboxyphenylessigsäure.** 2 Anilinsalz (*D. R. P.* 97241 *C.* 1898 [2] 524). — \*II, 1129.
- 18) **Lakton d.  $\alpha$ -Oxy-2-oder 3]-Nitro-4-Methyldiphenylmethan-2'-Carbonsäure (Nitrotolylphtalid).** Sm. 137° (*A.* 314, 245, 255). — \*II, 997.
- 19) **Methylester d. 3-Oxy-4-Keto-1,4-Dihydronaphtalin-3-Methyläther-1-Cyanmethylen-carbonsäure.** Sm. 155° (*C.* 1907 [1] 1130).
- 20) **Äthylester d. 3-Oxy-4-Keto-1,4-Dihydronaphtalin-1-Cyanmethylen-carbonsäure.** Sm. 130° (*B.* 38, 3694 *C.* 1905 [2] 1731).
- 21) **Acetat d. 2-Nitro-9-Oxyfluoren.** Sm. 155—156° (*B.* 38, 3741 *C.* 1906 [1] 41).
- 22) **Acetat d. 4-Nitro-9-Oxyfluoren.** Sm. 112—113° (*B.* 38, 3742 *C.* 1906 [1] 41).
- 23) **Acetylderivat d. 2,4-Dioxy-5-Keto-5,10-Dihydroakridin.** Sm. 200° (*B.* 38, 3011 *C.* 1905 [2] 1263).
- 24) **1-Benzoat d. 1,3-Dioxy-2-Keto-2,3-Dihydroindol.** Sm. 126° (*B.* 42, 478 *C.* 1909 [1] 760).
- 25) **Benzoylmonamid d. Benzol-1,2-Dicarbonsäure.** Sm. 123—124° (*Soc.* 89, 710 *C.* 1906 [2] 116).
- 26)  **$\beta\gamma$ -Phenylimid d. Propen- $\alpha\beta\gamma$ -Tricarbonsäure- $\alpha$ -Methylester.** Sm. 143° (*B.* 38, 1617 *C.* 1905 [1] 1532).
- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>N<sub>3</sub>** C 60,6 — H 3,7 — O 21,6 — N 14,1 — M. G. 297.
- 1) **Benzyläther d. Nitroisatinoxim.** Sm. 234—235° (*B.* 35, 4337 *C.* 1903 [1] 293).
- 2) **Nitrosofurfurin.** Sm. 112° (*B.* 11, 1250). — III, 723.
- 3) **Methylester d. 6-Nitro-1-Phenylisindazol-3-Carbonsäure.** Sm. 191 bis 192° (*B.* 22, 320; 23, 716). — IV, 1465.
- 4) **Nitril d.  $\alpha\beta$ -Di[2-Nitrophenyl]propionsäure.** Sm. 110,5° (*B.* 19, 2637; 30, 3018). — II, 1318; \*II, 817.
- 5) **Nitril d. 2,6-Diketo-4-[3,4-Dioxyphenyl]-1,2,3,6-Tetrahydropyridin-3,4-Dimethyläther-3,5-Dicarbonsäure.** NH<sub>4</sub> + 2½ H<sub>2</sub>O (*C.* 1904 [2] 903).
- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>N<sub>5</sub>** C 55,4 — H 3,4 — O 19,7 — N 21,5 — M. G. 325.
- 1) **?-Dinitro-3-Methyl-1,4-Diphenyl-1,2,5-Triazol.** Sm. 230—231° (*G.* 30 [2] 455). — \*IV, 813.
- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>Cl** 1) **3-Chlor-4-Diacetylmethyl-1,2-Naphtochinon.** Sm. 217—218° (*B.* 33, 2415). — \*III, 287.
- 2) **3-Chlor-2-Diacetylmethyl-1,4-Naphtochinon.** Sm. 131—132° (*B.* 33, 2405). — \*III, 287.
- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>Br** 1) **9[oder 10]-Methyläther d. ?-Brom-1,2,9,10-Tetraoxyanthracen?** (*C.* 1901 [1] 601).

$C_{15}H_{11}O_4Br$  2) 3-Brom-4-Diacetylmethyl-1,2-Naphtochinon. Sm. 211—212° (B. 33, 2417). — \*III, 287.

3) p-Brom-4-Oxy-3-Methyldiphenylketon-2'-Carbonsäure. Sm. 228°. Ba (A. 202, 160). — II, 1888.

4) p-Brom-4'-Oxydiphenylketon-4'-Methyläther-2-Carbonsäure. Sm. 194—196° (Bl. 46, 205). — II, 1887.

$C_{15}H_{11}O_5N$

C 63,2 — H 3,8 — O 28,1 — N 4,9 — M. G. 285.

1)  $\gamma$ -Keto- $\gamma$ -[3-Nitrophenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 217° (B. 34, 3530). — \*III, 181.

2) 3'-Nitro-2-Methyldiphenylketon-4-Carbonsäure. Sm. 152—153° (A. 286, 336). — II, 1712.

3) isom. 3'-Nitro-2-Methyldiphenylketon-4-Carbonsäure. Sm. 173°. Ba, Ag (A. 286, 336). — II, 1712.

4) 3'-Nitro-2-Methyldiphenylketon-5-Carbonsäure. Sm. 189°. Ba, Ag (A. 286, 342). — II, 1713.

5) 3'-Nitro-3-Methyldiphenylketon-4-Carbonsäure. Sm. 191°. Ba, Ag (A. 286, 340). — II, 1712.

6) 3-Nitro-4-Methyldiphenylketon-2'-Carbonsäure +  $H_2O$ . Sm. 205° (wasserfrei). Ba +  $H_2O$  (A. 299, 309). — \*II, 1005.

7) 5-[3,4-Dioxybenzyliden]amido-2-Oxybenzol-3,4-Methylenäther-1-Carbonsäure. Sm. 250° u. Zers. (G. 38 [1] 15 C. 1908 [1] 828).

8)  $\alpha$ -Phenyl- $\beta$ -[6-Nitro-3-Oxyphenyl]akrylsäure. Sm. 219—220° (B. 39, 3122 C. 1906 [2] 1331).

9) 4-Benzoylamidobenzol-1,4'-Dicarbonsäure. Sm. 275—277° u. Zers. (B. 10, 579). — II, 1813.

10) Lakton d. 1-[ $\beta$ -Nitro- $\alpha$ -Dioxy- $\beta$ -Phenyläthyl]benzol-2-Carbonsäure.  $Na_2 + 2\frac{1}{2}H_2O$ , Ag<sub>2</sub> (B. 18, 1252). — II, 1708.

11) Methylester d. 4-Nitrodiphenylketon-2-Carbonsäure. Sm. 123,5 bis 124° (M. 29, 434 C. 1908 [2] 1028).

12) isom. Methylester d. 4-Nitrodiphenylketon-2-Carbonsäure. Sm. 104 bis 105° (M. 29, 434 C. 1908 [2] 1028).

13) Methylester d. 5-Nitrodiphenylketon-2-Carbonsäure. Sm. 104,5° (105°) (B. 38, 295 C. 1905 [1] 617; M. 26, 973 C. 1905 [2] 1491).

14) Methylester d. 3'-Nitrodiphenylketon-2-Carbonsäure. Sm. 98—99° (M. 26, 974 C. 1905 [2] 1491; M. 29, 178 C. 1908 [2] 326).

15) Äthylester d. 2,4,9-Triketo-2,3,4,9-Tetrahydro- $\beta$ - $\beta$ -Naphtindol-3-Carbonsäure. Sm. 275° u. Zers. Cu (E. Hoyer, Dissert. Berlin 1901).

16) Acetat d. 4-Nitro-4'-Oxydiphenylketon. Sm. 131° (B. 36, 3898 C. 1904 [1] 94).

$C_{15}H_{11}O_5N_3$

C 57,5 — H 3,5 — O 25,6 — N 13,4 — M. G. 313.

1) 7-Methyläther d. 5-Nitro-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 191° (B. 19, 2277, 2309). — IV, 717.

2)  $\beta$ -[4-Nitrophenyl]hydrazon- $\alpha$ -Keto- $\alpha$ -Phenyläthan- $\beta$ -Carbonsäure. Sm. 225—226° u. Zers. (C. r. 147, 74 C. 1908 [2] 694).

3) 2-Nitrophenylazobenzoylessigsäure. Sm. 177° (B. 18, 2565). — IV, 1472.

4) Aldehyd d. 4'-Nitro-4-Acetoxyazobenzol-3-Carbonsäure. Sm. 150° (Soc. 91, 1263 C. 1907 [2] 1078).

5) Nitril d.  $\beta$ -Oxy- $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Nitrophenyl]propionsäure. Sm. 135—138° (B. 34, 3108).

$C_{15}H_{11}O_5N_5$

C 52,8 — H 3,2 — O 23,5 — N 20,5 — M. G. 341.

1) p-Dinitro-3-Methyl-1,4-Diphenyl-2,3-Dihydro-1,2,5-Triazol-2,3-Oxyd. Sm. 260° (G. 30 [2] 462). — \*IV, 814.

$C_{15}H_{11}O_6N$

C 59,8 — H 3,6 — O 31,9 — N 4,6 — M. G. 301.

1)  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxypheyl]- $\alpha$ -[2-Nitrophenyl]propen. Sm. 212° (C. 1906 [1] 1417).

2)  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxypheyl]- $\alpha$ -[3-Nitrophenyl]propen. Sm. 94° (C. 1906 [1] 1417).

3)  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxypheyl]- $\alpha$ -[4-Nitrophenyl]propen. Sm. 138° (C. 1906 [1] 1417).

4)  $\beta$  $\beta$ -Dioxy- $\alpha$  $\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[4-Nitrophenyl]propan. Sm. 100° (B. 37, 1533 C. 1904 [1] 1609).

5) Aldehyd d. 2-Nitro-4-Benzoxyl-3-Methoxybenzol-1-Carbonsäure. Sm. 97° (B. 40, 3506 C. 1907 [2] 1739).

- C<sub>15</sub>H<sub>11</sub>O<sub>6</sub>N** 6) Aldehyd d. 5-Nitro-3-Benzoxyl-4-Methoxylbenzol-1-Carbonsäure. Sm. 120—121° (*B.* 35, 4398 *C.* 1903 [1] 341).  
 7) Methylester d. 5-Nitro-2-Benzoxylbenzol-1-Carbonsäure. Sm. 117 bis 118° (*A.* 311, 66). — \*II, 896.  
 8) Methylester d. 3-Nitro-4-Benzoxylbenzol-1-Carbonsäure. Sm. 95° (*A.* 311, 71; *C.* 1897 [2] 672). — \*II, 912.  
 9) Phenylester d. 3-Nitro-2-Acetoxybenzol-1-Carbonsäure. Sm. 95° (*J. pr.* [2] 43, 382). — II, 1508.  
 10) Phenylester d. 5-Nitro-2-Acetoxybenzol-1-Carbonsäure. Sm. 118° (*J. pr.* [2] 43, 382). — II, 1509.  
 11) Acetat - 3 - Nitrobenzoat d. 1,4 - Dioxybenzol. Sm. 113° (*C.* 1908 [2] 309).  
 12) 4-Oxy-3-Carboxylphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 262—263° (*G.* 36 [2] 737 *C.* 1907 [1] 1122).  
**C<sub>15</sub>H<sub>11</sub>O<sub>6</sub>N<sub>3</sub>** 1) Inden + 1,3,5-Trinitrobenzol. Sm. 101—102° (*C.* 1905 [1] 1147).  
 2)  $\gamma$ -Oximido- $\beta$ -Nitro- $\alpha$ -Keto- $\gamma$ -[4-Nitrophenyl]- $\alpha$ -Phenylpropan. Sm. 136—137° u. Zers. +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (*A.* 328, 228 *C.* 1903 [2] 998).  
 3) 3'-Nitro-4-Acetoxyazobenzol-3 - Carbonsäure. Sm. 186° (*A.* 251, 190). — IV, 1469.  
**C<sub>15</sub>H<sub>11</sub>O<sub>6</sub>N<sub>5</sub>** C 50,4 — H 3,1 — O 26,9 — N 19,6 — M. G. 357.  
 1) s-Cinnamyliden-2,4,6-Trinitrophenylhydrazin. Sm. 200° (*G.* 24 [1] 578). — IV, 754.  
**C<sub>15</sub>H<sub>11</sub>O<sub>7</sub>N** C 56,8 — H 3,5 — O 35,3 — N 4,4 — M. G. 317.  
 1) Aristolsäure (oder C<sub>15</sub>H<sub>13</sub>O<sub>7</sub>N). Sm. 260—270° (*B.* 29 [2] 38). — III, 780.  
**C<sub>15</sub>H<sub>11</sub>O<sub>7</sub>N<sub>3</sub>** C 52,2 — H 3,2 — O 32,5 — N 12,1 — M. G. 345.  
 1) 3,2,2'-Trinitro-2,4-Dimethyldiphenylketon. Sm. 138—139° (*A.* 286, 334). — III, 231.  
 2) 3,5-Dinitro-2-Phenylacetylamidobenzol-1-Carbonsäure. Sm. 209 bis 210 (*M.* 22, 390).  
 3) Acetat d. 2,6-Dinitro-4-Benzoylamido-1-Oxybenzol. Sm. 180° (*B.* 39, 127 *C.* 1906 [1] 667).  
 4) Acetat d. 3,5-Dinitro-4-Benzoylamido-1-Oxybenzol. Sm. 215° (*B.* 39, 3795 *C.* 1907 [1] 104).  
 5) 3-Nitrobenzoat d. 3-Nitro-4-Acetylamo-1-Oxybenzol. Sm. 184° (*B.* 39, 3796 *C.* 1907 [1] 104).  
**C<sub>15</sub>H<sub>11</sub>O<sub>8</sub>N<sub>3</sub>** C 49,9 — H 3,0 — O 35,4 — N 11,6 — M. G. 361.  
 1) p-Trinitro-4-Methyldiphenylmethan-2'-Carbonsäure. Sm. 213°. Ba (*A.* 314, 246). — \*II, 871.  
 2) Acetylderivat d. 4,6-Dinitro-4'-Oxydiphenylamin-2-Carbonsäure. Sm. 97—99° u. Zers. (*M.* 22, 393).  
**C<sub>15</sub>H<sub>11</sub>O<sub>8</sub>Br<sub>3</sub>** 1) p-Tribrom- $\alpha\alpha$ -Di[2,3,4(p)-Trioxyphenyl]propionsäure (*B.* 16, 2409). — II, 2078.  
**C<sub>15</sub>H<sub>11</sub>O<sub>12</sub>N<sub>7</sub>** C 37,4 — H 2,3 — O 39,9 — N 20,4 — M. G. 481.  
 1) Propyl-2,4,6,2',4',6'-Hexanitrodiphenylamin. Sm. 136—137° (*R.* 25, 123 *C.* 1906 [2] 34).  
**C<sub>15</sub>H<sub>11</sub>NCl<sub>2</sub>** 1) Nitril d.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Diphenylpropionsäure. Sm. 167—168° (*B.* 26, 661). — II, 1467.  
**C<sub>15</sub>H<sub>11</sub>NBr<sub>2</sub>** 1) Nitril d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropionsäure. Sm. 129—130° (149 bis 150°) (*A.* 250, 158; *Am.* 22, 255). — II, 1467; \*II, 870.  
**C<sub>15</sub>H<sub>11</sub>NS** 1) 2,4-Diphenylthiazol. Sm. 92—93°; Sd. oberhalb 360° (*A.* 259, 237). — IV, 433.  
 2) 1-[ $\beta$ -Phenyläthenyl]benzthiazol. Sm. 111° (*B.* 13, 1235). — II, 1408.  
**C<sub>15</sub>H<sub>11</sub>NS<sub>2</sub>** 1) 2-Thiocarbonyl-3,4-Diphenyl-2,3-Dihydrothiazol. Sm. 148° (*J. pr.* [2] 75, 192 *C.* 1907 [1] 1501).  
**C<sub>15</sub>H<sub>11</sub>NSe** 1) 2,4-Diphenylselenazol. Sm. 99°. (2HCl, PtCl<sub>4</sub>) (*A.* 250, 317). — IV, 433.  
**C<sub>15</sub>H<sub>11</sub>N<sub>2</sub>Cl** 1) 5-Chlor-1,3-Diphenylpyrazol. Sm. 49° (*A.* 358, 171 *C.* 1908 [1] 856).  
 2) 3-Chlor-1,5-Diphenylpyrazol. Sm. 64° (*A.* 358, 161 *C.* 1908 [1] 855).  
 3) 2-Chlor-4,5-Diphenylimidazol. Sm. 217,5°. HCl, H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (*B.* 40, 2631 *C.* 1907 [2] 339).  
 4) 2-Chlor-4-Phenylamidochinolin. Sm. 156° (*B.* 40, 4290 *C.* 1907 [2] 1848).



- $C_{15}H_{11}N_2Cl$  5) 2-Chlor-6-Methyl-4-Phenyl-1,3-Benzdiazin. Sm. 140—141° (B. 32, 2024). — \*IV, 689.
- 6) 4-Chlor-1-Benzyl-2,3-Benzdiazin. Sm. 152° (B. 26, 713). — IV, 1027.
- 7) Nitril d.  $\beta$ -Imido- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. Sm. 174° (J. pr. [2] 67, 388 C. 1903 [1] 1357).
- $C_{15}H_{11}N_2Cl_3$  1)  $\beta$ -Chlor- $\gamma$ -[3-Chlorphenyl]imido- $\alpha$ -[3-Chlorphenyl]amidopropen. Sm. 115°. +  $\frac{1}{2}C_6H_6$ , HCl +  $C_2H_6O$ , HCl +  $C_2H_4O_2$  (E. COLLET, Dissert. Berlin 1903).
- 2)  $\beta$ -Chlor- $\gamma$ -[4-Chlorphenyl]imido- $\alpha$ -[4-Chlorphenyl]amidopropen. Sm. 192°. HCl +  $C_2H_6O$ , HCl +  $C_2H_4O_2$  (E. COLLET, Dissert. Berlin 1903).
- $C_{15}H_{11}N_2Br$  1) 2-[4-Bromphenyl]amidochinolin. Sm. 146° (B. 18, 1533). — IV, 909.
- $C_{15}H_{11}N_2J$  1) 4-Jod-1-Benzyl-2,3-Benzdiazin. Sm. 146° u. Zers. (B. 38, 3918 C. 1906 [1] 246).
- $C_{15}H_{11}N_3S_3$  1) 5-Benzylidenhydrosulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 155° (B. 29, 2135). — IV, 684.
- $C_{15}H_{11}N_4Cl$  1) 3-Chlor-4-Phenylazo-1-Phenylpyrazol. Sm. 140° (A. 338, 220 C. 1905 [1] 1158).
- 2) 5-Chlor-4-Phenylazo-3-Phenylpyrazol. Sm. 192° (A. 352, 161 C. 1907 [1] 1047).
- 3) 4-Phenylazo-1-[4-Chlorphenyl]pyrazol. Sm. 152° (B. 27, 224). — IV, 1488.
- $C_{15}H_{11}N_4Br$  1) Azimid d.  $\beta$ -Brom-5[oder 6]-Methyl-2-[2-Amido-4-Methylphenyl]-benzimidazol. Sm. 254° (B. 31, 322). — IV, 1294.
- $C_{15}H_{11}N_4Br_5$  1) Azimid d.  $\beta$ -Brom-5[oder 6]-Methyl-2-[2-Amido-4-Methylphenyl]-benzimidazoltetrabromid. Sm. 155° u. Zers. (B. 31, 321). — IV, 1294.
- $C_{15}H_{12}ON_2$  1) C 76,3 — H 5,1 — O 6,8 — N 11,8 — M. G. 236.
- 2)  $\alpha$ -Imido- $\alpha$ -Benzoylmethylenamido- $\alpha$ -Phenylmethan. Sm. 224°. HCl, (2HCl,  $PtCl_4$ ),  $H_2SO_4$ , Ag (B. 34, 641, 3024, 3032). — \*IV, 568.
- 3) 3-Phenylhydrazon-1-Keto-2,3-Dihydroinden. Sm. 162—163° (A. 246, 353). — IV, 784.
- 4) 2-Phenylhydrazon-1,2-Benzpyron (Cumarinphenylhydrazon). Sm. 143 bis 144° (B. 19, 1666). — IV, 696.
- 5) 3-Oxy-1,5-Diphenylpyrazol. Na (A. 358, 160 C. 1908 [1] 855).
- 6) 3-Keto-1,5-Diphenyl-2,3-Dihidropyrazol. Sm. 251° (252°; 256°) (B. 20, 1108; Soc. 85, 1495 C. 1905 [1] 173; C. r. 142, 1535 C. 1906 [2] 434; A. 358, 159 C. 1908 [1] 855). — IV, 907.
- 7) 5-Keto-1,3-Diphenyl-4,5-Dihidropyrazol. Sm. 137°. HCl,  $H_2SO_4$  (B. 20, 2546; 27, 784; D.R.P. 42726). — IV, 905; \*IV, 603.
- 8) 5-Keto-1,4-Diphenyl-4,5-Dihidropyrazol. Sm. 195—196° (B. 20, 2932; C. 1900 [1] 122). — IV, 906; \*IV, 604.
- 9) 2-Keto-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. 324° (G. 19, 566; A. 339, 262 C. 1905 [2] 46; B. 40, 4804 C. 1908 [1] 373; B. 41, 1884 C. 1908 [2] 526; A. 368, 173 Ann. C. 1909 [2] 1462). — III, 285.
- 10) 2-Amido-4,5-Diphenyloxazol (Tolanurein;  $\alpha\beta$ -Diphenylacetylenurein) (A. 261, 135; 284, 21). — III, 223.
- 11) 3-[4-Amidophenyl]-5-Phenylisoxazol. Sm. 155° (A. 328, 234 C. 1903 [2] 999).
- 12) 5-Imido-3,4-Diphenyl-4,5-Dihydroisoxazol? Sm. 160—162° (J. pr. [2] 55, 312). — \*II, 1003.
- 13) 3-Phenyl-5-Benzyl-1,2,4-Oxdiazol. Sm. 118° (B. 22, 3142). — III, 52.
- 14) 5-Phenyl-3-Benzyl-1,2,4-Oxdiazol. Sm. 82° (B. 18, 1071). — II, 1315.
- 15) 5-Phenyl-3-[2-Methylphenyl]-1,2,4-Oxdiazol. Sm. 80° (B. 22, 2440). — II, 1331.
- 16) 5-Phenyl-3-[4-Methylphenyl]-1,2,4-Oxdiazol. Sm. 103° (B. 19, 1490). — II, 1344.
- 17) 2-Phenyl-5-[4-Methylphenyl]-1,3,4-Oxdiazol. Sm. 126°. +  $AgNO_3$  (J. pr. [2] 70, 417 C. 1905 [1] 83).
- 18) 6-Oxy-4-Methyl-2-[2-Naphtyl]-1,3-Diazin. Sm. 210° (B. 25, 1427). — IV, 1029.
- 19) 1-Nitroso-5-Methyl-2-Phenylindol. Sm. 262° (B. 25, 2874). — IV, 417.
- 20) 1-Nitroso-7-Methyl-2-Phenylindol. Sm. 232° u. Zers. (B. 25, 2871). — IV, 417.
- 21) 3-Phenylimido-2-Keto-5-Methyl-2,3-Dihydroindol (p-Methylisatinphenylimid). Sm. 239—240° (B. 16, 2267). — II, 1652.

- $C_{15}H_{12}ON_2$ , 21) 3-Keto-2-[4-Amidobenzyliden]-2,3-Dihydroindol (C. 1903 [1] 34). — \*IV, 678.
- 22) 2-Keto-3-[2-Amidobenzyliden]-2,3-Dihydroindol. Sm. 233—234° (B. 39, 3121 C. 1906 [2] 1331).
- 23) 2-[2-Methylphenyl]amido-3-Ketopseudoindol. Sm. 152—160° (D.R.P. 115465 C. 1901 [1] 71). — \*II, 943.
- 24) 2-[4-Methylphenyl]amido-3-Ketopseudoindol. Sm. 150—153° (D.R.P. 115465 C. 1901 [1] 71). — \*II, 944.
- 25) 2-Acetyl-3-Phenylindazol. Sm. 69—70° (B. 29, 1271). — IV, 1011.
- 26) 1-Acetyl-3-Phenylisindazol. Sm. 185°. Acetat (B. 24, 2383; 29, 1263). — IV, 1012.
- 27) 6-Oxy-2-[4-Amidophenyl]chinolin. Sm. 294° u. Zers.  $HCl + \frac{1}{2}H_2O$ ,  $H_2SO_4 + \frac{1}{2}H_2O$  (M. 9, 146). — IV, 1024.
- 28) 4-Phenylamido-2-Oxychinolin. Sm. 318°.  $+ CH_4O$ ,  $+ C_2H_4O_2$ ,  $HCl$  (B. 40, 4285 C. 1907 [2] 1847).
- 29) 2-Amido-1-Keto-3-Phenyl-1,2-Dihydroisochinolin. Sm. 131° (B. 38, 3849 C. 1908 [1] 38).
- 30) 4-Amido-1-Keto-3-Phenyl-1,2-Dihydroisochinolin. Sm. 190° (B. 19, 833). — II, 1712.
- 31) 4-Oxy-2-Benzyl-1,3-Benzdiazin. Sm. 177° (B. 28, 290). — IV, 1027.
- 32) 2-Keto-4-[4-Methylphenyl]-1,2-Dihydro-1,3-Benzdiazin. Sm. 286°. ( $HCl$ ,  $AuCl_3 + H_2O$ ) (B. 30, 1135). — \*IV, 689.
- 33) 2-Keto-6-Methyl-4-Phenyl-1,2-Dihydro-1,3-Benzdiazin. Sm. 283 bis 285°.  $HCl$ ,  $HNO_3$ ,  $H_2Cr_2O_7$  (B. 32, 2024). — \*IV, 689.
- 34) 4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 143° (147°).  $HCl$  (B. 24, 3055; B. 35, 3482 C. 1902 [2] 1318). — IV, 901; \*IV, 602.
- 35) isom. ?-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 146—147° (J. pr. [2] 36, 163). — IV, 902.
- 36) isom. ?-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin? (Äthenylimidobenzanilid). Sm. 118° (B. 19, 2342). — II, 347.
- 37) 4-Keto-3-Methyl-2-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 130 bis 131° (J. pr. [2] 36, 161). — II, 1254.
- 38) 4-Keto-7-Methyl-2-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 243° (C. 1905 [2] 1787).
- 39) 4-Keto-2-Benzyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 242° (J. pr. [2] 69, 20 C. 1904 [1] 640).
- 40) 4-Keto-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 146°.  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ) (B. 22, 2697). — IV, 875.
- 41) 3-Oxy-6-Methyl-2-Phenyl-1,4-Benzdiazin. Sm. 198° (A. 237, 352). — IV, 1027.
- 42) 2-Keto-3-Methyl-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 195° (B. 25, 1628). — IV, 903.
- 43) 1-Keto-2-Methyl-4-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 153° (J. pr. [2] 51, 152). — IV, 1023.
- 44) 1-Keto-4-[4-Methylphenyl]-1,2-Dihydro-2,3-Benzdiazin. Sm. 246° (J. pr. [2] 51, 153). — IV, 1028.
- 45) 1-Keto-4-Benzyl-1,2-Dihydro-2,3-Benzdiazin (Benzylphtalazon). Sm. 196° (B. 26, 712; 29, 1434). — II, 1710; \*II, 1004.
- 46) N-Anhydrid d.  $\alpha$ -Hydrazon- $\alpha\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure. Sm. 202° (B. 38, 3846 C. 1906 [1] 38).
- 47) Nitril d. Benzoyl-3-Methylphenylamidoameisensäure. Sm. 69° (J. pr. [2] 65, 377 C. 1902 [1] 1329).
- 48) Nitril d. Benzoyl-4-Methylphenylamidoameisensäure. Sm. 126° (J. pr. [2] 65, 373 C. 1902 [1] 1329).
- 49) Nitril d. 3-Benzoylamido-1-Methylbenzol-4-Carbonsäure. Sm. 145° (C. 1905 [2] 1786).
- 50) Phenylamid d.  $\alpha$ -Cyanphenylessigsäure. Sm. 136° (Am. 39, 75 C. 1908 [1] 826).
- 51) Diphenylamid d. Cyanessigsäure. Sm. 153—154°. — II, 368.
- 52) Hydrazid d. Phenanthren-9-Carbonsäure. Sm. 228° (B. 35, 2727 C. 1902 [2] 643).
- 53) Verbindung (aus d. Verb.  $C_{15}H_8O_2N_2$  aus Indigotin). Sm. 190—193° (C. 1906 [2] 1434).

- C<sub>15</sub>H<sub>12</sub>ON<sub>4</sub>** C 68,2 — H 4,5 — O 6,1 — N 21,2 — M. G. 264.
- 1) Cykloformazylmethylketon (A. 300, 249). — IV, 1230.
  - 2) 4-Keto-5-Phenylhydrazon-1-Phenyl-4,5-Dihydropyrazol. Sm. 122 bis 125° (A. 313, 22). — \*IV, 1078.
  - 3) 5-Keto-4-Phenylhydrazon-1-Phenyl-4,5-Dihydropyrazol. Sm. 147° (149—150°). Ag (B. 21, 1204; 24, 400, 3831; 28, 624, 630). — IV, 705, 1488; \*IV, 1077.
  - 4) 5-Keto-4-Phenylhydrazon-3-Phenyl-4,5-Dihydropyrazol. Sm. 208° (207,5°) (B. 27, 783, 791; J. pr. [2] 51, 62; [2] 52, 32). — IV, 1490.
  - 5) 5-Nitrosimido-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 207° (J. pr. [2] 58, 141). — \*IV, 814.
  - 6) 4-Benzylidenamido-3-Oxy-1-Phenyl-1,2,5-Triazol. Sm. 173° (A. 295, 159). — IV, 1235.
  - 7) Amid d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 173° (C. 1908 [2] 594; J. pr. [2] 78, 533 C. 1908 [2] 594).
  - 8) Amid d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 195—196° (B. 22, 801). — IV, 1164.
  - 9) Verbindung (aus 4,5-Diketo-1,3-Diphenyl-4,5-Dihydropyrazol). Sm. 98 bis 101° (B. 36, 1136 C. 1903 [1] 1254). — \*IV, 604.
- C<sub>15</sub>H<sub>12</sub>OCl<sub>2</sub>** 1)  $\beta\gamma$ -Dichlor- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 113° (B. 28, 2540). — III, 228.
- C<sub>15</sub>H<sub>12</sub>OBr<sub>2</sub>** 1)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan ( $\alpha$ -Benzylidenacetophenondibromid). Sm. 156—157° (C. 1902 [1] 37; B. 14, 2464; A. 308, 223). — III, 228; \*III, 166.
- 2)  $\beta$ -Benzylidenacetophenondibromid. Sm. 108—109° (C. 1902 [1] 37). — \*III, 166.
  - 3) isom.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 88° (C. 1897 [2] 576). — \*III, 166.
  - 4)  $\alpha\gamma$ [?]-Dibrom- $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 110—111° (B. 22, 1368). — III, 229.
  - 5) Dibrompyrokresol. Sm. 215° (B. 15, 2206; 16, 2143; M. 3, 738). — III, 646.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>** C 71,4 — H 4,8 — O 12,7 — N 11,1 — M. G. 252.
- 1)  $\gamma$ -Phenylimido- $\alpha$ -[4-Nitrophenyl]propen. Sm. 132—133° (A. 253, 349). — III, 61.
  - 2) Dibenzoylformamidin (Benzoylamidobenzoylimidomethan). Sm. 236° (A. 287, 339).
  - 3) 5-Amido-2-Phtalylamido-1-Methylbenzol. Sm. 168° (D.R.P. 126964). — \*IV, 405.
  - 4) 1,3-Dioximido-2-Phenyl-2,3-Dihydroinden. Sm. 193—196° (B. 26, 2579). — III, 302.
  - 5) Monomethyläther d. 9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 222—223° (B. 40, 2458 C. 1907 [2] 245).
  - 6) 1,3-Diamido-2-Methyl-9,10-Anthrachinon. Sm. 273—276° (D.R.P. 205036 C. 1909 [1] 476).
  - 7) 5-Amido-1-Methylamido-9,10-Anthrachinon (B. 37, 72 C. 1904 [1] 666).
  - 8) 8-Amido-1-Methylamido-9,10-Anthrachinon (B. 37, 72 C. 1904 [1] 666).
  - 9) Diamidochrysophansäure (A. 183, 221; B. 39, 1203 Anm. C. 1906 [1] 1747). — III, 452.
  - 10) 4-Phenylhydrazido-1,2-Benzpyron. Sm. 201° (A. 367, 208 C. 1909 [2] 704).
  - 11) Monophenylhydrazon d. 3-Keto-2,3-Dihydro-1,2-Benzpyron. Sm. 173—174° (A. 337, 292 C. 1905 [1] 379).
  - 12) 4-Oxy-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 200—208° (B. 36, 1136 C. 1903 [1] 1254). — \*IV, 603.
  - 13) 5-Keto-4-[2-Fural]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 111 bis 112° (B. 33, 870). — \*IV, 607.
  - 14) 2,4-Diketo-1,3-Diphenyltetrahydroimidazol (Diphenylhydantoin). Sm. 139° (B. 25, 2274; 31, 509). — II, 402; \*II, 203.
  - 15) 1-2,4-Diketo-3,5-Diphenyltetrahydroimidazol. Sm. 191° (C. 1908 [1] 1632).
  - 16) 2,5-Diketo-4,4-Diphenyltetrahydroimidazol. Sm. 286° (B. 41, 1385 C. 1908 [1] 2103; B. 42, 1796 C. 1909 [2] 203).



- $C_{15}H_{12}O_2N_2$  17) 5-Phenyl-3-[2-Oxy-3-Methylphenyl]-1,2,4-Oxdiazol. Sm. 150° (B. 24, 3671). — II, 1546.
- 18) 5-Phenyl-3-[6-Oxy-3-Methylphenyl]-1,2,4-Oxdiazol. Sm. 151° (B. 24, 3663). — II, 1547.
- 19) 5-Keto-3-Phenyl-4-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 163° (B. 22, 2407). — II, 1205.
- 20) 2-Keto-3-Phenyl-5-Benzyl-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 68° (B. 33, 245). — \*IV, 431.
- 21) 2-Keto-5-Phenyl-3-[2-Methylphenyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 120° (B. 26, 2876). — IV, 802.
- 22) 3<sup>2</sup>-Methyläther d. 5-Phenyl-3-[2-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 117° (B. 22, 2801). — II, 1503.
- 23) 3<sup>4</sup>-Methyläther d. 5-Phenyl-3-[4-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 102,5° (B. 22, 2795). — II, 1532.
- 24) 5-Acetonyl-3-[2-Naphtyl]-1,2,4-Oxdiazol. Sm. 108—109° (B. 22, 2457). — II, 1455.
- 25) 2-Nitroso-3-Keto-1-Benzyl-1,3-Dihydroisindol. Sm. 92—93° (B. 18, 1263). — II, 1710.
- 26) 1-Acetylphenylamidobenzoxazol. Sm. 91° (Soc. 93, 1055 C. 1908 [2] 523).
- 27) 4-Acetylamido-1-Phenylbenzoxazol. Sm. 181—182° (B. 32, 1428). — \*II, 740.
- 28) 3-Oxy-2-Keto-1-Benzyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 265° (A. 292, 256). — IV, 899.
- 29) 3-Oxy-2-[6-Oxy-3-Methylphenyl]-1,4-Benzdiazin. Sm. oberhalb 300° (B. 41, 4282 C. 1909 [1] 379).
- 30) 3-Oxy-2-[2-Oxy-4-Methylphenyl]-1,4-Benzdiazin. Sm. oberhalb 300° (B. 41, 4284 C. 1909 [1] 380).
- 31) 3-Oxy-6-Methyl-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzdiazin. Sm. 261° (B. 34, 1112). — \*IV, 687.
- 32) Methyläther d. 2-Oxy-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 134° (Am. 21, 161). — \*IV, 599.
- 33) 2,4-Diketo-1-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 233° (223°) (J. pr. [2] 55, 130; Am. 21, 160). — \*IV, 599.
- 34) 2,4-Diketo-1-Benzyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Zers. oberhalb 360° (J. pr. [2] 49, 319).
- 35) 2,4-Diketo-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 243—244° (241—242°; 254—255°) (J. pr. [2] 51, 275; B. 38, 1214 C. 1905 [1] 1262; B. 39, 1735 C. 1906 [2] 59). — IV, 897.
- 36) 2,4-Diketo-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 259—260° (B. 38, 1214 C. 1905 [1] 1262).
- 37) 1,4-Diketo-3-Methyl-2-Phenyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin. Sm. 125° (G. 17, 279). — IV, 711.
- 38) 1-Benzoyl-2-Keto-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 210 bis 211° (B. 41, 802 C. 1908 [1] 1631).
- 39) Benzyläther d. Isatinoxim. Sm. 168,5—169° (B. 35, 4336 C. 1903 [1] 293).
- 40) Acetophenoncarbonsäurephenylhydrazon. Sm. 102° (B. 18, 803). — IV, 697.
- 41) 2-[ $\alpha$ -Cyanbenzyl]amidobenzol-1-Carbonsäure. Sm. 175° u. Zers. (171°) (J. pr. [2] 65, 276 C. 1902 [1] 1215; B. 35, 3336 C. 1902 [2] 1193; D.R.P. 157909 C. 1905 [1] 477; D.R.P. 157617 C. 1905 [1] 316; B. 39, 989 C. 1906 [1] 1340; B. 39, 2812 C. 1906 [2] 1491).
- 42) Azobenzol-4-Akrylsäure. Sm. 245° u. Zers. (C. r. 135, 1117 C. 1903 [1] 286). — \*IV, 1056.
- 43) 5[oder 6]-Methyl-2-Phenylbenzimidazol-2<sup>2</sup>-Carbonsäure. Sm. 258° u. Zers. (B. 23, 1043). — IV, 617.
- 44) Lakton d.  $\alpha$ -Oxy- $\alpha$ -[3-Amido-4-Methylphenyl]imido- $\alpha$ -Phenylmethan-2-Carbonsäure. Sm. 192° (B. 10, 1161; D.R.P. 126964 C. 1902 [1] 152). — IV, 606; \*IV, 402.
- 45) Lakton d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -Phenyläthan- $\alpha$ <sup>2</sup>-Carbonsäure. Sm. 180° u. Zers. (B. 40, 77 C. 1907 [1] 555).
- 46) Laktam d. 2-[Methyl-2-Amidobenzoylamido]benzol-1-Carbonsäure. Sm. 259° (A. 367, 150 C. 1909 [2] 701).

- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>** 47) Aldehyd d. Phenylazobenzoylessigsäure. Sm. 103° (B. 21, 1704). — IV, 1476.
- 48) Methylester d. 2-Phenylindazol-2<sup>2</sup>-Carbonsäure. Sm. 73° (Bl. [3] 31, 875 C. 1904 [2] 661).
- 49) Acetat d. p-Oxy-3-Phenylindazol. Sm. 90—91° (B. 29, 1268). — IV, 1012.
- 50) Nitril d. α-Phenylamidoformoxylphenylelessigsäure (Phenylglykolsäurenitrilphenylurethan). Sm. 105° (Bl. [3] 19, 776). — \*II, 924.
- 51) Phenylamid d. 3-Oxyindol-2-Carbonsäure. Zers. oberhalb 210° (B. 33, 555; D.R.P. 158089 C. 1905 [1] 574). — \*II, 863.
- 52) 4-Methyl-1,2-Phenyleneamid d. Benzol-1,2-Dicarbonsäure. Zers. bei 170° (G. 24 [1] 149). — IV, 618.
- 53) isom. 4-Methyl-1,2-Phenyleneamid d. Benzol-1,2-Dicarbonsäure. Sm. 104° (B. 10, 1165). — IV, 618.
- 54) Phenylamidomethylimid d. Benzol-1,2-Dicarbonsäure. Sm. 257° (B. 31, 3235). — \*II, 1051.
- 55) Verbindung (aus Carbonyltriphenylguanidin) + 1/2 H<sub>2</sub>O (J. pr. [2] 32, 28). — II, 351.
- 56) isom. Verbindung (aus Carbonyltriphenylguanidin) + 1/2 H<sub>2</sub>O (J. pr. [2] 32, 29). — II, 351.
- 57) Verbindung (aus 4-Oxy-1,2-Benzpyron). Sm. 120° (A. 367, 209 C. 1909 [2] 704).
- 58) Verbindung (aus 4-Oxy-1,2-Benzpyron). Sm. 186° (A. 367, 209 C. 1909 [2] 704).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>4</sub>** C 64,3 — H 4,3 — O 11,4 — N 20,0 — M. G. 280.
- 1) 4-Phenylazo-3,5-Diketo-1-Phenyltetrahydropyrazol. Sm. 232° (B. 25, 1510). — IV, 1488.
- 2) Hexahydrobenzo-4,4'-Benzyliden-5,5'-Diketo-3,4-Dipyrazol (B. 27, 472). — IV, 1294.
- 3) 4-Benzylidenamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 175° (B. 33, 462; C. 1901 [1] 936). — \*IV, 901.
- 4) 5-Benzoyl-2-Phenylamido-1,2,3,6-Oxtriazin. Zers. bei 65°. Acetat (R. 16, 318). — IV, 764.
- 5) 2-[α-Phenylsemicarbazol]-3-Keto-2,3-Dihydroindol. Sm. 212° (G. 38 [1] 340 C. 1908 [1] 2029).
- 6) 5-[4-Nitro-2-Amidophenyl]amidochinolin. Sm. 232°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 77, 486 C. 1908 [2] 75).
- 7) 6-[4-Nitro-2-Amidophenyl]amidochinolin. Sm. 215° (J. pr. [2] 77, 482 C. 1908 [2] 74).
- 8) 7-[4-Nitro-2-Amidophenyl]amidochinolin. Sm. 215° (J. pr. [2] 77, 480 C. 1908 [2] 74).
- 9) 8-[4-Nitro-2-Amidophenyl]amidochinolin. Sm. 231°. HCl, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 77, 476 C. 1908 [2] 73).
- 10) 5-[β-Phenylureido]-4-Keto-3,4-Dihydro-1,3-Benzdiazin. Sm. 250 bis 260° (C. 1906 [1] 1362).
- 11) 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin-3-Carbonsäure. Sm. 206 bis 207° u. Zers. (Soc. 87, 1868 C. 1906 [1] 550).
- 12) Nitril d. α-[4-Methylamidophenyl]imido-α-[4-Nitrophenyl]essigsäure. Sm. 188° (B. 34, 120). — \*IV, 391.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>6</sub>** C 58,4 — H 3,9 — O 10,4 — N 27,3 — M. G. 308.
- 1) Benzoat d. 4-Oximidoamidomethyl-1-Phenyl-1,2,3,5-Tetrazol. Sm. 205—206° u. Zers. (B. 22, 1756). — IV, 1239.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) Acetat d. α-Oxydi[4-Chlorphenyl]methan. Sm. 43,5° (R. 24, 117 C. 1905 [1] 1324).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>2</sub>** 1) 3,4-Methylenäther d. αβ-Dibrom-α-Phenyl-β-[3,4-Dioxyphenyl]-äthan. Sm. 188° (B. 37, 1432 C. 1904 [1] 1351).
- 2) Dibromoxydimethyldiphenylketon. (CH<sub>3</sub>:CH<sub>3</sub>:OH = 1:3:4) (G. 33 [2] 64 C. 1903 [2] 996).
- 3) Dibromoxydimethyldiphenylketon? Sd. 305—310<sub>11</sub> (B. 38, 1497 C. 1905 [1] 1406).
- 4) β-Bromäthyläther d. 3-Brom-4-Oxydiphenylketon. Sm. 96—97° (B. 40, 3662 C. 1907 [2] 1419).
- 5) αβ-Dibrom-αβ-Diphenyläthan-2-Carbonsäure. Sm. 180° u. Zers. (B. 34, 2831).

- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>2</sub>** 6) Phenylester d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 127° (B. 25, 958). — II, 1359.
- 7) Acetat d. 4,4'-Dibrom- $\alpha$ -Oxydiphenylmethan. Sm. 70–72° (Am. 30, 456 C. 1904 [1] 377).
- 8) Acetat d. 3,5-Dibrom-4-Oxydiphenylmethan. Sm. 53° (A. 334, 375 C. 1904 [2] 1051).
- 9) Benzoat d. 3,5-Dibrom-4-Oxy-1,2-Dimethylbenzol. Sm. 125–126° (A. 344, 173 C. 1906 [1] 1158).
- 10) Benzoat d. 3,6-Dibrom-2-Oxy-1,4-Dimethylbenzol. Sm. 133,5° (B. 29, 2345). — \*II, 718.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>4</sub>** 1)  $\beta\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]propan. Sm. 162–163° (A. 343, 86 C. 1906 [1] 132).
- 2) 4,6,4'6'-Tetrabrom-5,5'-Dioxy-2,2'-Dimethyldiphenylmethan. Sm. 227–228° (A. 356, 172 C. 1907 [2] 1700).
- 3) Dimethyläther d. 3,5,3',5'-Tetrabrom-4,4'-Dioxydiphenylmethan. Sm. 150–151° (B. 36, 1886 C. 1903 [2] 291).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>S** 1)  $\beta$ -Merkapto- $\beta$ -Phenylakrylphenyläthersäure. Sm. 163° u. Zers. Ag (Soc. 77, 1182). — \*II, 962.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>S<sub>2</sub>** 1) Methylenester d. Benzolthiolcarbonsäure. Sm. 120° (C. 1902 [1] 1401).
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>** C 67,2 — H 4,5 — O 17,9 — N 10,4 — M. G. 268.
- 1)  $\gamma$ -[2-Oxyphenyl]imido- $\alpha$ -[2-Nitrophenyl]propen. Sm. 125° (C. 1907 [1] 108).
- 2)  $\gamma$ -[2-Oxyphenyl]imido- $\alpha$ -[3-Nitrophenyl]propen. Sm. 137° (C. 1907 [1] 108).
- 3)  $\gamma$ -[2-Oxyphenyl]imido- $\alpha$ -[4-Nitrophenyl]propen. Sm. 158° (C. 1907 [1] 108).
- 4)  $\gamma$ -[4-Oxyphenyl]imido- $\alpha$ -[2-Nitrophenyl]propen. Sm. 168° (C. 1907 [1] 108).
- 5)  $\gamma$ -[4-Oxyphenyl]imido- $\alpha$ -[3-Nitrophenyl]propen. Sm. 196° (C. 1907 [1] 108).
- 6)  $\gamma$ -[4-Oxyphenyl]imido- $\alpha$ -[4-Nitrophenyl]propen. Sm. 191° (C. 1907 [1] 108).
- 7)  $\alpha$ -Amido- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 141° (B. 37, 1150 C. 1904 [1] 1267; Soc. 85, 1173 C. 1904 [2] 1216).
- 8) s-Dibenzoylharnstoff. Sm. 197° (202–203°; 210°) (B. 7, 1739; J. pr. [2] 5, 60; [2] 42, 95; [2] 59, 271; R. 10, 70; A. 284, 19; B. 36, 3220 C. 1903 [2] 1056; B. 40, 117 C. 1907 [1] 739; B. 40, 2635 C. 1907 [2] 340; J. pr. [2] 77, 536 C. 1908 [2] 152). — II, 1172; \*II, 737.
- 9)  $\alpha\gamma$ -Dioximido- $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 133,5° (B. 37, 1145 C. 1904 [1] 1266).
- 10) 4,4-Dioxy-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol (B. 36, 1134 C. 1903 [1] 1254). — \*IV, 603.
- 11) Fucusamid (A. 74, 287).
- 12) Fucusin. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Oxalat (A. 74, 289).
- 13) Furfuramid (Trifuraldiamin). Sm. 117° (A. 54, 56; B. 10, 1188; Bl. [3] 19, 174; Soc. 73, 599). — III, 721; \*III, 518.
- 14) Furfurin. Sm. 116°. Salze meist bekannt (A. 54, 59; 71, 63; 74, 283; 88, 127; J. pr. [2] 27, 311; B. 10, 1188; 22, 2305; J. 1855, 560; Bl. [3] 19, 174). — III, 722; \*III, 518.
- 15) isom. Furfurin. Sm. 143°. (2HCl, PtCl<sub>4</sub>), Ag (C. 1900 [2] 383). — \*III, 518.
- 16) Acetylorcirufamin (B. 23, 725). — II, 965.
- 17) 1-Benzoylhydrazonmethylbenzol-2-Carbonsäure. Sm. 189° u. Zers. (B. 34, 1017).
- 18) Phenylhydrazon d. Benzol-1-Carbonsäurealdehyd-2-Ketocarbon-säure. Sm. 229° (B. 42, 468 C. 1909 [1] 757).
- 19) Phenylazobenzoylessigsäure. Sm. 141° (B. 18, 2563; 21, 2120). — IV, 1472.
- 20) 4-Oxyazobenzol-2-Akrylsäure. Sm. 168° (B. 37, 4128 C. 1904 [2] 1735).
- 21) 4-Oxyazobenzol-3-Akrylsäure. Sm. 206° u. Zers. (B. 37, 4126 C. 1904 [2] 1735).



- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>N<sub>2</sub>** 22) 3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin-3<sup>3</sup>-Carbonsäure (D.R.P. 112631 C. 1900 [2] 463). — \*IV, 584.
- 23) Äthylester d.  $\beta\delta$ -Dicyan- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 145—146° (B. 41, 2404 C. 1908 [2] 858).
- 24) Acetat d. 5-Oxy-3-[2-Furanyl]-1-Phenylpyrazol. Sm. 69—72° (Am. 36, 542 C. 1907 [1] 570).
- 25) Amid d. Diphenylketon-2,4'-Dicarbonsäure. Sm. 285° (A. 309, 104). — \*II, 1147.
- 26) Amid d. Diphenylketon-4,4'-Dicarbonsäure. Sm. oberhalb 300° (A. 312, 98). — \*II, 1148.
- 27) Phenylamid d. Benzoylnitrosoessigsäure? Sm. 190° (A. 245, 375). — II, 1644.
- 28) Diphenylamid d. Ketomethandicarbonsäure (Mesoxanilid). Sm. bei 190° (A. 270, 288). — II, 421.
- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>N<sub>4</sub>** C 60,8 — H 4,0 — O 16,2 — N 18,9 — M. G. 296.
- 1) *p*-Nitro-3-[2-Methylphenyl]hydrazon-2-Oxypseudoindol. Sm. oberhalb 290° u. Zers. (B. 28, 547).
- 2) *p*-Nitro-3-[4-Methylphenyl]hydrazon-2-Oxypseudoindol. Sm. 274 bis 275° u. Zers. (B. 28, 547).
- 3) Formazylglyoxalsäure + 2H<sub>2</sub>O. Sm. 166°. Cu, Ag<sub>2</sub> (B. 27, 149; J. pr. [2] 64, 204). — IV, 1228; \*IV, 893.
- 4) Isoformazylglyoxalsäure. Sm. 158° (163°). Ag (B. 27, 151; 28, 1285 Anm.; J. pr. [2] 64, 208). — IV, 1228; \*IV, 894.
- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>Cl<sub>2</sub>** 1) Dimethyläther d. Di[*p*-Chlor-*p*-Oxyphenyl]keton. Sm. 183—184° (B. 28, 2873). — III, 200.
- 2) Methylester d.  $\alpha$ -Oxy- $\alpha$ -Di[4-Chlorphenyl]essigsäure. Sm. 60° (R. 21, 23 C. 1902 [1] 1013).
- 3) Di[ $\alpha$ -Chlorbenzylester] d. Kohlensäure. Sm. 105° (C. 1901 [2] 69). — \*III, 7.
- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>Br<sub>2</sub>** 1) 4'-Methyläther d. 5,3'-Dibrom-6,4'-Dioxy-3-Methyldiphenylketon. Sm. 168—169° (B. 40, 3518 C. 1907 [2] 1410).
- 2) Dimethyläther d. 5,5'-Dibrom-2,2'-Dioxydiphenylketon. Sm. 123° (B. 39, 2362 C. 1906 [2] 526).
- 3) Dimethyläther d. *p*-Dibrom-4,4'-Dioxydiphenylketon. Sm. 181° (B. 14, 329). — III, 198.
- 4) Dimethyläther d. Di[*p*-Brom-*p*-Oxyphenyl]keton. Sm. 180—181° (B. 28, 2873). — III, 200.
- 5) Monoäthyläther d. 5,5'-Dibrom-2,2'-Dioxydiphenylketon. Sm. 114°. K + H<sub>2</sub>O (B. 38, 1493 C. 1905 [1] 1406; B. 39, 2358 C. 1906 [2] 525).
- 6) Dibrom- $\beta$ -Lapachon (Soc. 63, 426; 65, 17). — III, 401.
- 7)  $\alpha$ -Acetat d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 115° (A. 334, 382 C. 1904 [2] 1052).
- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>S** 1) Methylester d. Anthracen-2-Sulfonsäure. Sm. 157° (B. 28, 2261). — \*II, 122.
- 2) Methylester d. Phenanthren-2-Sulfonsäure. Sm. 96—98° (A. 321, 274 C. 1902 [2] 57).
- 3) Methylester d. Phenanthren-3-Sulfonsäure. Sm. 119—120° (A. 321, 269 C. 1902 [2] 57; A. 369, 115 C. 1909 [2] 1809).
- C<sub>15</sub>H<sub>12</sub>O<sub>8</sub>S<sub>3</sub>** 1)  $\alpha$ -Trithiofurfurol. Sm. 128° (B. 24, 3592). — III, 724.
- 2)  $\beta$ -Trithiofurfurol. Sm. 229° u. Zers. (B. 24, 3593). — III, 725.
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>** C 63,4 — H 4,2 — O 22,5 — N 9,9 — M. G. 284.
- 1) 3-Keto-1-Oxy-1-[ $\alpha$ -Nitrobenzyl]-1,3-Dihydroisindol (Oxynitrobenzyl-phtalimidin) (B. 18, 2439, 2442). — II, 1709.
- 2) 1-[ $\beta$ -Nitro- $\alpha$ -Amido- $\beta$ -Phenyläthenyl]benzol-2-Carbonsäure (Nitrobenzalphtalimidinsäure). Sm. 147—150° u. Zers. Ba + 7H<sub>2</sub>O, Ag (B. 18, 2440). — II, 1710.
- 3) 1-[2-Nitro-4-Methylphenyl]imidomethylbenzol-2-Carbonsäure. Sm. 198° (G. 35 [2] 579 C. 1906 [1] 931).
- 4)  $\alpha$ -Phenylhydrazon-3,4-Dioxyphenylessig-3,4-Methylenäthersäure. Sm. 149° (G. 20, 696). — IV, 717.
- 5) Phenylimidophenylamidomethan-3,3'-Dicarbonsäure. Sm. 250° (C. 1902 [2] 954).
- 6) Phenylimidophenylamidomethan-4,4'-Dicarbonsäure. Sm. 235° (C. 1902 [2] 954).

- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>** 7) **1-Phenylhydrazonmethylbenzol-2,6-Dicarbonsäure.** Sm. 86—90° (A. 290, 216). — IV, 718.
- 8) **6-Acetoxy-lazobenzol-3-Carbonsäure.** Sm. 205° (B. 40, 3454 C. 1907 [2] 1505; J. pr. [2] 78, 402 C. 1909 [1] 363).
- 9) **Carbanilidoisatinsäure.** Sm. 170—180° u. Zers. (J. pr. [2] 32, 285). — II, 1604.
- 10) **Äthylester d. 4-Oximido-3-Oxy-1,4-Dihydronaphtalin-1-Cyanmethylen-carbonsäure.** Sm. 236° (B. 38, 3695 C. 1905 [2] 1731).
- 11) **Amid. d. 3'-Nitro-2-Methyldiphenylketon-4-Carbonsäure.** Sm. 226° (A. 286, 339). — II, 1712.
- 12) **Amid d. 3-Nitro-4-Methyldiphenylketon-2'-Carbonsäure.** Zers. bei 200° (A. 299, 312). — \*II, 1005.
- 13) **3-Phenylamid d. Benzol-1-Carbonsäure-3-Amidoketocarbonsäure.** Sm. 300—305° u. Zers. (A. 232, 135). — II, 1265.
- 14) **2-Methylphenylnitrosomonamid d. Benzol-1,2-Dicarbonsäure (Am. 26, 459).** — \*II, 1050.
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>N<sub>4</sub>** 15) **Monacetylderivat d. Verb. C<sub>13</sub>H<sub>10</sub>O<sub>3</sub>N<sub>2</sub>** (B. 35, 1483 C. 1902 [1] 1209). C 57,7 — H 3,8 — O 20,5 — N 17,9 — M. G. 312.
- 1) **2,3-2,3'-Dianhydrid d. Di[5-Nitro-2-Amido-3-Oxymethylphenyl]-methan.** Sm. 250—251° (B. 35, 745 C. 1902 [1] 754).
- 2) **s-Cinnamyliden-2,4-Dinitrophenylhydrazin (G. 24 [1] 568).** — IV, 754.
- 3) **6-Nitro-2-Methyl-3-[4-Nitrophenyl]-3,4-Dihydro-1,3-Benzdiazin.** Sm. 188—191°. HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Äthylschwefelsaures Salz, Essigsulfonsaures Salz (B. 36, 3118 C. 1903 [2] 1132; B. 38, 1242 C. 1905 [1] 1131).
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>Br<sub>2</sub>** 2) **4,4-Dimethyläther d. 3,5-Dibrom-2,4,6-Trioxydiphenylketon (Dibromhydrocotoin).** Sm. 95° (A. 199, 59). — III, 203.
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** 2) **2-Dibrom-αα-Di[2-Oxyphenyl]propionsäure (B. 16, 2073).** — II, 1882. C 60,0 — H 4,0 — O 26,7 — N 9,3 — M. G. 300.
- 1) **β-Keto-αγ-Di[4-Nitrophenyl]propan (4,4'-Dinitrodibenzylketon).** Sm. 105° (A. 337, 176 C. 1905 [1] 234; A. 345, 331 Anm. C. 1906 [1] 1696).
- 2) **Di[3-Nitro-4-Methylphenyl]keton.** Sm. 144° (A. 271, 6; D. R. P. 58360; G. 21, 99). — III, 233; \*III, 172.
- 3) **Gallocyanin (B. 21, 1740; D. R. P. 19580).** — III, 677; \*III, 493.
- 4) **s-Diphenylharnstoff-2,2'-Dicarbonsäure.** Sm. 165° u. Zers. Na<sub>2</sub> + H<sub>2</sub>O (B. 32, 2167). — \*II, 784.
- 5) **s-Diphenylharnstoff-3,3'-Dicarbonsäure.** Sm. noch nicht bei 270°. NH<sub>4</sub>, Ba + 3H<sub>2</sub>O, Pb, Ag (Z. 1868, 390, 650; A. 153, 94; 169, 103; 172, 170; 291, 323; B. 11, 701; 15, 44, 2117, 2122, 2128). — II, 1260; \*II, 788.
- 6) **s-Diphenylharnstoff-4,4'-Dicarbonsäure.** Sm. noch nicht bei 270°. Ba (J. pr. [2] 5, 370; [2] 60, 514; A. 291, 331). — II, 1272; \*II, 790.
- 7) **5-[2-Nitrobenzyliden]amido-2-Oxy-1-Methylbenzol-3-Carbonsäure.** Sm. 233° u. Zers. (G. 39 [1] 124 C. 1909 [1] 1233).
- 8) **5-[3-Nitrobenzyliden]amido-2-Oxy-1-Methylbenzol-3-Carbonsäure.** Sm. 250° u. Zers. (G. 38 [1] 16 C. 1908 [1] 828).
- 9) **5-[4-Nitrobenzyliden]amido-2-Oxy-1-Methylbenzol-3-Carbonsäure.** Sm. 260° u. Zers. (G. 39 [1] 122 C. 1909 [1] 1233).
- 10) **6-[2-Nitrobenzyliden]amido-3-Oxy-1-Methylbenzol-4-Carbonsäure.** Sm. 227° u. Zers. (G. 39 [1] 127 C. 1909 [1] 1234).
- 11) **6-[4-Nitrobenzyliden]amido-3-Oxy-1-Methylbenzol-4-Carbonsäure.** Sm. 232° u. Zers. (G. 39 [1] 126 C. 1909 [1] 1234).
- 12) **2-[Methyl-2-Nitrobenzoylamido]benzol-1-Carbonsäure.** Sm. 216° (A. 367, 143 C. 1909 [2] 701).
- 13) **3-[2-Nitrobenzylformyl]amidobenzol-1-Carbonsäure.** Sm. 195° (B. 25, 3594). — II, 1259.
- 14) **Azobenzol-4-Carbonsäure-4'-Oxyessigsäure.** Sm. 285° (B. 34, 3940 C. 1902 [1] 118). — \*IV, 1055.
- 15) **5-Oxy-2-Methylazobenzol-2',6'-Dicarbonsäure?** (B. 39, 75 C. 1906 [1] 670).
- 16) **Methylester d. 2-[2-Nitrobenzoyl]amidobenzol-1-Carbonsäure (B. 40, 1618 C. 1907 [1] 1630).**
- 17) **Methylester d. 5-Nitro-3-Benzoylamidobenzol-1-Carbonsäure.** Sm. 178° (Soc. 87, 1268 C. 1905 [2] 1331).

- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** 18) Methylester d. 2-Nitro-4-Benzoylamidobenzol-1-Carbonsäure. Sm. 93—94° (Soc. 87, 1269 C. 1905 [2] 1331).
- 19) Di[2 - Oximidomethylphenylester] d. Kohlensäure. Sm. 121—122° (B. 38, 3632 C. 1905 [2] 1729).
- 20) Nitrit d.  $\beta$ -Nitro- $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropan. Fl. (A. 328, 236 C. 1903 [2] 999).
- 21) Amid d.  $\alpha$ -Benzoxyl-2-Nitrophenylelessigsäure. Sm. 128° (B. 39, 2337 C. 1906 [2] 512).
- 22) 4-Methylphenylmonamid d. 4-Nitrobenzol-1,2-Dicarbonsäure. Sm. 172° (C. 1901 [2] 1160).
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>N<sub>4</sub>** C 54,9 — H 3,6 — O 24,4 — N 17,1 — M. G. 328.
- 1)  $\alpha$ -Phenylhydrazon- $\beta$ -Keto- $\alpha$ -[2,4-Dinitrophenyl]propan. Sm. 201 bis 202° u. Zers. (B. 42, 608 C. 1909 [1] 999).
- 2) 4,7-Dinitro-6-Oxy-2-Methyl-1-Benzylbenzimidazol. Sm. 156°. HCl (Soc. 89, 1941 C. 1907 [1] 715).
- 3) 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Methylphenyl]benzimidazol. Sm. 147—149°. Ag (Soc. 93, 1672 C. 1908 [2] 1922).
- 4) 4,7-Dinitro-6-Oxy-2-Methyl-1-[4-Methylphenyl]benzimidazol. Sm. 204,5°. Ag (Soc. 93, 1673 C. 1908 [2] 1922).
- 5) Methyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol. Sm. 205,5° (Soc. 93, 1672 C. 1908 [2] 1922).
- 6)  $\beta$ -Oximido- $\alpha$ -Phenylazo- $\beta$ -Phenylpropionsäure. Sm. 142° (B. 18, 2566). — IV, 1472.
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>N<sub>6</sub>** C 50,5 — H 3,4 — O 22,5 — N 23,6 — M. G. 356.
- 1) s-Di[4-Nitro- $\alpha$ -Imidobenzyl]harnstoff. Sm. 284° u. Zers. (B. 34, 1991). — \*IV, 567.
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>Br<sub>2</sub>** 1) Monoäthylester d. ? - Dibrom - 1 - Keto - 4 - Phenyl - 2,3 - Dihydro-R - Pentamethylen-3,5-Dicarbonsäure (B. 41, 2544 C. 1908 [2] 798).
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>Br<sub>4</sub>** 1) Verbindung (aus Espartoharz) (Soc. 41, 94). — I, 1080.
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** C 57,0 — H 3,8 — O 30,4 — N 8,8 — M. G. 316.
- 1)  $\alpha\beta$ -Di[2 - Nitrophenyl]propionsäure. Sm. 170° (B. 30, 3019). — \*II, 870.
- 2)  $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan-2-Carbonsäure. Sm. 123° u. Zers. (B. 34, 2830).
- 3) 3-Nitro-4-Benzoylamidophenoxylessigsäure. Sm. 176—177° (B. 42, 4113 C. 1909 [2] 2074).
- 4) Diacetat d. 5,6-Dioxy-1,4-Diketotetrahydronaphtopyrazol. Sm. 175° (B. 32, 2298). — \*IV, 664.
- C<sub>15</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>** C 52,3 — H 3,5 — O 27,9 — N 16,3 — M. G. 344.
- 1) 1<sup>2</sup>-Methyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Oxyphenyl]benzimidazol. Sm. 193° (Soc. 93, 1674 C. 1908 [2] 1922).
- 2) 1<sup>3</sup>-Methyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[3-Oxyphenyl]benzimidazol. Sm. 186° (Soc. 93, 1674 C. 1908 [2] 1922).
- 3) 1<sup>4</sup>-Methyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[4-Oxyphenyl]benzimidazol. Sm. 198,5°. Ag (Soc. 93, 1675 C. 1908 [2] 1922).
- 4) Methylester d. Phenylhydrazon-2,4-Dinitrophenylelessigsäure. Sm. 182—183° (B. 21, 1307; 22, 320). — IV, 1465.
- C<sub>15</sub>H<sub>12</sub>O<sub>7</sub>N<sub>2</sub>** C 54,2 — H 3,6 — O 33,7 — N 8,4 — M. G. 332.
- 1) Dimethyläther d. 3,3'-Dinitro-4,4'-Dioxydiphenylketon. Sm. 205° (G. 34 [1] 384 C. 1904 [2] 111).
- 2) 5-Carboxamido-2-Oxybenzol-1-Carbonsäure (J. pr. [2] 1, 234). — II, 1513.
- 3) s-Di[2-Oxyphenyl]harnstoff-3,3'-Dicarbonsäure. Sm. oberhalb 300° (J. pr. [2] 61, 539). — \*II, 897.
- 4) Äthylester d. ? - Dinitro-2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 76° (A. 257, 76). — II, 1495.
- 5) 2-Nitrophenylester d.  $\alpha$ -Oxypropion-2-Nitrophenyläthersäure. Sm. 137° (B. 39, 3858 C. 1907 [1] 95).
- 6) 3-Nitrophenylester d.  $\alpha$ -Oxypropion-3-Nitrophenyläthersäure. Sm. 109—110° (B. 39, 3859 C. 1907 [1] 95).
- 7) 4-Nitrophenylester d.  $\alpha$ -Oxypropion-4-Nitrophenyläthersäure. Sm. 137° (B. 39, 3860 C. 1907 [1] 96).
- 8) Di[3-Nitro-4-Methylphenylester] d. Kohlensäure. Sm. 143—144° (D.R.P. 206638 C. 1909 [1] 965).



- $C_{15}H_{12}O_7N_4$  C 50,0 — H 3,3 — O 31,1 — N 15,6 — M. G. 360.  
 1) Salicylidenbisbarbitursäure. Sm. 260° u. Zers. (B. 34, 1343). — \*II, 1224.
- $C_{15}H_{12}O_7N_6$  C 46,4 — H 3,1 — O 28,9 — N 21,6 — M. G. 388.  
 1) s-Di[3-Nitrophenylamidoformyl]harnstoff. Sm. 142° u. Zers. (Soc. 81, 1569 C. 1903 [1] 157).  
 2) 4,6-Dinitro-2-[3 oder 6-Nitro-2,4,5-Trimethylphenyl]-2,1,3-Benzotriazol-1-Oxyd. Sm. 237° u. Zers. (J. pr. [2] 71, 389 C. 1905 [2] 38).  
 3) Verbindung (aus 4-Nitrophenyloximidoamidomethan). Sm. 232° (B. 22, 2423). — II, 1237.
- $C_{15}H_{12}O_7S_3$  1) Diäthylester d.  $\beta\beta'$ -Dioxythio- $\gamma$ -Pyronedithiophen- $\alpha\alpha'$ -Dicarbon-säure. Sm. 242° (B. 41, 4049 C. 1909 [1] 84).
- $C_{15}H_{12}O_8N_2$  C 51,7 — H 3,4 — O 36,8 — N 8,0 — M. G. 348.  
 1) Methyl ester d. Dioxysigdi[4-Nitrophenyläther]säure. Sm. 146° (B. 40, 3174 C. 1907 [2] 981).
- $C_{15}H_{12}O_8N_4$  C 47,9 — H 3,2 — O 34,0 — N 14,9 — M. G. 376.  
 1)  $\alpha\gamma$ -Di[2-Dinitrophenyl]propan. Sm. 162—164° (B. 34, 1293).  
 2) Äthylester d. 2',4',6'-Trinitrodiphenylamin-2-Carbonsäure. Sm. 169° (A. 367, 120 C. 1909 [2] 699).
- $C_{15}H_{12}O_9N_6$  C 42,9 — H 2,8 — O 34,3 — N 20,0 — M. G. 420.  
 1) 3,5,3',5'-Tetranitro-4,4'-Di[Methylamido]diphenylketon. Sm. 225° u. Zers. (R. 6, 370). — III, 185.
- $C_{15}H_{12}O_9S_5$  1) Dithiénylphenylmethan- $\beta$ -Trisulfonsäure.  $Ca_3 + 8H_2O$ ,  $Ba_3 + 8H_2O$  (B. 30, 2033). — \*III, 596.
- $C_{15}H_{12}O_{10}N_2$  C 47,4 — H 3,1 — O 42,1 — N 7,4 — M. G. 380.  
 1)  $\beta\beta$ -Di[2-Dinitro-4-Oxyphenyl]propan. Sm. 231—232° (C. 1904 [2] 1737).
- $C_{15}H_{12}O_{12}N_8$  C 36,3 — H 2,4 — O 38,7 — N 22,5 — M. G. 496.  
 1) 3,5,3',5'-Tetranitro-4,4'-Di[Methylnitramido]diphenylmethan. Zers. bei 217—220° (R. 7, 228). — IV, 974.
- $C_{15}H_{12}NCl$  1) 5-Chlor-1-Methyl-2-Phenylindol. Sm. 109° (D.R.P. 128660 C. 1902 [1] 611). — \*IV, 251.  
 2) 5-Chlor-1,3-Dimethylakridin. Sm. 108°. (2HCl,  $PtCl_4$ ) (A. 279, 287). — IV, 418.  
 3) Chlor-1-Naphtylat d. Pyridin. +  $FeCl_3$  (J. pr. [2] 69, 129 C. 1904 [1] 815).  
 4) Chlor-2-Naphtylat d. Pyridin. +  $FeCl_3$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (J. pr. [2] 69, 127 C. 1904 [1] 815).
- $C_{15}H_{12}NJ$  1) Jod-2-Naphtylat d. Pyridin. Sm. 201° (J. pr. [2] 69, 128 C. 1904 [1] 815).
- $C_{15}H_{12}N_2Cl_2$  1)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -[4-Chlorphenyl]amidopropen. Sm. 160°. HCl (E. COLLET, Dissert. Berlin 1903).
- $C_{15}H_{12}N_2Br_2$  1) Di[2-Brom-4-Methylphenylimido]methan. Sm. 76—78° (J. pr. [2] 64, 266).  
 2) Nitril d. Di[4-Brombenzyl]amidoameisensäure. Sm. 133° (Am. 23, 497). — \*II, 301.
- $C_{15}H_{12}N_2S$  1) 2-Merkapto-4,5-Diphenylimidazol. Sm. noch nicht bei 220°. Na (A. 261, 136; 284, 11). — III, 224.  
 2) 2-Amido-4,5-Diphenylthiazol. Sm. 185—186°. HBr (A. 259, 243). — IV, 1029.  
 3) 2-Phenylimido-3-Phenyl-2,3-Dihydrothiazol. Sm. 105° (A. 265, 127). — IV, 505.
- $C_{15}H_{12}N_2S_2$  1) Benzyläther d. 5-Merkapto-2-Phenyl-1,2,4-Thiodiazol. Sm. 79° (B. 24, 390). — IV, 846.  
 2) 2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol-2,5-Sulfid. Sm. 205—206° u. Zers. (J. pr. [2] 67, 257 C. 1903 [1] 1265). — \*IV, 601.  
 3) Dehydrodithiomalonanilid. Sm. 154—155° (B. 39, 3302 C. 1906 [2] 1568).
- $C_{15}H_{12}N_2S_3$  1) Benzyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 93° (J. pr. [2] 60, 188). — \*IV, 445.
- $C_{15}H_{12}N_3Br$  1) 3-Methyl-4-Phenyl-1-[4-Bromphenyl]-1,2,5-Triazol. Sm. 97° (G. 30 [2] 457). — \*IV, 812.

- C<sub>15</sub>H<sub>12</sub>N<sub>3</sub>J** 1) **3-Methyl-4-Phenyl-1-[4-Jodphenyl]-1,2,5-Triazol.** Sm. 106° (*G.* 30 [2] 458). — \*IV, 812.
- C<sub>15</sub>H<sub>12</sub>N<sub>4</sub>S** 1) **Amid d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure.** Sm. 170,5 bis 171,5°. + C<sub>6</sub>H<sub>6</sub> (*B.* 25, 178 Anm.). — IV, 1164.
- C<sub>15</sub>H<sub>12</sub>N<sub>4</sub>S<sub>3</sub>** 1) **3,5-Diimido-2,4-Diphenyltetrahydro-1,2,4-Thiodiazol + Schwefelkohlenstoff.** Sm. 162° (*B.* 42, 3807 *C.* 1909 [2] 1858).
- C<sub>15</sub>H<sub>12</sub>N<sub>5</sub>Cl** 1) **Chlorocyananilid** (*A.* 60, 273). — II, 452.
- C<sub>15</sub>H<sub>13</sub>ON** C 80,7 — H 5,8 — O 7,2 — N 6,3 — M. G. 223.
- 1) **γ-[2-Oxyphenyl]imido-α-Phenylpropen.** Sm. 79° (*B.* 25, 2754; *C.* 1907 [1] 107). — III, 61.
- 2) **γ-[4-Oxyphenyl]imido-α-Phenylpropen.** Sm. 223° (*B.* 25, 2745; *C.* 1907 [1] 107). — III, 61.
- 3) **α-Amido-γ-Keto-αγ-Diphenylpropen.** Sm. 97° (*Soc.* 85, 1181 *C.* 1904 [2] 1216; *Soc.* 85, 1323 *C.* 1904 [2] 1645).
- 4) **γ-Keto-γ-[2-Amidophenyl]-α-Phenylpropen.** Sm. 147° (*B.* 28, 2500). — III, 246.
- 5) **γ-Keto-γ-[4-Amidophenyl]-α-Phenylpropen.** HCl (*B.* 37, 392 *C.* 1904 [1] 657).
- 6) **γ-Keto-γ-Phenyl-α-[3-Amidophenyl]propen.** Sm. 159°. HCl (*C.* 1906 [2] 1761).
- 7) **γ-Keto-γ-Phenyl-α-[4-Amidophenyl]propen.** Sm. 151°. HCl (*C.* 1906 [2] 1761).
- 8) **γ-Phenylimido-α-Keto-α-Phenylpropan.** Sm. 140—141° (*B.* 20, 2192). — III, 95.
- 9) **Methyl-4-Benzylidenamidophenylketon.** Sm. 96° (*B.* 37, 392 *C.* 1904 [1] 657).
- 10) **3-Benzoylamido-1-Äthenylbenzol.** Sm. 90—91° (*B.* 26 [2] 677). — II, 1167.
- 11) **4-Benzoylamido-1-Äthenylbenzol.** Sm. 161° (*B.* 26 [2] 677). — II, 1167.
- 12) **β-Amido-10-Oxy-β-Methylantracen.** Sm. 183°. HCl + H<sub>2</sub>O (*B.* 16, 703). — II, 903.
- 13) **Methyläther d. 9[oder 10]-Amido-3-Oxyphenanthren.** Sm. 117 bis 118° (*A.* 321, 286 *C.* 1902 [2] 58).
- 14) **anti-γ-Oximido-αγ-Diphenylpropen.** Sm. 75° (*A.* 351, 179 *C.* 1907 [1] 1418).
- 15) **syn-γ-Oximido-αγ-Diphenylpropen.** Sm. 115—116°. HCl (*A.* 351, 182 *C.* 1907 [1] 1419).
- 16) **N-Methyl-α-Benzilmonoxim.** Fl. (*Soc.* 95, 433 *C.* 1909 [1] 1755).
- 17) **1-Oximido-2-Phenyl-2,3-Dihydroinden.** Sm. 141° (*B.* 25, 2128). — III, 248.
- 18) **2-Acetylamidofluoren.** Sm. 187—188° (191°) (*B.* 17, 108; *B.* 35, 3285 *C.* 1902 [2] 1262). — II, 638.
- 19) **9-Acetylamidofluoren.** Sm. 260—261° (*B.* 41, 1250 *C.* 1908 [1] 1896).
- 20) **N-Phenyl-β-Phenylakrylaldoxim.** Sm. 150—151° (*C.* 1905 [2] 764).
- 21) **3,5-Diphenyl-4,5-Dihydroisoxazol.** Sm. 73° (*B.* 28, 965, 986; *J. pr.* [2] 54, 408). — III, 246; \*III, 179.
- 22) **1-Benzoyl-2,3-Dihydroindol.** Sm. 118—119° (*C.* 1905 [2] 335).
- 23) **3-Keto-1-Benzyl-1,3-Dihydroisocindol (Benzylphthalimidin).** Sm. 135 bis 137° (*B.* 18, 1262; 20, 2863; 29, 1435, 2525, 2744). — II, 1710; \*II, 1004.
- 24) **2-Benzoyl-1,3-Dihydroisocindol.** Sm. 100° (*B.* 33, 2812). — \*IV, 140.
- 25) **2-Keto-3-Phenyl-1,2,3,4-Tetrahydrochinolin.** Sm. 173—174° (169°) (*G.* 20, 400; 25 [1] 178; *B.* 29, 500). — II, 1467; \*II, 870.
- 26) **6-Acetyl-3-Methylcarbazol.** Sm. 200° (*B.* 40, 386 *C.* 1907 [1] 824).
- 27) **9-Acetyl-3-Methylcarbazol.** Fl. (*B.* 40, 385 *C.* 1907 [1] 824).
- 28) **1-Acetyl-3-Methyl-α-Naphtindol.** Sm. 228° (*B.* 25, 2700). — IV, 395.
- 29) **5-[β-Oxyäthyl]akridin.** Sm. 115—125° (*B.* 32, 3608). — \*IV, 253.
- 30) **5-Keto-10-Äthyl-5,10-Dihydroakridin (N-Äthylakridon).** Sm. 159° (*A.* 276, 47). — IV, 407.
- 31) **5-Keto-1,3-Dimethyl-5,10-Dihydroakridin.** Sm. 294° (*A.* 279, 285). — IV, 418.
- 32) **5-Keto-1,10-Dimethyl-5,10-Dihydroakridin.** Sm. 183—184° (*A.* 279, 279). — IV, 415.
- 33) **9-Keto-10-Äthyl-9,10-Dihydrophenanthridin.** Sm. 89° (88°) (*B.* 26, 1967; *A.* 276, 253). — IV, 408.

- C<sub>15</sub>H<sub>13</sub>ON** 34) 10-Acetyl-9,10-Dihydrophenanthridin. Sm. 108° (A. 266, 153). — IV, 396.
- 35) Cuprein (Farbstoff aus *Curculio cuprens*) (C. 1895 [2] 52).
- 36) Nitril d.  $\alpha$ -Oxy- $\beta\beta$ -Diphenylpropionsäure. Fl. (A. 248, 39). — II, 1699.
- 37) Phenylamid d.  $\beta$ -Phenylakrylsäure. Sm. 109° (153°) (A. 70, 43; B. 16, 1665; 31, 2617 Anm.; 34, 186; A. 351, 185 C. 1907 [1] 1419). — II, 1407; \*II, 851.
- C<sub>15</sub>H<sub>13</sub>ON<sub>8</sub>** C 71,7 — H 5,2 — O 6,4 — N 16,7 — M. G. 251.
- 1)  $\beta$ -Imidoamidomethylimido- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthen (Benzilmonoguanyl). Sm. oberhalb 300° (B. 19, 762; J. pr. [2] 49, 43). — III, 284.
  - 2) 4-Amido-5-Phenyl-3-[4-Amidophenyl]isoxazol +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 118° (A. 328, 225 C. 1903 [2] 998).
  - 3) 5-[4-Methylphenyl]amido-2-Phenyl-1,2,4-Oxiazol. Sm. 135° (B. 24, 398). — IV, 846.
  - 4) 2-Phenylimido-5-Methyl-3-Phenyl-2,3-Dihydro-1,3,4-Oxiazol. Sm. 75° (2HCl, PtCl<sub>4</sub>) (B. 26, 2871; 34, 343). — IV, 675; \*IV, 432.
  - 5) 5-Oxy-3-Benzyl-1-Phenyl-1,2,4-Triazol. Sm. 187—189° (B. 33, 244). — \*IV, 813.
  - 6) 3-Oxy-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 242°. Ag (Soc. 73, 369). — IV, 1158.
  - 7) 3-Oxy-1-Phenyl-5-[3-Methylphenyl]-1,2,4-Triazol. Sm. 256°. Ag + H<sub>2</sub>O (Soc. 71, 213). — IV, 1161.
  - 8) Methyläther d. 5-Oxy-1,4-Diphenyl-1,2,3-Triazol. Sm. 126° (A. 335, 105 C. 1904 [2] 1232).
  - 9) Methyläther d. 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 88° (85—86°). HCl, (2HCl, PtCl<sub>4</sub>) (B. 29, 2674; Am. 24, 854). — IV, 1157.
  - 10) 3-Keto-2-Phenyl-1-Benzyl-2,3-Dihydro-1,2,4-Triazol. Sm. 97—98°. — IV, 1101.
  - 11) 1-Acetyl-2-Methyl-5-[2-Naphtyl]-1,3,4-Triazol. Sm. 135° (B. 30, 1881; A. 298, 38). — IV, 1183.
  - 12) 3-Methyl-1,4-Diphenyl-2,3-Dihydro-1,2,5-Triazol-2,3-Oxyd. Sm. 83° (G. 30 [2] 460). — \*IV, 814.
  - 13) 5-Keto-1,4-Diphenyl-1,4,5,6-Tetrahydro-1,2,4-Triazin. Sm. 204 bis 205° (B. 28, 1230). — IV, 1106.
  - 14) 6-Keto-1,4-Diphenyl-1,4,5,6-Tetrahydro-1,2,4-Triazin. Sm. 173 bis 174° (B. 26, 2616). — IV, 665.
  - 15) 3-Keto-5,6-Diphenyl-2,3,4,5-Tetrahydro-1,2,4-Triazin. Sm. 275 bis 276° (B. 38, 1418 C. 1905 [1] 1413; A. 339, 282 C. 1905 [2] 47).
  - 16) 2[oder 3]-Phenylhydrazon-3[oder 2]-Keto-1-Methyl-2,3-Dihydroindol (Methylpseudoisatinphenylhydrazon). Sm. 145—146° (A. 248, 117). — II, 1603.
  - 17) 3-Phenylhydrazon-2-Keto-5-Methyl-2,3-Dihydroindol (Phenylhydrazinmethylisatin). Sm. oberhalb 300° (J. pr. [2] 33, 73). — II, 1652.
  - 18) 3-Phenylhydrazon-2-Keto-6-Methyl-2,3-Dihydroindol. Sm. 236° (B. 42, 2118 C. 1909 [2] 351).
  - 19) 3-Phenylhydrazon-2-Keto-7-Methyl-2,3-Dihydroindol. Sm. 242° (B. 40, 2657 C. 1907 [2] 223).
  - 20) 3-Methylphenylhydrazon-2-Oxypseudoindol. Sm. 172—173° (B. 28, 2526). — IV, 696.
  - 21) 3-[2-Methylphenyl]hydrazon-2-Oxypseudoindol. Sm. 240—241° (B. 28, 544). — IV, 803.
  - 22) 3-[4-Methylphenyl]hydrazon-2-Oxypseudoindol. Sm. 233° (B. 28, 544). — IV, 809.
  - 23) 2-[2-Acetylamidophenyl]benzimidazol. Sm. 213—214° u. Zers. (B. 32, 1469). — \*IV, 839.
  - 24) 2-[3-Acetylamidophenyl]benzimidazol. Sm. 288° (B. 32, 907; 34, 2960). — \*IV, 840.
  - 25) 2-[4-Acetylamidophenyl]benzimidazol. Sm. 299° (B. 34, 2961). — \*IV, 839.
  - 26) 5-Acetylamido-1-Phenylbenzimidazol. Sm. 170,5° (B. 38, 104 C. 1905 [1] 541).
  - 27) 5-Acetylamido-2-Phenylbenzimidazol. Sm. 241° (245—246°) (B. 32, 904, 2179). — \*IV, 838.



- C<sub>15</sub>H<sub>13</sub>ON<sub>3</sub>** 28) 1-Acetyl-2-Phenylimido-2,3-Dihydrobenzimidazol. Sm. 160° (B. 24, 2502). — IV, 566.
- 29) 1-Benzoyl-5,7-Dimethyl-1,2,3-Benztriazol. Sm. 111° (Am. 17, 453). — IV, 1150.
- 30) 3-Phenylamido-4-Keto-2-Methyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 208—209° (B. 35, 3483 C. 1902 [2] 1318). — \*IV, 801.
- 31) 3-Oxy-6[oder 7]-Methyl-2-[2-Amidophenyl]-1,4-Benzdiazin. Sm. 208—209° (B. 34, 4010 C. 1902 [1] 205). — \*IV, 846.
- 32) 4-Keto-3-[2,4-Dimethylphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 132° (J. pr. [2] 63, 283). — \*IV, 805.
- 33) 3-Keto-7-Methyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benztriazin. Sm. 168° (B. 32, 2968). — \*IV, 808.
- 34) 8-Keto-7-Äthyl-5-Phenyl-7,8-Dihydro-1,6,7-Benztriazin. Sm. 164° (M. 22, 845). — \*IV, 844.
- 35) Nitril d.  $\alpha$ -[Methyl-4-Nitrosophenylamido]- $\alpha$ -Phenylelessigsäure. Zers. bei 83° (B. 35, 3353 C. 1902 [2] 1195).
- 36) Nitril d. 2,6-Dimethyl-4-[2-Oxyphenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 265—270° u. Zers. (J. pr. [2] 56, 138). — \*IV, 221.
- 37) Amid d. Azobenzol-4-Akrylsäure. Sm. 228—229° (C. r. 135, 1117 C. 1903 [1] 286). — \*IV, 1056.
- 38) Phenylhydrazid d. Phenylcyanessigsäure. Sm. 224° (Am. 39, 76 C. 1908 [1] 826).
- C<sub>15</sub>H<sub>13</sub>ON<sub>5</sub>** C 64,5 — H 4,6 — O 5,7 — N 25,1 — M. G. 279.
- 1) Acetylcyanenchrysoidin. Sm. 246° (C. 1908 [2] 1588).
- 2) 3-Amidooximidomethyl-1,5-Diphenyl-1,2,4-Triazol +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 213,5—214° u. Zers. HCl (B. 22, 1752). — IV, 1164.
- 3) 5-Keto-3-Phenylhydrazonmethyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 275°. Ag (C. 1899 [2] 422). — \*IV, 768.
- 4) 4-Acetyl-5-Phenylimido-1-Phenyl-4,5-Dihydro-1,2,3,4-Tetrazol. Sm. 88—89° (B. 33, 1070). — \*IV, 979.
- 5) 2-[2-Semicarbazonomethylphenyl]indazol. Sm. 252—253° (Bl. [3] 31, 872 C. 1904 [2] 661).
- 6) Hydrazid d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 166 bis 167° (B. 39, 3924 C. 1907 [1] 115).
- C<sub>15</sub>H<sub>13</sub>OCl** 1) Methyläther d.  $\alpha$ -[4-Chlorphenyl]- $\beta$ -[4-Oxyphenyl]äthen. Sm. 177,5° (J. pr. [2] 61, 197). — \*II, 540.
- 2) Methyläther d. cis- $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 50,5° (B. 37, 4166 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 3) Methyläther d. trans- $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 71,5° (B. 37, 4165 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 4) Methyläther d. cis- $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 28—29°; Sd. 210—213° (B. 37, 4167 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 5) Methyläther d. trans- $\beta$ -Chlor- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 59—60° (B. 37, 4167 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 6)  $\gamma$ -Chlor- $\alpha$ -Keto- $\alpha$ -Diphenylpropan. Sm. 119—120° (u. 110—112°) (B. 14, 2464; 28, 957; A. 284, 2; B. 36, 1479 C. 1903 [1] 1349). — III, 228.
- 7) Chlorid d. 4-Methyldiphenylmethan-2'-Carbonsäure. Fl. A. 314, 239). — \*II, 871.
- C<sub>15</sub>H<sub>13</sub>OBr** 1) Methyläther d.  $\alpha$ -Phenyl- $\beta$ -[3-Brom-4-Oxyphenyl]äthen. Sm. 138° (J. pr. [2] 61, 198). — \*II, 540.
- 2) Methyläther d. cis- $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 56,5° (B. 37, 4165 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 3) Methyläther d. trans- $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthen. Sm. 78,5° (B. 37, 4164 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592; B. 41, 336 C. 1908 [1] 835).
- 4) Methyläther d. cis- $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 52° (B. 37, 4166 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 5) Methyläther d. trans- $\beta$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]äthen. Sm. 82,5° (B. 37, 4166 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 6)  $\gamma$ -Brom- $\alpha$ -Keto- $\alpha$ -Diphenylpropan. Sm. 111° (B. 28, 958; B. 41, 3651 C. 1908 [2] 1867). — III, 228.
- 7)  $\alpha$ -Brom- $\beta$ -Keto- $\alpha$ -Diphenylpropan. Sm. 43—44° (B. 22, 1368; Soc. 75, 870). — III, 229; \*III, 171.

- C<sub>15</sub>H<sub>13</sub>OBr** 8) 4-[ $\alpha$ -Brompropionyl]biphenyl. Sm. 79—80° (*C.* 1897 [2] 576). — \*III, 172.
- C<sub>15</sub>H<sub>13</sub>OJ** 1) Methylenäther d. trans- $\beta$ -Jod- $\alpha$ -Phenyl- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 84° (*B.* 41, 336 *C.* 1908 [1] 835).
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N** C 75,3 — H 5,4 — O 13,4 — N 5,9 — M. G. 239.
- 1)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[4-Methylphenyl]äthen. Sm. 211° (*B.* 39, 3112 *C.* 1906 [2] 1328).
- 2) Methylenäther d. 4-Methylphenyl-3,4-Dioxybenzylidenamin. Sm. 98°. HCl (*C.* 1908 [1] 1540).
- 3) Methylenäther d. 3,4-Dioxy-1-Benzylimidomethylbenzol. Sm. 76° (*G.* 26 [1] 10). — \*III, 75.
- 4) Methyl-4-[2-Oxybenzyliden]amidophenylketon. Sm. 116° (*B.* 37, 395 *C.* 1904 [1] 657).
- 5) Methyl-4-[4-Oxybenzyliden]amidophenylketon. Sm. 209° (*B.* 37, 395 *C.* 1904 [1] 658).
- 6) Methyl-2-Benzoylamidophenylketon. Sm. 98° (*B.* 26, 1391; *Ar.* 239, 597). — III, 124; \*III, 95.
- 7) Methyl-4-Benzoylamidophenylketon. Sm. 205° (*C.* 1903 [1] 832).
- 8) 2-Acetylamidodiphenylketon. Sm. 88,5—89° (72°) (*B.* 24, 2384; 25, 3081; 29, 1263). — III, 182; \*III, 147.
- 9) 4-Acetylamidodiphenylketon. Sm. 153° (*A.* 210, 270; 311, 153; *B.* 14, 1838). — III, 184; \*III, 147.
- 10)  $\alpha$ -Oxy- $\alpha$ -Benzoyl- $\alpha$ -[4-Methylphenyl]imidomethan. Sm. 111—113° (*Am.* 16, 383).
- 11)  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 125—126° (*B.* 21, 1326; *B.* 36, 3018 *C.* 1903 [2] 1001). — III, 228.
- 12)  $\gamma$ -Oximido- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan? Sm. 165° (*A.* 308, 250). — \*III, 226.
- 13) Methylenäther d.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (M. d.  $\alpha$ -Benziloxim). Sm. 62—63° (*B.* 23, 3591). — III, 289.
- 14) Methylenäther d. isom.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (M. d.  $\gamma$ -Benziloxim). Sm. 64—65°; Sd. 219—220°<sub>40</sub> (*B.* 23, 3593). — III, 289.
- 15) N-Benzoylbenzimidomethyläther. Sd. 210—212°<sub>12</sub> (*Am.* 20, 69). — \*II, 760.
- 16) 2-Oxy-1-[ $\alpha$ -Amidofural]naphtalin. Sm. 115°. HCl (*G.* 33 [1] 13 *C.* 1903 [1] 925). — \*IV, 253.
- 17) 9-Acetylamidoxanthen. Sm. 245° (*C. r.* 145, 815 *C.* 1908 [1] 140).
- 18) 2-Keto-4,5-Diphenyltetrahydrooxazol. Sm. 189—189,5° (*B.* 29, 1210). — \*II, 660.
- 19) Methylenäther d.  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen ( $\alpha$ -Piperonallutidin). Sm. 109°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 42, 1193 *C.* 1909 [1] 1576).
- 20) 1-Oxy-3-Keto-1-Methyl-2-Phenyl-1,3-Dihydroisindol. Sm. 185° (*C. r.* 143, 432 *C.* 1906 [2] 1495).
- 21) 1-Keto-2-[4-Oxymethylphenyl]-1,3-Dihydroisindol (4-Oxybenzylphtalimidin). Sm. 187—188° (*B.* 23, 344). — II, 1558.
- 22) Methylenäther d. 5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 98° (*B.* 37, 3110 *C.* 1904 [2] 994).
- 23) Methylenäther d. 3-Oxy-5-Methyl-1-Phenylbenzoxazol. Sm. 96—97,5° (*M.* 22, 248). — \*II, 742.
- 24) Äthyläther d. 5-Oxy-1-Phenylbenzoxazol. Sm. 64—66° (*J. pr.* [2] 70, 328 *C.* 1904 [2] 1541).
- 25) 4-Methylphenyläther d. 1-Oxymethylbenzoxazol. Sm. 142—143° (*J. pr.* [2] 64, 294).
- 26) Äthyläther d. 2-[4-Oxyphenyl]benzisoaxazol. Sm. 59—61° (*B.* 27, 1455). — IV, 410.
- 27) 2,8-Dioxy-3,7-Dimethylakridin. Sm. oberhalb 360° (*D.R.P.* 120466, 121686; *B.* 38, 3794 *C.* 1908 [1] 58). — \*IV, 253.
- 28) Acetonylnaphtalimidin. Sm. 142° (*M.* 22, 840).
- 29)  $\alpha$ -[4-Methylphenyl]imidophenylelessigsäure. Sm. 152—153° u. Zers. (*A. ch.* [7] 9, 517). — \*II, 941.
- 30) 1-[4-Methylphenyl]imidomethylbenzol-2-Carbonsäure (*B.* 29, 2039). — \*II, 949.

- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N** 31) 2-Amido- $\alpha$ - $\beta$ -Diphenyläthen-4-Carbonsäure. Sm. 197—198° (B. 41, 2295 C. 1908 [2] 599).
- 32)  $\alpha$ -Phenyl- $\beta$ -[2-Amidophenyl]akrylsäure (2 Modif.). Sm. 185—186° (B. 29, 498). — \*II, 874.
- 33) 2-Phenyl-1,3-Dihydroisindol-2<sup>3</sup>-Carbonsäure. Sm. 246—247° (B. 31, 631). — \*IV, 140.
- 34) 2-Methyl- $\beta$ -Naphthindol-1-Methylcarbonsäure. Sm. 210°. +  $\frac{1}{2}$  Molec. Aceton. Ag (A. 242, 368). — IV, 403.
- 35) Lakton d.  $\alpha$ -Oxy-2[oder 3]-Amido-4-Methyldiphenylmethan-2'-Carbonsäure. Sm. 144°. HCl, HNO<sub>3</sub> (A. 314, 256). — \*II, 997.
- 36) Lakton d. Methylphenylamidooxymethylbenzol-2'-Carbonsäure. Sm. 150° (B. 29, 2039). — \*II, 949.
- 37) Lakton d. 1-[4-Methylphenyl]amidooxymethylbenzol-2'-Carbonsäure. Sm. 149° (B. 29, 2039). — \*II, 949.
- 38) Aldehyd d. 2-Methylbenzoylamidobenzol-1-Carbonsäure. Sm. 78,5 bis 79° (B. 37, 983 C. 1904 [1] 1079).
- 39) Methylester d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 100° (J. pr. [2] 63, 260).
- 40) Äthylester d. Carbazol-3-Carbonsäure. Sm. 184° (B. 40, 382 C. 1907 [1] 823).
- 41) Äthylester d.  $\alpha$ -Naphtindol-2-Carbonsäure. Sm. 170° (A. 239, 232). — IV, 403.
- 42) Acetat d.  $\alpha$ -Oximidodiphenylmethan. Sm. 55° (M. 5, 205). — II, 189.
- 43) Benzoat d.  $\gamma$ -Oxy- $\beta$ -[2-Pyridyl]propen. Sm. 60—61° (B. 37, 745 C. 1904 [1] 1090).
- 44) Amid d.  $\beta$ -Oxy- $\beta$ -Phenylakrylphenyläthersäure. Sm. 195—197° (C. r. 142, 895 C. 1906 [1] 1551; Bl. [3] 35, 537 C. 1906 [2] 760).
- 45) Amid d. Benzoylphenylessigsäure. Sm. 172—173° (178°) (J. pr. [2] 55, 314; Soc. 91, 593 C. 1907 [2] 69). — \*II, 1003.
- 46) Amid d.  $\alpha$ -Keto- $\alpha$ - $\beta$ -Diphenyläthan- $\alpha$ '-Carbonsäure (A. d. Desoxybenzoincarbonsäure). Sm. 165—166° (B. 18, 2434). — II, 1709; \*II, 1004.
- 47) Amid d. 4-Methyldiphenylketon-2'-Carbonsäure. Sm. 175—176° (B. 30, 1132). — \*II, 1005.
- 48) Amid d. 4-Methyldiphenylketon-4'-Carbonsäure. Sm. 196° (A. 312, 94). — \*II, 1006.
- 49) Phenylamid d. Benzoylessigsäure. Sm. 107—108°. HCl (A. 245, 374). — II, 1644.
- 50) Phenylamid d. 2-Acetylbenzol-1-Carbonsäure. Sm. 189—192° (156 bis 157°) (B. 19, 2371; C. 1909 [1] 1707). — II, 1873.
- 51) Phenylamid d. 1,2-Dihydrobenzofuran-1-Carbonsäure. Sm. 104° (B. 39, 495 C. 1906 [1] 932).
- 52) 2-Methylphenylamid d. Benzolketocarbonsäure. Sm. 108° (A. 270, 318). — II, 1598.
- 53) Acetylphenylamid d. Benzolcarbonsäure (Acetylbenzoylamidobenzol). Sm. 68° (Am. 18, 546). — \*II, 735.
- 54) 2-Methylphenylformylamid d. Benzolcarbonsäure. Sm. 92° (Am. 18, 387; 19, 136). — \*II, 734.
- 55) 4-Methylphenylformylamid d. Benzolcarbonsäure. Sm. 101° (102°) (Am. 16, 383; 18, 546; 19, 136). — II, 1170; \*II, 734.
- 56) Benzylidenamid d.  $\alpha$ -Oxyphenylessigsäure (B. d. Mandelsäure). Sm. 195° (Berz. J. 17, 288; 18, 362; Z. 1868, 710; B. 25, 1682; 29, 207). — III, 36.
- 57) Benzoylamid d. Phenylessigsäure. Sm. 171° (129—130°) (Am. 13, 6; C. 1903 [2] 831). — II, 1312.
- 58) Benzoylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 112—113° (C. 1903 [2] 831).
- 59) 1-Naphtylimid d. Propan- $\alpha$ - $\beta$ -Dicarbonsäure (C. 1896 [1] 109).
- 60) 2-Naphtylimid d. Propan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 158—159° (160,5°) (C. 1896 [1] 996; A. 309, 328).
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>3</sub>** C 67,4 — H 4,9 — O 12,0 — N 15,7 — M. G. 267.
- 1)  $\beta$ -Nitro- $\alpha$ - $\gamma$ -Di[Phenylimido]propan. Sm. 93—94° (Am. 22, 100). — \*II, 236.
- 2) Dibenzoylguanidin. Sm. 215° (Ar. 241, 478 C. 1903 [2] 989).



- $C_{15}H_{13}O_2N_3$  3)  $\beta$ -Semicarbazon- $\alpha$ -Keto- $\alpha$ - $\beta$ -Diphenyläthan ( $\alpha$ -Benzilmonosemicarbazon). Sm. 164—165° (174—175°) u. Zers. (B. 34, 3979 C. 1902 [1] 192; B. 35, 345 C. 1902 [1] 584; A. 339, 250 C. 1905 [2] 46). — \*III, 222.
- 4) 1,3,2-Triamido-2-Methyl-9,10-Anthrachinon. Sm. oberhalb 300° (D.R.P. 205036 C. 1909 [1] 475).
- 5)  $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Nitrophenyl]propen. Sm. 157,5° (B. 18, 2338). — IV, 754.
- 6)  $\gamma$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]propen. Sm. 106° (B. 18, 484). — IV, 754.
- 7)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Nitrophenyl]propen. Sm. 180—181° (B. 18, 2337). — IV, 754.
- 8)  $\gamma$ -[4-Nitrophenyl]hydrazon- $\alpha$ -Phenylpropen. Sm. 195° (B. 32, 1814). — \*IV, 489.
- 9)  $\alpha$ -[2-Nitrophenyl]hydrazon- $\gamma$ -Phenylpropen. Sm. 190° (R. 24, 37 C. 1905 [1] 1278).
- 10)  $\alpha$ -[3-Nitrophenyl]hydrazon- $\gamma$ -Phenylpropen. Sm. 146° (R. 24, 36 C. 1905 [1] 1277).
- 11) 3-Methyläther d.  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxybenzyliden]hydrazin. Sm. 118° (G. 37 [1] 625 C. 1907 [2] 803).
- 12) 4-[2-Fural]amido-5-Keto-1-Methyl-3-Phenyl-4,5-Dihydropyrazol. Sm. 180° (A. 352, 200 C. 1907 [1] 1050).
- 13) 4-Phenylamido-2,5-Diketo-4-Phenyltetrahydroimidazol. Sm. 295 bis 300° u. Zers. (A. 350, 121 C. 1907 [1] 156).
- 14) 5-Keto-3-Oxy-1-Phenyl-4-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 189—190° (B. 34, 2337). — \*IV, 747.
- 15) 5-Keto-3-Oxy-4-Phenyl-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 201° (B. 34, 2338). — \*IV, 747.
- 16) 5-Keto-3-Oxy-4-Benzyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 232° (B. 34, 2335). — \*IV, 747.
- 17) 3,5-Diketo-1-Methyl-2,4-Diphenyltetrahydro-1,2,4-Triazol. Sm. 134° (B. 34, 2337; 35, 1562). — \*IV, 747.
- 18) 3,5-Diketo-1,4-Diphenylhexahydro-1,2,4-Triazin. Sm. 257—258° (A. 301, 69). — \*IV, 477.
- 19) Methyläther d. 3-Phenylhydrazon-1-Oxy-2-Keto-2,3-Dihydroindol. Sm. 128—129° (B. 29, 659). — IV, 696.
- 20) Methyläther d. 3-Phenylhydrazon-5-Oxy-2-Keto-2,3-Dihydroindol. Sm. 219° (B. 42, 2112 C. 1909 [2] 350).
- 21) 1,5-Dimethyl-2-[2-Nitrophenyl]benzimidazol. Sm. 152—153° (B. 26, 197). — IV, 1013.
- 22) 1,5-Dimethyl-2-[4-Nitrophenyl]benzimidazol (B. 26, 197). — IV, 1013.
- 23) 6-Phenylazo-5-Oxy-1,3-Dimethylbenzoxazol. Sm. 116—118° (M. 19, 512). — IV, 1448.
- 24) 2-[ $\alpha$ -Semicarbazonäthyl]- $\beta$ -Naphtofuran. Sm. 249° (B. 36, 2867 C. 1903 [2] 832).
- 25) 5-Acetylamido-3-Keto-4-Methyl-3,4-Dihydro-4,7-Naphtisodiazin. Acetat (B. 42, 2620 C. 1909 [2] 542).
- 26) 6-Cinnamylidenhydrazidopyridin-3-Carbonsäure. Sm. 263—264° (B. 36, 1114 C. 1903 [1] 1184). — \*IV, 783.
- 27) 1-[2,4-Dimethylphenyl]-1,2,3-Benztriazol-5-Carbonsäure. Sm. 230° (A. 332, 91 C. 1904 [1] 1570).
- 28) 4,6-Dimethyl-2-Phenyl-2,1,5-Benztriazol-2<sup>3</sup>-Carbonsäure + 2H<sub>2</sub>O. Sm. 165° (A. 366, 401 C. 1909 [2] 290).
- 29) Äthylester d. 1-Naphtylhydrazoncyanessigsäure. Sm. 147° (J. pr. [2] 52, 167). — IV, 1547.
- 30) Äthylester d. 2-Naphtylhydrazoncyanessigsäure. Sm. 145° (J. pr. [2] 52, 169). — IV, 1457.
- 31) Äthylester d. 1-Naphtalinazocyanessigsäure. Sm. 105° (J. pr. [2] 52, 168). — IV, 1457.
- 32) Äthylester d. 2-Naphtalinazocyanessigsäure. Sm. 124° (J. pr. [2] 52, 169). — IV, 1457.
- 33) Äthylester d. 2-Phenyl-2,1,3-Benztriazol-6-Carbonsäure. Sm. 84° (B. 39, 189 C. 1906 [1] 754).
- 34) Benzoat d.  $\alpha$ -Oximido- $\alpha$ -Phenylazoäthan. Sm. 137—137,5° (B. 35, 72 C. 1902 [1] 403). — \*IV, 1067.

- $C_{15}H_{13}O_2N_3$  35) Nitril d.  $\alpha$ -[Methyl-4-Nitrophenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 127° (B. 35, 3355 C. 1902 [2] 1195).
- 36) Amid d.  $\alpha$ -Phenylazobenzoylessigsäure. Sm. 163—165° (B. 35, 924 C. 1902 [1] 806). — \*IV, 1059.
- 37) Phenylhydrazidomethylimid d. Benzol-1,2-Dicarbonsäure. Sm. 120 bis 121° (B. 31, 3235). — \*IV, 478.
- $C_{15}H_{13}O_2Cl$  1) Benzoat d. 5-Chlor-4-Oxy-1,3-Dimethylbenzol. Sm. 94—95,5° (B. 40, 2268 C. 1907 [2] 593).
- $C_{15}H_{13}O_2Br$  1)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[5-Brom-2-Oxyphenyl]propan. Sm. 94—95° (B. 31, 719). — \*III, 167.
- 2)  $\beta$ -Brom- $\alpha$ -Keto- $\alpha$ -[4-Oxy-3-Methylphenyl]- $\beta$ -Phenyläthan. Sm. 132° (M. 26, 1160 C. 1905 [2] 1182).
- 3) Bromoxydimethyldiphenylketon ( $CH_3 : CH_3 : OH : Br = 1 : 2 : 4 : ?$ ). Sm. 134—135° (G. 32 [2] 272 C. 1902 [2] 1382).
- 4) Bromoxydimethyldiphenylketon ( $CH_3 : CH_3 : OH : Br = 1 : 4 : 2 : ?$ ). Sm. 115—116° (G. 32 [2] 271 C. 1902 [2] 1382).
- 5) Methyläther d.  $\beta$ -Brom- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 73—74° (A. 355, 292 C. 1907 [2] 1625).
- 6) Äthyläther d. 2-Brom-4'-Oxydiphenylketon. Sm. 79° (B. 27, 1454). — III, 195.
- 7)  $\beta$ -Bromäthyläther d. 4-Oxydiphenylketon. Sm. 72° (B. 40, 3664 C. 1907 [2] 1419).
- 8)  $\alpha$ -[oder  $\beta$ ]-Brom- $\alpha\beta$ -Diphenylpropionsäure. Sm. 185° (B. 26, 661). — II, 1467.
- 9)  $\alpha$ -Brom- $\beta\beta$ -Diphenylpropionsäure. Sm. 164°.  $K + 2H_2O$  (Am. 33, 34 C. 1905 [1] 523; Am. 32, 137 C. 1905 [2] 1023).
- 10) Äthylester d.  $\beta$ -Brombiphenyl-4-Carbonsäure (B. 27, 3389). — II, 1462.
- $C_{15}H_{13}O_2Br_3$  1) Äthylester d.  $\beta$ -Tribrom-2,6-Dimethylnaphtalin-1-Carbonsäure. Sm. 138—142° (B. 32, 2442). — \*II, 868.
- 2) Acetat d.  $\beta$ -Tribrom-1-Oxymethyl-2,6-Dimethylnaphtalin. Sm. 181 bis 183° (B. 32, 2440). — \*II, 656.
- $C_{15}H_{13}O_2J$  1)  $\beta$ -Jod- $\alpha$ -Keto- $\alpha$ -[4-Oxy-3-Methylphenyl]- $\beta$ -Phenyläthan. Sm. 120° (M. 26, 1162 C. 1905 [2] 1182).
- $C_{15}H_{13}O_3N$  C 70,6 — H 5,1 — O 18,8 — N 5,5 — M. G. 255.
- 1) Methyläther d.  $\alpha$ -Nitro- $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthen. Sm. 151° (B. 37, 4509 C. 1905 [1] 253).
- 2) Methyläther d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[4-Oxyphenyl]äthen. Sm. 133° (J. pr. [2] 61, 184). — \*II, 540.
- 3) 3,4-Methylenäther d. 2-[3,4-Dioxybenzyliden]amido-1-Oxymethylbenzol. Sm. 78° (B. 25, 2972). — III, 103.
- 4) 1-Methyläther-3,4-Methylenäther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol. Sm. 121° (B. 31, 175). — \*III, 75.
- 5) 3'-Nitro-2,4-Dimethyldiphenylketon. Sm. 64° (A. 286, 333). — III, 231.
- 6) 3'-Nitro-2,5-Dimethyldiphenylketon. Sm. 97—98° (A. 286, 341). — III, 232.
- 7) 3'-Nitro-3,4-Dimethyldiphenylketon. Sm. 100° (A. 286, 339). — III, 233.
- 8) Anthracenmethylnitrat. Sm. 183° (Soc. 59, 648; 61, 871; A. 323, 226, 233 C. 1902 [2] 802). — II, 260.
- 9)  $\beta$ -Nitro-4-Acetyldiphenylmethan. Sm. 91,5° (C. r. 146, 343 C. 1908 [1] 1393).
- 10) 4-Methyläther d.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 130—131° (A. 355, 289 C. 1907 [2] 1624).
- 11) 6-Methyläther d. 6,7-Dioxy-1-Keto-2-Phenyl-1,3-Dihydroisindol. Sm. 164° (M. 30, 494 C. 1909 [2] 1339).
- 12) 2-Methoxyphenyläther d. 1-Oxymethylbenzoxazol. Sm. 143—144° (J. pr. [2] 64, 295).
- 13) Methyläther d. 4-Keto-2-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzoxazin. Sm. 166—167° (Soc. 91, 268 C. 1907 [1] 1262).
- 14) Dimethylderivat d. 2,4-Dioxy-5-Keto-5,10-Dihydroakridin. Sm. 286—287° u. Zers. (B. 38, 3013 C. 1905 [2] 1264).

- C<sub>15</sub>H<sub>18</sub>O<sub>3</sub>N** 15)  $\alpha$ -Phenyl- $\beta$ -[2-Amido-3-Oxyphenyl]akrylsäure. Sm. 201° (*B.* 39, 3123 *C.* 1906 [2] 1332).
- 16)  $\alpha$ -Phenyl- $\beta$ -[6-Amido-3-Oxyphenyl]akrylsäure. Sm. 237—239° (*B.* 39, 3123 *C.* 1906 [2] 1332).
- 17)  $\alpha$ -Phenylimido-6-Oxy-3-Methylphenylessigsäure. Sm. 80° (*B.* 41, 4283 *C.* 1909 [1] 379).
- 18) 2-Benzylformylamidobenzol-1-Carbonsäure. Sm. 196° (*B.* 16, 1285). — II, 1250.
- 19)  $\alpha$ -Benzoylamido- $\alpha$ -Phenylessigsäure. Sm. 174° (175,5°). Ba (*B.* 24, 4151; *D. R. P.* 55026; *B.* 37, 2961 *C.* 1904 [2] 993). — II, 1326; \*II, 821.
- 20) Phenylbenzoylamidoessigsäure. Sm. 63°. Cu (*G.* 17, 232). — II, 1186.
- 21) 4-Benzoylamidoessigsäure. Sm. 205—206° (*Soc.* 79, 1354 *C.* 1902 [1] 25).
- 22) 1-Benzoylamidomethylbenzol-3-Carbonsäure. Sm. 186° (*A.* 343, 251 *C.* 1906 [1] 925).
- 23) 1-Benzoylamidomethylbenzol-2-Carbonsäure. Sm. 190° (*D. R. P.* 156398 *C.* 1905 [1] 55).
- 24) 2-Benzoylmethylamidobenzol-1-Carbonsäure. Sm. 161° (161—162°) (*J. pr.* [2] 55, 129; [2] 62, 140; *B.* 37, 4669 *C.* 1905 [1] 382). — \*II, 786.
- 25) 6-Benzoylamido-1-Methylbenzol-3-Carbonsäure. Sm. unter 100° (*A.* 221, 169). — II, 1339.
- 26) 3-Amido-4-Methyldiphenylketon-2'-Carbonsäure. Sm. 163°. Ag, HCl (*A.* 299, 314). — \*II, 1005.
- 27) 6-Oxido- $\alpha$ - $\beta$ -Diphenylpropionsäure. Sm. 138—139°. Ag (*J. pr.* [2] 55, 316). — \*II, 1003.
- 28) Lakton d. 1-[ $\gamma$ -Oximido- $\alpha$ -Oxybutyl]naphtalin-8-Carbonsäure. HCl (*M.* 22, 826).
- 29) Methylester d. 4-Benzoylphenylamidoameisensäure. Sm. 155° (*A.* 311, 148). — \*III, 147.
- 30) Methylester d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 99—100° (101,5°) (*B.* 32, 1216, 3404; *J. pr.* [2] 64, 85). — \*II, 786.
- 31) Monomethylester d. Benzol-1,2-Dicarbonsäurephenylmonamid. Sm. 111—113,5° (110—115°) (*R.* 15, 347; 18, 364). — \*II, 1050.
- 32) Isomethylester d. Benzol-1,2-Dicarbonsäurephenylmonamid. Zers. bei 123°. HCl, Ag (*R.* 15, 343). — \*II, 1050.
- 33) Äthylester d. 3-Benzoylpyridin-2-Carbonsäure. Sm. 108—110° (*M.* 22, 116, 845). — \*IV, 119.
- 34) Äthylester d. 4-Benzoylpyridin-3-Carbonsäure. Sm. 75° (*M.* 22, 117). — \*IV, 119.
- 35) Äthylester d. 3-Oxy- $\alpha$ -Naphtindol-2-Carbonsäure. Sm. 198° (*C.* 1900 [2] 407). — \*IV, 243.
- 36) Äthylester d. 1-Oxy- $\beta$ -Naphtindol-2-Carbonsäure (Ä. d.  $\beta$ -Naphtylindoxylsäure). Sm. 158° (156°) (*B.* 31, 1817; *C.* 1900 [2] 407). — \*IV, 243.
- 37) Äthylester d. Naphtostyryl-N-Methylcarbonsäure. Sm. 86—87° (*B.* 35, 4221 *C.* 1903 [1] 166).
- 38) Phenylester d. Benzoylamidoessigsäure. Sm. 104° (*H.* 20, 412; *B.* 26, 1700). — II, 1184.
- 39) Phenylester d. 1,2-Dihydrobenzofuran-1-Amidoameisensäure. Sm. 151° (*B.* 39, 495 *C.* 1906 [1] 932).
- 40) Acetat d. 4-Benzoylamido-1-Oxybenzol. Sm. 171° (*B.* 39, 3793 *C.* 1907 [1] 104).
- 41) Benzoat d. N-Benzoylmethylhydroxylamin. Sm. 56° (*A.* 365, 213 *C.* 1909 [1] 1812).
- 42) Benzoat d. 4-Acetylamido-1-Oxybenzol. Sm. 171° (166,5°) (*B.* 39, 3794 *C.* 1907 [1] 104; *Am.* 37, 67 *C.* 1907 [1] 806).
- 43) O-Benzoat d. Oximidooxymethan-N-Benzyläther (Benzylloximidoformylbenzoat). Sm. 29,5—30,5° (*A.* 310, 23). — \*II, 757.
- 44) Benzoat d. anti-4-Methoxylbenzaldoxim. Sm. 109—110° (*G.* 22 [2] 169; 26 [1] 461). — III, 88; \*III, 63.
- 45) Benzoat d. anti-Methylbenzhydroxamsäure. Sm. 53—54° (*A.* 175, 341; 281, 235, 237; *B.* 29, 1151, 1155). — II, 1207; \*II, 755.
- 46) Benzoat d. syn-Methylbenzhydroxamsäure. Sm. 55° (*B.* 29, 1158). — II, 1207; \*II, 755.



- $C_{15}H_{13}O_3N$  47) Benzoat d. 4-Methylbenzhydroxamsäure. Sm. 156° (A. 281, 226). — II, 1344.
- 48) 4-Methylbenzoat d. Benzhydroxamsäure. Sm. 155° (A. 281, 225). — II, 1344.
- 49) Amid d.  $\alpha$ -Benzoxyl- $\alpha$ -Phenylelessigsäure (A. d. Benzoylmandelsäure). Sm. 162° (Soc. 79, 1354 C. 1902 [1] 25).
- 50) Amid d. 2-Benzoxylphenylelessigsäure. Sm. 162—164° (B. 40, 3512 C. 1907 [2] 1409).
- 51) Amid d. 4-Benzoxylphenylelessigsäure. Sm. 167—169° (Soc. 79, 1354 C. 1902 [1] 25).
- 52) Methylamid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 122° (Soc. 91, 194 C. 1907 [1] 1199).
- 53) Phenylamid d. 2-Acetoxybenzol-1-Carbonsäure. Sm. 136—137° (B. 37, 3976 C. 1904 [2] 1605).
- 54) Benzylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 154°. Ag (B. 31, 2740; Am. 38, 650 C. 1908 [1] 360). — \*II, 1050.
- 55) 2-Methylphenylmonamid d. Benzol-1,2-Dicarbonsäure (o-Tolylphthalamidsäure). Ba, Pb, Ag, Ag<sub>2</sub> (Am. 9, 53; B. 17, 2679). — II, 1797.
- 56) 3-Methylphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 159 bis 161°. Benzylaminsalz (C. 1909 [1] 653).
- 57) 4-Methylphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 160 bis 165° (C. 1907 [1] 246; 1909 [1] 654).
- 58) 1-Naphtylamid d. Pseudoitakonsäure. Sm. 205—206° (A. 254, 151). — II, 612.
- 59) Benzoylamid d. 2-Oxybenzylmethyläther-1-Carbonsäure. Sm. 144 bis 145° (Soc. 89, 1332 C. 1906 [2] 1416).
- 60) 4-Methoxyphenylimid d. 1,2-Dihydrobenzol-1,2-Dicarbonsäure. Sm. 160° (C. 1906 [2] 876).
- 61) 4-Methoxyphenylimid d. 1,2-Dihydrobenzol-1,6-Dicarbonsäure. Sm. 122° (C. 1906 [2] 876).
- 62) 4-Methoxyphenylimid d. 1,2-Dihydrobenzol-3,4-Dicarbonsäure. Sm. 105° (C. 1905 [1] 1319; 1906 [2] 876).
- 63) 4-Methoxyphenylimid d. 1,4-Dihydrobenzol-1,2-Dicarbonsäure. Sm. 92° (C. 1905 [1] 1319; 1906 [2] 876).
- 64) 4-Methoxyphenylimid d. 1,4-Dihydrobenzol-2,3-Dicarbonsäure. Sm. 104° (C. 1906 [2] 876).
- $C_{16}H_{13}O_3N_3$  C 63,6 — H 4,6 — O 17,0 — N 14,8 — M. G. 283.
- 1) 4-Acetylamido-1-[3-Nitrobenzyliden]amidobenzol (D.R.P. 135335 C. 1902 [2] 1167).
- 2) 4-Acetylamido-1-[4-Nitrobenzyliden]amidobenzol (D.R.P. 135335 C. 1902 [2] 1167).
- 3) Methyläther d. 1,3-Diamido-2-Oxy-9,10-Anthrachinon. Sm. 225 bis 230° (D.R.P. 205036 C. 1909 [1] 476).
- 4)  $\alpha\beta\gamma$ -Trioximido- $\alpha\gamma$ -Diphenylpropan. Sm. 185—186° (B. 23, 3387). — III, 316.
- 5)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 170° (J. pr. [2] 53, 457; B. 17, 2097). — IV, 752.
- 6)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[4-Nitrobenzyliden]hydrazin. Sm. 160—162° (J. pr. [2] 53, 460). — IV, 752.
- 7)  $\gamma$ -Phenylhydrazon- $\alpha$ -[3-Nitro-2-Oxyphenyl]propen. Sm. 157° (B. 20, 1934). — IV, 762.
- 8)  $\gamma$ -Phenylhydrazon- $\alpha$ -[5-Nitro-2-Oxyphenyl]propen. Sm. 235° (B. 20, 1933). — IV, 762.
- 9)  $\beta$ -[2-Nitro-4-Methylphenyl]azo- $\alpha$ -Keto- $\alpha$ -Phenyläthan (B. 18, 2566). — IV, 1478.
- 10) 4-Benzoylamidoacetylazo-1-Oxybenzol. Zers. bei 170° (A. 340, 95 C. 1905 [2] 322).
- 11) 1-Nitroso-2-[3-Nitrophenyl]-1,2,3,4-Tetrahydrochinolin. Sm. 71° (B. 18, 1906). — IV, 399.
- 12) 7-Methyläther d. 5-Amido-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin (Normethylamidoopiänsäurephenylhydrazid) (B. 19, 2310). — IV, 717.
- 13) Methylester d. 4-Oxalylamidoazobenzol. Sm. 178—179° (B. 35, 1431 C. 1902 [1] 1161). — \*IV, 1011.

- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>** 14) Äthylester d. 2-Phenyl-2,1,3-Benzotriazol-1-Oxy-6-Carbonsäure. Sm. 105° (*B.* 39, 186 *C.* 1906 [1] 754).
- 15) Benzoat d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\alpha$ -Benzoylamidomethan. Zers. bei 162–163° (*B.* 40, 1690 *C.* 1907 [1] 1685).
- 16) Amid d. Carbanilidoisatinsäure. Sm. 229° u. Zers. (*J. pr.* [2] 32, 288). — *II*, 1604.
- 17) Phenylnitrosamid d. Benzoylamidoessigsäure. Sm. 195–197° (*J. pr.* [2] 52, 258). — *\*II*, 746.
- 18) 3-Amid-1-Phenylamid d. Benzol-1-Carbonsäure-3-Amidoketocarbonsäure (*A.* 232, 137). — *II*, 1205.
- 19) Di[Phenylamid] d. Oximidomalonsäure. 2 isom. Formen. Sm. 141° K, Ag (*Soc.* 83, 34 *C.* 1903 [1] 73, 441).
- 20)  $\alpha$ -Phenylhydrazid d. Phenylimidoessigsäure-2-Carbonsäure. Sm. 243° u. Zers. K, Ca + 8½ H<sub>2</sub>O, Ba (*A.* 332, 232 *C.* 1904 [2] 38).
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>N<sub>5</sub>** C 57,9 — H 4,2 — O 15,4 — N 22,5 — M. G. 311.
- 1)  $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -Phenylhydrazon- $\beta$ -Ketopropan. Sm. 180° (*B.* 25, 3546; *J. pr.* [2] 64, 244). — *IV*, 1230; *\*IV*, 894.
- 2) 2-Semicarbazonomethylazobenzol-2'-Carbonsäure. Sm. 240° (*C. r.* 140, 664 *C.* 1905 [1] 1099).
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>Cl** 1) 1-Äthyläther d. 5-Chlor-1,3,6-Trioxypentanthren. Sm. 175–176° (*B.* 34, 1555).
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>Br** 1) 1-Äthyläther d. 5-Brom-1,3,6-Trioxypentanthren. Sm. 180° (*B.* 33, 575; 34, 1545). — *\*II*, 1144.
- 2)  $\alpha$ -Bromlapachol. Sm. 170–171° (*Soc.* 65, 16). — *III*, 400.
- 3)  $\beta$ -Bromlapachol. Sm. 139–140° (*G.* 12, 353; 21, 374). — *III*, 400.
- 4) Brom- $\alpha$ -Lapachon. Sm. 172,5–173,5° (*Soc.* 65, 18). — *III*, 401.
- 5) Brom- $\beta$ -Lapachon. Sm. bei 205° u. Zers. (*Soc.* 65, 18). — *III*, 401.
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>Br<sub>3</sub>** 1) Tribromdihydrolapachol. + ½ HBr (Sm. 200° u. Zers.) (*Soc.* 63, 433). — *III*, 402.
- C<sub>15</sub>H<sub>13</sub>O<sub>4</sub>N** C 66,4 — H 4,8 — O 23,6 — N 5,2 — M. G. 271.
- 1) Dimethyläther d. 1,3-Dioxy- $\beta$ -[3-Nitrobenzyliden]benzol. Zers. bei 158–160° (*G.* 22 [2] 299). — *II*, 997.
- 2) Dimethyläther d. 1,3-Dioxy- $\beta$ -[4-Nitrobenzyliden]benzol (*G.* 22 [2] 299). — *II*, 998.
- 3) 1-Methyläther-2,3-Methylenäther d. 5-Benzoylamido-1,2,3-Trioxypentanthren. Sm. 128–129° (*Soc.* 95, 1162 *C.* 1909 [2] 811).
- 4) Methyläther d. 4'-Nitro-6-Oxy-3-Methyldiphenylketon. Sm. 101 bis 102° (*B.* 40, 3518 *C.* 1907 [2] 1410).
- 5) Äthyläther d. 2-Nitro-4'-Oxydiphenylketon. Sm. 115° (*B.* 36, 3891 *C.* 1904 [1] 93).
- 6) Äthyläther d. 3-Nitro-4'-Oxydiphenylketon. Sm. 79–81° (*B.* 36, 3891 *C.* 1904 [1] 93).
- 7) Äthyläther d. 4-Nitro-4'-Oxydiphenylketon. Sm. 112° (*B.* 36, 3896 *C.* 1904 [1] 93).
- 8) Oxyessig-4-Benzoylamidophenyläthersäure. Sm. 194–195° (197°) (*J. pr.* [2] 55, 121 *B.* 42, 4110 *C.* 1909 [2] 2074). — *\*II*, 740.
- 9) 4-Benzoylphenylamidoessigsäure. Sm. 165–171° (*B.* 42, 4110 *C.* 1909 [2] 2074).
- 10)  $r$ - $\alpha$ -[Phenylamidoformoxyl]phenylessigsäure. Sm. 146°. Na + 3 H<sub>2</sub>O, Ba + 3 H<sub>2</sub>O, Ag (*Bl.* [3] 19, 775; *Bl.* [3] 27, 450 *C.* 1902 [2] 34). — *\*II*, 923.
- 11) Phenyl-2-Carboxylphenylamidoessigsäure. Sm. 184–186° u. Zers. (*J. pr.* [2] 65, 277 *C.* 1902 [1] 1215).
- 12)  $\alpha$ -[2-Carboxylphenyl]amido- $\alpha$ -Phenylessigsäure. Sm. 227° u. Zers. (*B.* 32, 3059). — *\*II*, 820.
- 13) 5-[2-Oxybenzyliden]amido-2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 230° u. Zers. (*G.* 38 [1] 16 *C.* 1908 [1] 828).
- 14) 5-[2-Oxybenzyliden]amido-3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 223° u. Zers. (*G.* 38 [1] 18 *C.* 1908 [1] 828).
- 15) 2-[4-Oxy-3-Methoxylbenzyliden]amidobenzol-1-Carbonsäure. Sm. 172–174° (*B.* 37, 596 *C.* 1904 [1] 881).
- 16) 6-[4-Methoxylbenzyliden]amido-3-Oxybenzol-1-Carbonsäure. Sm. 227,8° (*G.* 39 [2] 26 *C.* 1909 [2] 1053).

- $C_{15}H_{13}O_4N$  17) 2-[4-Methoxylbenzoylamido]benzol-1-Carbonsäure. Sm. 232° (B. 32, 3404). — \*II, 908.
- 18) 2-[p-Methylamidooxybenzoyl]benzol-1-Carbonsäure. Sm. 178—179° (D.R.P. 162034 C. 1905 [2] 729).
- 19)  $\alpha$ -Oximido- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan- $\alpha^3$ -Carbonsäure. Sm. 170° (M. 28, 289 C. 1907 [1] 1749).
- 20) 8-Diacetylamidonaphthalin-2-Carbonsäure. Sm. 181° (J. pr. [2] 42, 297). — II, 1459.
- 21)  $\alpha$ -Benzoxyl- $\beta$ -[2-Pyridyl]propionsäure. Sm. 145° u. Zers. (2HCl, PtCl<sub>4</sub>) (A. 265, 217). — IV, 154.
- 22)  $\beta$ -Benzoxyl- $\beta$ -[2-Pyridyl]propionsäure. Sm. 135,5° (A. 265, 234). — IV, 154.
- 23) 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbonsäure + x H<sub>2</sub>O (Phenyl-lutidindicarbonsäure). Sm. 280° u. Zers. HCl, Ba + 7H<sub>2</sub>O (B. 16, 1608; 25, 2786; Ph. Ch. 3, 394). — IV, 386.
- 24) Dimethylphenylpyridindicarbonsäure. Fl. Ag<sub>2</sub> (J. pr. [2] 35, 311). — IV, 386.
- 25) 1,2-Lakton d. 3,4-Dioxy-1-Phenylamidooxymethylbenzol-3[oder 4]-Methyläther-2-Carbonsäure. Sm. 199° u. Zers. Na + H<sub>2</sub>O (B. 29, 2034). — \*II, 1119.
- 26) Methylester d. Benzoyl-4-Oxyphenylamidoameisensäure. Sm. 91 bis 92° (D.R.P. 73285). — \*II, 740.
- 27) Methylester d. 2-Phenylamidoformoxylbenzol-1-Carbonsäure. Sm. 96° (238°; 117°) (B. 18, 2431; Bl. [3] 27, 874 C. 1902 [2] 935; A. 363, 86 C. 1908 [2] 1724). — II, 1496.
- 28) Methylester d. 5-Amido-2-Benzoxylbenzol-1-Carbonsäure. Sm. 180 (176°) (C. 1897 [2] 672; A. 311, 66). — \*II, 899.
- 29) Methylester d. 3-Amido-4-Benzoxylbenzol-1-Carbonsäure. Sm. 157 bis 158° (C. 1897 [2] 672). — \*II, 913.
- 30) Methylester d. 3-Benzoylamido-4-Oxybenzol-1-Carbonsäure. Sm. 241° (C. 1897 [2] 672; A. 311, 72). — \*II, 914.
- 31) Methylester d.  $\alpha$ -Benzoylamido- $\beta$ -[2-Furanyl]akrylsäure. Sm. 141° (A. 337, 284 C. 1905 [1] 378).
- 32) Methylester d. 3,4-Dioxynaphthalin-3-Methyläther-1-Cyanmethyl-carbonsäure. Sm. 128° (C. 1907 [1] 1130).
- 33) Phenylester d. Benzoylamidooxyessigsäure. Sm. 170° (B. 26, 2644; H. 20, 419). — II, 1192; \*II, 748.
- 34) 2-Oxyphenylester d. Benzoylamidoessigsäure. Sm. 134—136° (B. 38, 2927 C. 1905 [2] 1336).
- 35) 3-Oxyphenylester d. Benzoylamidoessigsäure. Sm. 144° (corr.) (B. 38, 2930 C. 1905 [2] 1336).
- 36) isom. 3-Oxyphenylester d. Benzoylamidoessigsäure. Sm. 274° (B. 38, 2931 C. 1905 [2] 1337).
- 37) 4-Oxyphenylester d. Benzoylamidoessigsäure. Sm. 155—157° (B. 38, 2933 C. 1905 [2] 1337).
- 38) 4-Acetylamidophenylester d. 2-Oxybenzol-1-Carbonsäure (Salophen). Sm. 185° (187°) (J. pr. [2] 61, 550; D.R.P. 62533, 69289). — \*II, 888.
- 39) 1-Benzozat d. 4-Nitroso-1,3-Dioxybenzol-3-Äthyläther. Sm. 155° (M. 12, 374). — II, 1150.
- 40)  $\beta$ -[2-Oxybenzoat] d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 97° (C. 1896 [1] 764).
- 41) Benzoat d. 4-Methoxylbenzhydroxamsäure. Sm. 147—148° (A. 175, 294). — II, 1533.
- 42) 4-Methoxylbenzoat d. Benzhydroxamsäure. Sm. 131—132° (A. 175, 288). — II, 1533.
- 43) 2-Phenylamid d. Oxyessigphenyläther-2-Carbonsäure (Ph. d. Salicyl-essigsäure). Sm. 159° (157—158°) (C. 1900 [2] 461; J. pr. [2] 60, 405). — \*II, 892.
- 44) Phenylmonamid d. 3-Oxybenzolzomethyläther-1,2-Dicarbonsäure. Sm. 164° (Soc. 91, 110 C. 1907 [1] 1121).
- 45) Phenylmonamid d. 4-Oxybenzolzomethyläther-1,2-Dicarbonsäure. Sm. 148—149° (Soc. 91, 104 C. 1907 [1] 1120).
- 46) 3[oder 4]-[2-Oxyphenylamid] d. 1-Methylbenzol-3,4-Dicarbonsäure. Sm. 200° u. Zers. (M. 12, 632). — II, 1846.



- C<sub>15</sub>H<sub>18</sub>O<sub>4</sub>N** 47) **4-Methoxyphenylmonamid d. Benzol-1,2-Dicarbonsäure.** Sm. 180 bis 185° (*B.* 36, 998 *C.* 1903 [1] 1131).
- C<sub>15</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>** 1) **C 60,2 — H 4,3 — O 21,4 — N 14,0 — M. G. 299.**  
 1) **Methyläther d. Phenylamido-3-Nitrobenzoylimidooxymethan.** Sm. 124° (*C.* 1904 [1] 1559).  
 2) **Methyläther d. Benzoylimido-3-Nitrophenylamidooxymethan.** Sm. 86—88° (*Am.* 24, 221; *Am.* 32, 364 *C.* 1904 [2] 1507).  
 3)  **$\alpha$ -Acetyl- $\alpha$ -[3-Nitrophenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin.** Sm. 164° (*A.* 365, 332 *C.* 1909 [1] 1867).  
 4)  **$\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxybenzyliden]hydrazin.** Sm. 165° (*B.* 37, 3930 *C.* 1904 [2] 1595).  
 5)  **$\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitro-4-Oxybenzyliden]hydrazin.** Sm. 193 bis 194° (*B.* 37, 3933 *C.* 1904 [2] 1596).  
 6)  **$\beta$ -Acetyl- $\alpha$ -[2-Nitrobenzoyl]- $\alpha$ -Phenylhydrazin.** Sm. 134° (*A.* 301, 89). — \*IV, 428.  
 7)  **$\alpha$ -Acetyl- $\beta$ -Benzoyl- $\alpha$ -[3-Nitrophenyl]hydrazin.** Sm. 147° (*B.* 22, 2813). — IV, 669.  
 8)  **$\beta$ -Acetyl- $\alpha$ -Benzoyl- $\alpha$ -[3-Nitrophenyl]hydrazin.** Sm. 173° (*B.* 22, 2812). — IV, 669.  
 9) **4-[4-Nitrobenzylidenamido]phenylamidoessigsäure** (D.R.P. 135335 *C.* 1902 [2] 1167).  
 10) **s-Diphenylguanidin-2,2'-Dicarbonsäure** +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 201° u. Zers. (*J. pr.* [2] 69, 30 *C.* 1904 [1] 641).  
 11) **s-Diphenylguanidin-3,3'-Dicarbonsäure.** Ba, HCl, (2HCl, PtCl<sub>4</sub>) (*A.* 172, 172; *Z.* 1867, 34; *B.* 11, 1987). — II, 1268.  
 12)  **$\alpha$ -Phenylhydrazon- $\beta$ -[2-Nitrophenyl]propionsäure.** Sm. 148—149° u. Zers. (*B.* 30, 1038). — IV, 697.  
 13)  **$\alpha$ -Phenylhydrazon- $\beta$ -[4-Nitrophenyl]propionsäure.** Sm. 168° u. Zers. (*B.* 30, 1049). — IV, 697.  
 14)  **$\alpha$ -Methylphenylhydrazon-2-Nitrophenylessigsäure.** Sm. 141—142° (*B.* 23, 1583). — IV, 695.  
 15)  **$\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure.** Sm. 196—197° (*B.* 36, 3883 *C.* 1904 [1] 26).  
 16) **4'-Acetylamido-4-Oxyazobenzol-3-Carbonsäure.** Sm. 245° (*C.* 1908 [2] 310).  
 17) **2-Methylester d. Diazoamidobenzol-2,2'-Dicarbonsäure.** Sm. 127° u. Zers. (*J. pr.* [2] 63, 291). — \*IV, 1137.  
 18) **Äthylester d.  $\beta\gamma$ -Dicyan- $\alpha$ -Phenylamidoformoxylpropen- $\alpha$ -Carbonsäure.** Zers. bei 200° (*B.* 41, 3764 *C.* 1908 [2] 1858).  
 19) **Äthylester d. 2-Nitroazobenzol-4-Carbonsäure.** Sm. 139° (*B.* 39, 191 *C.* 1906 [1] 754).  
 20) **Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxybenzyliden]hydrazin.** Sm. 191° (*B.* 37, 3929 *C.* 1904 [2] 1595).  
 21) **Acetat d.  $\alpha$ -Phenyl- $\beta$ -[6-Nitro-2-Oxybenzyliden]hydrazin.** Sm. 128° (*B.* 37, 3932 *C.* 1904 [2] 1596).  
 22) **Acetat d.  $\alpha$ -Phenyl- $\beta$ -[3-Nitro-4-Oxybenzyliden]hydrazin.** Sm. 134 bis 135° (*B.* 37, 3932 *C.* 1904 [2] 1596).  
 23) **Acetat d. 2-Nitrophenyl-2-Oxybenzylidenhydrazin.** Sm. 160° (*A.* 365, 331 *C.* 1909 [1] 1867).  
 24) **Acetat d. 3-Nitrophenyl-2-Oxybenzylidenhydrazin.** Sm. 165° (*A.* 365, 332 *C.* 1909 [1] 1867).  
 25) **Acetat d. 4-Nitrophenyl-2-Oxybenzylidenhydrazin.** Sm. 185—186° +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (*A.* 365, 334 *C.* 1909 [1] 1867).  
 26) **Acetat d. 3'-Nitro-4'-Oxy-2-Methylazobenzol.** Sm. 108° (*Soc.* 79, 157). — \*IV, 1038.  
 27) **Acetat d. 4'-Nitro-6-Oxy-3-Methylazobenzol.** Sm. 184° (*A.* 365, 310 *C.* 1909 [1] 1865).  
 28) **Acetat d. 3-Nitro-4'-Oxy-4-Methylazobenzol.** Sm. 113° (*Soc.* 87, 231 *C.* 1905 [1] 930, 1316).  
 29) **Acetat d. 3'-Nitro-4'-Oxy-4-Methylazobenzol.** Sm. 94° (*Soc.* 79, 158). — \*IV, 1038.  
 30) **Acetat d. 2-Nitro- $\beta$ -Oxy- $\beta$ -Methylazobenzol.** Sm. 99—100° (*B.* 24, 2308). — IV, 1421.

- $C_{15}H_{13}O_4N_3$  31) Acetat d. 3-Nitro- $\beta$ -Oxy- $\beta$ -Methylazobenzol. Sm. 143—144° (*Soc.* 65, 838). — IV, 1421.
- 32) 4-Methylphenylamidoformiat d. anti-2-Nitrobenzaldoxim. Sm. 139° (*B.* 26, 2101). — III, 47.
- 33) 4-Methylphenylamidoformiat d. syn-2-Nitrobenzaldoxim. Sm. 93° u. Zers. (*B.* 26, 2102). — III, 47.
- 34) 2-Methylphenylamidoformiat d. anti-3-Nitrobenzaldoxim. Sm. 138° u. Zers. (*B.* 26, 2099). — III, 48.
- 35) 4-Methylphenylamidoformiat d. anti-3-Nitrobenzaldoxim. Sm. 96° (*B.* 26, 2099). — III, 48.
- 36) isom. 4-Methylphenylamidoformiat d. anti-3-Nitrobenzaldoxim. Sm. 132° (*B.* 26, 2099). — III, 48.
- 37) 4-Methylphenylamidoformiat d. syn-3-Nitrobenzaldoxim. Sm. 181° u. Zers. (*B.* 26, 2099). — III, 48.
- 38) 2-Methylphenylamidoformiat d. anti-4-Nitrobenzaldoxim. Sm. 183° (*B.* 26, 2096). — III, 49.
- 39) 2-Methylphenylamidoformiat d. syn-4-Nitrobenzaldoxim. Sm. 185° (*B.* 26, 2096). — III, 50.
- 40) 4-Methylphenylamidoformiat d. anti-4-Nitrobenzaldoxim. Sm. 154° (*B.* 26, 2096). — III, 49.
- 41) 4-Methylphenylamidoformiat d. syn-4-Nitrobenzaldoxim. Sm. 176° (*B.* 26, 2096). — III, 50.
- 42) Phenylamid d. 2-Nitro-4-Acetylamidobenzol-1-Carbonsäure. Sm. 238° (*J. pr.* [2] 76, 297 *C.* 1908 [1] 36).
- 43) Di[Phenylamid] d. Nitromalonsäure. Sm. 141° (*C.* 1904 [1] 1555; *B.* 38, 41 *C.* 1905 [1] 603).
- 44) Verbindung (aus Carbanilidoisatin). Sm. 225° (*J. pr.* [2] 32, 291). — II, 1604.
- 45) Verbindung (aus Phenylcarbonimid u. N-Methyl-syn-3-Nitrobenzaldoxim). Sm. 139° (*B.* 24, 2816). — III, 48.
- $C_{15}H_{13}O_4N_5$  C 55,0 — H 4,0 — O 19,6 — N 21,4 — M. G. 327.
- 1) 4,6-Dinitro-2-[2,4,5-Trimethylphenyl]-2,1,3-Benztriazol. Sm. 151° (*J. pr.* [2] 71, 389 *C.* 1905 [2] 39).
- $C_{15}H_{13}O_4Br$  1) Bromoxy- $\beta$ -Lapachon. Sm. 247° u. Zers. (*Soc.* 63, 430). — III, 402.
- 2) 2,4-Dimethyläther d.  $\beta$ -Brom-2,4,6-Trioxydiphenylketon (Bromhydrocotoin). Sm. 147° (*A.* 199, 59). — III, 203.
- 3) Äthylester d. 3-Brom-6-Methyl-4-Phenyl-1,2-Pyron-5-Carbonsäure. Sm. 72° (*B.* 35, 788 *C.* 1902 [1] 761).
- 4) Äthylester d. 3-Brom-1-Keto-2-[ $\beta$ -Ketopropyl]inden-2 $\alpha$ -Carbonsäure (D. d. Bromindonacetessigsäure). Sm. 80—82° (*B.* 31, 2083). — \*II, 1089.
- $C_{15}H_{13}O_5N$  C 62,7 — H 4,5 — O 27,9 — N 4,9 — M. G. 287.
- 1) 3-Methyläther d. 3-Oxy-4-[2-Oxybenzoxyl]benzaldoxim. Sm. 164,5° (*Ar.* 247, 77 *C.* 1909 [1] 747).
- 2) 6-[3-Methoxyl-4-Oxybenzyliden]amido-3-Oxybenzol-1-Carbonsäure. Sm. 267° u. Zers. (*G.* 39 [2] 27 *C.* 1909 [2] 1053).
- 3) 4-Phenylamidophenyltartronsäure. Sm. 125—127° u. Zers. (*C.* 1900 [2] 791). — \*II, 1123.
- 4) 4-Keto-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-3,5-Dicarbon-säure. Sm. 227°. Ba + H<sub>2</sub>O (*B.* 20, 160). — II, 2005.
- 5) 2-[3,4-Dimethoxylbenzoyl]pyridin-4-Carbonsäure (Pyropapaverin-säure). Sm. 230°. Ca + 4H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, 2HCl + H<sub>2</sub>O (*M.* 6, 394; 10, 694). — IV, 177.
- 6) Benzoat d.  $\beta$ -Oxyäthyl-2-Nitrophenyläther. Sm. 76—77° (*J. pr.* [2] 24, 252). — II, 1145.
- 7) 2-Benzoat d. 2-Oximido-4,5-Dioxy-1-Keto-1,2-Dihydrobenzol-4,5-Dimethyläther. Sm. 190—193° u. Zers. (*B.* 39, 3684 *C.* 1907 [1] 37).
- 8) Phenylamid d. Dehydraceticarbonsäure. Sm. 185° (*A.* 273, 208). — II, 424.
- $C_{15}H_{13}O_5N_3$  C 57,1 — H 3,2 — O 25,4 — N 13,3 — M. G. 315.
- 1) Äthyläther d. 2-Nitro-4-[4-Nitrobenzyliden]amido-1-Oxybenzol. Sm. 84° (*Soc.* 93, 1918 *C.* 1909 [1] 280).
- 2) Äthyläther d. 4-[2,4-Dinitrobenzyliden]amido-1-Oxybenzol. Sm. 135° (*Soc.* 93, 1918 *C.* 1909 [1] 280).
- 3) Acetyl-2',4'-Dinitro-4-Methyldiphenylamin. Sm. 141—142° (*B.* 36, 32 *C.* 1903 [1] 520).

- C<sub>15</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>** 4)  $\beta$ -Keto- $\alpha$ -[*p*-Dinitro-*p*-Phenylamidophenyl]propan. Sm. 131°. Na (*Am.* 12, 178). — III, 144.
- 5) 3,5-Dinitro-2-Äthylamidodiphenylketon. Sm. 104° (*B.* 39, 361 *C.* 1906 [1] 844).
- 6) *p*-Dinitro-*p*-Dimethylamidodiphenylketon. Sm. 142° (*A.* 206, 90). — III, 183.
- 7) *p*-Dinitro-4-Methylphenylamidobenzoylmethan. Sm. 156° u. Zers. (*B.* 23, 169). — III, 127.
- 8) 3-Nitro-1-[Acetyl-4-Nitrobenzyl]amidobenzol. Sm. 178° (*B.* 32, 1256). — \*II, 295.
- 9) 4-Nitro-1-[Acetyl-4-Nitrobenzyl]amidobenzol. Sm. 145° (*B.* 32, 1257). — \*II, 295.
- 10) 2,6-Dinitro-4-Benzoylamido-1,3-Dimethylbenzol. Sm. 244° (*G.* 39 [1] 518 *C.* 1909 [2] 274).
- 11) 2,3-Dinitro-4-Methylbenzoylamido-1-Methylbenzol. Sm. 110,5° (*J. pr.* [2] 62, 520). — \*II, 731.
- 12)  $\beta$ -Oximido- $\alpha$ -Di[4-Nitrophenyl]propan. Sm. 133° (*A.* 337, 178 *C.* 1905 [1] 234).
- 13) Äthylester d. 5-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 128 bis 129° (*Soc.* 79, 53). — \*IV, 1058.
- 14) Äthylester d. 4'-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 220 bis 225° (*Soc.* 79, 53). — \*IV, 1058.
- 15) 4-Acetat d. 3'-Nitro-3,4-Dioxyazobenzol-3-Methyläther. Sm. 95 bis 97° (*C.* 1908 [1] 128).
- 16) 6-Nitro-2,4-Dimethylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 139—140° (*B.* 26, 2763). — II, 1236.
- C<sub>15</sub>H<sub>13</sub>O<sub>5</sub>N<sub>5</sub>** C 52,5 — H 3,8 — O 23,3 — N 20,4 — M. G. 343.
- 1) 4,6-Dinitro-2-[2,4,5-Trimethylphenyl]-2,1,3-Benzotriazol-1-Oxyd. Sm. 222° (*J. pr.* [2] 71, 388 *C.* 1905 [2] 38).
- C<sub>15</sub>H<sub>13</sub>O<sub>5</sub>J** 1) 1,4-Diacetat d. 3-Jod-1,2,4-Trioxynaphtalin-2-Methyläther. Sm. 162—163° (*B.* 28, 347). — \*II, 626.
- C<sub>15</sub>H<sub>13</sub>O<sub>6</sub>N** C 59,4 — H 4,3 — O 31,7 — N 4,6 — M. G. 303.
- 1) 2-Oxybenzol- $\beta$ -[2-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. 142—148° (*J. pr.* [2] 27, 214). — II, 1495.
- 2) 2-Oxybenzol- $\beta$ -[4-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. 132° (*J. pr.* [2] 27, 220). — II, 1496.
- 3) 4-Oxybenzol- $\beta$ -[2-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. 205—207° (*J. pr.* [2] 27, 222). — II, 1527.
- 4) 4-Oxybenzol- $\beta$ -[4-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. 218°. Na + 3H<sub>2</sub>O (*J. pr.* [2] 27, 225). — II, 1527.
- 5) Lakton d.  $\alpha$ -Phtalylamido- $\gamma$ -Oxypropan- $\alpha\alpha$ -Dicarbonsäuremono-äthylester. Sm. 132° (*H.* 56, 272 *C.* 1908 [2] 683).
- 6) Dimethylester d. 4-Oximido-3-Oxy-1,4-Dihydronaphtalin-1-Methyldicarbonsäure. Sm. 194° (*C.* 1907 [1] 1130).
- 7) Äthylester d. 5-Methyl-4-[4-Nitrophenyl]-1,2-Pyron-6-Carbonsäure. Sm. 131—132° (*Soc.* 75, 782). — \*II, 1138.
- 8) 1-Methylester-3-[3-Oxyphenyl]ester d. 4-Oxybenzol-1-Carbonsäure-3-Amidoameisensäure. Sm. 161° (*A.* 325, 325 *C.* 1903 [1] 770).
- 9)  $\beta$ -[2-Nitrophen]oxyläthylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 106° (*J. pr.* [2] 27, 215). — II, 1493.
- 10)  $\beta$ -[4-Nitrophen]oxyläthylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 131° (*J. pr.* [2] 27, 221). — II, 1493.
- C<sub>15</sub>H<sub>13</sub>O<sub>6</sub>N<sub>8</sub>** C 54,4 — H 3,9 — O 29,0 — N 12,7 — M. G. 331.
- 1)  $\beta$ -Nitro- $\alpha$ -Di[2-Nitrophenyl]propan. Sm. 140—141,5° (*B.* 31, 657). — \*II, 115.
- 2) 2,4-Dinitrophenyläther d.  $\beta$ -Äthylbenzhydroxamsäure. Sm. 150 bis 152° (*B.* 27, 1656). — II, 1198.
- 3) 4,6-Dinitroäthylidiphenylamin-2-Carbonsäure. Sm. 150—151°. K (*G.* 33 [2] 329 *C.* 1904 [1] 278).
- 4) 6-Nitro-3-Oxy-4-Methoxyl-1-Phenylhydrazonmethylbenzol-2-Carbonsäure. Sm. 178—179° u. Zers. (*B.* 19, 2308). — IV, 716.
- 5) Äthylester d. 2',4'-Dinitrodiphenylamin-2-Carbonsäure. Sm. 164 bis 166° (*A.* 367, 115 *C.* 1909 [2] 699).



- C<sub>15</sub>H<sub>18</sub>O<sub>6</sub>N<sub>3</sub>** 6) Äthylester d. 2,6-Dinitrodiphenylamin-4-Carbonsäure. Sm. 154° (*Am.* 19, 21, 208). — **II**, 795.
- 7) Äthylester d. Di[2-Nitrophenyl]amidoameisensäure. Fl. (*B.* 18, 2574). — **II**, 374.
- 8) Äthylester d. Di[4-Nitrophenyl]amidoameisensäure. Sm. 133—134° (*B.* 18, 2576). — **II**, 374.
- 9) Acetat d. 4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 146 bis 147° (*B.* 37, 2093 *C.* 1904 [2] 33).
- C<sub>15</sub>H<sub>18</sub>O<sub>6</sub>N<sub>5</sub>** C 50,2 — H 3,6 — O 26,7 — N 19,5 — M. G. 359.
- 1) 4-[2,4,6-Trinitrobenzyliden]amido-1-Dimethylamidobenzol. Zers. bei 268°. + Nitrobenzol (*C.* 1901 [2] 69; *B.* 36, 960 *C.* 1903 [1] 969). — **\*IV**, 394.
- 2)  $\beta$ -Phenylhydrazon- $\alpha$ -[2,4,6-Trinitrophenyl]propan. Sm. 125° u. Zers. (*B.* 23, 2724). — **IV**, 773.
- 3) 2',4',6'-Trinitro-2,4,5-Trimethylazobenzol. Sm. 168° (*J. pr.* [2] 71, 388 *C.* 1905 [2] 38).
- C<sub>15</sub>H<sub>18</sub>O<sub>6</sub>Br** 1) Brompikropodophyllin. Sm. 138° (*Soc.* 73, 217). — **\*III**, 473.
- C<sub>15</sub>H<sub>18</sub>O<sub>7</sub>N<sub>5</sub>** 1) Brompodophyllotoxin. Sm. oberhalb 250° (*Soc.* 73, 217). — **\*III**, 473.
- C 48,0 — H 3,4 — O 29,9 — N 18,7 — M. G. 375.
- 1) Äthyläther d. s-Benzyliden-2,4,6-Trinitro-3-Oxyphenylhydrazin. Sm. 228° (*G.* 25 [2] 503). — **III**, 39.
- 2) 1-Methylhydroxyd d. 5-Nitro-2-Methyl-1-[2,4-Dinitrophenyl]benzimidazol. Sm. 264° (*B.* 31, 1464). — **\*IV**, 364.
- C<sub>15</sub>H<sub>18</sub>O<sub>7</sub>Cl** 1) Dimethylester d. 2-Chlor-6-Methoxyl-1,3-Diketo-4-Methyl-2,3-Dihydroinden-2,7-Dicarbonsäure (Trimethylester d. Chlorcarminondicarbonsäure). Sm. 165—166° (*B.* 34, 2156).
- C<sub>15</sub>H<sub>18</sub>O<sub>7</sub>Br** 1) Dimethylester d. 2-Brom-6-Methoxyl-1,3-Diketo-4-Methyl-2,3-Dihydroinden-2,7-Dicarbonsäure. Sm. 168—170° (*B.* 34, 2156).
- C<sub>15</sub>H<sub>18</sub>O<sub>9</sub>N<sub>5</sub>** C 46,0 — H 3,3 — O 32,7 — N 17,9 — M. G. 391.
- 1) 3-Äthyläther d.  $\alpha$ -[2,4,6-Trinitro-3-Oxyphenyl]- $\beta$ -[2-Oxybenzyliden]-hydrazin. Sm. 217—218° (*G.* 25 [2] 503). — **III**, 76.
- 2) 3-Äthyläther d.  $\alpha$ -[2,4,6-Trinitro-3-Oxyphenyl]- $\beta$ -[4-Oxybenzyliden]-hydrazin. Sm. 231° (*G.* 25 [2] 504). — **III**, 86.
- C<sub>15</sub>H<sub>18</sub>NCl<sub>2</sub>** 1)  $\alpha\beta$ -Dichlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylpropen. Sm. 154° u. Zers. (*A.* 356, 101 *C.* 1907 [2] 1701).
- C<sub>15</sub>H<sub>18</sub>NBr<sub>2</sub>** 1)  $\alpha\beta$ -Dibrom- $\gamma$ -Phenylimido- $\alpha$ -Phenylpropan. Sm. bei 175° u. Zers. (*A.* 239, 384; *A.* 356, 101 *C.* 1907 [2] 1701). — **III**, 54.
- 2) 1,3-Dimethyl- $\alpha$ -Naphtochinolindibromid. 2 + HBr (*J. pr.* [2] 35, 305). — **IV**, 419.
- C<sub>15</sub>H<sub>18</sub>NS** 1)  $\alpha$ -Rhodan-4-Methyldiphenylmethan. Fl. (*C.* 1902 [2] 789).
- 2) 3,5-Dimethyl-1-Phenylbenzthiazol. Fl. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 21, 2552). — **II**, 1294.
- 3) 3-[2-Methylphenyl]-2,4-Benzthiazin. Sm. 54,5—56° (*B.* 30, 1142). — **IV**, 419.
- 4) 3-[4-Methylphenyl]-2,4-Benzthiazin. Sm. 109—110°. Pikrat (*B.* 30, 1141). — **IV**, 420.
- 5) Äthyläther d. 5-Merkaptoakridin. Sm. 65°. (2HCl, PtCl<sub>4</sub>), Pikrat (*J. pr.* [2] 68, 76 *C.* 1903 [2] 445).
- C<sub>15</sub>H<sub>18</sub>NS<sub>2</sub>** 1) Dithiänyl-2-Amidophenylmethan. Sm. 59—60°. HCl (*B.* 30, 2036). — **\*III**, 596.
- 2) Dithiänyl-3-Amidophenylmethan. Sm. 73—74°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 30, 2034). — **\*III**, 596.
- 3) Dithiänyl-4-Amidophenylmethan. Sm. 84—85°. HCl (*B.* 30, 2036). — **\*III**, 596.
- 4) 4'-Äthyläther d. 1-[4-Merkaptophenyl]benzthiazol. Sm. 101—102° (*B.* 27, 1740). — **II**, 1542.
- C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>Cl** 1)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen. Sm. 179° u. Zers. (183°). HCl + C<sub>2</sub>H<sub>6</sub>O (*B.* 37, 4641 *C.* 1905 [1] 220; E. COLLET, Dissert. Berlin 1903).
- 2)  $\beta$ -Chlor- $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylpropen. Sm. 160° (*B.* 24, 247). — **IV**, 754.
- 3) 5-Chlor-1-Phenylhydrazon-2,3-Dihydroinden. Sm. 139° (*B.* 23, 1893). — **IV**, 774.

- C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>Cl** 4) 6-Chlor-1-Phenylhydrazon-2,3-Dihydroinden. Sm. 136,5—137,5° (B. 25, 2113). — IV, 774.
- 5) Chlormethylat d. 4-Phenyl-1,2-Benzdiazin. Zers. bei 70° (B. 42, 3128 C. 1909 [2] 1355).
- 6) Chlorbenzylat d. 2,3-Benzdiazin (Ch. d. Phtalazin). Sm. 97—99° (B. 28, 1835). — IV, 900.
- 7) Nitril d. 2-Methylphenylamido-4-Chlorphenylessigsäure. Sm. 106° (J. pr. [2] 65, 275 C. 1902 [1] 1215).
- 8) Nitril d. 3-Methylphenylamido-4-Chlorphenylessigsäure. Sm. 105° (J. pr. [2] 65, 273 C. 1902 [1] 1215).
- 9) Nitril d. 4-Methylphenylamido-4-Chlorphenylessigsäure. Sm. 80° (J. pr. [2] 65, 272 C. 1902 [1] 1214).
- C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>Br** 1) β-Brom-γ-Phenylimido-α-Phenylamidopropen. Sm. 145°. HBr + C<sub>2</sub>H<sub>6</sub>O (B. 22, 3308; 34, 514; B. 37, 4645 C. 1905 [1] 220). — II, 371.
- 2) β-Brom-γ-Phenylhydrazon-α-Phenylpropen. Sm. 129—130° (B. 17, 1815). — IV, 754.
- 3) 4-Brom-1-Phenylhydrazon-2,3-Dihydroinden. Sm. 146—147,5° (B. 25, 2110). — IV, 774.
- 4) 6-Brom-1-Phenylhydrazon-2,3-Dihydroinden. Sm. 158—159,5° (B. 25, 2111). — IV, 774.
- 5) 2-Brom-6-Methyl-4-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 155°. HBr (B. 32, 2027). — \*IV, 679.
- 6) 2-Methyl-3-[4-Bromphenyl]-3,4-Dihydro-1,3-Benzdiazin. HCl (J. pr. [2] 47, 362). — IV, 884.
- C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>J** 1) Jodmethylat d. 4-Phenyl-1,2-Benzdiazin. Zers. bei 220° (B. 42, 3127 C. 1909 [2] 1355).
- C<sub>15</sub>H<sub>13</sub>N<sub>3</sub>S** 1) Benzyläther d. α-Cyanimido-α-Phenylamido-α-Merkaptomethan (Phenylpseudobenzylthioharnstoffcyanid). Sm. 182° (190°) u. Zers. (B. 23, 1666; 28, 1304; C. 1903 [2] 662; A. 331, 297 C. 1904 [2] 33; A. 355, 201 C. 1907 [2] 1327). — II, 529; \*II, 640.
- 2) 3-Merkapto-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 170 bis 171° (Am. 27, 267 C. 1902 [1] 1299). — \*IV, 807.
- 3) Methyläther d. 5-Merkapto-1,3-Diphenyl-1,2,4-Triazol. Sm. 56—57° (Am. 34, 131 C. 1905 [2] 1031).
- 4) Methyläther d. 3-Merkapto-1,5-Diphenyl-1,2,4-Triazol. Sm. 102 bis 103° (103—104°) (Am. 27, 265 C. 1902 [1] 1299; J. pr. [2] 67, 226 C. 1903 [1] 1261). — \*IV, 807.
- 5) Methyläther d. 5-Merkapto-1,2-Diphenyl-1,3,4-Triazol. Sm. 164°. HCl, (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (B. 29, 2918). — IV, 1159.
- 6) Benzyläther d. 3[oder 5]-Merkapto-1-Phenyl-1,2,4-Triazol. Sm. 64° (A. 361, 345 C. 1908 [2] 883).
- 7) 5-Methyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 253° (J. pr. [2] 67, 252 C. 1903 [1] 1265). — \*IV, 756.
- C<sub>15</sub>H<sub>13</sub>N<sub>3</sub>S<sub>2</sub>** 1) α-Phenyl-α-Phenyldithioalduret. Sm. 227° (A. 275, 40). — III, 34.
- 2) 5-Merkapto-2-Phenylimido-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 162—163° (B. 34, 316). — \*IV, 536.
- 3) Methyläther d. 5-Merkapto-2-Phenylimido-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 67°. (2HCl, PtCl<sub>4</sub>) (B. 34, 313, 334). — \*IV, 450.
- 4) 3-Merkapto-5-Thiocarbonyl-4-Phenyl-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 162—163°. Na (B. 34, 314). — \*IV, 751.
- 5) 3-Merkapto-5-Thiocarbonyl-1-Phenyl-4-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 178° (B. 34, 317). — \*IV, 750.
- 6) Methyläther d. 3-Merkapto-5-Thiocarbonyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 120° (u. 125°) (B. 34, 309, 342). — \*IV, 750.
- 7) Verbindung (aus d. Methyläther d. Phenylimido-α-Phenylhydrazidomer-  
kaptomethan). Sm. 156—157° (B. 34, 342). — \*IV, 450.
- C<sub>15</sub>H<sub>13</sub>N<sub>3</sub>S<sub>3</sub>** 1) 4-Amidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-[2-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 128° (J. pr. [2] 60, 213). — \*IV, 531.
- 2) 4-Amidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 173°. HCl, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 60, 210). — \*IV, 535.

- $C_{15}H_{13}N_3S_3$  3) 4-Amido-3-Methylphenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 128° (B. 29, 2142). — IV, 683.
- $C_{15}H_{13}N_4J$  1) Jodmethylat d. 3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 128° u. Zers. (B. 27, 1004). — II, 1214.  
2) Jodmethylat d. 3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 150° u. Zers. (B. 27, 1006). — II, 1215.
- $C_{15}H_{13}ClBr_2$  1)  $\alpha$ -Chlor- $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropan. Sm. 122—125° u. Zers. (Soc. 71, 225). — \*II, 115.
- $C_{15}H_{13}ClS_3$  1) Chlorid (aus Trithiodibutolakton). Sm. 227°.  $2 + PtCl_4$  (B. 34, 3402). — \*III, 594.
- $C_{15}H_{13}BrS_3$  1) Bromid (aus Trithiodibutolakton). Sm. 267° u. Zers. (B. 34, 3403). — \*III, 594.
- $C_{15}H_{13}JS_3$  1) Jodid (aus Trithiodibutolakton). Sm. 275° (B. 34, 3404). — \*III, 594.  
 $C_{16}H_{14}ON_2$  C 75,6 — H 5,9 — O 6,7 — N 11,8 — M. G. 238.  
1)  $\gamma$ -Keto- $\alpha\gamma$ -Di[3-Amidophenyl]propen.  $2HCl$  (B. 34, 3528). — \*III, 180.  
2) Benzyliden-4-Acetylamidophenylamin. Sm. 125° (165—166°) (B. 39, 4067 C. 1907 [1] 468; B. 42, 2481 C. 1909 [2] 516).  
3)  $\alpha$ -Phenylamido- $\alpha$ -Acetylimido- $\alpha$ -Phenylmethan. Sm. 138—139° (C. 1903 [2] 831; Am. 20, 574). — \*IV, 567.  
4)  $\alpha$ -Imido- $\alpha$ -Acetylphenylamido- $\alpha$ -Phenylmethan. Sm. 128—129° (C. 1903 [2] 831).  
5) Carbonyl-2,2'-Diamido-4,4'-Dimethylbiphenyl. Sm. 339°.  $+ \frac{1}{2}C_2H_4O_2$  (B. 34, 3334). — \*IV, 657.  
6) Carbonyl-4,4'-Diamido-3,3'-Dimethylbiphenyl (o-Tolidinharnstoff). Sm. 370—373° (M. 25, 386 C. 1904 [2] 320).  
7)  $\alpha$ -[ $\beta$ -Phenyläthenyl]- $\beta$ -Phenylharnstoff. Sm. 217° (Soc. 95, 439 C. 1909 [1] 1655).  
8) s-Äthylendiphenylharnstoff. Sm. 209° (B. 14, 2183; 20, 784). — II, 380.  
9)  $\gamma$ -Oximido- $\gamma$ -Phenyl- $\alpha$ -[4-Amidophenyl]propen. Sm. 139° (C. 1906 [2] 1762).  
10)  $\alpha$ -Benzyliden- $\beta$ -Acetyl- $\beta$ -Phenylhydrazin. Sm. 122° (B. 17, 2097; 27, 2965; A. 252, 304; J. pr. [2] 53, 457). — IV, 750.  
11)  $\alpha$ -Acetyl- $\beta$ -Diphenylmethylenhydrazin. Sm. 107° (J. pr. [2] 44, 197). — III, 187.  
12)  $\alpha$ -Benzoyl- $\alpha$ -Methyl- $\beta$ -Benzylidenhydrazin. Sm. 82° (B. 41, 3288 C. 1908 [2] 1676).  
13)  $\alpha$ -Benzoyl- $\beta$ -Äthyliden- $\alpha$ -Phenylhydrazin. Sm. 89—90° (A. 342, 41 C. 1905 [2] 1246).  
14)  $\gamma$ -Phenylhydrazon- $\alpha$ -Keto- $\alpha$ -Phenylpropan. Sm. 118—120° (B. 21, 1139). — IV, 762.  
15)  $\alpha$ -Phenylhydrazon- $\beta$ -Keto- $\alpha$ -Phenylpropan? Sm. 144° (B. 22, 2129; A. 291, 287). — IV, 783.  
16) 1-Acetyl-2-[2-Naphtyl]-4,5-Dihydroimidazol. Sm. 160—166° (B. 25, 2139). — IV, 956.  
17) 2-Amido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 153—154°.  $2 + (2HCl, PtCl_4)$  (B. 28, 1899). — \*II, 660.  
18) 3-Phenyl-5-Benzyl-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 136°.  $HCl$  (B. 22, 3141). — III, 52.  
19)  $\alpha$ -[4-Acetylamidophenyl]- $\beta$ -[2-Pyridyl]äthen. Sm. 170—171° (B. 39, 2973 C. 1906 [2] 1504).  
20) 4-[ $\alpha$ -Keto- $\gamma$ -Phenylimidobutyl]pyridin? Sm. 103—104° (M. 22, 621). — \*IV, 136.  
21) 2-[2-Oxybenzyliden]amido-1,3-Dihydroisocindol. Sm. 165—166° (B. 33, 2813). — \*IV, 572.  
22) 1-Keto-2-[4-Amidomethylphenyl]-1,3-Dihydroisocindol (4-Amidobenzylphtalimidin). Sm. 187—188°.  $HCl$ ,  $(HCl, SnCl_2)$ ,  $(2HCl, PtCl_4)$ ,  $3HBr$ , Pikrat (B. 23, 341). — IV, 640.  
23) Methyläther d. 2-[2-Oxymethylphenyl]indazol (C. r. 137, 523 C. 1903 [2] 1061).  
24) Äthyläther d. 2-[4-Oxyphenyl]indazol. Sm. 118° (B. 24, 965). — IV, 867.



- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>** 25) **3-Keto-2-Methyl-1-Benzyl-2,3-Dihydrobenzpyrazol** + H<sub>2</sub>O. Sm. 75 bis 80° (*M.* 29, 927 *C.* 1908 [2] 2008).
- 26) **1,5-Dimethyl-2-[2-Oxyphenyl]benzimidazol**. Sm. 180° (*B.* 26, 197). — *IV*, 1014.
- 27) **Äthyläther d. 1-Phenyl-6-Oxybenzimidazol**. Sm. 77–78° (*B.* 25, 1000). — *II*, 723.
- 28) **Phenyläther d. 2-Oxymethyl-5[oder 6]-Methylbenzimidazol**. Sm. 170–171°. HCl, Pikrat (*J. pr.* [2] 63, 192). — \**IV*, 591.
- 29) **1-Phenylimido-2-Äthyl-1,2-Dihydrobenzoxazol**. Fl. (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 42, 450). — *II*, 708.
- 30) **3-Phenylamido-2-Keto-1,2,3,4-Tetrahydrochinolin**. Sm. 178° (*B.* 35, 517 *C.* 1902 [1] 658).
- 31) **1-Nitroso-2-Phenyl-1,2,3,4-Tetrahydrochinolin**. Fl. (*B.* 19, 1198). — *IV*, 399.
- 32) **1-Nitroso-4-Phenyl-1,2,3,4-Tetrahydrochinolin**. Sm. 72° (*B.* 28, 1043). — *IV*, 400.
- 33) **6-Nitroso-4-Phenyl-1,2,3,4-Tetrahydrochinolin**. Sm. 199,5° u. Zers. (*B.* 28, 1044). — *IV*, 400.
- 34) **1-Nitroso-6-Phenyl-1,2,3,4-Tetrahydrochinolin**. Sm. 111–112° (*A.* 230, 22). — *IV*, 400.
- 35) **Methyläther d. 3-[2-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin**. Fl. HCl, (HCl, SnCl<sub>4</sub>), Pikrat (*J. pr.* [2] 54, 281). — *IV*, 873.
- 36) **Methyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin**. Sm. 115°. HCl, (HCl, ZnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (*J. pr.* [2] 54, 285). — *IV*, 873.
- 37) **Methyläther d. 1-Oxy-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin**. Sm. 59–60° (*A.* 347, 123 *C.* 1906 [2] 776).
- 38) **2-Keto-6-Methyl-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin**. Sm. 206–207°. HCl, Acetat, Pikrat (*B.* 32, 2026, 2028). — \**IV*, 679.
- 39) **2-Keto-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin**. Sm. 189–190° (*J. pr.* [2] 51, 274). — *IV*, 632.
- 40) **2-Keto-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin**. Sm. 218–220° (*B.* 25, 2858; 27, 47, 2425; *J. pr.* [2] 55, 247). — *IV*, 632.
- 41) **2-Keto-4-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin**. Sm. 208–209° (*B.* 30, 1135). — \**IV*, 679.
- 42) **3-Keto-2-Benzyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin**. Sm. 216° (*B.* 25, 953). — *IV*, 1017.
- 43) **3-Keto-2,6 oder 2,7-Dimethyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin**. Sm. 200–201° (*B.* 25, 952). — *IV*, 1017.
- 44) **2-Amido-8-Oxy-3,7-Dimethylakridin** (*D. R. P.* 121686 *C.* 1901 [2] 78). — \**IV*, 678.
- 45) **Methyl-2-Naphthooxymethylchinizin**. Sm. 129° (*B.* 17, 551). — *IV*, 929.
- 46) **N-Äthylapotelusafranon** (*B.* 31, 1188). — *IV*, 1009.
- 47) **Anhydro-γ-[2-Naphtyl]hydrazonvaleriansäure**. Sm. 119° (*A.* 242, 367). — *IV*, 930.
- 48) **1,2<sup>2</sup>-Anhydrid d. 5[oder 6]-Methyl-2-Phenyl-2-Tetrahydrobenzimidazol-2<sup>2</sup>-Carbonsäure**. Sm. 186–187° (*B.* 25, 1990). — *IV*, 618.
- 49) **Anhydrid d. Säure C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub> (aus Hydrobenzamid)**. Sm. 164°. HCl (*B.* 14, 1139). — *III*, 36.
- 50) **Anhydroverbindung d. 2-Amidophenyläther d. Benzolcarbon-säure-β-Oxyäthylamid**. Sm. 149–151° (*J. pr.* [2] 24, 250). — *II*, 1160.
- 51) **Nitril d. α-[2-Methoxyphenyl]amido-α-Phenylessigsäure**. Sm. 73° (*B.* 39, 2811 *C.* 1906 [2] 1491).
- 52) **Nitril d. α-Phenylamido-α-[2-Oxyphenyl]essigmethyläthersäure**. Sm. 61° (*B.* 15, 2026). — *II*, 1543.
- 53) **Nitril d. α-Phenylamido-α-[4-Oxyphenyl]essigmethyläthersäure**. Sm. 104–105° (*B.* 37, 4085 *C.* 1904 [2] 1723).
- 54) **Nitril d. α-[4-Methoxyphenyl]amido-α-Phenylessigsäure**. Sm. 85° (73–74°) (*B.* 31, 2706; *B.* 39, 1000 *C.* 1906 [1] 1342). — \**II*, 820.
- 55) **Benzylidenamid d. Phenylamidoessigsäure**. Sm. 219° (*B.* 31, 2709). — \**III*, 26.
- 56) **isom. Benzylidenamid d. Phenylamidoessigsäure**. Sm. 169° (*B.* 31, 2710). — \**III*, 26.
- 57) **Phenylhydrazid d. β-Phenylakrylsäure**. Sm. 183° (187°) (*B.* 20, 1108; 34, 186, 2075). — *IV*, 670; \**IV*, 428.

- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>** 58) Benzylidenhydrazid d. Phenylelessigsäure. Sm. 154° (*J. pr.* [2] 64, 317). — \*III, 31.
- 59) Benzylidenhydrazid d. 1-Methylbenzol-2-Carbonsäure. Sm. 164° (*J. pr.* [2] 69, 370 *C.* 1904 [2] 534).
- 60) Benzylidenhydrazid d. 1-Methylbenzol-3-Carbonsäure. Sm. 139° (*J. pr.* [2] 69, 371 *C.* 1904 [2] 534).
- 61) Benzylidenhydrazid d. 1-Methylbenzol-4-Carbonsäure. Sm. 235° (*J. pr.* [2] 69, 371 *C.* 1904 [2] 534).
- 62) 4-Methylbenzylidenhydrazid d. Benzolcarbonsäure. Sm. 155°. Ag (*J. pr.* [2] 70, 397 *C.* 1905 [1] 82).
- 63)  $\alpha$ -Phenyläthylidenhydrazid d. Benzolcarbonsäure. Sm. 153° (*J. pr.* [2] 50, 306). — III, 130.
- 64) Verbindung (aus 4-Methylphenylazobenzylelessigsäureäthylester). Sm. 122–123° (*B.* 21, 2124). — IV, 1473.
- C<sub>15</sub>H<sub>14</sub>ON<sub>4</sub>** C 67,7 — H 5,3 — O 6,0 — N 21,0 — M. G. 266.
- 1) s-Di[Benzylidenamido]harnstoff. Sm. 198° (*J. pr.* [2] 52, 471; [2] 58, 217; *B.* 27, 58). — III, 40.
- 2) s-Di[ $\alpha$ -Imidobenzyl]harnstoff (Dibenzenylamidinharnstoff). Sm. 229° (*B.* 23, 2920). — IV, 846.
- 3)  $\alpha\gamma$ -Di[Phenylhydrazon]- $\beta$ -Ketopropan. Sm. 175–176° u. Zers. (*B.* 24, 3257; 27, 220; *B.* 38, 1373 *C.* 1905 [1] 1368). — IV, 762.
- 4)  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazon- $\beta$ -Ketopropan (Formazylmethylketon). Sm. 134–135°. Na + C<sub>2</sub>H<sub>6</sub>O, Ag (*B.* 24, 2794, 3262; 25, 747, 3210, 3539, 3544; *J. pr.* [2] 64, 222). — IV, 1228; \*IV, 894.
- 5)  $\alpha$ -Phenylazo- $\alpha$ -Acetylphenylhydrazonmethan (Acetylformazylwasserstoff). Sm. 188–189° (*B.* 25, 3187, 3204; *J. pr.* [2] 65, 130 *C.* 1902 [1] 995). — IV, 1226; \*IV, 892.
- 6) Äthyläther d. p-Phenylazo-3-Oxyphenylcyanamin. Sm. 81–82° (*C.* 1908 [2] 1588).
- 7) Äthyläther d. 4-Cyanamido-3-Oxyazobenzol. Sm. 121° (*C. r.* 143, 343 *C.* 1906 [2] 1055).
- 8) Benzyläther d. 5-Oxy-1-Benzyl-1,2,3,4-Tetrazol. Sm. 106° (*A.* 287, 258). — \*IV, 895.
- 9) 1[oder 3]-Nitroso-2-[4-Methylphenyl]imido-5-Methyl-2,3-Dihydrobenzimidazol. Sm. bei 140° u. Zers. (*B.* 24, 2521). — IV, 623.
- 10) 3-[ $\alpha$ -Semicarbazonäthyl]carbazol. Sm. oberhalb 360° (*B.* 40, 381 *C.* 1907 [1] 823).
- C<sub>15</sub>H<sub>14</sub>ON<sub>6</sub>** C 61,2 — H 4,8 — O 5,4 — N 28,6 — M. G. 294.
- 1) 5-Benzylnitrosamido-1-Benzyl-1,2,3,4-Tetrazol. Sm. 105° (*A.* 287, 257). — \*IV, 978.
- 2) isom. 5-Benzylnitrosamido-1-Benzyl-1,2,3,4-Tetrazol. Sm. 97–98° (*A.* 287, 260). — \*IV, 979.
- C<sub>15</sub>H<sub>14</sub>OCl<sub>2</sub>** 1) Methyläther d.  $\alpha\beta$ -Dichlor- $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]äthan. Sm. 90° (*B.* 37, 4165 *C.* 1904 [2] 1643).
- C<sub>15</sub>H<sub>14</sub>OBr<sub>2</sub>** 1) Methyläther d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthan. Sm. 177° (*J. pr.* [2] 61, 176; *A.* 333, 270 *C.* 1904 [2] 1392). — \*II, 540.
- 2) Äthyläther d. 4,4'-Dibrom- $\alpha$ -Oxydiphenylmethan. Sd. 228°<sub>18</sub> (*Am.* 30, 461 *C.* 1904 [1] 377).
- C<sub>15</sub>H<sub>14</sub>OS** 1) Äthyläther d. 4-Merkaptodiphenylketon (Ä. d. 4-Merkaptobenzenphenon). Sm. 82–83° (*B.* 27, 1734). — III, 210.
- 2) Methyläther d. 9-Oxy-9-Methylthioxanthen. Sm. 98–99° (*B.* 38, 2510 *C.* 1905 [2] 636).
- C<sub>15</sub>H<sub>14</sub>OS<sub>2</sub>** 1) Di[4-Methylphenylester] d. Dithiokohlensäure. Sm. 90–91° (*J. pr.* [2] 41, 190). — II, 824.
- C<sub>15</sub>H<sub>14</sub>OS<sub>3</sub>** 1) Base (aus Trithiodibutolakton). Chlorid, 2 Chlorid + PtCl<sub>4</sub>, Bromid, Jodid, Nitrat, Rhodanat (*B.* 34, 3402). — \*III, 594.
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** C 70,8 — H 5,5 — O 12,6 — N 11,0 — M. G. 254.
- 1) 2-[3-Nitrobenzyliden]amido-1,3-Dimethylbenzol. Sm. 105° (*B.* 32, 1010). — \*III, 23.
- 2) 2-[3-Nitrobenzyliden]amido-1,4-Dimethylbenzol. Sm. 126° (*A.* 255, 170). — III, 30.
- 3) Benzylidenderivat d. 4-Acetylamido-1-Hydroxylamidobenzol. Sm. 215° (*B.* 42, 2480 *C.* 1909 [2] 516).

- $C_{15}H_{14}O_2N_2$  4) Methyläther d.  $\alpha$ -Benzoylamido- $\alpha$ -Phenylimido- $\alpha$ -Oxymethan. Ag (C. 1904 [1] 1559).
- 5) Methyläther d. Benzoylimidophenylamidooxymethan (Benzoylpseudomethylphenylharnstoff). Fl. (Am. 24, 219; 26, 231).
- 6) Methyläther d.  $\alpha$ -Imido- $\alpha$ -Benzoylphenylamidooxymethan. Sm. 64 bis 65° (Am. 26, 232).
- 7)  $\alpha$ -Acetyl- $\alpha$ - $\beta$ -Diphenylharnstoff. Sm. 105° (106,5°) (B. 8, 1182; 17, 2882; J. pr. [2] 64, 261; B. 35, 1877 C. 1902 [2] 32; J. pr. [2] 79, 536 C. 1909 [2] 428). — II, 382.
- 8)  $\alpha$ -Phenacetyl- $\beta$ -Phenylharnstoff. Sm. 168—169° (166°) (Soc. 69, 866; C. 1900 [2] 530). — \*II, 814.
- 9)  $\alpha$ -Benzyl- $\beta$ -Benzoylharnstoff. Sm. 165—166° (Am. 27, 219 C. 1902 [1] 916).
- 10) Benzoylpseudobenzylharnstoff (Benzoylimidobenzylamidooxymethan). Sm. 89° (Am. 24, 208; Am. 27, 218 C. 1902 [1] 915).
- 11)  $\alpha$ -[2-Methylphenyl]- $\beta$ -Benzoylharnstoff. Sm. 210° (B. 25, 1089; J. pr. [2] 59, 274). — II, 1172; \*II, 736.
- 12)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Benzoylharnstoff. Sm. 222—223° (Am. 27, 219 C. 1902 [1] 916). — \*II, 736.
- 13) Benzoylpseudo-4-Methylphenylharnstoff (Benzoylimido-4-Methylphenylamidooxymethan). Sm. 80—81° (Am. 24, 209; Am. 27, 218 C. 1902 [1] 915).
- 14) Di[Benzoylamido]methan (Hipparaffin). Sm. 220,5—221° (218°) (A. 75, 201; 223, 43; 258, 109; 288, 250; J. 1878, 775; B. 9, 1427; 25, 311; J. pr. [2] 44, 570; B. 37, 4097 C. 1904 [2] 1726; A. 343, 226 C. 1906 [1] 923). — II, 1193; \*II, 750.
- 15)  $\alpha$ -Phenylnitrosamidoäthylphenylketon. Sm. 75° (Bl. [3] 17, 73). — \*III, 113.
- 16)  $\beta$ -Nitroso-4-Dimethylamidodiphenylketon. Fl. (B. 22, 339). — III, 183.
- 17) Methyl-2-Benzylnitrosamidophenylketon. Sm. 54—55° (B. 17, 972). — III, 124.
- 18) anti- $\alpha$ -Oximido-2-Acetylamidodiphenylmethan. Sm. bei 180° (B. 29, 1264). — III, 190.
- 19) Oxim d. Acetonynaphtalimidin. Sm. 233° (M. 22, 841).
- 20)  $\alpha$ -Diamidopyrokresoloxyd (Soc. 55, 54). — III, 646.
- 21) 4-Acetylhydrazidodiphenylketon. Sm. 154—155° (Soc. 55, 614). — III, 186.
- 22) Dimethyläther d. Phenyl-3,4-Dioxybenzylidenhydrazin. Sm. 121° (B. 40, 119 C. 1907 [1] 548).
- 23)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 158—159° (A. 365, 319 C. 1909 [1] 1866).
- 24)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 182° (B. 36, 3974 C. 1904 [1] 163).
- 25)  $\alpha$ - $\beta$ -Dibenzoyl- $\alpha$ -Methylhydrazin. Sm. 143° (145°) (A. 253, 12; B. 41, 3289 C. 1908 [2] 1677). — II, 1159.
- 26)  $\beta$ -Acetyl- $\alpha$ -Benzoyl- $\alpha$ -Phenylhydrazin +  $H_2O$ . Sm. 95—97° (152 bis 153° wasserfrei) (B. 20, 1716; A. 365, 346 C. 1909 [2] 1868). — IV, 669.
- 27) Methyläther d.  $\alpha$ -Benzyliden- $\beta$ -[4-Oxybenzoyl]hydrazin. Sm. 198° (J. pr. [2] 74, 14 Anm. C. 1906 [2] 791).
- 28) Methylenäther d. Methylphenyl-3,4-Dioxybenzylidenhydrazin. Sm. 85° (B. 29, 2328). — IV, 764.
- 29) Methylenäther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[3,4-Dioxyphenyl]äthan (Acetopiperonphenylhydrazon). Sm. 114° (B. 24, 2989; 34, 1471). — IV, 772.
- 30) 3,4-Äthylenäther d. 3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 107—108° (Bl. [3] 19, 510). — \*IV, 497.
- 31) 2-[ $\beta$ -Phenylureido]-1,2-Dihydrobenzofuran. Sm. 204° (B. 39, 498 C. 1906 [1] 932).
- 32) 1-4-Oxy-5-Keto-1,3-Diphenyltetrahydropyrazol. Sm. 175° (B. 39, 793 C. 1906 [1] 1167).
- 33) 1-4-Oxy-5-Keto-1,3-Diphenyltetrahydropyrazol. Sm. 174° (B. 39, 793 C. 1906 [1] 1167).
- 34) 4-Oxy-3-Keto-1,5-Diphenyltetrahydropyrazol. Sm. 173,5°. Na +  $4H_2O$  (Soc. 85, 1492 C. 1905 [1] 173).



- $C_{15}H_{14}O_2N_2$  35)  $\beta$ -[3-Nitrophenyl]- $\alpha$ -[5-Äthyl-2-Pyridyl]äthen. Sm. 66°. HCl, (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ), Pikrat (B. 34, 2227). — \*IV, 239.
- 36)  $\beta$ -[4-Nitrophenyl]- $\alpha$ -[5-Äthyl-2-Pyridyl]äthen. Sm. 116°. HCl, (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), Pikrat (B. 34, 2230). — \*IV, 239.
- 37) 2-[2-Nitrobenzyl]-1,3-Dihydroisindol. Sm. 80–81° (B. 33, 2817). — \*IV, 140.
- 38) 2-[4-Nitrobenzyl]-1,3-Dihydroisindol. Sm. 78–80° (B. 33, 2818). — \*IV, 140.
- 39) Dimethyläther d. 5,6-Dioxy-1-Phenylbenzimidazol. Sm. 106–107° (B. 29, 2689). — \*II, 561.
- 40) 2-[3-Nitrophenyl]-1,2,3,4-Tetrahydrochinolin. Sm. 100–101° (B. 18, 1905). — IV, 399.
- 41) Methyläther d. 2-Keto-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 217–218° (J. pr. [2] 52, 403). — IV, 632.
- 42) 2-Oxy-1[oder 4]-Methyläthylphenazon. Sm. 206° (A. 290, 304). — IV, 1009.
- 43)  $\beta$ -Phenylimido- $\beta$ -Phenylamidopropionsäure. Anilinsalz (Sm. 223°) (B. 28, 479). — \*II, 160.
- 44) 1-Methylphenylhydrazonmethylbenzol-2-Carbonsäure. Sm. 176° (B. 24, 2352). — IV, 696.
- 45)  $\alpha$ -Diphenylhydrazonpropionsäure. Sm. 145° (B. 17, 567). — IV, 689.
- 46)  $\alpha$ -Phenylhydrazon- $\beta$ -Phenylpropionsäure. Sm. 160–161° u. Zers. (B. 20, 593). — IV, 697.
- 47)  $\alpha$ -Methylphenylhydrazonphenylelessigsäure. Sm. 116° u. Zers. (A. 227, 350). — IV, 694.
- 48)  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazidoessigsäure. Sm. 165–166° (B. 36, 3883 C. 1904 [1] 26).
- 49) 2,4'-Dimethylazobenzol-6-Carbonsäure. Sm. 122,5° (C. r. 147, 982 C. 1909 [1] 69).
- 50) Methylester d. Phenylimidophenylamidoessigsäure. Sm. 65–66°. (2HCl,  $PtCl_4$ ) (Soc. 85, 991 C. 1904 [2] 831).
- 51) Äthylester d. Azobenzol-4-Carbonsäure. Sm. 85–86° (A. 303, 387). — IV, 1460.
- 52) Äthylester d. peri-Naphtimidazol-2-Methylcarbonsäure. Sm. 152° (A. 365, 115 C. 1909 [1] 1413).
- 53) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 141–142° (A. 365, 318 C. 1909 [1] 1866).
- 54) Acetat d. 2-Oxymethylazobenzol. Sm. 39–40° (C. r. 138, 1427 C. 1904 [2] 229; Bl. [3] 31, 868 C. 1904 [2] 661).
- 55) Acetat d. 4'-Oxy-2-Methylazobenzol. Sm. 65° (68°) (B. 32, 3097; J. pr. [2] 78, 388 C. 1909 [1] 361).
- 56) Acetat d. 4-Oxy-3-Methylazobenzol. Sm. 81–82° (87°) (B. 17, 364; B. 40, 2155 C. 1907 [2] 144). — IV, 1420.
- 57) Acetat d. 6-Oxy-3-Methylazobenzol. Sm. 87–88° (B. 17, 353; 24, 2300; A. 359, 368 C. 1908 [1] 1773). — IV, 1420.
- 58) Acetat d. 4'-Oxy-4-Methylazobenzol. Sm. 95° (97–98°) (B. 24, 2410; B. 39, 4162 C. 1907 [1] 227). — IV, 1413.
- 59) Propionat d. 4-Oxyazobenzol. Sm. 75° (B. 41, 1157 C. 1908 [1] 1880).
- 60) Propionat d.  $\beta$ -Oxy- $\alpha$ -Cyan- $\alpha$ -[2-Cyanphenyl]- $\alpha$ -Buten (Dipropionyl- $\alpha$ -Cyanbenzyleyanid). Sm. 135,5° (B. 27, 2232). — II, 1966.
- 61) Benzoat d.  $\beta$ -Oximido- $\beta$ -Amido- $\alpha$ -Phenyläthan. Sm. 144° (B. 18, 1069). — II, 1315.
- 62) Benzoat d.  $\alpha$ -Oximido- $\alpha$ -Phenylamidoäthan (Benzoat d. Äthenylphenylamidoxim). Sm. 110° (B. 22, 2409). — II, 1209.
- 63) Benzoat d. 2-Oximidoamidomethyl-1-Methylbenzol (B. d. 2-Methylbenzenylamidoxim). Sm. 145° (B. 22, 2441). — II, 1350.
- 64) Benzoat d. 4-Oximidoamidomethyl-1-Methylbenzol (B. d. 4-Methylbenzenylamidoxim). Sm. 173° (B. 19, 1489). — II, 1344.
- 65) Benzoat d. 2-[ $\alpha$ -Oximidoäthyl]pyridin. Sm. 69° (B. 24, 2531). — IV, 184.
- 66) Phenylamidoformiat d.  $\alpha$ -Oximidoäthylbenzol (Carbanilidoacetophenonoxim). Sm. 126° (B. 22, 3103). — III, 131.
- 67) 4-Methylphenylamidoformiat d. anti-Benzaldoxim. Sm. 121° (B. 25 2586). — III, 42.

- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** 68) **4-Methylphenylamidoformiat d. syn-Benzaldoxim.** Sm. 74—76° (B. 25, 2586). — III, 44.
- 69) **Amid d. 4-Benzoylamidophenylelessigsäure.** Sm. 248° (Soc. 79, 1353 C. 1902 [1] 25).
- 70) **Amid d. Diphenylmethan-2,4'-Dicarbonsäure.** Sm. 236° (A. 309, 119). — \*II, 1096.
- 71) **Methylenamid d. Benzolcarbonsäure.** Sm. 218° (C. r. 133, 1214 C. 1902 [1] 256).
- 72) **Methylamid d. 2-Benzoylamidobenzol-1-Carbonsäure.** Sm. 181° (J. pr. [2] 36, 159). — II, 1254.
- 73) **Phenylamid d. Benzoylamidoessigsäure.** Sm. 208,5° (J. pr. [2] 52, 257). — \*II, 746.
- 74) **Phenylamid d. 2-Acetylamidobenzol-1-Carbonsäure.** Sm. 167—168° (J. pr. [2] 36, 163). — II, 1250.
- 75) **Di[Phenylamid] d. Malonsäure.** Sm. 224—225° (223°) (B. 17, 135, 235; 27, 2745; 31, 337; A. 285, 134, 135; C. r. 130, 920; J. pr. [2] 55, 265; [2] 58, 413; J. pr. [2] 73, 63 C. 1906 [1] 820; A. 347, 23 C. 1906 [2] 506; B. 39, 3300 C. 1906 [2] 1567; J. pr. [2] 80, 57 C. 1909 [2] 1320). — II, 412; \*II, 210.
- 76) **4-Nitrosophenyl-4-Methylphenylamid d. Essigsäure.** Sm. 103° (A. 255, 164). — II, 486.
- 77) **Äthyl-4-Nitrophenylamid d. Benzolcarbonsäure.** Sm. 98° (Soc. 53, 779). — II, 1164.
- 78) **s-Phenyl-4-Methylphenylamid d. Oxalsäure.** Sm. 206° (A. 332, 267 C. 1904 [2] 700).
- 79) **Phenylmonohydrazid d. Phenylmethandicarbonsäuremonoaldehyd.** Sm. 91—93° (B. 28, 774). — IV, 696.
- 80) **Benzylidenhydrazid d. α-Oxyphenylelessigsäure.** Sm. 149° (B. 34, 2797). — \*III, 32.
- 81) **Benzylidenhydrazid d. 1-Oxymethylbenzol-2-Carbonsäure.** Sm. 145° (B. 33, 769). — \*III, 32.
- 82) **2-Oxybenzylidenhydrazid d. Phenylelessigsäure.** Sm. 188° (J. pr. [2] 64, 318). — \*III, 56.
- 83) **2-Oxybenzylidenhydrazid d. 1-Methylbenzol-2-Carbonsäure.** Sm. 166° (J. pr. [2] 69, 370 C. 1904 [2] 534).
- 84) **2-Oxybenzylidenhydrazid d. 1-Methylbenzol-4-Carbonsäure.** Sm. 197° (J. pr. [2] 69, 371 C. 1904 [2] 534).
- 85) **Verbindung (aus Thymochinon u. α-Benzoylphenylhydrazinsulfat).** Sm. 155° (Am. 22, 374 Anm.). — \*IV, 525.
- 86) **Verbindung (aus Anilin u. Brompropionsäure).** Sm. 220° (B. 22, 3305). — II, 371.
- 87) **Verbindung (aus Benzaldehyd)** (A. 168, 241). — III, 33.
- 88) **Verbindung (aus Carbanilidoisatinsäure).** Sm. 197° (J. pr. [2] 32, 285). — II, 1604.
- 89) **Verbindung (aus N-Methyl-syn-Benzaldoxim u. Phenylcarbonimid).** Sm. 119° (B. 28, 2815). — III, 43.
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>** C 63,8 — H 5,0 — O 11,3 — N 19,8 — M. G. 282.
- 1) **α-Phenylhydrazonacetyl-β-Phenylharnstoff.** Sm. 197° (C. 1899 [2] 422). — \*IV, 458.
- 2) **4-Phenylamido-3,5-Diketo-2-Methyl-1-Phenyltetrahydro-1,2,4-Triazol.** Sm. 156° (153°) (C. 1901 [1] 935; B. 34, 2318 Anm.; 35, 1562). — \*IV, 435.
- 3) **4-Methylphenylamido-3,5-Diketo-1-Phenyltetrahydro-1,2,4-Triazol.** Sm. 167—168° (B. 34, 2316; B. 35, 1566 C. 1902 [1] 1231). — \*IV, 900.
- 4) **4-[4-Methylphenyl]amido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol.** Sm. 238° u. Zers. (C. 1901 [1] 936). — \*IV, 900.
- 5) **4-Phenylamido-3-Oxy-5-Keto-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol.** Sm. 239,5° (C. 1901 [1] 936). — \*IV, 900.
- 6) **Acetylderivat d. Oxydiamidophenylbenzimidazol.** Sm. 150° (B. 32, 912). — \*IV, 674.
- 7) **5-Nitro-2-[2,4,5-Trimethylphenyl]-2,1,3-Benztriazol.** Sm. 136,5° (J. pr. [2] 71, 392 C. 1905 [2] 39).

- $C_{15}H_{14}O_2N_4$  8)  $\alpha\beta$ -Di[Phenylhydrazon]propionsäure. Sm. 205° u. Zers. (201—203°; 222—224°). Na + H<sub>2</sub>O, Ca (A. 248, 87; B. 24, 405; Soc. 79, 98; Bl. [3] 21, 598; Soc. 81, 428 C. 1902 [1] 857; C. 1908 [2] 686). — IV, 705; \*IV, 460.
- 9) isom.  $\alpha\beta$ -Di[Phenylhydrazon]propionsäure. Sm. 145—146° (C. 1908 [2] 686).
- 10)  $\alpha$ -Phenylazo- $\alpha$ -[4-Methylphenyl]hydrazonessigsäure. Sm. 165—166° (B. 27, 1688). — IV, 1241.
- 11)  $\alpha$ -[4-Methylphenyl]azo- $\alpha$ -Phenylhydrazonessigsäure. Sm. 164—165° (B. 27, 1687). — IV, 1241.
- 12) Methylester d. Formazylcarbonsäure. Sm. 134—135° (B. 25, 3184). — IV, 1228.
- 13) Phenylamidoformiat d.  $\alpha$ -Oximido- $\alpha$ -Phenylazoäthan (Carbanilphenyl-äthylidenoxy-R-Triazan). Sm. 123,5—124° (127°) (B. 33, 2797; B. 35, 72 C. 1902 [1] 403; B. 35, 689 C. 1902 [1] 726; B. 35, 757 C. 1902 [1] 726; B. 35, 3271 C. 1902 [2] 1251). — \*IV, 1067.
- 14) Phenylhydrazid-Benzylidenhydrazid d. Oxalsäure. Sm. 249—250° (B. 37, 2426 C. 1904 [2] 341).
- 15) Verbindung (aus d.  $\alpha$ -Phenylhydrazid d.  $\alpha$ -Phenylhydrazidoessigsäure). Sm. 209—210° (A. 301, 88). — \*IV, 477.
- $C_{15}H_{14}O_2N_6$  C 58,1 — H 4,5 — O 10,3 — N 27,1 — M. G. 310.
- 1) 6-[4-Nitrophenylhydrazon]methyl-2,4-Dimethyldiazobenzolimid. Sm. 153,5—156,5° u. Zers. (B. 34, 1319). — \*IV, 804.
- $C_{15}H_{14}O_2Cl_2$  1) Dimethyläther d.  $\alpha\alpha$ -Dichlor-2,5-Dioxydiphenylmethan (A. 344, 52 C. 1906 [1] 1097).
- $C_{15}H_{14}O_2Br_2$  1) 3',5'-Dibrom-4,4'[oder 6,4']-Dioxy-2,5-Dimethyldiphenylmethan. Sm. 153—155° (B. 38, 3306 C. 1905 [2] 1588).
- 2) 5,5'-Dibrom-4,4'-Dioxy-3,3'-Dimethyldiphenylmethan. Sm. 173° (A. 356, 168 C. 1907 [2] 1700).
- 3) Dimethyläther d. 5,5'-Dibrom-2,2'-Dioxydiphenylmethan. Sm. 108° (B. 39, 2362 C. 1906 [2] 526).
- 4)  $\alpha$ -Äthyläther d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 85 bis 86° (A. 334, 382 C. 1904 [2] 1052).
- $C_{15}H_{14}O_2S$  1) Dimethyläther d. 4,4'-Dioxydiphenylthioketon. Sm. 115° (B. 28, 2870). — III, 211.
- 2) Äthylester d. Diphenylsulfid-2-Carbonsäure. Sm. 151° (A. 263, 6). — II, 1514.
- 3) Di[4-Methylphenylester] d. Thiokohlensäure. Sm. 132° (B. 27, 3410). — \*II, 434.
- 4) 4-Benzooat d. 4-Merkapto-1-Oxybenzol-1-Äthyläther. Sm. 106° (Bl. [3] 33, 838 C. 1905 [2] 618).
- $C_{15}H_{14}O_3S_2$  1) Formaldibenzyldisulfoxyd. Sm. 108° (B. 41, 3421 C. 1908 [2] 1810).
- 2)  $\alpha\alpha$ -Dimerkaptopropiondiphenyläthersäure. Sm. 116—117°. Na, Ba + 2H<sub>2</sub>O (B. 18, 264; 19, 1787). — II, 788.
- $C_{15}H_{14}O_4Se$  1) 4-Benzooat d. 4-Seleno-1-Oxybenzol-1-Äthyläther. Sm. 94—95° (97°) (Bl. [3] 35, 674 C. 1906 [2] 1120; C. 1908 [2] 1351).
- $C_{15}H_{14}O_3N_2$  C 66,6 — H 5,2 — O 17,8 — N 10,4 — M. G. 270.
- 1) Phenyl-3-Nitro-4-Oxy-2,5-Dimethylbenzylidenamin. Sm. 136° (A. 357, 326 C. 1908 [1] 354).
- 2) Äthyläther d. 4-[4-Nitrobenzyliden]amido-1-Oxybenzol. Sm. 130,5°. HCl (Soc. 93, 1917 C. 1909 [1] 280).
- 3) Äthyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenylimido-3-Nitrophenylmethan. Sm. 55 bis 56° (A. 265, 151). — II, 1235.
- 4) 2-Nitro-4-Methylphenylamidobenzoylmethan. Sm. 163—165° (B. 23, 169). — III, 126.
- 5) 3-Nitro-4-Äthylamidodiphenylketon. Sm. 99—100° (B. 24, 3772). — III, 183.
- 6) 3-Nitro-4'-Dimethylamidodiphenylketon. Sm. 173° (D.R.P. 42853). — \*III, 148.
- 7) p-Nitro-4-[ $\alpha$ -Oximidoäthyl]diphenylmethan. Sm. 162° (C. r. 146, 343 C. 1908 [1] 1393).
- 8)  $\alpha$ -Oximido-3'-Nitro-2,4-Dimethyldiphenylmethan. Sm. 131—149° (?) (A. 286, 336). — III, 231.
- 9)  $\alpha\beta$ -Dioximido- $\alpha$ -Phenyl- $\beta$ -[4-Oxy-3-Methylphenyl]äthan. 2HCl (M. 26, 1158 C. 1905 [2] 1182).



- $C_{15}H_{14}O_8N_2$  10) Harnstoff (aus d. Dimethyläther d. 4,4'-Diamido-3,3'-Dioxybiphenyl) (*J. pr.* [2] 59, 216). — \*II, 601.
- 11) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -Benzoylharnstoff. Sm. 216—218° (*Am.* 24, 210). — \*II, 736.
  - 12) Benzoylmethyläther d. 4-Oxyphenylharnstoff. Sm. 160° u. Zers. (*C.* 1897 [1] 595). — \*III, 102.
  - 13) 3-Methyläther d. 3, 4-Dioxy-1-Benzoylhydrazonmethylbenzol (Vanillinbenzoylhydrazon). Sm. 124,5° (*C.* 1900 [2] 692). — \*III, 77.
  - 14) 4,5-Dioxy-2-Keto-4,5-Diphenyltetrahydroimidazol. Zers. bei 170° (*A.* 368, 173 *C.* 1909 [2] 1463).
  - 15) Methyläther d. 10-Amido-5-Oxy-9-Keto-3,7-Dimethylphenoxazin. Sm. 253° (256—260°). HCl, HBr (*B.* 30, 1107; *J. pr.* [2] 70, 366 *C.* 1904 [2] 1565). — \*II, 583.
  - 16) Methyläther d. 4-Amido-3-Oxy-9-Keto-5,7-Dimethylphenoxazin. Sm. 258—260°. 2HCl (*B.* 41, 4213 *C.* 1909 [1] 279).
  - 17) 2-[Methyl-2-Amidobenzoylamido]benzol-1-Carbonsäure. Sm. 170° (*A.* 367, 148 *C.* 1909 [2] 701).
  - 18) 4-Benzylidenhydrazidophenoxylessigsäure. Sm. 158° (*B.* 30, 2103). — IV, 815.
  - 19) 2-Phenylhydrazonmethylphenoxylessigsäure. Sm. 105° (*B.* 17, 2994). — IV, 760.
  - 20) 3-Phenylhydrazonmethylphenoxylessigsäure. Sm. bei 140° u. Zers. (*B.* 19, 3046). — IV, 760.
  - 21) 4-Phenylhydrazonmethylphenoxylessigsäure. Sm. 159° (*B.* 19, 3045). — IV, 761.
  - 22)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Methoxyphenyl]essigsäure (*G.* 20, 695). — IV, 709.
  - 23) 4-Oxy-1-[ $\alpha$ -Phenylhydrazonäthyl]benzol-3-Carbonsäure. Sm. 212° u. Zers. (*B.* 30, 1777). — IV, 709.
  - 24) 1- $\alpha$ -[ $\beta$ -Phenylureido]phenylelessigsäure. Sm. 168° (*C.* 1908 [1] 1632).
  - 25) 1- $\alpha$ -[ $\beta$ -Phenylureido]phenylelessigsäure. Sm. 154° (*B.* 24, 4153). — II, 1326.
  - 26)  $\beta\beta$ -Diphenylureidoessigsäure. Sm. 144,5° (*B.* 38, 2365 *C.* 1905 [2] 460).
  - 27) 4-Oxyazobenzol-2-Propionsäure. Sm. 146° (*B.* 37, 4130 *C.* 1904 [2] 1735).
  - 28) 4-Oxyazobenzol-3-Propionsäure. Sm. 130° (*B.* 37, 4129 *C.* 1904 [2] 1735).
  - 29) 6-Oxyazobenzol-3-Propionsäure. Sm. 140—141° (*B.* 37, 4131 *C.* 1904 [2] 1735).
  - 30) 3-Methylazobenzol-6-Oxyessigsäure. Sm. 123° (*B.* 34, 3940 *C.* 1902 [1] 117). — \*IV, 1040.
  - 31) 4-Methylazobenzol-4'-Oxyessigsäure. Sm. 200°. Na, Ba (*B.* 34, 3940 *C.* 1902 [1] 118). — \*IV, 1037.
  - 32) 4'-Oxy-2,3'-Dimethylazobenzol-5'-Carbonsäure. Sm. 210° (*G.* 37 [1] 77 *C.* 1907 [2] 404).
  - 33) 5'-Oxy-2,3'-Dimethylazobenzol-6'-Carbonsäure. Sm. 212° (*G.* 37 [1] 80 *C.* 1907 [2] 404).
  - 34) 4-Oxy-3,4'-Dimethylazobenzol-5'-Carbonsäure. Sm. 195° (*G.* 37 [1] 78 *C.* 1907 [2] 404).
  - 35) 5-Oxy-3,4'-Dimethylazobenzol-6-Carbonsäure. Sm. 225° (*G.* 37 [1] 81 *C.* 1907 [2] 404).
  - 36) Lakton d.  $\zeta$ -Benzylidenhydrazon- $\beta$ -Oxy- $\delta$ -Keto- $\beta$ -Hepten- $\epsilon$ -Carbon-säure. Sm. 191° (*B.* 38, 3031 *C.* 1905 [2] 1326).
  - 37) Methylester d.  $\alpha\beta$ -Diphenylharnstoff- $\alpha$ -Carbonsäure. Sm. 231° (*B.* 4, 248). — II, 382.
  - 38) Methylester d. 2-[2-Amidobenzoyl]amidobenzol-1-Carbonsäure. Sm. 118—119° (115°). HCl (*A.* 351, 275 *C.* 1907 [1] 1494; *B.* 40, 1619 *C.* 1907 [1] 1630).
  - 39) Methylester d. 2-Oxymethylazobenzol-2'-Carbonsäure (*C. r.* 138, 1277 *C.* 1904 [2] 120).
  - 40) Methylester d. 4-Oxyazobenzolmethyläther-3-Carbonsäure. Sm. 63—64° (*C.* 1908 [1] 127).
  - 41) Äthylester d.  $\rho$ -Nitrodiphenylamidoameisensäure (Nitrodiphenyl-urethan). Sm. 89° (*A.* 277, 103). — II, 374.

- $C_{15}H_{14}O_3N_2$  42) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -[4-Keto-1,4-Dihydrophenyl]hydrazon-ameisensäure. Sm. 96–97° (B. 40, 1435 C. 1907 [1] 1499).
- 43) Äthylester d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 88–89° (101°) (Soc. 69, 1265; A. 263, 228). — IV, 1468.
- 44) Äthylester d. 6-Oxyazobenzol-3-Carbonsäure. Sm. 105–106° (B. 30, 993; J. pr. [2] 78, 404 C. 1909 [1] 363). — IV, 1471.
- 45) Äthylester d. 4-Methylbenzo- $\beta$ -Ketopentamethylenazinmethylsäure. Zers. bei 200° (Bl. [3] 25, 721). — \*IV, 661.
- 46) Benzylester d.  $\alpha$ -Phenylharnstoff- $\beta$ -Carbonsäure. Sm. 158° (B. 22, 1573). — II, 1051.
- 47) 2-Acetylamidophenylester d. Phenylamidoameisensäure. Sm. 162° (J. pr. [2] 41, 328). — II, 706.
- 48) 4-Acetate d. 3,4-Dioxyazobenzol-3-Methyläther. Sm. 61° (C. 1908 [1] 127).
- 49) Benzoat d.  $\beta$ -Phenylnitrosamido- $\alpha$ -Oxyäthan. Fl. (A. 332, 210 C. 1904 [2] 211).
- 50)  $\beta$ -Benzoat d.  $\beta$ -Oximido- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 148 bis 149° u. Zers. (B. 18, 1078). — II, 1554.
- 51) 3-Benzoat d. 4-Oxy-3-Amidooximidomethyl-1-Methylbenzol. Sm. 181–182° (B. 24, 3662). — II, 1547.
- 52) 1-Benzoat d. 4-Oxy-1-Amidooximidomethylbenzol-4-Methyläther. Sm. 148° (B. 22, 2795). — II, 1532.
- 53) Phenylamidoformiat d. anti-Methylbenzhydroxamsäure. Sm. 115° (B. 29, 1157). — \*II, 751.
- 54) Phenylamidoformiat d. syn-Methylbenzhydroxamsäure. Sm. 117° (B. 29, 1160). — \*II, 752.
- 55) Phenylamidoformiat d. 2-Methoxybenzaloxim. Sm. 105° (B. 23, 2741). — III, 77.
- 56) Phenylamidoformiat d. anti-4-Methoxybenzaloxim. Sm. 103° (110°) (B. 22, 3102; 26, 2090; A. 355, 52 C. 1907 [2] 1165). — III, 87.
- 57) Phenylamidoformiat d. syn-4-Methoxybenzaloxim. Sm. 80° (B. 23, 2165; 26, 2089). — III, 87.
- 58) isom. Phenylamidoformiat d. syn-4-Methoxybenzaloxim. Sm. 82° u. Zers. (B. 23, 2165; 26, 2089). — III, 87.
- 59) Äthylcarbonat d. 4-Oxyazobenzol. Sm. 82–83° (B. 40, 1436 C. 1907 [1] 1499).
- 60)  $\alpha$ -Amid d. Phenyl-2-Carboxylphenylamidoessigsäure. Sm. 236° (J. pr. [2] 65, 277 C. 1902 [1] 1215).
- 61) 2-Amid d. Benzol-1-Carbonsäure-2-Benzylamidoameisensäure (J. pr. [2] 49, 319).
- 62) Gem. Methylenamid d. Benzolcarbonsäure u. 2-Oxybenzol-1-Carbonsäure. Sm. 151–153° (A. 343, 258 C. 1906 [1] 925).
- 63) Phenylamid d. Phenylamidoformoxylessigsäure. Sm. 145–147° (Bl. [3] 29, 122 C. 1903 [1] 564).
- 64) Phenylmonamid d. Phenylamidomethan- $\alpha\alpha$ -Dicarbonsäure (Anilidomalonanilsäure). Sm. 157° u. Zers. Cu (B. 31, 385). — \*II, 230.
- 65) 2-Phenylamid d. Benzol-1-Carbonsäure-2-Amidoessigsäure. Sm. 235° u. Zers. (B. 33, 555). — \*II, 785.
- 66) 2-Nitrobenzylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 134 bis 135° (B. 25, 3034). — II, 1330.
- 67) 2-Nitrobenzylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 140 bis 142° (B. 25, 3036). — II, 1341.
- 68) 2-Nitro-4-Methylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 165–166° (A. 210, 331). — II, 1341.
- 69) 2,4-Dimethylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 166° (B. 26, 2763). — II, 1236.
- 70) 4-Nitro-2,3-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 208 bis 209° (B. 34, 2247). — \*II, 732.
- 71) 5-Nitro-2,3-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 227 bis 228° (B. 34, 2247). — \*II, 732.
- 72) 6-Nitro-2,3-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 177 bis 178° (B. 34, 2247). — \*II, 732.
- 73) 3-Nitro-2,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 236° (G. 33 [2] 281 C. 1904 [1] 265).

- $C_{15}H_{14}O_3N_2$  74) 5-Nitro-2,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 200° (*G.* 33 [2] 281 *C.* 1904 [1] 265).
- 75) ?-Nitro-2,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 184,5° (*B.* 10, 1710, 1711; *A.* 208, 320). — II, 1166.
- 76) 2-Nitro-3,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 199 bis 200° (*B.* 34, 2251). — \*II, 732.
- 77) 5-Nitro-3,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 223 bis 224° (*B.* 34, 2251). — \*II, 732.
- 78) 6-Nitro-3,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 149 bis 150° (*B.* 34, 2251). — \*II, 732.
- 79) ?-Nitro-?-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 178° (*B.* 10, 1711; *A.* 208, 323). — II, 1166.
- 80) 3-Nitro-4-Methylbenzylamid d. Benzolcarbonsäure. Sm. 145–147° (*B.* 28, 2989). — \*II, 732.
- 81) Phenyl-2-Nitrobenzylamid d. Essigsäure. Sm. 75° (*B.* 23, 2638). — II, 524.
- 82) Phenyl-3-Nitrobenzylamid d. Essigsäure. Sm. 48° (*G.* 30 [2] 257). — \*II, 295.
- 83) 4-Nitrophenylbenzylamid d. Essigsäure. Sm. 108–109° (*Soc.* 53, 779). — II, 524.
- 84) 2-Nitrobenzyl-2-Methylphenylamid d. Ameisensäure. Sm. 76° (*B.* 22, 2701). — II, 524.
- 85) 2-Nitrobenzyl-4-Methylphenylamid d. Ameisensäure. Sm. 79° (*B.* 22, 2695). — II, 524.
- 86) 2-Oxybenzylidenhydrazid d.  $\alpha$ -Oxyessigphenyläthersäure. Sm. 179° (*B.* 34, 2797). — \*III, 56.
- 87)  $\alpha$ -Phenyläthylidenhydrazid d. 2-Oxyphenylkohlsäure (2-Oxyphenylester d.  $\alpha$ -Phenyläthylidenhydrazidoameisensäure). Sm. 190–191° (*A.* 317, 194). — \*III, 99.
- 88)  $\alpha$ -Phenyläthylidenhydrazid d. 3-Oxyphenylkohlsäure. Sm. 174° (*A.* 317, 198). — \*III, 99.
- 89)  $\alpha$ -Phenyläthylidenhydrazid d. 4-Oxyphenylkohlsäure. Sm. 120 bis 121° (*A.* 317, 203). — \*III, 99.
- 90) Verbindung (aus 3,4-Diamido-1-Methylbenzol u. Phtalsäureanhydrid). Zers. bei 90° (*G.* 24 [1] 148). — IV, 618.  
C 60,4 — H 4,7 — O 16,1 — N 18,7 — M. G. 298.
- $C_{15}H_{14}O_3N_4$
- 1) s-Di[Phenylamidoformyl]harnstoff. Sm. 140° (211°) (*Soc.* 79, 843; *C.* 1904 [2] 29).
- 2) 4,4'-Di[Methylnitrosamidophenyl]keton. Sm. 228–229° (*B.* 37, 2677 *C.* 1904 [2] 444).
- 3) 5-Nitro-2-Acetylamido-1-Phenylhydrazonmethylbenzol. Sm. 229° (*M.* 24, 97 *C.* 1903 [1] 921). — \*IV, 488.
- 4) 6-Nitro-3-Acetylamido-1-Phenylhydrazonmethylbenzol. Sm. 247° (*M.* 24, 6 *C.* 1903 [1] 775). — \*IV, 488.
- 5) 3-Nitro-4-Acetylamido-1-Phenylhydrazonmethylbenzol. Sm. 209° (*M.* 24, 91 *C.* 1903 [1] 921). — \*IV, 488.
- 6)  $\beta$ -[2-Nitro-4-Methylphenyl]azo- $\alpha$ -Oximido- $\alpha$ -Phenyläthan. Sm. 174° (*B.* 18, 2567). — IV, 1478.
- 7) 4-Benzoylamidoacetylhydrazon-1-Oximido-1,4-Dihydrobenzol. Sm. 219° u. Zers. (*A.* 343, 191 *C.* 1906 [1] 837).
- 8) 1<sup>4</sup>-Methyläther d. 4-Phenylamido-3-Oxy-5-Keto-1-[4-Oxyphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 242° (*C.* 1901 [1] 936; *B.* 34, 2323). — \*IV, 900.
- 9) 4<sup>4</sup>-Methyläther d. 4-[4-Oxyphenyl]amido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 205,5° (*C.* 1901 [1] 936; *B.* 34, 2322). — \*IV, 900.
- 10) 5,5'-Diketo-1-Benzoyl-2,2'-Dimethyl-4,5,4',5'-Tetrahydro-4,4'-Bimidazol. Sm. 216–218° u. Zers. (*J. pr.* [2] 76, 95 *C.* 1907 [2] 1088).
- 11) 3[oder 4]-Semicarbazon d. 6-Äthylphenoxazin-3,4-Chinon. Sm. 243° u. Zers. (*B.* 31, 498). — \*IV, 235.
- 12) 6-Nitro-2-[2,4,5-Trimethylphenyl]-2,1,3-Benzotriazol-1-Oxyd. Sm. 185° (*J. pr.* [2] 71, 391 *C.* 1905 [2] 39).
- 13) Aldehyd d. 3-Nitro-4'-Dimethylamidoazobenzol-4-Carbonsäure. Sm. 219–220° (*B.* 39, 2755 *C.* 1906 [2] 1322).



- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>N<sub>4</sub>** 14) Äthylester d. 2-Phenyl-2,1,3-Benztriazol-1-Oxyd-6-Amidoameisensäure. Sm. 215° (B. 39, 188 C. 1906 [1] 754).
- 15) Carbonat d. Benzenylamidoxim. Sm. 128—129° (B. 18, 2471; 19, 1481). — II, 1201.
- 16) Benzoat d. Anhydrodioximidotropinonoxim. Sm. 150—152° (B. 30, 2706). — \*III, 612.
- 17) Amid d. s-Diphenylharnstoff-3,3'-Dicarbonsäure. Zers. oberhalb 270° (A. 232, 140). — II, 1260.
- 18) Phenylnitrosamid d. β-Phenylureidoessigsäure. Sm. 131° u. Zers. (J. pr. [2] 70, 250 C. 1904 [2] 1463).
- 19) Phenylnitrosohydrazid d. Benzoylamidoessigsäure. Sm. 128—129° (J. pr. [2] 52, 249). — IV, 670.
- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>Br<sub>2</sub>** 1) Dibromdihydrolapachol. Sm. 132°. +  $\frac{1}{3}$  C<sub>2</sub>H<sub>6</sub>O (Soc. 61, 643). — III, 402.
- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>S** 1) Diformalphenylbenzylsulfon. Sm. 76° (B. 42, 3824 C. 1909 [2] 1861).
- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>S<sub>2</sub>** 1) Di[2-Methoxyphenylester] d. Dithiokohlensäure. Sm. 123° (B. 39, 1348 C. 1906 [1] 1788).
- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>Hg** 1) 5-Acetat d. 6-Oxy-3-Methylazobenzol-5-Quecksilberhydroxyd. Sm. 269° u. Zers. (C. 1901 [1] 453).
- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>N<sub>2</sub>** C 62,9 — H 4,9 — O 22,4 — N 9,8 — M. G. 286.
- 1) αγ-Di[*p*-Nitrophenyl]propan. Sm. 139° (B. 34, 1293).
- 2) Di[5-Nitro-2-Methylphenyl]methan. Sm. 153° (D.R.P. 67001; B. 27, 3314). — \*II, 115.
- 3) Di[*p*-Nitro-*p*-Methylphenyl]methan. Sm. 164° (B. 7, 1183). — II, 238.
- 4) Di[*p*-Nitro-*p*-Methylphenyl]methan. Sm. 170° (D.R.P. 67001). — \*II, 115.
- 5) Acetyl-3-Nitrophenyl-2-Oxybenzylamin. Sm. 126° (B. 32, 2060). — \*II, 427.
- 6) Methyläther d. 2-Oxyphenyl-2-Nitrobenzylformylamin. Sm. 82° (J. pr. [2] 54, 279). — \*II, 388.
- 7) Methyläther d. 4-Oxyphenyl-2-Nitrobenzylformylamin. Sm. 69° (J. pr. [2] 54, 284). — \*II, 401.
- 8) Methyläther d. 2-Oxyphenyl-4-Nitrobenzylformylamin. Sm. 102° (B. 32, 1254). — \*II, 388.
- 9) 4-Methyläther-1-Benzyläther d. anti-3-Nitro-4-Oxybenzaldoxim. Sm. 124° (C. 1907 [1] 548).
- 10) 4-Methyläther-1-Benzyläther d. syn-3-Nitro-4-Oxybenzaldoxim. Sm. 195° (C. 1907 [1] 548).
- 11) β-Phenylamido-β-[2-Nitrophenyl]propionsäure. Sm. 120—122°. NH<sub>4</sub> (B. 17, 1501). — II, 1367.
- 12) 4'-Nitro-2,4-Dimethyldiphenylamin-2'-Carbonsäure. Sm. 241° u. Zers. K + H<sub>2</sub>O, Ba + 5H<sub>2</sub>O (A. 279, 1281). — II, 1283.
- 13) 2'-Nitro-2,4-Dimethyldiphenylamin-4'-Carbonsäure. Sm. 213° (A. 332, 90 C. 1904 [1] 1570).
- 14) Di[Phenylamido]malonsäure. Anilinsalz (B. 35, 1820 C. 1902 [2] 25).
- 15) Di[Phenylamido]methan-2,2'-Dicarbonsäure. Sm. 158° u. Zers. (157°) (A. 324, 122 C. 1902 [2] 1253; B. 36, 50 C. 1903 [1] 505; D.R.P. 138393 C. 1903 [1] 372).
- 16) Di[Phenylamido]methan-3,3'-Dicarbonsäure. Sm. 119—129° (B. 36, 51 C. 1903 [1] 505).
- 17) Di[Phenylamido]methan-4,4'-Dicarbonsäure. Sm. 167—168° (B. 36, 52 C. 1903 [1] 505).
- 18) *p*-Diamidodiphenylmethan-2,4'-Dicarbonsäure. Sm. 265°. 2HCl, 2H<sub>2</sub>SO<sub>4</sub> (A. 309, 124). — \*II, 1096.
- 19) 4,4'-Diamidodiphenylmethan-3,3'-Dicarbonsäure. Zers. bei 239° (254°). (NH<sub>4</sub>)<sub>2</sub> (J. pr. [2] 63, 255; A. 324, 127 C. 1902 [2] 1253).
- 20) *p*-Diamidodiphenylmethan-4,4'-Dicarbonsäure. Sm. 329° (C. r. 141, 199 C. 1905 [2] 770).
- 21) 4,4'-Dioxyazobenzol-4'-Äthyläther-3-Carbonsäure. Sm. 208° (C. 1908 [2] 310).
- 22) 2,6-Dimethyl-4-[3-Amidophenyl]pyridin-3,5-Dicarbonsäure. Sm. 238° u. Zers. Ba + 3H<sub>2</sub>O (G. 17, 469; B. 20, 1340). — IV, 387.
- 23) 4-Phenylamido-2,6-Dimethylpyridin-3,4<sup>3</sup>-Dicarbonsäure + 2H<sub>2</sub>O. Sm. 234° (A. 366, 371 C. 1909 [2] 288).

- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>N<sub>2</sub>** 24) Methylester d. N-Methyl-2'-Nitrodiphenylamin-2-Carbonsäure. *Sd.* 256°<sub>760</sub> (*A.* 367, 143 *C.* 1909 [2] 701).
- 25) Äthylester d. 4-Nitrodiphenylamin-2-Carbonsäure. *Sm.* 118° (121°) (*B.* 23, 3442; 24, 3810). — II, 1283.
- 26) Äthylester d. 2-Nitrodiphenylamin-4-Carbonsäure. *Sm.* 123° (*B.* 22, 3285; 23, 3450). — II, 1285.
- 27) Äthylester d. Acetyldicyanbenzoylessigsäure. *Sm.* 111° (*A.* 332, 153 *C.* 1904 [2] 192).
- 28) Acetat d. 2-Nitrophenyl-2-Oxybenzylamin. *Sm.* 93° (*B.* 32, 2059). — \*II, 427.
- 29) Acetat d. β-Oxy-β-[2-Nitrophenyl]-α-[2-Pyridyl]äthan. *Sm.* 82° (*B.* 33, 3477). — \*IV, 226.
- 30) Phenylamidoformiat d. 2-Oximido-5-Oxy-1-Keto-1,2-Dihydrobenzol-5-Äthyläther (*J. pr.* [2] 70, 324 *C.* 1904 [2] 1541).
- 31) 2-Nitrophenyläther d. β-Oxyäthylamid d. Benzolcarbonsäure. *Sm.* 94—95° (*J. pr.* [2] 24, 249). — II, 1160.
- 32) Methylenamid d. 2-Oxybenzol-1-Carbonsäure. *Sm.* 195—197° (*A.* 343, 257 *C.* 1906 [1] 925).
- 33) Phenylamid d. β-Oxy-β-[4-Nitrophenyl]propionsäure. *Sm.* 176° (*B.* 17, 1502). — II, 1575.
- 34) Di[4-Oxyphenylamid] d. Methandicarbonsäure. *Sm.* oberhalb 235° u. Zers. (*G.* 25 [2] 537). — \*II, 409.
- 35) Mesoxanilidhydrat (*A.* 270, 291). — II, 421.
- 36) 2-Nitrophenylamid d. α-Oxypropionphenyläthersäure. *Sm.* 88° (*B.* 34, 2057).
- 37) 3-Nitrophenylamid d. α-Oxypropionphenyläthersäure. *Sm.* 118° (*B.* 34, 2062).
- 38) 4-Nitrophenylamid d. α-Oxypropionphenyläthersäure. *Sm.* 141 bis 142° (*B.* 34, 2065).
- 39) 4-Methoxybenzylidenhydrazid d. 2-Oxyphenylkohlenensäure. *Sm.* 192° (*A.* 300, 151). — \*III, 62.
- 40) Verbindung (aus 5-Keto-3-Methyl-4-Benzyliden-4,5-Dihydroisoxazol). *Sm.* 145° (*B.* 30, 1338). — \*II, 1176.
- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>N<sub>4</sub>** C 57,3 — H 4,5 — O 20,4 — N 17,8 — *M. G.* 314.
- 1) 4-[2,4-Dinitrobenzyliden]amido-1-Dimethylamidobenzol + H<sub>2</sub>O. *Sm.* 193° (196°) (*C.* 1901 [2] 69; *B.* 35, 1226 *C.* 1902 [1] 1000). — \*IV, 394.
- 2) β-Phenylhydrazon-α-[2,4-Dinitrophenyl]propan. *Sm.* 124—125° (*B.* 42, 608 *C.* 1909 [1] 999).
- 3) 2',4'-Dinitro-2,4,5-Trimethylazobenzol. *Sm.* 177—178° (*J. pr.* [2] 71, 391 *C.* 1905 [2] 39).
- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>N<sub>6</sub>** 4) Ricininsäure. *Sm.* 295°. Ba + 4H<sub>2</sub>O, Ag<sub>2</sub> + 4H<sub>2</sub>O (*C.* 1895 [1] 853). C 52,6 — H 4,1 — O 18,7 — N 24,6 — *M. G.* 342.
- 1) αβ-Di[4-Nitrophenylhydrazon]propan. *Sm.* 277° u. Zers. (*B.* 41, 962 *C.* 1908 [1] 1681).
- 2) α-Phenylnitrosohydrazon-β-[4-Nitrophenyl]hydrazon-α-Oxypropan. *Sm.* 147—148° (*J. pr.* [2] 64, 242; *B.* 34, 546). — \*IV, 452.
- 3) αγ-Dinitro-αγ-Di[Phenylazo]propan. *Sm.* 173° (*B.* 25, 1712). — IV, 1376.
- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Dibromdihydroxanthoxylin N. *Sm.* 171° (*C.* 1907 [1] 169).
- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>S** 1) 2,4-Dimethyldiphenylketon-2'-Sulfonsäure + 2H<sub>2</sub>O. *Sm.* 80°. NH<sub>4</sub> + 1/2 H<sub>2</sub>O, Na, K, Ba + 2H<sub>2</sub>O (*B.* 33, 3489). — \*III, 171.
- 2) β-Phenylsulfon-β-Phenylpropionsäure. *Sm.* 173°. Ba, Ag (*Am.* 31, 174 *C.* 1904 [1] 876; *B.* 40, 4791 *C.* 1908 [1] 232).
- 3) Benzylidenacetophenonhydrosulfonsäure. K + 2 1/2 H<sub>2</sub>O (*B.* 37, 4049 *C.* 1904 [2] 1648).
- 4) Aldehyd d. 2-[4-Methylphenyl]sulfoxyl-1-Methylbenzol-3-Carbonsäure. *Sm.* 62° (*D.R.P.* 185547 *C.* 1907 [2] 863).
- 5) Aldehyd d. 4-[4-Methylphenyl]sulfoxyl-1-Methylbenzol-3-Carbonsäure. *Sm.* 68—69° (*D.R.P.* 185547 *C.* 1907 [2] 863).
- 6) Methylester d. 4-Methyldiphenylsulfon-2'-Carbonsäure. *Sm.* 89° (*B.* 38, 741 *C.* 1905 [1] 877).
- 7) Äthylester d. Diphenylsulfon-2-Carbonsäure. *Sm.* 78—79° (*Am.* 33, 413 *C.* 1905 [1] 1395).
- 8) Äthylester d. Diphenylketon-2-Sulfonsäure. *Sm.* 125,5—126,5° (*Am.* 17, 358). — III, 192.

- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>S** 9) Benzoat d.  $\beta$ -Oxyäthylphenylsulfon. Sm. 124—125° (*J. pr.* [2] 30, 191). — II, 1139.
- C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>S<sub>2</sub>** 1) 1,3-Benzylidendi[Sulfonmethyl]benzol. Sm. oberhalb 300° u. Zers. (*B.* 34, 1776). — \*III, 15.  
C 59,6 — H 4,6 — O 26,5 — N 9,3 — M. G. 302.
- C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>N<sub>2</sub>** 1)  $\beta$ -Phenylamido- $\alpha$ -Oxy- $\beta$ -[2-Nitrophenyl]propionsäure. Sm. 127° (*A.* 284, 139). — II, 1578.  
2) 1- $\alpha$ -[ $\beta$ -1-Naphtylureido]äthan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 115° (*C.* 1907 [2] 1157).  
3) 1-Benzylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 231 bis 232° u. Zers. K +  $\frac{1}{2}$ H<sub>2</sub>O (*B.* 35, 4319 *C.* 1903 [1] 336). — \*IV, 357.  
4) 2-[ $\alpha$ -Oximido-3,4-Dimethoxybenzyl]pyridin-4-Carbonsäure. Sm. 226°. HCl + H<sub>2</sub>O (*M.* 10, 699). — IV, 177.  
5) Dimethylester d.  $\alpha$  $\gamma$ -Dicyan- $\beta$ -Oxy- $\beta$ -Phenylpropan- $\alpha$  $\gamma$ -Dicarbonsäure. Sm. 162° (*Bl.* [3] 31, 529 *C.* 1904 [1] 1554).  
6) Äthylester d. 8-Nitro-5-Acetylamidonaphtalin-1-Carbonsäure. Sm. 173°. — II, 1452.  
7)  $\alpha$ -Amid- $\alpha$  $\gamma$ -Phenylimid d. Propen- $\alpha$  $\alpha$  $\gamma$ -Tetracarbonsäure- $\gamma$ -Äthylester. Sm. 271° (*J. pr.* [2] 80, 56 *C.* 1909 [2] 1320).  
8) Phenylhydrazid d. Dehydracetcarbonsäure. Sm. 190—191° (*A.* 273, 211). — IV, 727.  
C 54,4 — H 4,2 — O 24,2 — N 17,0 — M. G. 330.
- C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>N<sub>4</sub>** 1) 2',4'-Dinitro-3-Acetylamido-4-Methyldiphenylamin. Sm. 163—164° (*B.* 15, 1237). — IV, 602.  
2) 4-Nitrophenyl-5-Nitro-2-Acetylamidobenzylamin. Sm. 241—242° u. Zers. (*B.* 35, 741). — \*IV, 409.  
3) s-Di[4-Nitrobenzyl]harnstoff. Sm. 234° u. Zers. (*B.* 23, 340). — II, 526.  
4) s-Di[4-Nitro-2-Methylphenyl]harnstoff. Sm. 305—310° (*Bl.* [3] 21, 659). — \*II, 253.  
5) s-Di[5-Nitro-2-Methylphenyl]harnstoff. Sm. 300—305° (*Bl.* [3] 21, 662). — \*II, 253.  
6) s-Di[2-Nitro-4-Methylphenyl]harnstoff. Sm. 244—245° (*Bl.* [3] 21, 661). — \*II, 272.  
7) s-Di[3-Nitro-4-Methylphenyl]harnstoff. Sm. 245° (251—252°) (*G.* 29 [2] 134; *Bl.* [3] 21, 663). — \*II, 272.  
8) s-Di[p-Nitro-4-Methylphenyl]harnstoff. Sm. 233° u. Zers. (*Soc.* 37, 698). — II, 495.  
9) 3,3'-Dinitro-4,4'-Di[Methylamido]diphenylketon. Sm. 212° (*G.* 34 [1] 386 *C.* 1904 [2] 111).  
10)  $\beta$ -Formyl- $\alpha$ -Di[2-Nitrobenzoyl]hydrazin. Sm. 156° (*B.* 33, 2707). — \*IV, 540.  
11) Antipyrinalloxan. *Ag.* (*A.* 255, 237). — IV, 548.  
12) 6-Nitro-2-Oxy-2-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 243—246° (*B.* 35, 741 *C.* 1902 [1] 753; *B.* 36, 3120 *C.* 1903 [2] 1132).  
13) Amid d.  $\alpha$ -[Methyl-p-Dinitrophenyl]amido- $\alpha$ -Phenyllessigsäure. Zers. bei 170—172° (*B.* 35, 3357 *C.* 1902 [2] 1195).
- C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>Cl<sub>2</sub>** 1) Äthylester d. 3,5[oder 4,6]-Dichlor-4[oder 5]-Acetoxy-1,6[oder 1,3]-Dimethylbenzofuran-2-Carbonsäure. Sm. 138—139° (*A.* 283, 259). — III, 732.
- C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>S** 1) Phenoxylmethyl-4-Methylphenylketon-p-Sulfonsäure. Sm. 167° (*B.* 35, 3564 *C.* 1902 [2] 1313).  
2) Äthylester d. 1-Benzoxylbenzol-4-Sulfonsäure. Sm. 62° (*B.* 41, 3366 *C.* 1908 [2] 1687).  
3) 4-Benzolsulfonat d. 3,4-Dioxybenzol-3-Äthyläther-1-Carbonsäurealdehyd. Sm. 72° (*D.R.P.* 81352). — \*III, 76.  
4) 4-[4-Methylbenzol]sulfonat d. 3,4-Dioxybenzol-3-Methyläther-1-Carbonsäurealdehyd. Sm. 115° (*D.R.P.* 80498). — \*III, 76.
- C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>S<sub>2</sub>** 1)  $\alpha$  $\gamma$ -Di[Phenylsulfon]- $\beta$ -Ketopropan (s-Diphenyldisulfonaceton). Sm. 149° (*J. pr.* [2] 36, 417; *B.* 22, 1967; 25, 3423). — II, 791.
- C<sub>15</sub>H<sub>14</sub>O<sub>6</sub>N<sub>2</sub>** C 56,6 — H 4,4 — O 30,2 — N 8,8 — M. G. 318.  
1)  $\beta$  $\beta$ -Di[p-Nitro-4-Oxyphenyl]propan. Sm. 133°. Na<sub>2</sub> (*C.* 1904 [2] 1737).  
2) Dimethyläther d. 3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 160° (*D.R.P.* 140690 *C.* 1903 [1] 1010).



- $C_{15}H_{14}O_6N_2$  3) Triketosantonsäuredioximanhydrid. Sm. 140° u. Zers. (*G.* 29 [2] 256). — \*II, 1201.
- 4) Acetat d. 5-Oxy-2,4,6-Triketo-5-[4-Methylbenzoyl]methylhexahydro-1,3-Diazin. Zers. bei 220° (*B.* 42, 1288 *C.* 1909 [1] 1548).  
 $C_{15}H_{14}O_6N_4$  C 52,0 — H 4,0 — O 27,7 — N 16,2 — M. G. 346.
- 1) 2',4',6'-Trinitro-2,4,5-Trimethyldiphenylamin. Sm. 160° (*J. pr.* [2] 79, 552 *C.* 1909 [2] 429).
- 2) 2,5-Dinitro-6-Acetylamido-3-Oxyphenylbenzylamin. Sm. 207° (*Soc.* 89, 1940 *C.* 1907 [1] 715).
- 3) 2,4-Dinitrophenylester d. 3-Amido-4-Dimethylamidobenzol-1-Carbonsäure. Sm. 265° (*B.* 40, 3688 *C.* 1907 [2] 1333).  
 $C_{15}H_{14}O_6N_6$  C 48,1 — H 3,7 — O 25,7 — N 22,5 — M. G. 374.
- 1) 2,4-Di[Barbiturylamido]-1-Methylbenzol (*J. pr.* [2] 73, 486 *C.* 1906 [2] 505).  
 $C_{15}H_{14}O_7N_2$  C 53,9 — H 4,2 — O 33,5 — N 8,4 — M. G. 334.
- 1) 5-Acetat d. 5-Oxy-2,4,6-Triketo-5-[4-Oxybenzoyl]methylhexahydro-1,3-Diazin-5'-Methyläther. Sm. 197° u. Zers. (*B.* 42, 1291 *C.* 1909 [1] 1549).
- $C_{15}H_{14}O_7N_4$  C 49,7 — H 3,9 — O 30,9 — N 15,5 — M. G. 362.
- 1) s-Di[5-Amido-2-Oxyphenyl]harnstoff-3,3'-Dicarbonsäure (D. R. P. 94634). — \*II, 899.
- $C_{15}H_{14}O_7S_2$  1) 2,5-Dimethyldiphenylketon- $\beta$ -Disulfonsäure. Ba + 2H<sub>2</sub>O (*B.* 19, 2881; *J. pr.* [2] 35, 478). — III, 232.
- $C_{15}H_{14}O_8N_2$  C 51,4 — H 4,0 — O 36,6 — N 8,0 — M. G. 350.
- 1) Diamid d. Di[4,5,6-Trioxiphenyl]methan-2,2'-Dicarbonsäure (Methylendigallamid). Zers. oberhalb 250°. Cu (*J. pr.* [2] 63, 89). — \*II, 1229.
- $C_{15}H_{14}O_8N_6$  C 44,3 — H 3,4 — O 31,5 — N 20,7 — M. G. 406.
- 1) 3,5,3',5'-Tetranitro-4,4'-Di[Methylamido]diphenylmethan. Sm. bei 250° u. Zers. (*R.* 7, 231). — IV, 973.
- $C_{15}H_{14}O_8S$  1) Guajakolcarbonatmonosulfonsäure. K (D. R. P. 203754 *C.* 1908 [2] 1754).
- $C_{15}H_{14}O_9Br_2$  1) Dibromäskulin. Sm. 193—195° u. Zers. (*B.* 13, 1594). — III, 567.
- $C_{15}H_{14}O_{11}S_2$  1) Guajakolcarbonat-5,5'-Disulfonsäure. Sm. 115—117°. K<sub>2</sub> (D. R. P. 203754 *C.* 1908 [2] 1753; D. R. P. 215050 *C.* 1909 [2] 1604).
- $C_{15}H_{14}O_{12}N_2$  C 43,5 — H 3,4 — O 46,4 — N 6,7 — M. G. 414.
- 1) Äthylester d. 2,6-Dinitro-3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 145—146° (*Soc.* 81, 75 *C.* 1902 [1] 194).
- $C_{15}H_{14}NBr$  1) Bromäthylat d.  $\beta$ -Naphtochinolin + xH<sub>2</sub>O. Sm. 238° (*J. pr.* [2] 57, 52). — \*IV, 248.
- $C_{15}H_{14}NJ$  1) 3,4'-Dimethyldiphenyljodoniumcyanid. Sm. 104—108° (*A.* 327, 281 *C.* 1903 [2] 351).
- 2) Jodmethylat d. 3-Methyl- $\beta$ -Naphtochinolin. Sm. 241—247° u. Zers. (*B.* 22, 256). — IV, 412.
- 3) Jodmethylat d. 5-Methylakridin. Sm. 185° (273—275°) (*A.* 224, 36; *B.* 32, 3124; *B.* 42, 1756 *C.* 1909 [2] 36). — IV, 415; \*IV, 251.
- 4) Jodmethylat d. 1-Methylphenanthridin. Sm. 187° u. Zers. (*A.* 266, 162). — IV, 416.
- 5) Jodmethylat d. 3-Methylphenanthridin. Sm. 180° u. Zers. (*A.* 266, 159). — IV, 416.
- 6) Jodmethylat d. 9-Methylphenanthridin. Sm. 246—247° u. Zers. (*B.* 29, 1185). — IV, 416.
- 7) Jodäthylat d. Akridin (*A.* 158, 275). — IV, 406.
- 8) Jodäthylat d. Phenanthridin. Sm. 253° (*B.* 26, 1967). — IV, 407.
- 9) Jodäthylat d.  $\beta$ -Naphtochinolin. Sm. 206° u. Zers. (*J. pr.* [2] 57, 53).
- $C_{15}H_{14}N_2Cl_2$  1) Chlormethylat d. 5-Chlor-3-Methyl-1-[2-Naphtyl]pyrazol. Sm. 138° (*A.* 339, 185 *C.* 1905 [1] 1403).
- $C_{15}H_{14}N_2Br_2$  1)  $\alpha$ -Brom- $\alpha$ -[3-Methylphenyl]bromamido- $\alpha$ -[3-Methylphenyl]imido-methan. Zers. bei 150—262° (*B.* 20, 1894). — II, 478.
- $C_{15}H_{14}N_2S$  1) 3-Thiocarbonyl-1,5-Dimethyl-2-[2-Naphtyl]-2,3-Dihydropyrazol. Sm. 135° (*A.* 320, 31 *C.* 1902 [1] 666). — \*IV, 332.
- 2) 2-Merkapto-4,5-Diphenyl-4,5-Dihydroimidazol. Sm. 183—184° (*B.* 28, 3178). — IV, 979.
- 3) 2-Phenylimido-3-Phenyltetrahydrothiazol. Sm. 136°. HBr, H<sub>2</sub>SO<sub>4</sub> (*B.* 14, 1490; 15, 343). — II, 396.

- C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>S**
- 4) **2-Phenylimido-5-Phenyltetrahydrothiazol.** Sm. 113,5—115°. Pikrat (*B.* 37, 2485 *C.* 1904 [2] 420).
  - 5) **2-Thiocarbonyl-5-Methyl-1-[4-Methylphenyl]-2,3-Dihydrobenzimidazol** (p-Tolyltoluylenthioharnstoff). Sm. 270° (*B.* 23, 3799). — *IV*, 615.
  - 6) **1-[2-Methylphenyl]amido-3-Methylbenzthiazol.** Sm. 136—137° (*B.* 36, 3129 *C.* 1903 [2] 1070).
  - 7) **1-[4-Methylphenyl]amido-5-Methylbenzthiazol.** Sm. 162° (*B.* 36, 3131 *C.* 1903 [2] 1070).
  - 8) **3-[4-Methylphenyl]imido-3,4-Dihydro-2,4-Benzthiazin** (p-Tolyl-imidocumothiazon). Sm. 187° (*B.* 27, 2433). — *IV*, 878.
  - 9) **2-Thiocarbonyl-1-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benz-diazin.** Sm. 92° (*J. pr.* [2] 51, 267). — *IV*, 635.
  - 10) **2-Thiocarbonyl-6-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benz-diazin.** Sm. 242—250°. (2HCl, PtCl<sub>4</sub>), 2 + (2HCl, PtCl<sub>4</sub>) (*Soc.* 95, 499 *C.* 1909 [1] 499).
  - 11) **2-Thiocarbonyl-6-Methyl-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Benz-diazin.** Sm. 265—270° u. Zers. (*B.* 32, 2027). — \**IV*, 679.
  - 12) **2-Thiocarbonyl-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benz-diazin.** Sm. 206° (202°) (*B.* 27, 1869; *J. pr.* [2] 51, 275). — *IV*, 635.
  - 13) **2-Thiocarbonyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benz-diazin.** Sm. 242° (235°) (*B.* 25, 2859; 27, 1869, 2433). — *IV*, 635.
  - 14) **2-Thiocarbonyl-4-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benz-diazin.** Sm. 224° (*B.* 30, 1134). — \**IV*, 679.
  - 15) **Phenylamid d. 1,3-Dihydroisindol-2-Thiocarbonsäure.** Sm. 226 bis 227° (*B.* 33, 2813). — \**IV*, 140.
  - 16) **Thioharnstoff** (aus  $\alpha\beta$ -Di[4-Amidophenyl]äthan). Sm. 272—273° (*B.* 40, 3256 *C.* 1907 [2] 1072).
- C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>S<sub>2</sub>**
- 1) **Thioharnstoff d. Di[4-Amidobenzyl]sulfid.** Sm. 220° (*B.* 28, 1339). — \**II*, 646.
  - 2) **Phenylhydrazonmethylenäther d. 1,2-Di[Merkaptomethyl]benzol.** Sm. 202° (*J. pr.* [2] 65, 478 *C.* 1902 [2] 28). — \**IV*, 440.
  - 3) **Methyläther d. 5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thio-diazol.** Sm. 93—94° (*B.* 28, 2645, 2647). — *IV*, 750.
  - 4) **Dithiocarbaminsaures Dibenzylidenammonium.** Sm. bei 100° u. Zers. (*A.* 71, 13; 168, 238). — *III*, 34.
  - 5) **Di[Phenylamid] d. Methandi[Thiocarbonsäure].** Sm. 149° (*B.* 39, 3301 *C.* 1906 [2] 1568).
- C<sub>15</sub>H<sub>14</sub>N<sub>3</sub>Cl**
- 1) **5-Chlor-2-[2,4,5-Trimethylphenyl]-2,1,3-Benztriazol.** Sm. 115° (*J. pr.* [2] 71, 397 *C.* 1905 [2] 39).
  - 2) **3-Chlor-4,6-Dimethyl-2-Benzyl-2,1,5-Benztriazol.** Sm. 95° (*A.* 366, 399 *C.* 1909 [2] 290).
  - 3) **3-Chlor-4,6-Dimethyl-2-[2-Methylphenyl]-2,1,5-Benztriazol.** Sm. 157° (*A.* 366, 405 *C.* 1909 [2] 290).
  - 4) **3-Chlor-4,6-Dimethyl-2-[4-Methylphenyl]-2,1,5-Benztriazol.** Sm. 174° (*A.* 366, 401 *C.* 1909 [2] 290).
- C<sub>15</sub>H<sub>14</sub>N<sub>3</sub>Br**
- 1) **3-Brom-4,6-Dimethyl-2-[2-Methylphenyl]-2,1,5-Benztriazol.** Sm. 155° (*A.* 366, 405 *C.* 1909 [2] 290).
  - 2) **3-Brom-4,6-Dimethyl-2-[4-Methylphenyl]-2,1,5-Benztriazol.** Sm. 161° (*A.* 366, 402 *C.* 1909 [2] 290).
  - 3) **4,6-Dimethyl-2-[p-Brom-4-Methylphenyl]-2,1,5-Benztriazol + 2H<sub>2</sub>O.** Sm. 133° (141° wasserfrei). HBr (*A.* 366, 404 *C.* 1909 [2] 290).
- C<sub>15</sub>H<sub>14</sub>N<sub>4</sub>S**
- 1) **s-Di[Benzylidenamido]thioharnstoff.** Sm. 194° (*B.* 41, 1100 *C.* 1908 [1] 1682).
  - 2) **Base** (aus  $\alpha$ -Methylamido- $\beta$ -Phenylthioharnstoff). Sm. 175°. (2HCl, PtCl<sub>4</sub>) (*B.* 29, 2922). — *IV*, 1235.
  - 3) **Methyläther d. 5-Phenylimido-3-Merkapto-4-Phenyl-4,5-Dihydro-1,2,4-Triazol.** Sm. 226—227° (*B.* 35, 1713 *C.* 1902 [2] 29). — \**IV*, 899.
  - 4) **Benzyläther d. 5-Amido-3-Merkapto-1-Phenyl-1,2,4-Triazol.** Sm. 137° (*A.* 348, 197 *C.* 1906 [2] 794; *A.* 355, 205 *C.* 1907 [2] 1327).
  - 5) **Penzyläther d. 3-Amido-5-Merkapto-1-Phenyl-1,2,4-Triazol.** Sm. 116,5° (*A.* 348, 191 *C.* 1906 [2] 794; *A.* 361, 326 *C.* 1908 [2] 881).
- C<sub>15</sub>H<sub>14</sub>N<sub>7</sub>Cl**
- 1) **Bisphenylhydrazinecyanurchlorid** (*B.* 19, 2060). — *IV*, 743.

- $C_{15}H_{14}Br_2S_2$  1) Di[4-Bromphenyläther] d.  $\beta\beta$ -Dimerkaptopropan. Sm. 89—90° (B. 18, 888). — II, 793.
- $C_{15}H_{15}ON$  C 80,0 — H 6,7 — O 7,1 — N 6,2 — M. G. 225.
- 1) 2-Oxybenzyliden-2,4-Dimethylphenylamin. Sm. 30—31° (Soc. 95, 443 C. 1909 [1] 1654).
  - 2) 2-Oxybenzyliden-2,5-Dimethylphenylamin. Sm. 107—108° (Soc. 95, 443 C. 1909 [1] 1654).
  - 3) Phenyl-4-Oxy-2,5-Dimethylbenzylidenamin. Sm. 143° (A. 357, 324 C. 1908 [1] 353).
  - 4) 4-Oxy-3-[2-Methylphenyl]imidomethyl-1-Methylbenzol. Sm. 93° (B. 38, 3996 C. 1906 [1] 235).
  - 5) 4-Oxy-3-[4-Methylphenyl]imidomethyl-1-Methylbenzol. Sm. 106,5° (B. 38, 3997 C. 1906 [1] 235).
  - 6) Methyläther d.  $\alpha$ -Benzylimido- $\alpha$ -Oxy- $\alpha$ -Phenylmethan. Sd. 178 bis 180°<sub>11</sub> (Soc. 83, 328 C. 1903 [1] 581, 876).
  - 7) Methyläther d. Phenyl-6-Oxy-3-Methylbenzylidenamin. Sm. 70° (B. 40, 3472 C. 1907 [2] 1332).
  - 8) Methyläther d. 2-Methylphenyl-4-Oxybenzylidenamin. Sm. 32° (A. 241, 340). — III, 85.
  - 9) Methyläther d. 4-Methylphenyl-4-Oxybenzylidenamin. Sm. 92° (A. 241, 338). — III, 85.
  - 10) Äthyläther d. Benzyliden-2-Oxyphenylamin. Sd. 215—216°<sub>20</sub> (B. 34, 833 Anm.). — \*III, 24.
  - 11) Äthyläther d. Benzyliden-4-Oxyphenylamin. Sm. 76° (71°). HCl (B. 25, 3249; D.R.P. 69006; Soc. 93, 1916 C. 1909 [1] 279). — III, 32; \*III, 24.
  - 12) Äthyläther d. Phenyl-2-Oxybenzylidenamin. Fl. (A. 150, 195). — III, 73.
  - 13) Äthyläther d.  $\alpha$ -Phenylimido- $\alpha$ -Oxyphenylmethan (Phenylbenzimidöäthyläther). Sd. 176°<sub>12</sub> (A. 265, 138; Soc. 79, 698; Soc. 81, 593 C. 1902 [1] 1055, 1333). — II, 1213.
  - 14) N-[4-Methylphenyl]benzimidomethyläther. Sd. 177°<sub>12</sub> (Soc. 81, 598 C. 1902 [1] 1056).
  - 15) Methylphenylamidobenzoylmethan. Sm. 120° u. Zers. (2HCl, PtCl<sub>4</sub>) (B. 13, 843; 14, 984; 16, 23, 25). — III, 126.
  - 16) 2-Methylphenylamidobenzoylmethan. Sm. 89°. HCl (B. 25, 2865). — III, 126.
  - 17) 4-Methylphenylamidobenzoylmethan. Sm. 134° (127°) (B. 23, 167; 25, 2866). — III, 126.
  - 18) Benzylamidobenzoylmethan. HCl, (2HCl, PtCl<sub>4</sub>), HBr, H<sub>2</sub>SO<sub>4</sub>, Pikrat (Soc. 63, 1360). — III, 127.
  - 19)  $\alpha$ -Phenylamidoäthylphenylketon. Sm. 98° (38°?). HCl, HBr (B. 19, 2897; Bl. [3] 15, 716; [3] 17, 72). — III, 141; \*III, 113.
  - 20)  $\beta$ -Phenylamidoäthylphenylketon. Sm. 111—112° (Bl. [3] 17, 80). — \*III, 113.
  - 21) Phenylamidomethyl-4-Methylphenylketon. Sm. 118—120° (Bl. [3] 17, 508). — \*III, 117.
  - 22) 3-Dimethylamidodiphenylketon. Sm. 47° (A. 354, 188 C. 1907 [2] 988).
  - 23) 4-Dimethylamidodiphenylketon. Sm. 90° (92°) (A. 210, 270; 217, 257; 307, 307; D.R.P. 41751; B. 13, 2225; 14, 1837; Bl. [3] 19, 830). — III, 183; \*III, 147.
  - 24) isom. p-Dimethylamidodiphenylketon. Sm. 38—39°; Sd. 330—340° (A. 206, 88). — III, 183.
  - 25) Methyl-2-Benzylamidophenylketon. Sm. 79—81° (B. 17, 971). — III, 124.
  - 26) 2'-Amido-2,4-Dimethyldiphenylketon. Sm. 89°. HCl Pikrat (B. 32, 1260). — \*III, 171.
  - 27) 3'-Amido-2,4-Dimethyldiphenylketon. Sm. 118° (A. 286, 334). — III, 231.
  - 28) 3'-Amido-2,5-Dimethyldiphenylketon. HCl, H<sub>2</sub>SO<sub>4</sub> (A. 286, 341). — III, 232.
  - 29) 3'-Amido-3,4-Dimethyldiphenylketon. HCl, H<sub>2</sub>SO<sub>4</sub> (A. 286, 339). — III, 233.



- $C_{15}H_{15}ON$  30) *p*-Amido-4-Acetyldiphenylmethan. Sm. 135,5°. HCl (*C. r.* 146, 343 *C.* 1908 [1] 1393).
- 31)  $\beta$ -Oximido- $\alpha\alpha$ -Diphenylpropan. Sm. 164,5° (*B.* 39, 2303 *C.* 1906 [2] 525).
- 32)  $\alpha$ -Oximido- $\alpha\beta$ -Diphenylpropan. Sm. 120° (*B.* 21, 1298). — III, 230.
- 33)  $\alpha$ -Oximido- $\alpha\gamma$ -Diphenylpropan. Sm. 87° (82°) (*B.* 21, 1326; *Soc.* 59, 1007). — III, 228.
- 34)  $\beta$ -Oximido- $\alpha\gamma$ -Diphenylpropan. Sm. 119,5° (125°) (*B.* 21, 1316; 34, 2076; *M.* 22, 664; *Soc.* 75, 868). — III, 229; \*III, 171.
- 35)  $\alpha$ -Oximido- $\beta\beta$ -Diphenylpropan. Sm. 123° (*C. r.* 143, 1243 *C.* 1907 [1] 727).
- 36)  $\alpha$ -Oximido- $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenyläthan. Sm. 131° (*B.* 22, 1231). — III, 230.
- 37)  $\alpha$ -Oximido- $\beta$ -[4-Methylphenyl]- $\alpha$ -Phenyläthan. Sm. 109° (*B.* 22, 1231; *C.* 1902 [1] 1011). — III, 230; \*III, 171.
- 38) 4-[ $\alpha$ -Oximidoäthyl]diphenylmethan. Sm. 99,5° (*C. r.* 146, 343 *C.* 1908 [1] 1393).
- 39) anti- $\alpha$ -Oximido-4-Äthyldiphenylmethan. Sm. 142° (*B.* 24, 4030). — III, 231.
- 40) syn- $\alpha$ -Oximido-4-Äthyldiphenylmethan. Sm. 108° (*B.* 24, 4030). — III, 231.
- 41) anti- $\alpha$ -Oximido-2,4-Dimethyldiphenylmethan. Sm. 126° (*B.* 24, 4048). — III, 231.
- 42) syn- $\alpha$ -Oximido-2,4-Dimethyldiphenylmethan. Sm. 152° (*B.* 24, 4048). — III, 231.
- 43) anti- $\alpha$ -Oximido-2,4'-Dimethyldiphenylmethan. Sm. 122° (*B.* 36, 2026 *C.* 1903 [2] 376).
- 44) anti- $\alpha$ -Oximido-3,4'-Dimethyldiphenylmethan. Sm. 118–119° (*B.* 36, 2027 *C.* 1903 [2] 376).
- 45) syn- $\alpha$ -Oximido-3,4'-Dimethyldiphenylmethan. Sm. 143° (*B.* 36, 2027 *C.* 1903 [2] 376).
- 46)  $\alpha$ -Oximido-4,4'-Dimethyldiphenylmethan. Sm. 163° (*B.* 23, 2747; *G.* 21, 98). — III, 233.
- 47) N-[2,5-Dimethylphenyl]äther d. syn-Benzaldoxim. Sm. 129–130° (*B.* 29, 3042). — \*III, 35.
- 48) N-[2-Methylphenyl]benzimidomethyläther. Sd. 173°<sub>15</sub> (*Soc.* 81, 596 *C.* 1902 [1] 1056).
- 49) Äthyläther d.  $\alpha$ -Oximidodiphenylmethan. Sd. 276–279° n. Zers. (*M.* 5, 204). — III, 189.
- 50) i- $\alpha$ -Benzoylamido- $\alpha$ -Phenyläthan. Sm. 120° (*B.* 27, 2308; *Soc.* 83, 1152 *C.* 1903 [2] 1061). — II, 1166.
- 51)  $\beta$ -Benzoylamido- $\alpha$ -Phenyläthan. Sm. 116° (113–114°) (*B.* 26, 1907, 2167). — II, 1166.
- 52) 2-Propionylamidobiphenyl. Sm. 65°; Sd. bei 350° (*B.* 29, 1186). — \*II, 349.
- 53) 2-Acetylamidodiphenylmethan. Sm. 107° (*B.* 27, 2786).
- 54) 4'-Acetylamido-4-Methylbiphenyl. Sm. 147° (*B.* 28, 405). — \*II, 350.
- 55)  $\gamma$ -Keto- $\gamma$ -[*p*-Äthylpyrryl]- $\alpha$ -Phenylpropen (Äthylpyrrylcinnamylketon). Sm. 148°. Ag (*B.* 19, 2194; 23, 2564). — IV, 101.
- 56)  $\gamma$ -Keto- $\gamma$ -[2,3-Dimethyl-*p*-Pyrryl]- $\alpha$ -Phenylpropen. Sm. 166° (*B.* 22, 1926). — IV, 101.
- 57)  $\gamma$ -Keto- $\gamma$ -[2,4-Dimethyl-*p*-Pyrryl]- $\alpha$ -Phenylpropen. Sm. 188° (*B.* 22, 1921). — IV, 101.
- 58)  $\gamma$ -Keto- $\gamma$ -[2,5-Dimethyl-3-Pyrryl]- $\alpha$ -Phenylpropen (2,5-Dimethyl-3-Pyrrylcinnamylketon). Sm. 208,5° (*G.* 22 [1] 446; 23 [1] 467). — IV, 101.
- 59) 5-Keto-3,4-Dimethyl-2-[ $\gamma$ -Phenylallyliden]-2,5-Dihydropyrrol. Sm. 248° (*A.* 306, 246). — \*II, 991.
- 60)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[4,6-Dimethyl-2-Pyridyl]äthen. Sd. 170–175°<sub>20–25</sub>. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*B.* 42, 1197 *C.* 1909 [1] 1577).
- 61) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthen. Sm. 181–182°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, Pikrat (*B.* 42, 1454 *C.* 1909 [1] 1935).
- 62) Äthyläther d.  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[2-Pyridyl]äthen. Fl. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*B.* 23, 2699). — IV, 395.

- $C_{15}H_{15}ON$  63) Methyläther d. 2-[4-Oxyphenyl]-1,3-Dihydroisocindol. Sm. 214° (B. 31, 423). — \*IV, 139.
- 64) 2-[3-Oxyphenyl]-1,2,3,4-Tetrahydrochinolin. Sm. 113—115°. HCl (M. 13, 69). — IV, 400.
- 65) 2-[4-Oxyphenyl]-1,2,3,4-Tetrahydrochinolin. HCl (M. 8, 135). — IV, 399.
- 66) 2-Keto-1,3,3-Trimethyl-2,3-Dihydro- $\alpha$ -Naphtindol. Sm. 78,5° (M. 29, 424 C. 1908 [2] 879).
- 67) 2-Keto-1,1,3-Trimethyl-1,2-Dihydro- $\beta$ -Naphtindol. Sm. 155,5° (M. 29, 428 C. 1908 [2] 879).
- 68) 4-Acetyl-1,2,3,4-Tetrahydro- $\beta$ -Naphtochinolin. Sm. 77° (B. 24, 2645). — IV, 379.
- 69) Methylhydroxyd d. 5-Methylakridin. Jodid (A. 224, 37). — IV, 415.
- 70) Methylhydroxyd d. 3-Methylphenanthridin. Sm. 136°. Jodid (A. 266, 159). — IV, 416.
- 71) Äthylhydroxyd d. Phenanthridin. Sm. 95°. Jodid (B. 26, 1967). — IV, 407.
- 72) Äthylhydroxyd d.  $\beta$ -Naphtochinolin. Bromid +  $xH_2O$ , Jodid, Bichromat +  $2H_2O$  (J. pr. [2] 57, 52). — \*IV, 248.
- 73) Acetylderivat d. Base  $C_{13}H_{13}N$  (aus Rohanilin). Sm. 114,2° (B. 8, 968). — IV, 379.
- 74)  $\delta\zeta$ -Anhydro- $\delta$ -Amido- $\alpha$ -Phenyl- $\epsilon$ -Methyl- $\alpha\gamma\epsilon$ -Heptatrien- $\zeta$ -Carbonsäure. Sm. 248° (A. 306, 246).
- 75) Aldehyd d. Äthylidiphenylamin-4-Carbonsäure (C. 1899 [2] 927).
- 76) Aldehyd d. 6-Benzylamido-1-Methylbenzol-3-Carbonsäure (C. 1899 [2] 927).
- 77) Aldehyd d. 4-Methylbenzylamidobenzol-1-Carbonsäure. Sm. 63° (C. 1899 [2] 927). — \*III, 13.
- 78) Amid d.  $\alpha\beta$ -Diphenylpropionsäure. Sm. 133—134° (B. 21, 1314). — II, 1467.
- 79) Amid d.  $\beta\beta$ -Diphenylpropionsäure. Sm. 127° (125—126°) (Am. 33, 341 C. 1905 [1] 1390; C. 1908 [2] 1100).
- 80) Amid d. 4-Methyldiphenylelessigsäure. Sm. 151° (B. 10, 997). — II, 1469.
- 81) Amid d.  $\beta$ -Methyldiphenylmethan-2-Carbonsäure. Sm. 123° (B. 25, 3025). — II, 1469.
- 82) Phenylamid d.  $\beta$ -Phenylpropionsäure. Sm. 92° (97°) (B. 25 [2] 747; B. 37, 4633 Ann. C. 1905 [1] 238; B. 39, 3055 C. 1906 [2] 1248). — II, 1357.
- 83) Phenylamid d. 1-Äthylbenzol-4-Carbonsäure. Sm. 121° (B. 24, 4031). — II, 1373.
- 84) Phenylamid d. 1,2-Dimethylbenzol-4-Carbonsäure. Sm. 104° (J. pr. [2] 41, 307). — II, 1375.
- 85) Phenylamid d. 1,3-Dimethylbenzol-4-Carbonsäure. Sm. 141° (138,5°) (B. 12, 1971; J. pr. [2] 41, 307). — II, 1376.
- 86) Phenylamid d. 1,4-Dimethylbenzol-2-Carbonsäure. Sm. 140° (J. pr. [2] 41, 308). — II, 1380.
- 87) Benzylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 133° (R. 16, 326). — \*II, 827.
- 88) Methylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 70° (B. 24, 2114). — II, 1341.
- 89) 4-Methylphenylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 144° (B. 36, 2027 C. 1903 [2] 376).
- 90) 4-Methylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 158 bis 159° (160°; 165°) (B. 23, 2747; J. pr. [2] 41, 311; R. 16, 322). — II, 1341; \*II, 827.
- 91) 2-Methylphenylamid d. Phenylelessigsäure. Sm. 159° (A. 279, 174). — \*II, 814.
- 92) 4-Methylphenylamid d. Phenylelessigsäure. Sm. 132—133° (135—136°) (A. 279, 128; G. 20, 178). — II, 1312.
- 93) Äthylphenylamid d. Benzolcarbonsäure. Sm. 60°; Sd. 260°<sub>620</sub> (B. 18, 687). — II, 1164.
- 94) 2-Äthylphenylamid d. Benzolcarbonsäure. Sm. 147° (B. 17, 2802). — II, 1166.

- C<sub>15</sub>H<sub>15</sub>ON** 95) 4-Äthylphenylamid d. Benzolcarbonsäure. Sm. 151° (*B.* 17, 2802). — II, 1166.
- 96) 1- $\alpha$ -Phenyläthylamid d. Benzolcarbonsäure. Sm. 125,5° (*B.* 38, 809 *C.* 1905 [1] 871).
- 97) i- $\alpha$ -Phenyläthylamid d. Benzolcarbonsäure. Sm. 120° (*F.* 27, 2308; *J. pr.* [2] 71, 321 *C.* 1905 [1] 1597).
- 98) 2,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 192° (*A.* 208, 319; *B.* 10, 1710; *G.* 38 [1] 657 *C.* 1908 [2] 787). — II, 1166.
- 99) 2,5-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 140° (*A.* 255, 169). — II, 1166.
- 100) 2,6-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 164° (159 bis 160°; 168—168,5°) (*M.* 19, 639; *A.* 316, 303; *B.* 32, 1009). — \*II, 732.
- 101) ?-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 140° (*B.* 10, 1711; *A.* 208, 322). — II, 1166.
- 102) Methylbenzylamid d. Benzolcarbonsäure. Sd. 213—214°<sub>11</sub> (*Soc.* 83, 408 *C.* 1903 [1] 833).
- 103) 2-Methylbenzylamid d. Benzolcarbonsäure. Sm. 88° (*B.* 23, 1027). — II, 1166.
- 104) 3-Methylbenzylamid d. Benzolcarbonsäure. Sm. 69° (*B.* 21, 2704). — II, 1166.
- 105) 4-Methylbenzylamid d. Benzolcarbonsäure. Sm. 125° (137°) (*B.* 23, 1031; 28, 2988). — II, 1166; \*II, 732.
- 106) Methyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 65—66° (*Soc.* 83, 408 *C.* 1903 [1] 833).
- 107) Methyl-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 46—48° (53°) (*Soc.* 83, 408 *C.* 1903 [1] 833; *B.* 41, 2109 *C.* 1908 [2] 695).
- 108) Phenylbenzylamid d. Essigsäure. Sm. 58°; Sd. 230—240°<sub>40</sub> (*B.* 28, 2354; *C. r.* 139, 300 *C.* 1904 [2] 703). — \*II, 295.
- 109) Diphenylmethylanid d. Essigsäure. Sm. 146—147° (*Am.* 26, 354).
- 110) Phenyl-4-Methylphenylamid d. Essigsäure. Sm. 51° (52°) (*A.* 239, 57; *B.* 40, 4544 *C.* 1908 [1] 244). — II, 493.
- 111) 2-Benzylphenylamid d. Essigsäure. Sm. 135° (*B.* 26, 3086). — II, 634.
- 112) 3-Benzylphenylamid d. Essigsäure. Sm. 91° (*B.* 15, 2092). — II, 634.
- 113) Dibenzylamid d. Ameisensäure. Sm. 52°; Sd. oberhalb 360° (*B.* 18, 2341; 19, 2128). — II, 524.
- 114) 2-Naphtylamid d.  $\beta$ -Buten- $\beta$ -Carbonsäure (2-N. d. Angelikasäure). Sm. 135° (*C.* 1907 [2] 292).
- 115) 2-Naphtylamid d. isom.  $\beta$ -Buten- $\beta$ -Carbonsäure (2-N. d. Tiglinsäure). Sm. 96° (*C.* 1907 [2] 292).
- C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>** C 71,1 — H 5,9 — O 6,3 — N 16,6 — M. G. 253.
- 1)  $\alpha$ -[ $\alpha$ -Phenyläthyliden]amido- $\alpha$ -Phenylharnstoff. Sm. 122° (*G.* 38 [1] 340 *C.* 1908 [1] 2029).
- 2)  $\alpha$ -Phenylamido- $\beta$ -[ $\beta$ -Phenyläthenyl]harnstoff. Sm. 221° u. Zers. (*Soc.* 95, 439 *C.* 1909 [1] 1655).
- 3)  $\alpha$ -Benzylidenamido- $\alpha$ -Methyl- $\beta$ -Phenylharnstoff. Sm. 108° (*B.* 37, 2323, 2325 *C.* 1904 [2] 312).
- 4)  $\alpha$ -Benzylidenamido- $\alpha$ -Benzylharnstoff. Sm. 153—154° (*B.* 37, 2325 *C.* 1904 [2] 312).
- 5)  $\alpha$ -Benzylidenamido- $\alpha$ -[3-Methylphenyl]harnstoff. Sm. 142° (*D.R.P.* 163035 *C.* 1905 [2] 1299).
- 6)  $\beta$ -Semicarbazon- $\alpha\alpha$ -Diphenyläthan. Sm. 160° (161—162°) (*B.* 39, 1755 *C.* 1906 [2] 54; *C. r.* 142, 1537 *C.* 1906 [2] 431; *B.* 39, 2293 *C.* 1906 [2] 523).
- 7)  $\alpha$ -Semicarbazon- $\alpha\beta$ -Diphenyläthan. Sm. 148° (*C.* 1907 [1] 1579).
- 8) 4-Acetyl-amido-1-Phenylhydrazonmethylbenzol. Sm. 155° (209°) (*J. pr.* [2] 56, 104; *M.* 24, 89 *C.* 1903 [1] 921). — IV, 753; \*IV, 487.
- 9)  $\alpha$ -Benzoylamido- $\beta$ -Phenylhydrazonäthan. Sm. 107—108° (*B.* 26, 466). — IV, 747.
- 10)  $\alpha$ -Amido- $\alpha$ -Benzoylhydrazon- $\alpha$ -[4-Methylphenyl]methan (Benzoyl-p-Tolenylhydrazidin). Zers. bei 120° (*B.* 27, 3279; *A.* 298, 5). — IV, 1139.
- 11)  $\beta$ -Oximido- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylpropan. Sm. 205—206° (202°) (*A.* 291, 288; *B.* 22, 2129). — IV, 783.
- 12)  $\alpha$ -Oximido- $\beta$ -Phenylhydrazon- $\alpha$ -Phenylpropan. Sm. 154° (*A.* 291, 290). — IV, 783.



- $C_{15}H_{15}ON_3$  13)  $\beta$ -Oximido- $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Methylphenyl]äthan. Sm. 165°. — IV, 762.
- 14)  $\beta$ -Acetyl- $\alpha$ -Benzylidenamido- $\alpha$ -Phenylhydrazin. Sm. 162—164° u. Zers. (B. 35, 1902 C. 1902 [2] 42). — \*IV, 777.
- 15) 1-[4-Methylphenylacetyl]amidodiazobenzol. Sm. 140° (B. 28, 875). — IV, 1570.
- 16) 4-Propionylamidoazobenzol. Sm. 170° (Soc. 81, 982 C. 1902 [2] 360). — \*IV, 1011.
- 17) 3-Acetylamido-2-Methylazobenzol. Sm. 194° (Soc. 67, 932). — IV, 1382.
- 18) 3-Acetylamido-4-Methylazobenzol. Sm. 199° (Soc. 67, 931). — IV, 1382.
- 19) 4-Methylacetylamidoazobenzol. Sm. 139° (B. 17, 1401). — IV, 1357.
- 20) Azobenzyläthylamidophenol (B. 23, 1782). — IV, 1414.
- 21) Äthyläther d. 6-Oxy-1-[3-Methylphenyl]-1,2,3-Benztriazol. Sm. 110 bis 111° (A. 287, 171). — IV, 1548.
- 22) Äthyläther d. 6-Oxy-1-[4-Methylphenyl]-1,2,3-Benztriazol? Sm. 117 bis 118° (A. 287, 178).
- 23) Äthyläther d. 6-Oxy-5-Methyl-1-Phenyl-1,2,3-Benztriazol. Sm. 118° (A. 287, 149). — IV, 1550.
- 24) Äthyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 144° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>), (2HCl, AuCl<sub>3</sub>), HBr, Pikrat (J. pr. [2] 52, 399). — IV, 1149.
- 25) 3-Keto-1,4,6-Trimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benztriazol + 12H<sub>2</sub>O. Sm. 154°. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), HJ (B. 36, 518 C. 1903 [1] 649; A. 366, 387 C. 1909 [2] 289). — \*IV, 785.
- 26) 3-Keto-4,5,6-Trimethyl-2-Phenyl-2,3-Dihydro-5,1,2-Benztriazol. Sm. 258°. HCl + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HJ + 2H<sub>2</sub>O (A. 366, 380 C. 1909 [2] 288).
- 27) 3-Keto-4,6-Dimethyl-2-[2-Methylphenyl]-2,3-Dihydro-5,1,2-Benztriazol. Sm. noch nicht bei 310°. + HgCl<sub>2</sub> (A. 366, 376 C. 1909 [2] 288).
- 28) 3-Keto-7-Methyl-2-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,2,4-Benztriazin. Sm. 146° (B. 32, 2969). — \*IV, 797.
- 29) 5-Acetylamido-1,2-Dimethyl- $\alpha$ -Naphtimidazol. Sm. 250° u. Zers. Pikrat (Soc. 75, 1014; 77, 1165). — \*IV, 828.
- 30) 5-Acetylamido-2,3-Dimethyl- $\beta$ -Naphtimidazol + H<sub>2</sub>O. Sm. 256° u. Zers. (Soc. 77, 1165). — \*IV, 828.
- 31) 7-Dimethylamido-3-Oxy-2-Methyl-5,10-Naphtdiazin (C. 1901 [2] 1108).
- 32) 7-Amido-3-Keto-8-Methyl-5-Äthyl-5,10-Naphtdiazin. HCl (D. R. P. 189078 C. 1907 [2] 1718).
- 33) Amid d.  $\alpha$ -Methylphenylhydrazonphenylelessigsäure. Sm. 156° (A. 227, 351). — IV, 694.
- 34) Amid d.  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazidoessigsäure. Sm. 225° (B. 29, 622; A. 301, 71). — \*IV, 484.
- 35) Phenylamid d.  $\alpha$ -Phenylhydrazonpropionsäure + H<sub>2</sub>O. Sm. 101 bis 105° (176° wasserfrei) (A. 270, 300; A. 335, 97 C. 1904 [2] 1232). — IV, 689.
- 36) Phenylamid d.  $\beta$ -Methylen- $\alpha$ -Phenylhydrazidoessigsäure. Sm. 220° u. Zers. (A. 301, 60). — \*IV, 479.
- 37) Benzylidenhydrazid d. Phenylamidoessigsäure. Sm. 176° (J. pr. [2] 52, 448). — III, 39.
- 38)  $\alpha$ -Phenyläthylidenhydrazid d. Phenylamidoameisensäure. Sm. 187 bis 188° (B. 34, 4301 C. 1902 [1] 304; B. 38, 833 C. 1905 [1] 867). — \*III, 99.
- 39)  $\alpha$ -Phenyläthylidenhydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 165° (J. pr. [2] 69, 99 C. 1904 [1] 730).
- $C_{15}H_{15}OCl$  1)  $\beta$ -Chlor- $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylpropan. Fl. (B. 39, 2301 C. 1906 [2] 524).
- $C_{15}H_{15}OBr_3$  1) Äthyläther d. P-Tribrom-1-Oxymethyl-2,6-Dimethylnaphtalin. Sm. 141—142° (B. 32, 2440). — \*II, 656.
- $C_{15}H_{15}OJ$  1)  $\beta$ -Jod- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthan (C. 1907 [1] 1579).
- $C_{15}H_{15}O_2N$  1) C 74,7 — H 6,2 — O 13,3 — N 5,8 — M. G. 241.
- 1)  $\gamma$ -Nitro- $\alpha\beta$ -Diphenylpropan. Sm. 153—155° (C. 1905 [2] 826).
- 2) Dimethyläther d. 2,4-Dioxybenzylidenamidobenzol. Sd. 245°<sub>10</sub> (C. 1896 [2] 378; Bl. [3] 17, 946).

- $C_{15}H_{15}O_2N$  3) Dimethyläther d. 2,5-Dioxybenzylidenamidobenzol. *Sd.* 239°<sub>30</sub> (*B.* 40, 2357 *C.* 1907 [2] 310).
- 4) Dimethyläther d. 3,4-Dioxybenzylidenamidobenzol. *Sd.* 245°<sub>10</sub> (*C.* 1896 [2] 378; *Bl.* [3] 17, 946).
- 5) Dimethyläther d. 4-[4-Oxybenzyliden]amido-1-Oxybenzol. *Sm.* 142°. *HCl* (*B.* 34, 832). — \*III, 61.
- 6) 1-Äthyläther d. 2-[2-Oxybenzyliden]amido-1-Oxybenzol. *Sd.* 228 bis 229°<sub>17</sub> (*B.* 34, 833 *Anm.*). — \*III, 52.
- 7) 1-Äthyläther d. 4-[2-Oxybenzyliden]amido-1-Oxybenzol. *Sm.* 94° (90—91,5°) (*D.R.P.* 79814, 79857). — \*III, 52.
- 8) Äthyläther d. 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydrobenzol. *Sm.* 137—138° (*A.* 369, 13 *C.* 1909 [2] 1853).
- 9) Acetylphenyl-2-Oxybenzylamin. *Sm.* 132° (*B.* 32, 2062). — \*II, 427.
- 10) Acetyl-3'-Oxy-4-Methyldiphenylamin. *Sm.* 213° (*J. pr.* [2] 65, 50 *C.* 1902 [1] 578).
- 11)  $\alpha$ -Oxy-2-Acetylamidodiphenylmethan. *Sm.* 118° (*B.* 29, 1305). — \*II, 657.
- 12) Methyläther d. 4'-Acetylamido-4-Oxybiphenyl. *Sm.* 193° (*D.R.P.* 85988). — \*II, 538.
- 13)  $\beta$ -Benzoylamido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. *Sm.* 144—145,5° (*B.* 37, 2484 *C.* 1904 [2] 420).
- 14) N-Benzoyl- $\beta$ -Oxyäthylphenylamin. *Sm.* 142—146° (*A.* 332, 212 *C.* 1904 [2] 211).
- 15) 4-Oxy-1-[ $\beta$ -Benzoylamidoäthyl]benzol. *Sm.* 162° (*Soc.* 95, 1128 *C.* 1909 [2] 835).
- 16) Methyläther d. 4-Benzoylamido-1-Oxymethylbenzol. *Sm.* 111 bis 113° (*G.* 35 [1] 114 *C.* 1905 [1] 1384).
- 17) Äthyläther d. 4-Benzoylamido-1-Oxybenzol. *Sm.* 173° (*B.* 31, 3246). — \*II, 740.
- 18) Benzyläther d. 4-Acetylamido-1-Oxybenzol. *Sm.* 139° (*A.* 287, 182). — \*II, 637.
- 19) 4-Dimethylamido-2'-Oxydiphenylketon. *Sm.* 187° (*A.* 307, 306). — \*III, 153.
- 20) Phenylamidomethyl-6-Oxy-3-Methylphenylketon. *Sm.* 82—83° (*A.* 364, 169 *C.* 1909 [1] 918).
- 21) Methyläther d. 4'-Amido-6-Oxy-3-Methyldiphenylketon. *Sm.* 152° (*B.* 40, 3519 *C.* 1907 [2] 1410).
- 22) anti-Oxim d. Oxydimethyldiphenylketon. ( $CH_3 : CH_3 : OH = 1 : 2 : 4$ ). *Sm.* 165—166° (*G.* 32 [2] 274 *C.* 1902 [2] 1383).
- 23) syn-Oxim d. Oxydimethyldiphenylketon. ( $CH_3 : CH_3 : OH = 1 : 2 : 4$ ). *Sm.* 140,5—141,5° (*G.* 32 [2] 274 *C.* 1902 [2] 1383).
- 24)  $\alpha$ -Oximido- $\alpha$ -[4-Oxy-3-Methylphenyl]- $\beta$ -Phenyläthan. *Sm.* 158° (*M.* 26, 1155 *C.* 1905 [2] 1182).
- 25)  $\alpha$ -Methyläther d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthan. *Sm.* 130 bis 132° (*B.* 26, 2474). — III, 226.
- 26) 4-Methyläther d.  $\alpha$ -Oximido- $\beta$ -[4-Oxyphenyl]- $\alpha$ -Phenyläthan. *Sm.* 111° (*B.* 21, 2451). — III, 227.
- 27) 4-Methyläther d. N-Benzyl-4-Oxybenzaldoxim. *Sm.* 106—107° (109°). *HCl* (*B.* 23, 1689, 2169; *A.* 367, 281 *C.* 1909 [2] 1231). — III, 87.
- 28) 4-Methyläther d. isom. N-Benzyl-4-Oxybenzaldoxim. *Sm.* 128° (*B.* 27, 1958).
- 29) 4-Methyläther d. N-[4-Oxybenzyl]benzaldoxim. *Sm.* 125° (*B.* 27, 1958).
- 30) 4-Methyläther d. N-2-Methylphenyl-4-Oxybenzaldoxim. *Sm.* 84 bis 85° (*A.* 367, 278 *C.* 1909 [2] 1231).
- 31) 4-Methyläther d. N-3-Methylphenyl-4-Oxybenzaldoxim. *Sm.* 88 bis 89° (*A.* 367, 280 *C.* 1909 [2] 1231).
- 32) 4-Methyläther d. N-4-Methylphenyl-4-Oxybenzaldoxim. *Sm.* 128 bis 129° (*A.* 367, 276 *C.* 1909 [2] 1230).
- 33)  $\beta$ -Phenyläther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -[4-Methylphenyl]äthan. *Sm.* 96° (*B.* 35, 3564 *C.* 1902 [2] 1313).
- 34) Benzyläther d. anti-4-Methoxybenzaldoxim. *Sm.* 46,5° (*B.* 23, 1687). — III, 87.
- 35) 2,5-Diacetyl-1-Benzylpyrrol? *Sm.* 129—130° (*B.* 20, 1370). — IV, 102.

- $C_{15}H_{15}O_2N$  36) **Methylcarbophenyllutidylumdehydrid**. Sm. 160—161° (B. 17, 2914; D. R. P. 32280). — IV, 383; \*IV, 229.
- 37) **Acetylmethyl- $\beta$ -Naphtomorpholin**. Sm. 124° (B. 31, 760). — \*II, 525.
- 38) **2,8-Dioxy-3,7-Dimethyl-5,10-Dihydroakridin** (C. 1901 [1] 1130). — \*IV, 240.
- 39)  $\alpha$ -Phenyl- $\beta$ -[2-Amidophenyl]propionsäure. Sm. 147—149° (G. 25 [1] 180; B. 29, 500). — II, 1467; \*II, 870.
- 40)  $\alpha$ -Phenyl- $\beta$ -[3-Amidophenyl]propionsäure (G. 25 [1] 181). — II, 1468.
- 41)  $\alpha$ -Phenyl- $\beta$ -[4-Amidophenyl]propionsäure. Sm. 200—201°. HCl,  $H_2SO_4$  (G. 25 [1] 183; 27 [2] 47). — II, 1468.
- 42)  $\alpha$ -[2-Methylphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 142—143° u. Zers. (J. 1878, 781; B. 39, 995 C. 1906 [1] 1341). — II, 1324.
- 43)  $\alpha$ -[4-Methylphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 178—182° u. Zers. (J. 1878, 780; B. 29, 1739). — II, 1324; \*II, 820.
- 44)  $\alpha$ -Phenylamido- $\alpha$ -[3-Methylphenyl]essigsäure. Sm. 137—139° u. Zers. (B. 17, 1471). — II, 1374.
- 45) **Phenylbenzylamidoessigsäure**. Sm. 121—123° (B. 31, 2675). — \*II, 295.
- 46) **2,4-Dimethyldiphenylamin-2'-Carbonsäure**. Sm. 182° (187°). Ag (A. 279, 284; A. 355, 326 C. 1907 [2] 1506). — II, 1248.
- 47) **2[oder 3]-Amido-4-Methyldiphenylmethan-2'-Carbonsäure**. Sm. 155°. Ba, Ag, HCl,  $HNO_3$  (A. 314, 249). — \*II, 871.
- 48) **2-Methyl-1-Allyl-5-Phenylpyrrol-3-Carbonsäure**. Sm. 158° (B. 18, 2594). — IV, 357.
- 49) **Äthylester d. 2-Biphenylamidoameisensäure**. Sm. 186° (B. 29, 1188). — \*II, 349.
- 50) **Äthylester d. 4-Biphenylamidoameisensäure**. Sm. 110° (B. 13, 1965). — II, 634.
- 51) **Äthylester d. Diphenylamidoameisensäure (Diphenylurethan)**. Sm. 72° (B. 5, 284; 18, 2574). — II, 374.
- 52) **4-Methylphenylester d. Phenylamidoessigsäure**. Sm. 109° (B. 42, 4276 C. 1909 [1] 378).
- 53) **4-Methylphenylester d. Methylphenylamidoameisensäure**. Sm. 62° (B. 24, 2110). — II, 750.
- 54) **2-Methylphenylester d. 2-Methylphenylamidoameisensäure**. Sm. 126° (B. 25, 1087). — II, 738.
- 55) **Benzylester d. 2-Methylphenylamidoameisensäure**. Sm. 83—84° (B. 25, 1087). — II, 1051.
- 56) **Formiat d.  $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan**. Sm. 182—183° (B. 29, 1213). — \*II, 660.
- 57) **Benzoat d.  $\beta$ -Phenylamido- $\alpha$ -Oxyäthan**. Sm. 77°. HCl (A. 332, 209 C. 1904 [2] 211).
- 58) **Benzoat d. 3-Dimethylamido-1-Oxybenzol**. Sm. 94°; Sd. 250° (B. 29, 508). — \*II, 717.
- 59) **Phenylamidoformiat d.  $\alpha$ -Oxyäthylbenzol**. Sm. 94° (91,5°) (B. 31, 1004; A. 308, 115). — \*II, 648.
- 60) **Phenylamidoformiat d.  $\beta$ -Oxyäthylbenzol**. Sm. 79—80° (B. 33, 2300; C. 1907 [1] 1033). — \*II, 649.
- 61) **Phenylamidoformiat d. 2-Oxy-1-Äthylbenzol**. Sm. 140—141° (B. 34, 53; B. 35, 1631 C. 1902 [1] 1359).
- 62) **Phenylamidoformiat d. 4-Oxy-1,3-Dimethylbenzol**. Sm. 102° (B. 33, 3020).
- 63) **Phenylamidoformiat d. 2-Oxy-1,4-Dimethylbenzol**. Sm. 160—161° (B. 32, 19). — \*II, 446.
- 64) **Phenylamidoformiat d. 2-Oxymethyl-1-Methylbenzol**. Sm. 79° (C. r. 137, 574 C. 1903 [2] 1117).
- 65) **Nitril d. 6-Oxy-4-Keto-3-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzolzomethyläther-3-Carbonsäure**. Sm. 136° (A. 294, 286). — \*II, 1085.
- 66) **Amid d. 6-Oxy-3-Methyldiphenylelessigsäure**. Sm. 139—140° (B. 31, 2817). — \*II, 996.
- 67) **Amid d. 2-Oxy-4-Methyldiphenylelessigsäure**. Sm. 163—166° (B. 31, 2820). — \*II, 997.



- $C_{15}H_{15}O_2N$  68) Methylamid d. 2-Oxydiphenylelessigsäure. Sm. 180—182° (*B.* 31, 2814). — \*II, 995.
- 69) Phenylamid d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 96° (*J. pr.* [2] 41, 315). — II, 1547.
- 70) Phenylamid d. 6-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 147° (*J. pr.* [2] 41, 314). — II, 1548.
- 71) Phenylamid d. 3-Oxybenzoläthyläther-1-Carbonsäure. Sm. 104° (*D.R.P.* 65952). — \*II, 903.
- 72) Phenylamid d. 4-Oxybenzoläthyläther-1-Carbonsäure. Sm. 170° (*J. pr.* [2] 41, 313). — II, 1530.
- 73) Phenylamid d.  $\alpha$ -Oxypropionphenyläthersäure. Sm. 117° (118,5 bis 119°); Sd. 211—212°<sub>14</sub> (*Bl.* [3] 17, 361; *B.* 34, 1839). — \*II, 363.
- 74) Phenylamid d. Oxyessig-2-Methylphenyläthersäure. Sm. 110° (*G.* 22 [2] 543). — II, 738.
- 75) Phenylamid d. Oxyessig-3-Methylphenyläthersäure. Sm. 95° (*G.* 20, 508). — II, 744.
- 76) Phenylamid d. Oxyessig-4-Methylphenyläthersäure. Sm. 109° (*G.* 22 [2] 543). — II, 750.
- 77) Benzylamid d. 4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 126° (131°) (*R.* 16, 328; *B.* 37, 4138 *C.* 1904 [2] 1714). — \*II, 907.
- 78) Methylphenylamid d. Oxyessigphenyläthersäure. Sm. 94° (*B.* 34, 2126).
- 79) 2-Methylphenylamid d.  $\alpha$ -Oxyphenylelessigsäure. Sm. 72° (*A.* 279, 125). — II, 1552.
- 80) 4-Methylphenylamid d.  $\alpha$ -Oxyphenylelessigsäure. Sm. 172°; Sd. oberhalb 200°<sub>10</sub> (*A.* 279, 126). — II, 1552.
- 81) 2,4-Dimethylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 143° (*Soc.* 95, 444 *C.* 1909 [1] 1654).
- 82) 2,5-Dimethylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 164° (*Soc.* 95, 444 *C.* 1909 [1] 1654).
- 83)  $\beta$ -Phenoxyäthylamid d. Benzolcarbonsäure. Sm. 93° (*B.* 24, 189). — II, 1160.
- $C_{15}H_{15}O_2N_3$  C 66,9 — H 5,6 — O 11,9 — N 15,6 — M. G. 269.
- 1) 4-Dimethylamido-1-[2-Nitrobenzyliden]amidobenzol. Sm. 90° (*C.* 1907 [1] 107).
- 2) 4-Dimethylamido-1-[3-Nitrobenzyliden]amidobenzol. Sm. 156° (*C.* 1907 [1] 108).
- 3) 4-Nitro-1-[4-Dimethylamidobenzyliden]amidobenzol. Sm. 198—199°. HCl (*C. r.* 134, 550 *C.* 1902 [1] 874). — \*III, 22.
- 4) 4-[4-Nitrobenzyliden]amido-1-Dimethylamidobenzol. Sm. 217° (*B.* 35, 1239 *C.* 1902 [1] 1001; *C.* 1907 [1] 108). — \*IV, 393.
- 5)  $\alpha$ -Phenylimido- $\alpha$ -Äthylimido- $\alpha$ -[3-Nitrophenyl]methan. HJ (*A.* 265, 154). — IV, 842.
- 6) Methyläther d.  $\alpha$ -Phenylamidoformylimido- $\alpha$ -Phenylamido- $\alpha$ -Oxy-methan. Sm. 111° (*Am.* 26, 233).
- 7) 2-Acetylamido-1-Phenylnitrosamidomethylbenzol. Sm. 112—113° (*J. pr.* [2] 47, 358). — IV, 630.
- 8)  $\alpha$ -Acetylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 181° (175—176°; 184°) (*B.* 26, 2872; 27, 1515; *B.* 36, 1365 *C.* 1903 [1] 1341). — IV, 675; \*IV, 432.
- 9)  $\alpha$ -Acetylphenylamido- $\beta$ -Phenylharnstoff. Sm. 183° (192°) (*B.* 27, 1516; *B.* 36, 1369 *C.* 1903 [1] 1342). — IV, 675; \*IV, 432.
- 10)  $\alpha$ -Phenylamidoacetyl- $\beta$ -Phenylharnstoff. Sm. 160° (*C.* 1899 [2] 420). — \*II, 225.
- 11) Benzoyl-4-Methylphenylamidoharnstoff. Sm. 218° (*Soc.* 73, 369). — \*IV, 533.
- 12)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oximido- $\beta$ -Phenyläthenyl]harnstoff. Sm. 123° (*B.* 18, 1074). — II, 1315.
- 13)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oximido-4-Methylbenzyl]harnstoff. Sm. 155° (*B.* 22, 2436). — II, 1343.
- 14)  $\alpha$ -Oxy- $\alpha$ -Semicarbazone- $\alpha\beta$ -Diphenyläthan. Sm. 206° u. Zers. (*A.* 339, 257 *C.* 1905 [2] 46).
- 15)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Nitro-4-Methylphenyl]äthan (*G.* 21 [1] 93). — IV, 773.
- 16)  $\alpha$ -Äthyl- $\alpha$ -Phenyl- $\beta$ -[2-Nitrobenzyliden]hydrazin. Sm. 44° (*B.* 32, 3062). — \*IV, 486.

- $C_{18}H_{15}O_2N_3$  17)  $\alpha$ -Äthyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 114° (B. 32, 3061). — \*IV, 486.
- 18)  $\alpha$ -Äthyl- $\alpha$ -Phenyl- $\beta$ -[4-Nitrobenzyliden]hydrazin. Sm. 131° (B. 32, 3061). — \*IV, 486.
- 19)  $\alpha$ -Methyl- $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Nitrobenzyliden]hydrazin. Sm. 90,5° (B. 32, 3063). — \*IV, 537.
- 20)  $\alpha$ -Methyl- $\alpha$ -[4-Methylphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 150,5° (B. 32, 3063). — \*IV, 537.
- 21)  $\alpha$ -Methyl- $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Nitrobenzyliden]hydrazin. Sm. 143° (B. 32, 3063). — \*IV, 537.
- 22) 4-Nitrophenyl-2,5-Dimethylbenzylidenhydrazin. Sm. 182° (C. r. 146, 298 C. 1908 [1] 1389).
- 23)  $\alpha$ -[2,6-Dimethylphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 119 bis 120° (B. 32, 1012). — \*IV, 544.
- 24)  $\alpha$ -[2-Oxybenzyliden]- $\beta$ -[4-Acetylamidophenyl]hydrazin. Sm. 230° (D.R.P. 81765). — \*IV, 777.
- 25)  $\alpha$ -Acetyl- $\beta$ -Nitroso- $\beta$ -Phenyl- $\alpha$ -Benzylhydrazin. Sm. 84° (J. pr. [2] 78, 53 C. 1908 [2] 689).
- 26)  $\beta$ -Acetyl- $\alpha$ -[2-Amidobenzoyl]- $\alpha$ -Phenylhydrazin. Sm. 140° (A. 301, 90). — \*IV, 428.
- 27) Äthyl-4-Benzoylamidodiazobenzol. Molybdat (Soc. 95, 1325 C. 1909 [2] 978).
- 28) 5-Acetylamido-4'-Oxy-2-Methylazobenzol. Sm. 252—253° (B. 15, 2827). — IV, 1414.
- 29) 5-Keto-3-Phenyl-2,5-Dihydroisoxazol + Phenylhydrazin. Sm. 153° u. Zers. (A. 296, 44). — IV, 654.
- 30) 2,4-Dimethyldiazoamidobenzol-2'-Carbonsäure. Sm. 117° u. Zers. Na (J. pr. [2] 63, 303). — \*IV, 1138.
- 31) 4'-Dimethylamidoazobenzol-2-Carbonsäure (B. 41, 3905 C. 1909 [1] 43).
- 32) 4'-Dimethylamidoazobenzol-3-Carbonsäure (B. 10, 527; 31, 2205; C. 1899 [1] 1078). — IV, 1461.
- 33) 4'-Dimethylamidoazobenzol-4-Carbonsäure. HCl (B. 41, 1194 C. 1908 [1] 1886).
- 34) isom. ?-Dimethylamidoazobenzol-?-Carbonsäure (B. 10, 527). — IV, 1461.
- 35) Azobenzol-4-Methylamidoessigsäure. Na, Ba (B. 35, 577 C. 1902 [1] 580). — \*IV, 1012.
- 36) 4-Methylazobenzol-4'-Amidoessigsäure. Na, Ba (B. 35, 581 C. 1902 [1] 581). — \*IV, 1022.
- 37) Methylester d. 2'-Methyldiazoamidobenzol-2-Carbonsäure. Sm. 69,5° (J. pr. [2] 63, 276). — \*IV, 1138.
- 38) Methylester d. 3'-Methyldiazoamidobenzol-2-Carbonsäure. Sm. 87,5° (J. pr. [2] 63, 277). — \*IV, 1138.
- 39) Methylester d. 4'-Methyldiazoamidobenzol-2-Carbonsäure. Sm. 115,5° (J. pr. [2] 63, 277). — \*IV, 1138.
- 40) Methylester d. 4-Amido-2-Methylazobenzol-2'-Carbonsäure. Sm. 93° (J. pr. [2] 63, 279). — \*IV, 1055.
- 41) Äthylester d. 1-Phenylamidodiazobenzol-1<sup>3</sup>-Carbonsäure. (2HCl, PtCl<sub>4</sub>) (A. 137, 64). — IV, 1578.
- 42) Äthylester d. Diazoamidobenzol-2-Carbonsäure. Sm. 76° (J. pr. [2] 64, 74). — \*IV, 1137.
- 43) Äthylester d. Azobenzol-4-Amidoameisensäure (B. 35, 582 C. 1902 [1] 581). — \*IV, 1011.
- 44) Amid d.  $\alpha$ -[Methyl-4-Nitrosophenyl]amido- $\alpha$ -Phenylessigsäure. Zers. bei 185—186° (B. 35, 3355 C. 1902 [2] 1195).
- 45) Phenylamid d.  $\beta$ -Phenylureidoessigsäure. Sm. 214° (J. pr. [2] 70, 249 C. 1904 [2] 1463).
- 46) Phenylamid d. 4-Äthoxyphenylazoameisensäure. Sm. 139—140° (A. 334, 180, 184 C. 1904 [2] 834).
- 47) Phenylamid d. Phenylamidoessigsäure-2-Carbonsäureamid. Sm. 185° (D.R.P. 135638 C. 1902 [2] 1235).
- 48) Phenylamid d. 3-Amido-4-Methylphenyloxaminsäure. Sm. 185 bis 186° (A. 268, 333). — IV, 605.
- 49) Di[Phenylamid] d. Amidomalonsäure. Sm. 141—142° (C. 1904 [1] 1555).

- $C_{15}H_{15}O_2N_3$  50) Phenylhydrazid d. Benzoylamidoessigsäure. Sm. 182,5° (*J. pr.* [2] 52, 248). — IV, 670.
- 51) 2-Oxybenzylidenhydrazid d. 2-Methylphenylamidoameisensäure. Sm. 204,5° (*B.* 38, 835 *C.* 1905 [1] 867).
- 52) 2-Oxybenzylidenhydrazid d. 4-Methylphenylamidoameisensäure. Sm. 238—239° (*B.* 38, 834 *C.* 1905 [1] 867).
- $C_{15}H_{15}O_2N_6$  C 60,6 — H 5,0 — O 10,8 — N 23,6 — M. G. 297.
- 1)  $\alpha$ -Ureido- $\beta$ -Diphenylmethylenamidoharnstoff. Sm. 222° (*G.* 37 [1] 443 *C.* 1907 [2] 587).
- 2)  $\beta$ -Nitro- $\alpha\gamma$ -Di[Phenylhydrazon]propan. Sm. 98° u. Zers. Na, Pb (*Am.* 22, 102). — \*IV, 490.
- 3)  $\alpha$ -Phenylnitrosohydrazon- $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm. 128 bis 129° u. Zers. (*B.* 34, 546; *J. pr.* [2] 64, 242). — \*IV, 452.
- 4) Hippurylphenylbuzylen. Sm. 86° (*B.* 26, 1268). — IV, 1578.
- 5) Nitril d. 3-Nitrobenzylidendi[ $\beta$ -Amidoerotsäure]. Sm. 118—120° (*J. pr.* [2] 56, 133). — \*II, 1176.
- 6) Amid d. s-Diphenylguanidin-2,2'-Dicarbonsäure + H<sub>2</sub>O. Sm. oberhalb 290° (wasserfrei). Pikrat (*J. pr.* [2] 69, 37 *C.* 1904 [1] 641).
- 7) Di[Phenylamid] d. Guanidindicarbonsäure. Sm. 174—175° (*J. pr.* [2] 49, 42). — \*II, 188.
- $C_{15}H_{15}O_2Cl$  1) Diphenyläther d.  $\beta$ -Chlor- $\alpha\gamma$ -Dioxypropan. Sm. 37° (*Soc.* 79, 1223).
- $C_{15}H_{15}O_2Br$  1) 1-Naphtylester d.  $\alpha$ -Bromisovaleriansäure. Sm. 68° (*B.* 39, 3848 *C.* 1907 [1] 94).
- 2) 2-Naphtylester d.  $\alpha$ -Bromisovaleriansäure. Sm. 51°; Sd. 205°<sub>15</sub> (*B.* 39, 3850 *C.* 1907 [1] 94).
- $C_{15}H_{15}O_2P$  1) Anhydrid d.  $\beta\beta'$ -Diphenylisopropylphosphinsäure. Sm. 151° (*B.* 34, 1294). — \*IV, 1184.
- $C_{15}H_{15}O_3N$  C 70,0 — H 5,8 — O 18,7 — N 5,4 — M. G. 257.
- 1) Methyläther d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 130—131° (*A.* 355, 275 *C.* 1907 [2] 1623).
- 2) Methyläther d. isom.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 97—98° (*A.* 355, 277 *C.* 1907 [2] 1623).
- 3) 2'-Methyläther d. 2-[3,4-Dioxybenzyliden]amido-1-Oxymethylbenzol (Vanilliden-2-Amidobenzylalkohol). Sm. 119° (*B.* 25, 2972). — III, 101.
- 4) 1,4'-Dimethyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol. Sm. 137° (*B.* 31, 176). — \*III, 73.
- 5) 1-Äthyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol (Protokatechualdehyd-p-Phenetidin). Sm. 218° (*C.* 1897 [1] 1121). — \*III, 72.
- 6) 1-Methyläther d. 1,2-Dioxy-2-Benzoylamidomethylbenzol. Sm. 148° (*A.* 343, 235 *C.* 1906 [1] 924).
- 7) 5-Methyläther d. 2-Benzoylamido-3,5-Dioxy-1-Methylbenzol. Sm. 219—220° (*M.* 22, 247; *B.* 36, 891 *C.* 1903 [1] 966). — \*II, 742.
- 8) Dimethyläther d. 4-Benzoylamido-1,2-Dioxybenzol. Sm. 177° (*Bl.* [3] 15, 338, 649). — \*II, 742.
- 9) Dimethyläther d. 4-Benzoylamido-1,3-Dioxybenzol. Sm. 173° (*B.* 22, 2380). — II, 1180.
- 10) 1-Äthyläther d. 4-Benzoylamido-1,3-Dioxybenzol. Sm. 187° (*J. pr.* [2] 70, 327 *C.* 1904 [2] 1541).
- 11) Benzylamidomethyl-3,4-Dioxyphenylketon (*C.* 1905 [2] 1459).
- 12) Phenylmethylenamidomethyl-3,4-Dioxyphenylketon. Sm. 155°. HCl (*J. r.* 25, 280). — III, 138.
- 13) Dimethyläther d. 2'-Amido-2,4-Dioxydiphenylketon. Sm. 128° (*B.* 35, 4280 *C.* 1903 [1] 333; *B.* 39, 4335 *C.* 1907 [1] 347).
- 14) Dimethyläther d. 2'-Amido-2,5-Dioxydiphenylketon. Sm. 98° (*B.* 39, 4334 *C.* 1907 [1] 347).
- 15) Dimethyläther d. 2'-Amido-3,4-Dioxydiphenylketon. Sm. 74° (*B.* 39, 4336 *C.* 1907 [1] 347).
- 16) Dimethyläther d.  $\alpha$ -Oximido-2,2'-Dioxydiphenylmethan. Sm. 188° (*B.* 19, 2610). — III, 195.
- 17)  $\gamma$ -Oximido- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropan. Sm. 171—172° (*C.* 1908 [2] 1024).
- 18) 2,5-Dimethyläther d.  $\alpha$ -Oximido-2,5-Dioxydiphenylmethan. Sm. 120° (*A.* 344, 50 *C.* 1906 [1] 1097).



- $C_{15}H_{15}O_3N$  19) 2,5-Dimethyläther d. isom.  $\alpha$ -Oximido-2,5-Dioxydiphenylmethan. Sm. 136° (A. 344, 50 C. 1906 [1] 1097).
- 20) Dimethyläther d.  $\alpha$ -Oximido-4,4'-Dioxydiphenylmethan. Sm. 133° (B. 28, 2870).
- 21) 4-Methyläther- $\beta$ -Phenyläther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]-äthan. Sm. 105° (B. 35, 3565 C. 1902 [2] 1313).
- 22) Benzyläther d. 4-Methoxybenzhydroxamsäure. Sm. 113° (A. 281, 191). — II, 1533.
- 23) Oxim d. Lapachol. Zers. oberhalb 160° (G. 19, 612; Soc. 65, 720). — III, 401.
- 24) Oxim d.  $\alpha$ -Lapachon. Sm. 204° u. Zers. (Soc. 65, 723). — III, 401.
- 25) Oxim d.  $\beta$ -Lapachon. Sm. 168,5—169,5° (G. 19, 613; Soc. 65, 724). — III, 401.
- 26)  $\beta$ -Phenylamido- $\alpha$ -Oxy- $\alpha$ -Phenylpropionsäure. Sm. 144—145°. Na (A. 271, 157). — II, 436.
- 27) 1- $\beta$ -Phenylamido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 187°. Na (B. 39, 793 C. 1906 [1] 1167).
- 28) i- $\beta$ -Phenylamido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 156° (B. 39, 793 C. 1906 [1] 1167).
- 29) isom. i- $\beta$ -Phenylamido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 158° (B. 39, 793 C. 1906 [1] 1167).
- 30)  $\alpha$ -[2-Naphtyl]acetylamidopropionsäure. Sm. 199—200° (B. 25, 2313). — II, 621.
- 31)  $\alpha$ -Amido-6-Oxy-3-Methyldiphenylelessigsäure. Sm. 190—192°. HCl (B. 31, 2819). — \*II, 996.
- 32)  $\alpha$ -[4-Methoxyphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 184° u. Zers. (B. 31, 2706). — \*II, 520.
- 33) 4'-Oxydiphenylaminäthyläther-2-Carbonsäure. Sm. 209° (A. 355, 346 C. 1907 [2] 1508).
- 34) Lakton d.  $\zeta$ -[4-Methylphenyl]imido- $\delta$ -Oxy- $\beta$ -Keto- $\gamma$ -Hepten- $\alpha$ -Carbonsäure. Sm. 154° (B. 41, 4165 C. 1909 [1] 157).
- 35) Methylester d. 4-Keto-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 152° (Soc. 51, 498). — II, 2006.
- 36) Äthylester d. 6-Oxy-2-Methyl-4-Phenylpyridin-3-Carbonsäure. Sm. 184°; Sd. 270°<sub>11</sub> (Soc. 75, 412). — \*IV, 229.
- 37) Benzoat d.  $\beta$ -Oxyäthyl-2-Amidophenyläther. Sm. 98—100° (J. pr. [2] 24, 253). — II, 1145.
- 38) Monophenylamidoformiat d. 2-Oxy-1-[ $\beta$ -Oxyäthyl]benzol. Sm. 116 bis 117° (B. 34, 1810).
- 39) Phenylamid d. 3,4-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 154° (J. pr. [2] 53, 254). — \*II, 1028.
- 40) Methylphenylamid d. Oxyessig-2-Oxyphenyläthersäure. Sm. 95° (J. pr. [2] 61, 360). — \*II, 552.
- 41) 2-Methylphenylamid d. Oxyessig-2-Oxyphenyläthersäure. Sm. 105°, Sd. 220° (J. pr. [2] 61, 360). — \*II, 552.
- 42) 4-Methylphenylamid d. Oxyessig-2-Oxyphenyläthersäure. Sm. 147° (J. pr. [2] 61, 359). — \*II, 552.
- 43) 2-Methoxyphenylamid d. 2-Oxybenzoldimethyläther-1-Carbonsäure. Sm. 97—98° (M. DOHRN, Dissertat. Heidelberg 1899, S. 13).
- 44) 4-Methoxyphenylamid d. 4-Oxybenzoldimethyläther-1-Carbonsäure. Sm. 202° (B. 36, 654 C. 1903 [1] 768).
- 45) 4-Äthoxyphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 142—143° (140°) (G. 28 [2] 198; J. pr. [2] 61, 547). — \*II, 892.
- 46) 4-Methoxyphenylamid d. Oxyessigphenyläthersäure. Sm. 135 bis 136° (D.R.P. 82105). — \*II, 408.
- 47) 1-Naphtylmonamid d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 160—161° (C. 1896 [1] 109, 997).
- 48) 2-Naphtylmonamid d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 158—159° (154,5°) (C. 1896 [1] 997; A. 309, 328). — \*II, 339.
- 49) 4-Methoxyphenylimid d. cis-1,2,3,4-Tetrahydrobenzol-1,2-Dicarbonsäure. Sm. 88° (C. 1905 [1] 1319; 1906 [2] 876).
- 50) 4-Methoxyphenylimid d. 1,2,3,4-Tetrahydrobenzol-1,6-Dicarbonsäure. Sm. 71° (C. 1906 [2] 876).
- 51) 4-Methoxyphenylimid d. trans-1,2,3,4-Tetrahydrobenzol-2,3-Dicarbonsäure. Sm. 128° (C. 1906 [2] 876).

- $C_{15}H_{15}O_3N$  52) 4-Methoxyphenylimid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbon-  
säure (2 isom. Formen). Sm.  $108^\circ$  ( $96^\circ$ ) (B. 36, 1003 C. 1903 [1] 1132;  
C. 1906 [2] 876).
- $C_{15}H_{15}O_3N_3$  C 63,2 — H 5,2 — O 16,8 — N 14,7 — M. G. 285.
- 1) 4-Acetylamidophenyl-4-Nitrobenzylamin (D.R.P. 135335 C. 1902 [2] 1167).
  - 2)  $\beta$ -Oximido- $\beta$ -[ $\beta$ -Phenylureido]- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm.  $155^\circ$  (B. 18, 2478). — II, 1553.
  - 3) 2-Semicarbazon-3-Keto-4-Acetyl-5-Methyl-1-Phenyl-2,3-Dihydro-R-Penten. Sm.  $208^\circ$  u. Zers. (Soc. 89, 687 C. 1906 [2] 46).
  - 4) 2-Oxyphenyläther d.  $\alpha$ -Semicarbazon- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm.  $145,5^\circ$  (Bl. [4] 5, 504 C. 1909 [2] 21).
  - 5) Methyläther d.  $\beta$ -Nitro- $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm.  $159$ — $159,5^\circ$  (B. 36, 372 C. 1903 [1] 577). — \*IV, 493.
  - 6) Methyläther d.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Nitro-4-Oxybenzyliden]hydrazin. Sm.  $104,5$ — $105,2^\circ$  (B. 36, 363 C. 1903 [1] 577). — \*IV, 494.
  - 7) 2-Nitrophenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm.  $101^\circ$  (B. 30, 1635). — IV, 767.
  - 8) 4-Nitrophenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm.  $140^\circ$  (B. 30, 1633). — IV, 768.
  - 9)  $\beta$ -Nitroso-2',4'-Dioxy-2,4,5-Trimethylazobenzol (Nitrosoresorcinazopseudocumol). Zers. oberhalb  $190^\circ$  (B. 21, 3110). — IV, 1445.
  - 10) 4'-Nitro-6-Oxy-2,3,5-Trimethylazobenzol. Sm.  $209$ — $210^\circ$  (A. 356, 165 Anm. C. 1907 [2] 1700).
  - 11) Äthyläther d. 3'-Nitro-4'-Oxy-2-Methylazobenzol. Sm.  $83^\circ$  (Soc. 79, 157). — \*IV, 1038.
  - 12) Äthyläther d. 3'-Nitro-4'-Oxy-3-Methylazobenzol. Sm.  $92^\circ$  (Soc. 79, 158). — \*IV, 1038.
  - 13) Äthyläther d. 3'-Nitro-4'-Oxy-4-Methylazobenzol. Sm.  $118^\circ$  (Soc. 79, 159). — \*IV, 1038.
  - 14) 2-Oxy-1,3-Dimethyl-2-[3-Nitrophenyl]-2,3-Dihydrobenzimidazol. Sm.  $210^\circ$  (J. pr. [2] 74, 71 C. 1906 [2] 1503).
  - 15) 2-Oxy-1,3-Dimethyl-2-[3-Nitrophenyl]-2,3-Dihydrobenzimidazol. Sm.  $167^\circ$  (J. pr. [2] 74, 71 C. 1906 [2] 1503).
  - 16) 2-Oxy-1,3-Dimethyl-2-[4-Nitrophenyl]-2,3-Dihydrobenzimidazol. Sm.  $140^\circ$  (J. pr. [2] 74, 73 C. 1906 [2] 1503).
  - 17) 5-Nitro-2-Oxy-2,3-Dimethyl-1-Phenyl-2,3-Dihydrobenzimidazol. Sm.  $206^\circ$  (J. pr. [2] 74, 195 C. 1906 [2] 1436; J. pr. [2] 74, 242 C. 1906 [2] 1436).
  - 18) 6-Nitro-2-Oxy-1,3-Dimethyl-2-Phenyl-2,3-Dihydrobenzimidazol. Sm.  $192^\circ$  (J. pr. [2] 74, 70 C. 1906 [2] 1504).
  - 19)  $\alpha\gamma$ -Diphenylsemicarbazidoessigsäure. Sm.  $203$ — $204^\circ$  u. Zers. (B. 36, 3886 C. 1904 [1] 27).
  - 20) 3,5, $\beta$ -Triamido-4-Methyldiphenylketon-2'-Carbonsäure (D.R.P. 205036 C. 1909 [1] 475).
  - 21) Amid d.  $\alpha$ -[Methyl-4-Nitrophenylamido]- $\alpha$ -Phenylessigsäure. Sm.  $210^\circ$  u. Zers. (B. 35, 3358 C. 1902 [2] 1196).
  - 22) Verbindung (aus 4-Amidoazobenzol). Zers. oberhalb  $300^\circ$  (B. 31, 2851).
- $C_{15}H_{15}O_3Cl$  1) Chlordihydrolapachol. Sm.  $113^\circ$  (Soc. 61, 632). — III, 401.
- $C_{15}H_{15}O_3Cl_3$  1) Trichlorsantonin. Sm.  $213^\circ$  (Bl. 5, 202). — II, 1787.
- $C_{15}H_{15}O_3Br_3$  1) Tribrom- $\alpha$ -Santonin. Sm.  $187$ — $188^\circ$  (G. 29 [2] 256). — \*II, 1044.
- $C_{15}H_{15}O_4N$  C 65,9 — H 5,5 — O 23,4 — N 5,1 — M. G. 273.
- 1) Phenylmethyldimethyl-2,3,4-Trioxypheylketon (Methylanilidoacetylpyrogallol). Sm.  $168^\circ$  (J. r. 25, 281). — III, 139.
  - 2) Oxim d. Trioxypheylketondimethyläther. (OH:OH:OH = 1:2:3). Sm.  $137$ — $138^\circ$  (G. 32 [2] 276 C. 1902 [2] 1383).
  - 3) 4,2'-Dioxydiphenylamindimethyläther-2-Carbonsäure. Sm.  $192^\circ$  (B. 38, 2126 C. 1905 [2] 248).
  - 4) 2-Oxybenzol- $\beta$ -[2-Amidophen]oxyläthyläther-1-Carbonsäure. Sm.  $110^\circ$ . HCl (J. pr. [2] 27, 218). — II, 1496.
  - 5) 4-Oxybenzol- $\beta$ -[2-Amidophen]oxyläthyläther-1-Carbonsäure. Sm.  $185^\circ$  (J. pr. [2] 27, 223). — II, 1527.
  - 6) 2,5-Dimethyl-1-[2-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Sm.  $203$ — $204^\circ$  u. Zers. Ag (B. 35, 686 C. 1902 [1] 715). — \*IV, 77.

- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>N**
- 7) 2,5-Dimethyl-1-[3-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Sm. 222 bis 223° u. Zers. Ag (B. 35, 688 C. 1902 [1] 716). — \*IV, 78.
  - 8) 2,5-Dimethyl-1-[4-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Sm. 249 bis 250°. K<sub>2</sub>, Ag (B. 18, 304; B. 35, 191 C. 1902 [1] 415). — IV, 92; \*IV, 78.
  - 9) Dimethylester d. 3-Phenylpyrrol-4-Carbonsäure-5-Methylcarbon-säure. Sm. 126° (B. 35, 3004 C. 1902 [2] 1120). — \*IV, 219.
  - 10) Äthylester d. 4,5-Diketo-2-Methyl-1-[4-Methylphenyl]tetrahydro-pyrrol-2-Carbonsäure. Sm. 152° (C. r. 147, 125 C. 1908 [2] 801).
  - 11) 4-Äthoxyphenylamid d. 2-Oxyphenylkohlen-säure. Sm. 146° (A. 300, 143; D.R.P. 92535). — \*II, 550.
  - 12) βγ-Phenylimid d. β-Penten-βγε-Tricarbonsäure-ε-Methylester. Sm. 47—48° (H. 54, 546 C. 1908 [1] 1398).
  - 13) βγ-Phenylimid d. Propen-αβγ-Tricarbonsäure-α-Propylester. Sm. 106° (B. 38, 1619 C. 1905 [1] 1532).
  - 14) Verbindung (aus Anilin u. d. 2-Aldehyd d. Oxyessigphenyläthersäure-2-Carbonsäure). HCl, H<sub>2</sub>SO<sub>4</sub> (B. 17, 2992). — III, 67.  
C 59,8 — H 5,0 — O 21,3 — N 13,9 — M. G. 301.
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>N<sub>8</sub>**
- 1) Methyldi[2-Nitrobenzyl]amin. Sm. 62—64° (B. 24, 3094; 25, 3040). — II, 520.
  - 2) Methyldi[4-Nitrobenzyl]amin. Sm. 104° (B. 30, 63). — \*II, 293.
  - 3) Äthyl-2,4-Dinitrophenylbenzylamin. Sm. 72—73° (71°) (A. 334, 256 C. 1904 [2] 901; R. 25, 110 C. 1906 [2] 33; C. 1906 [2] 1314).
  - 4) Äthyl-2,4'-Dinitro-2-Methyldiphenylamin. Sm. 114° (J. pr. [2] 68, 258 C. 1903 [2] 1064).
  - 5) Äthyl-2,4'-Dinitro-4-Methyldiphenylamin. Sm. 120° (J. pr. [2] 68, 256 C. 1903 [2] 1064).
  - 6) Propyl-2,4-Dinitrodiphenylamin. Sm. 73—74° (R. 25, 112 C. 1906 [2] 33).
  - 7) Äthyläther d. 4-Oxyphenyl-2-Nitrobenzyl-nitrosamin. Sm. 95° (B. 27, 2903). — \*II, 400.
  - 8) Dimethyläther d. 2-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylben-zol. Sm. 194° (B. 32, 3409). — \*IV, 497.
  - 9) Dimethyläther d. 5-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylben-zol. Sm. 108—110° (B. 35, 4399 C. 1903 [1] 341). — \*IV, 497.
  - 10) Dimethyläther d. 6-Nitro-3,4-Dioxy-1-Phenylhydrazonmethylben-zol. Sm. 216—218° (B. 32, 3412). — \*IV, 497.
  - 11) 3-Nitrobenzoylhydrazon d. Aldehydalkohol C<sub>8</sub>H<sub>10</sub>O<sub>2</sub>. Sm. 235 bis 237° (C. 1897 [2] 364). — \*I, 487.
  - 12) β-[1-Naphtyl]ureidoacetyl-amidoessigsäure. Sm. 217° (B. 38, 2364 C. 1905 [2] 460).
  - 13) 3-Acetoxy-5-[β-Phenyläthenyl]-1,2,4-Triazol-1-[Äthyl-α-Carbon-säure]. Sm. 168° u. Zers. (B. 33, 1531). — \*IV, 819.
  - 14) 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3,4<sup>2</sup>-Dicarbon-säure. Sm. 285°. HCl, (2HCl, PtCl<sub>4</sub>), Na + 2H<sub>2</sub>O, Ba, Ag (A. 366, 368 C. 1909 [2] 287).
  - 15) Äthylester d. 4-Nitro-s-Diphenylhydrazin-2-Carbonsäure. Sm. 129 bis 130° (B. 30, 1100). — IV, 741.
  - 16) Äthylester d. 2-Nitro-s-Diphenylhydrazin-4-Carbonsäure. Sm. 129° (B. 39, 190 C. 1906 [1] 754).
  - 17) α-Amid d. 1-α-[β-1-Naphtylureido]äthan-αβ-Dicarbonsäure. Sm. 199° (C. 1907 [2] 1157).  
C 54,7 — H 4,6 — O 19,4 — N 21,3 — M. G. 329.
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>N<sub>5</sub>**
- 1) Di[β-Nitro-4-Methylphenyl]guanidin. Sm. 197° u. Zers. HNO<sub>3</sub> (Soc. 37, 697). — II, 489.
  - 2) 3-Nitro-1-[Äthyl-5-Nitro-2-Methylphenyl]amidodiazobenzol. Sm. 88° (Soc. 67, 250). — IV, 1572.
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>Cl**
- 1) Äthylester d. 6-Oxy-4-Keto-2-[2-Chlorphenyl]-1,2,3,4-Tetrahydro-benzol-3-Carbonsäure. Sm. 142°. Na (A. 294, 292). — \*II, 1085.
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>Br**
- 1) Bromoxydihydrolapachol. Sm. 164,5—165,5° (Soc. 65, 19). — III, 403.
- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>N**
- 1) Verbindung (aus Lapachonon). Sm. 140° (C. 1901 [1] 114). — \*III, 467.  
C 62,3 — H 5,2 — O 27,7 — N 4,8 — M. G. 289.
  - 1) Äthylester d. β-Oxy-γ-Acetoxy-α-Cyan-γ-Phenylpropen-α-Carbon-säure. Fl. Ag (A. 368, 69 C. 1909 [2] 1444).



- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>N** 2) Äthylester d.  $\delta$ -Phtalylamido- $\beta$ -Ketobutan- $\alpha$ -Carbonsäure. Sm. 121 bis 122° (B. 42 1245 C. 1909 [1] 1693).
- 3) Äthylester d. 3-Acetoxy-1-Acetylindol-2-Carbonsäure. Sm. 82° (B. 34, 1855; D.R.P. 131400 C. 1902 [1] 1343).
- 4) 2,3-Dioxyphenylester d. 4-Äthoxyphenylamidoameisensäure. Sm. 162° (B. 37, 110 C. 1904 [1] 584).
- 5) Diäthylester d.  $\beta$ -Cyan- $\alpha$ -Keto- $\alpha$ -Phenyläthan- $\beta$ ,2-Dicarbonsäure (D. d. Benzoylcyanessig-o-Carbonsäure). Ag (A. ch. [7] 1, 494). — II, 1962.
- 6) 4-Äthoxyphenylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure +  $1\frac{1}{2}$  H<sub>2</sub>O. Sm. 219°. + 2 Molec. Anilin (J. pr. [2] 63, 77). — \*II, 1111.
- 7)  $\alpha\gamma$ -Acetylimid d.  $\beta$ -Phenylbutan- $\alpha\gamma\gamma$ -Tricarbonsäure. Sm. 110° (C. 1900 [2] 1239). — \*II, 1173.
- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>N<sub>3</sub>** C 56,8 — H 4,7 — O 25,2 — N 13,3 — M. G. 317.
- 1) Phtalylacetessigsäureäthylestersemicarbazon. Sm. 188—189° (B. 38, 1915 C. 1905 [2] 44).
- 2) Amid d. 9-Dimethylamido-2,3-Dioxyphenoxazoniumhydroxyd-5-Carbonsäure (oder C<sub>15</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>). Sm. 251° (J. pr. [2] 72, 256 C. 1905 [2] 1450).
- 3) 2,4-Dinitro-1-Naphtylamid d. Isovaleriansäure. Sm. 218° (B. 27 [2] 593). — II, 607.
- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>N<sub>5</sub>** C 52,2 — H 4,3 — O 23,2 — N 20,3 — M. G. 345.
- 1) Di[2-Nitrobenzyl]amidoharnstoff. Sm. 234° (B. 33, 2711). — \*IV, 541.
- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>Br** 1) Bromdioxydihydrolapachol (Soc. 63, 428). — III, 403.
- 2) Äthylester d. 5[oder 4]-Brom-4[oder 5]-Acetoxy-1,6[oder 1,3]-Dimethylbenzofuran-2-Carbonsäure. Sm. 137—138° (A. 283, 257). — III, 732.
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>N** C 59,0 — H 4,9 — O 31,5 — N 4,6 — M. G. 305.
- 1)  $\epsilon$ -Phtalylamidopentan- $\alpha\alpha$ -Dicarbonsäure. Sm. 127° (B. 42, 556 C. 1909 [1] 861).
- 2) Äthylester d.  $\gamma\epsilon$ -Diketo- $\alpha$ -[2-Nitrophenyl]- $\alpha$ -Hexen- $\delta$ -Carbonsäure. Sm. 120,5°. Na (B. 16, 33, 163). — II, 1877.
- 3) Äthylester d. 6-Oxy-4-Keto-2-[3-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 163° (A. 294, 294). — \*II, 1085.
- 4) Äthylester d. 6-Oxy-4-Keto-2-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 140°. + C<sub>2</sub>H<sub>6</sub>O. Sm. 110° (A. 294, 292). — \*II, 1085.
- 5) Diäthylester d. Phtalylamidomalonsäure. Sm. 73,8—74°. Na (C. 1903 [2] 33).
- 6)  $\alpha\beta$ -Imid d.  $\beta$ -Benzoxylpropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\gamma$ -Äthylester. Sm. 115° (B. 38, 3200 C. 1905 [2] 1324).
- 7) Verbindung (aus Phenylimidodiessigsäureäthylester). Sm. 147—148° (Soc. 87, 450 C. 1905 [1] 1640).
- 8) Verbindung (aus Phenylimidodiessigsäureäthylester u. Oxalsäureäthylester). Sm. 175° (Soc. 87, 449 C. 1905 [1] 1640).
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>N<sub>3</sub>** C 54,0 — H 4,5 — O 28,8 — N 12,6 — M. G. 333.
- 1) Triäthylester d. 1,2,3-Tricyan-R-Trimethylen-1,2,3-Tricarbonsäure. Sm. 119° (B. 33, 2979; 34, 1045, 3714).
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>N<sub>5</sub>** C 49,9 — H 4,1 — O 26,6 — N 19,4 — M. G. 331.
- 1) 4,6-Dinitro-5-Methylnitramido-2,4'-Dimethyldiphenylamin. Sm. 184° (J. pr. [2] 67, 525 C. 1903 [2] 239). — \*IV, 1115.
- 2)  $\alpha$ -Isopropyl- $\alpha$ -Phenyl- $\beta$ -[2,4,6-Trinitrophenyl]hydrazin. Sm. 156° (B. 30, 2819). — IV, 1498.
- 3)  $\alpha$ -[2,4,6-Trinitrophenyl]- $\beta$ -[2,4,5-Trimethylphenyl]hydrazin. Sm. 157,5° u. Zers. (J. pr. [2] 71, 387 C. 1905 [2] 38).
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>Cl** 1) Chlorpikrotoxinin. Sm. 272° (B. 31, 2966). — \*III, 471.
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>Br** 1) Brompikrotoxinin. Sm. 250—255° u. Zers. (259—260°) (B. 10, 1100; 14, 819; 31, 2966; A. 222, 331, 341; G. 36 [2] 651 C. 1907 [1] 1043). — III, 643; \*III, 471.
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>J** 1) Jodpikrotoxinin. Sm. 198—199° (B. 31, 2967). — \*III, 471.
- C<sub>15</sub>H<sub>15</sub>O<sub>7</sub>N** C 56,1 — H 4,7 — O 34,9 — N 4,3 — M. G. 321.
- 1) 8-Oxyehinolinglykuronsäure. Sm. 151°. K + H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Sr, Cd (H. 28, 443; 30, 559 Anm.). — \*IV, 185.
- 2)  $\alpha$ ,2-Lakton d.  $\beta$ -Acetoximido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan-2-Carbonsäure + Essigsäureanhydrid. Sm. 210—211° (B. 40, 77 C. 1907 [1] 555).

- C<sub>15</sub>H<sub>15</sub>O<sub>7</sub>Br** 1) Brompikrotoxensäure +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 180° u. Zers. (G. 39 [1] 297 C. 1909 [1] 1482).
- C<sub>15</sub>H<sub>15</sub>O<sub>8</sub>N** C 53,4 — H 4,4 — O 38,0 — N 4,2 — M. G. 337.
- 1) Anhydronitropikroton. Sm. 260° (B. 31, 2974). — \*III, 472.
- 2) Narceinsäure + 3H<sub>2</sub>O(?). Sm. 184° u. Zers. Na +  $\frac{4}{2}$ H<sub>2</sub>O, Na<sub>2</sub> + 5H<sub>2</sub>O, Na<sub>3</sub> + 5H<sub>2</sub>O, Ag<sub>3</sub> + 5H<sub>2</sub>O (J. pr. [2] 37, 3). — II, 2081.
- 3) Acetylamid d. 3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 210° (240°) (A. 263, 257; A. GANSSER, Dissert. Zürich 1900). — II, 1922.
- C<sub>15</sub>H<sub>15</sub>O<sub>9</sub>N** C 51,0 — H 4,2 — O 40,8 — N 4,0 — M. G. 353.
- 1)  $\alpha$ -Benzoylamidobutan- $\alpha\alpha^2\delta$ -Tetracarbonsäure (C. 1903 [2] 33).
- C<sub>15</sub>H<sub>15</sub>O<sub>12</sub>N<sub>3</sub>** C 42,0 — H 3,5 — O 44,7 — N 9,8 — M. G. 429.
- 1) Diäthylester d.  $\alpha$ -Acetoxyl-2,4,6-Trinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 125° (Am. 21, 429). — \*II, 1122.
- C<sub>15</sub>H<sub>15</sub>NCl<sub>2</sub>** 1)  $\alpha\alpha$ -Dichlor-4-Dimethylamidodiphenylmethan (B. 42, 3980 C. 1909 [2] 1734).
- C<sub>15</sub>H<sub>15</sub>NBr<sub>2</sub>** 1)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Methylphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthan. Sm. 154° (B. 36, 1684 C. 1903 [2] 46). — \*IV, 228.
- 2) 5-Äthyl-2-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]pyridin. Sm. 127,5–128° (B. 21, 3098; 22, 1060). — IV, 398.
- 3) 2-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]-4,6-Dimethylpyridin. Sm. 213–214° u. Zers. (B. 27, 82).
- C<sub>15</sub>H<sub>15</sub>NS** 1) Phenylamid d. 1,2-Dimethylbenzol-4-Thiocarbonsäure. Sm. 106 bis 107° (J. pr. [2] 59, 576). — \*II, 840.
- 2) Phenylamid d. 1,3-Dimethylbenzol-4-Thiocarbonsäure. Sm. 106,5 bis 107,5° (J. pr. [2] 59, 576). — \*II, 841.
- 3) 4-Methylphenylamid d. 1-Methylbenzol-4-Thiocarbonsäure. Sm. 165–166° (B. 25, 3527; J. pr. [2] 59, 576). — II, 1354.
- 4) 2,4-Dimethylphenylamid d. Benzolthiocarbonsäure. Sm. 90° (B. 21, 2552). — II, 1294.
- C<sub>15</sub>H<sub>15</sub>NS<sub>2</sub>** 1) Dibenzylamidodithioameisensäure. Dibenzylaminsalz (B. 37, 3236 C. 1904 [2] 1153).
- 2) Phenylester d. Äthylphenylamidodithioameisensäure. Sm. 127,8° (B. 21, 105; Bl. [4] 1, 740 C. 1907 [2] 1160). — II, 785.
- 3) Phenylamid d. 4-Merkaptobenzoläthyläther-1-Thiocarbonsäure. Sm. 140–141° (B. 27, 1740). — II, 1541.
- C<sub>15</sub>H<sub>15</sub>N<sub>2</sub>Cl** 1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Chlorphenyl]propan. Sm. 94–96° (Bl. [3] 19, 830). — \*IV, 503.
- 2) 2-Methylphenylamid-2-Methylphenylamidochlormethan. HCl (C. 1899 [1] 830).
- 3) Chlormethylat d. 1-Methyl-2-Phenylbenzimidazol + H<sub>2</sub>O. 2 + PtCl<sub>4</sub> (A. 210, 358; J. pr. [2] 73, 433 C. 1906 [2] 253). — IV, 1006.
- 4) 5-Chlormethylat d. 3,8-Dimethyldiphenazon. 2 + ZnCl<sub>2</sub> (B. 37, 27 C. 1904 [1] 523).
- 5) Chloräthylat d. 9-Methylphenanthrolin. (HCl, PtCl<sub>4</sub>) (B. 22, 249). — IV, 1011.
- C<sub>15</sub>H<sub>15</sub>N<sub>2</sub>Br** 1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Bromphenyl]propan. Sm. 99–101° (Bl. [3] 19, 830). — \*IV, 503.
- C<sub>15</sub>H<sub>15</sub>N<sub>2</sub>J** 1) Jodmethylat d. 1-Methyl-2-Phenylbenzimidazol. Sm. 280° (278 bis 279°). + J<sub>2</sub> (A. 210, 356; J. pr. [2] 73, 432 C. 1906 [2] 253). — IV, 1006.
- 2) Jodmethylat d. 3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 170° (B. 22, 2689). — IV, 872.
- 3) Jodäthylat d. 9-Methylphenanthrolin + 2H<sub>2</sub>O (B. 22, 249). — IV, 1011.
- C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) 2,5-Dichlorphenyl-4-Dimethylamidobenzylidenhydrazin. Sm. 120° (B. 33, 3511 C. 1905 [2] 1627).
- C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>Br<sub>2</sub>** 1) 2,6-Dibrom-4'-Dimethylamido-4-Methylazobenzol. Sm. 156°. HCl, HBr (B. 41, 1184 C. 1908 [1] 1885).
- C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>S** 1)  $\alpha$ -Benzylidenamido- $\alpha$ -Methyl- $\beta$ -Phenylthioharnstoff. Sm. 132° (B. 37, 2322 C. 1904 [2] 311; B. 41, 3287 C. 1908 [2] 1676).
- 2)  $\alpha$ -Benzylidenamido- $\beta$ -Methyl- $\alpha$ -Phenylthioharnstoff. Sm. 151–152° (B. 37, 2331 C. 1904 [2] 314).
- 3) 5-Phenylamido-2-Methyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiadiazol. HCl (B. 30, 854). — IV, 686.

- C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>S** 4) **2-Thiocarbonyl-3-[2-Amidobenzyl]-1,2,3,4-Tetrahydro-1,3-Benz-diazin.** Sm. 212° (*J. pr.* [2] 55, 362). — **IV**, 635.  
 5) **N-Dimethyl-o-Methylthionin.** HJ +  $\frac{1}{2}$  H<sub>2</sub>O (*A.* 251, 92). — **II**, 811.  
 6) **Amid d. Phenylamido-2-Methylphenylimidothioessigsäure.** Sm. 134° (*C.* 1901 [1] 69).  
 7) **Amid d. Phenylamido-4-Methylphenylimidothioessigsäure.** Sm. 139° (*C.* 1901 [1] 69).
- C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>S<sub>2</sub>** 1) **Methyläther d. α-Phenylimido-α-[β-Phenylthioureido]-α-Merkapto-methan.** Sm. 101° (*Am.* 30, 176 *C.* 1903 [2] 872).
- C<sub>15</sub>H<sub>15</sub>N<sub>3</sub>S<sub>6</sub>** 1) **α-Phenyl-α-[Phenylimidomerkaptomethyläthermethyl]hydrazin-β-Dithiocarbonsäure** (*B.* 34, 338).
- C<sub>15</sub>H<sub>15</sub>N<sub>4</sub>Cl** 1) **α-Chlor-αβ-Di[Phenylhydrazon]propan.** Sm. 182,5° u. Zers. (*B.* 38, 2989 *C.* 1905 [2] 1454).  
 2) **Chlormethylat d. 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin.** Sm. 244°. 2 + PtCl<sub>4</sub> (*Soc.* 55, 245). — **IV**, 1233.
- C<sub>15</sub>H<sub>15</sub>N<sub>4</sub>J** 1) **Jodmethylat d. 3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin.** Sm. 128° u. Zers. (*B.* 27, 1004; *A.* 297, 259). — **II**, 1214.  
 2) **Jodmethylat d. 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin.** Sm. 214° (*Soc.* 55, 245). — **IV**, 1233.  
 3) **Jodmethylat d. 3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin.** Sm. 150° u. Zers. (*B.* 27, 1006; *A.* 297, 262). — **II**, 1215; \***II**, 762.
- C<sub>15</sub>H<sub>15</sub>ClS<sub>2</sub>** 1) **Diphenyläther d. γ-Chlor-αβ-Dimerkaptopropan.** Fl. (*A.* 283, 205).  
**C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>** *C* 75,0 — H 6,7 — O 6,7 — N 11,6 — M. G. 240.  
 1) **p-Nitroso-4-Dimethylamidodiphenylmethan.** Sm. 89° (*A.* 307, 311). — \***II**, 350.  
 2) **Äthylbenzyl-4-Nitrosophenylamin.** Sm. 62°. HCl (*B.* 35, 1294 *C.* 1902 [1] 1094; *A.* 334, 238 *C.* 1904 [2] 900).  
 3) **Methylendi-p-Anhydroamidobenzylalkohol** = (C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>)<sub>x</sub>. Zers. oberhalb 290°. 2HCl, (2HCl, PtCl<sub>4</sub>) (*C.* 1896 [1] 1104; 1898 [1] 987). — \***II**, 646.  
 4) **αβ-Diphenyläthylharnstoff.** Sm. 98—99° (*B.* 22, 1411). — **II**, 636.  
 5) **4-Methyldiphenylmethylharnstoff** (p-Homobenzhydrylharnstoff). Sm. 158° (*B.* 24, 2802). — **II**, 637.  
 6) **α-Äthyl-αβ-Diphenylharnstoff.** Sm. 91° (*B.* 17, 2093, 3036; *A.* 309, 193). — **II**, 380; \***II**, 187.  
 7) **s-Dibenzylharnstoff.** Sm. 167° (*B.* 4, 412; 5, 92; 27, 3379; *A.* 309, 203; *J. pr.* [2] 64, 321). — **II**, 526; \***II**, 297.  
 8) **uns-Dibenzylharnstoff.** Sm. 124—125° (*B.* 9, 81; *J. pr.* [2] 76, 463 *C.* 1908 [1] 453). — **II**, 526.  
 9) **s-Di[2-Methylphenyl]harnstoff.** Sm. 256° (250°; 243°; 219—220°) (*B.* 6, 444; 12, 1350, 1859, 2325; 19, 1769; *J. pr.* [2] 38, 303; *Soc.* 79, 105; *C.* 1896 [1] 701; 1896 [2] 171; *M.* 25, 378 *C.* 1904 [2] 320). — **II**, 464.  
 10) **s-Di[3-Methylphenyl]harnstoff.** Sm. 221° (203°; 217°) (*B.* 13, 1090; 25, 1089; *M.* 25, 382 *C.* 1904 [2] 320). — **II**, 479.  
 11) **s-Di[4-Methylphenyl]harnstoff.** Sm. 256° (263°; 244—245°) (*J.* 1869, 638; *A.* 126, 161; *B.* 9, 714, 821; 14, 2446; 19, 1768; 27, 2426; *Am.* 12, 502; *G.* 29 [1] 133; *Soc.* 79, 103; *C.* 1896 [1] 701; 1896 [2] 171; *B.* 35, 1878 *C.* 1902 [2] 33; *Soc.* 93, 1058 *C.* 1908 [2] 523). — **II**, 495; \***II**, 272.  
 12) **s-Benzyl-2-Methylphenylharnstoff.** Sm. 188—188,5° (*Soc.* 67, 562). — \***II**, 297.  
 13) **s-Benzyl-3-Methylphenylharnstoff.** Sm. 158,5—159° (*Soc.* 67, 563). — \***II**, 297.  
 14) **s-Benzyl-4-Methylphenylharnstoff.** Sm. 180—181° (*B.* 21, 505). — **II**, 526.  
 15) **s-2-Methylphenyl-4-Methylphenylharnstoff.** Sm. 263—264° (*Soc.* 67, 562). — \***II**, 272.  
 16) **s-Phenyl-3-Methylbenzylharnstoff.** Sm. 131° (*B.* 21, 2703). — **II**, 545.  
 17) **s-Phenyl-2,4-Dimethylphenylharnstoff.** Sm. 242—243° (*G.* 29 [2] 143). — \***II**, 312.  
 18) **α-Methyl-α-Phenyl-β-Benzylharnstoff.** Sm. 84° (*B.* 24, 3817). — **II**, 526.  
 19) **α-Methyl-β-Phenyl-α-Benzylharnstoff.** Sm. 134—135° (*Soc.* 75, 374). — \***II**, 297.



- $C_{15}H_{16}ON_2$  20)  $\alpha$ -Methyl- $\beta$ -Phenyl- $\beta$ -Benzylharnstoff. Sm. 107,5—108,5° (Soc. 67, 563). — \*II, 296.
- 21)  $\alpha\beta$ -Dimethyl- $\alpha\beta$ -Diphenylharnstoff. Sm. 120—121°; Sd. 350° (B. 12, 1166; J. 1881, 335). — II, 380.
- 22) 2-[4-Dimethylamidobenzyliden]amido-1-Oxybenzol. Sm. 119° (C. 1907 [1] 109).
- 23) 4-[4-Dimethylamidobenzyliden]amido-1-Oxybenzol. Sm. 265° (C. 1907 [1] 108).
- 24) 4-[2-Oxybenzyliden]amido-1-Dimethylamidobenzol. Sm. 134°. HCl, 2HCl (B. 18, 573; Am. 34, 478 C. 1906 [1] 342; C. 1908 [1] 1540). — IV, 597.
- 25) 4-[4-Oxybenzyliden]amido-1-Dimethylamidobenzol (B. 18, 574). — IV, 597.
- 26)  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]hydroxylamidomethan. HCl, Cu (B. 35, 1877 C. 1902 [2] 33).
- 27) Methyläther d.  $\alpha$ -Phenylamido- $\alpha$ -[4-Oxyphenyl]imidoäthan. Sd. 295 bis 300°<sub>80</sub> (D.R.P. 80568). — \*II, 402.
- 28) Äthyläther d. Phenylimidophenylamidooxymethan (Äthylisocarb-anilid). Sd. 200°<sub>20</sub>. HCl, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (B. 27, 927; 28, 574; Am. 17, 112; C. 1899 [1] 830). — \*II, 187.
- 29) 2-Amido-1-Acetylphenylamidomethylbenzol. Sm. 80—81° (J. pr. [2] 47, 350). — IV, 630.
- 30) 2-Acetylamido-1-Phenylamidomethylbenzol. Sm. 126—127°. HCl, (HCl, SnCl<sub>2</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 24, 3051; J. pr. [2] 47, 357). — IV, 630.
- 31) 4[oder 3]-Phenacetylamido-3[oder 4]-Amido-1-Methylbenzol. Sm. 194° (B. 24, 633). — IV, 617.
- 32)  $\alpha$ -Benzoylamido- $\beta$ -Phenylamidoäthan. Sm. 127°. (2HCl, PtCl<sub>4</sub>) (B. 28, 2934). — \*II, 733.
- 33) 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 123° (Bl. [3] 11, 1133). — III, 357.
- 34) 4-[4-Dimethylamidophenyl]imido-1-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 117—118° (Bl. [3] 11, 1133). — III, 357; \*III, 265.
- 35) 4,4'-Di[ $\alpha$ -Methylamidophenyl]keton. Sm. 130°. (2HCl, PtCl<sub>4</sub>) (B. 37, 2677 C. 1904 [2] 443).
- 36) Di[3-Amido-4-Methylphenyl]keton. Sm. 171—172°. 2HCl (A. 271, 7). — III, 233.
- 37)  $\alpha$ -Oximido-4-Dimethylamidodiphenylmethan. Sm. 152—154° (D.R.P. 167053 C. 1906 [1] 721).
- 38) Benzyläther d.  $\beta$ -Oximido- $\beta$ -Amido- $\alpha$ -Phenyläthan. Sm. 55° (B. 18, 1072). — II, 1314.
- 39) Phenyl-4-Oxy-2,3-Dimethylbenzylidenhydrazin. Sm. 165° (A. 357, 326 C. 1908 [1] 354).
- 40) Phenyl-4-Oxy-2,5-Dimethylbenzylidenhydrazin. Sm. 164° (A. 357, 324 C. 1908 [1] 353).
- 41) Phenyl-6-Oxy-3,4-Dimethylbenzylidenhydrazin. Sm. 195° (A. 357, 329 C. 1908 [1] 354).
- 42) 2-Oxybenzyliden-4-Methylbenzylhydrazin. Sm. 105° (J. pr. [2] 62, 109). — \*IV, 545.
- 43)  $\alpha$ -Methyl- $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 85 bis 86° (B. 32, 3063). — \*IV, 538.
- 44) Methyläther d.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 110—112° (M. 26, 341 C. 1905 [1] 1144).
- 45)  $\beta$ -Benzoyl- $\alpha$ -Äthyl- $\alpha$ -Phenylhydrazin. Sm. 168° (C. 1903 [1] 1128; B. 35, 4189 C. 1903 [1] 143). — \*IV, 427.
- 46)  $\beta$ -Benzoyl- $\beta$ -Äthyl- $\alpha$ -Phenylhydrazin. Sm. 100° (B. 42, 3528 C. 1909 [2] 1461).
- 47)  $\beta$ -Benzoyl- $\alpha\beta$ -Dimethyl- $\alpha$ -Phenylhydrazin. Sm. 103—104° (B. 27, 700). — IV, 669.
- 48)  $\beta$ -Propionyl- $\alpha\alpha$ -Diphenylhydrazin. Sm. 178° (B. 25, 1077). — IV, 666.
- 49)  $\beta$ -Acetyl- $\alpha$ -Phenyl- $\alpha$ -Benzylhydrazin. Sm. 121° (A. 252, 288; M. 29, 913 C. 1908 [2] 2008). — IV, 812.
- 50)  $\alpha$ -Acetyl- $\beta$ -Phenyl- $\alpha$ -Benzylhydrazin. Sm. 91° (J. pr. [2] 78, 53 C. 1908 [2] 689).

- $C_{15}H_{16}ON_2$  51) Acetyl-4-Methyl-s-Diphenylhydrazin. Sm. 140° (A. 303, 370): — IV, 1502.
- 52)  $\beta$ -Formyl- $\alpha\alpha$ -Di[2-Methylphenyl]hydrazin. Sm. 139° (B. 25, 1078). — IV, 801.
- 53)  $\beta$ -Formyl- $\alpha\alpha$ -Di[4-Methylphenyl]hydrazin. Sm. 146° (B. 25, 1079). — IV, 805.
- 54) 5-Oxy-4-Phenylhydrazonmethyl-1,2-Dimethylbenzol. Sm. 190° (B. 35, 4104 C. 1903 [1] 149). — \*IV, 495.
- 55) 2-Oxy-5-Phenylhydrazonmethyl-1,3-Dimethylbenzol. Sm. 143° (A. 311, 368). — \*IV, 495.
- 56) 4-Oxy-5-Phenylhydrazonmethyl-1,3-Dimethylbenzol. Sm. 105° (B. 35, 4104 C. 1903 [1] 149). — \*IV, 495.
- 57) 3-Oxy-2-Phenylhydrazonmethyl-1,4-Dimethylbenzol. Sm. 148° (B. 35, 4104 C. 1903 [1] 149). — \*IV, 495.
- 58) 5-Oxy-2-Phenylhydrazonmethyl-1,4-Dimethylbenzol. Sm. 164° (B. 35, 4105 C. 1903 [1] 149). — \*IV, 495.
- 59)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]propan. Sm. 80° (J. pr. [2] 43, 90). — IV, 772.
- 60)  $\alpha$ -Phenylhydrazon- $\alpha$ -[6-Oxy-3-Methylphenyl]äthan. Sm. 152,5° (A. 365, 343 C. 1909 [1] 1868).
- 61) Methyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 86° (114°) (B. 25, 1308; B. 36, 3589 C. 1903 [2] 1365). — IV, 772.
- 62) Methyläther d.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 113,5—114° (B. 36, 363 C. 1903 [1] 577). — \*IV, 493.
- 63) Methyläther d. polym.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin =  $(C_{15}H_{16}ON_2)_x$ . Sm. 106,5—108,5° (B. 36, 369 C. 1903 [1] 577). — \*IV, 493.
- 64) Phenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan (B. 28, 1253). — IV, 767.
- 65) 3-Methylphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxyäthan. Sm. 72° (B. 30, 1441). — IV, 755.
- 66) 4-Methylphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxyäthan. Sm. 106° (111°) (B. 30, 1440, 1704). — IV, 755.
- 67) 5-Oxy-1,2,4-Trimethyl-*p*-Azobenzol. Sm. 93—94° (B. 17, 886). — IV, 1424.
- 68) 4'-Oxy-2,4,5-Trimethylazobenzol. Sm. 94°. HCl (B. 24, 2313, 3097). — IV, 1414; \*IV, 1039.
- 69) 6'-Oxy-2,4,3'-Trimethylazobenzol. Sm. 85°; Sd. 230—233°<sub>80</sub> (A. 369, 31 C. 1909 [2] 1855).
- 70) 6'-Oxy-3,4,3'-Trimethylazobenzol. Sm. 131—132° (A. 365, 304 C. 1909 [1] 1865).
- 71) 2-Oxy-3,5,4'-Trimethylazobenzol. Sm. 99° (A. 369, 25 C. 1909 [2] 1854).
- 72) Äthyläther d. 4-Oxy-2-Methylazobenzol. Sm. 51,5° (A. 287, 147; B. 31, 891 Anm., 895). — IV, 1420; \*IV, 1040.
- 73) Äthyläther d. 4'-Oxy-2-Methylazobenzol. Sm. 53° (B. 22, 3258; B. 36, 3859 C. 1904 [1] 91). — IV, 1413.
- 74) Äthyläther d. 4-Oxy-3-Methylazobenzol. Sm. 59° (60°) (B. 23, 3259; Z. Kr. 32, 256). — IV, 1419; \*IV, 1040.
- 75) Äthyläther d. 6-Oxy-3-Methylazobenzol. Sm. 48° (B. 23, 3262). — IV, 1420.
- 76) Äthyläther d. 4'-Oxy-3-Methylazobenzol. Sm. 65° (A. 287, 161). — IV, 1413.
- 77) Äthyläther d. 2'-Oxy-4-Methylazobenzol. Sm. 92—93° (A. 369, 7 C. 1909 [2] 1852).
- 78) Äthyläther d. 4'-Oxy-4-Methylazobenzol. Sm. 121—122°; Sd. 251°<sub>47</sub> (B. 23, 3258; B. 39, 4162 C. 1907 [1] 227; A. 369, 33 Anm. C. 1909 [2] 1855). — IV, 1413.
- 79) Propyläther d. 4-Oxyazobenzol. Sm. 61° (B. 41, 1157 C. 1908 [1] 1880).
- 80) 2,6-Dimethyl-4-[3-Acetylamidophenyl]pyridin. Sm. 72—76° (G. 17, 472). — IV, 976.
- 81) 1,3-Dimethyl-2-[2-Oxyphenyl]-2,3-Dihydrobenzimidazol. Sm. 155° (B. 34, 4203 C. 1902 [1] 262). — \*IV, 367.

- C<sub>15</sub>H<sub>16</sub>ON<sub>2</sub>** 82) **2-Oxy-1,3-Dimethyl-2-Phenyl-2,3-Dihydrobenzimidazol**. Sm. 159°. Pikrat (*J. pr.* [2] 73, 432 *C.* 1906 [2] 253).
- 83) **1-Methylhydroxyd d. 1-Methyl-2-Phenylbenzimidazol**. Sm. 152°. Chlorid + 2H<sub>2</sub>O, 2Chlorid + PtCl<sub>4</sub>, Jodid, Trijodid, Nitrat, Sulfat + H<sub>2</sub>O (*A.* 210, 357). — IV, 1006.
- 84) **4-Oxy-7-Methyl-2-Phenyl-5,6,7,8-Tetrahydro-1,3-Benzdiazin**. Sm. 227° (*J. pr.* [2] 79, 120 *C.* 1909 [1] 855).
- 85) **Methyläther d. 3-[2-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin**. Sm. 141—142° (96°) (*J. pr.* [2] 53, 423; [2] 54, 283). — IV, 636.
- 86) **Methyläther d. 3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin**. Sm. 134° (*J. pr.* [2] 54, 288). — IV, 636.
- 87) **2-Amido-8-Oxy-3,7-Dimethyl-5,10-Dihydroakridin** (*C.* 1901 [2] 78).
- 88) **Dimethylharmin**. Chlorid, Jodid, Nitrat (*B.* 30, 2483).
- 89) **Nitril d. β-Oxy-α-[2-Cyanphenyl]-α-Pentenäthyläther-α-Carbonsäure**. Sm. 80° (*B.* 29, 2394). — \*II, 1136.
- 90) **Nitril d. β-Oxy-α-[2-Cyanphenyl]-γ-Methyl-α-Butenäthyläther-α-Carbonsäure**. Sm. 91° (*B.* 30, 891). — \*II, 1136.
- 91) **Amid d. α-Phenylamido-α-Phenylpropionsäure**. Sm. 119° (*B.* 19, 1516). — II, 1371.
- 92) **Amid d. α-Phenylamido-α-[3-Methylphenyl]essigsäure**. Sm. 127 bis 128° (*B.* 17, 1471). — II, 1374.
- 93) **Amid d. α-Methylphenylamido-α-Phenylessigsäure**. Sm. 133° (*B.* 35, 3355 *C.* 1902 [2] 1195).
- 94) **Amid d. α-[2-Methylphenyl]amido-α-Phenylessigsäure**. Sm. 125 bis 126° (*B.* 39, 995 *C.* 1906 [1] 1341).
- 95) **Amid d. α-[4-Methylphenyl]amido-α-Phenylessigsäure**. Sm. 113 bis 114° (*B.* 39, 997 *C.* 1906 [1] 1341).
- 96) **Phenylamid d. α-Phenylamidopropionsäure**. Sm. 126° (*B.* 22, 1794; 30, 2313, 2317, 2321). — II, 432; \*II, 227.
- 97) **Phenylamid d. β-Phenylamidopropionsäure**. Sm. 92—93°. HCl (*B.* 36, 1264 *C.* 1903 [1] 1219).
- 98) **Phenylamid d. 4-Methylphenylamidoessigsäure**. Sm. 82—83° (*B.* 8, 1161). — II, 505.
- 99) **4-Methylphenylamid d. Phenylamidoessigsäure**. Sm. 165° (171 bis 172°) (*B.* 8, 1158; 23, 2000). — II, 493.
- 100) **2,4-Dimethylphenylamid d. 2-Amidobenzol-1-Carbonsäure**. Sm. 138° (*J. pr.* [2] 63, 285).
- 101) **2-Amidobenzylamid d. 1-Methylbenzol-2-Carbonsäure**. Sm. 114 bis 116°. HCl (*B.* 25, 3034). — IV, 631.
- 102) **3-Amido-4-Methylbenzylamid d. Benzolcarbonsäure**. Sm. 113—115°. HCl, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*B.* 28, 2990). — IV, 644.
- 103) **2-Dimethylamidophenylamid d. Benzolcarbonsäure**. Sm. 51° (*B.* 32, 1905). — \*IV, 367.
- 104) **3-Dimethylamidophenylamid d. Benzolcarbonsäure**. Sm. 163—164° (*D.R.P.* 81374). — \*IV, 376.
- 105) **4-Dimethylamidophenylamid d. Benzolcarbonsäure**. Sm. 228° (223 bis 224°) (*B.* 29, 1482; *Am.* 34, 479 *C.* 1906 [1] 342). — IV, 594.
- 106) **Äthyl-4-Amidophenylamid d. Benzolcarbonsäure**. Sm. 117° (*Soc.* 95, 1322 *C.* 1909 [2] 977).
- 107) **Phenylhydrazid d. β-Phenylpropionsäure**. Sm. 116—117° (*B.* 36, 1101 *C.* 1903 [1] 1140). — \*IV, 428.
- 108) **2,5-Dimethylphenylhydrazid d. Benzolcarbonsäure**. Sm. 181° (*J. pr.* [2] 71, 409 *C.* 1905 [2] 41).
- C<sub>15</sub>H<sub>16</sub>ON<sub>4</sub>** C 67,1 — H 6,0 — O 6,0 — N 20,9 — M. G. 268.
- 1) **βγ-Di[Phenylhydrazon]-α-Oxypropan**. Sm. 131° (136—137°) (*B.* 20, 1089, 3386; 28, 1522; 30, 1662, 3165; 34, 1532; *Soc.* 75, 5). — IV, 762; \*IV, 496.
- 2) **Monoacetylderivat d. α-Phenylhydrazon-α-Phenylhydrazidomethan**. Sm. 163—164° (*B.* 25, 3189). — IV, 1227.
- 3) **α-Phenylazo-α-Äthyl-β-Phenylharnstoff**. Sm. 99° (*B.* 38, 681 *C.* 1905 [1] 732).
- 4) **Äthylencarbonylbisphenylhydrazid**. Sm. 199—200° (*A.* 310, 160). — \*IV, 430.



- $C_{15}H_{16}ON_4$  5) Amid d. 3,4'-Dimethylazobenzol-6-Amidoameisensäure. Sm. 207° (B. 32, 2970). — \*IV, 1021.
- 6) Phenylhydrazid d.  $\alpha$ -Phenylhydrazonpropionsäure. Sm. 163° (162°) (J. pr. [2] 42, 78; B. 21, 2922). — IV, 666; \*IV, 452.
- $C_{15}H_{16}ON_6$  C 60,8 — H 5,4 — O 5,4 — N 28,4 — M. G. 296.
- 1) Base (aus d. Verbindung  $C_{15}H_{16}N_6$ ). Sm. 228° (M. 5, 470). — II, 450.
- $C_{15}H_{16}OS$  1) 1-Äthyläther-4-Benzyläther d. 4-Merkapto-1-Oxybenzol. Sm. 43 bis 44° (Bl. [3] 33, 839 C. 1905 [2] 618).
- $C_{16}H_{16}O_2N_2$  C 70,3 — H 6,2 — O 12,5 — N 10,9 — M. G. 256.
- 1) Äthylphenyl-2-Nitrobenzylamin. Sm. 66°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 334, 248 C. 1904 [2] 901).
- 2) Äthylphenyl-3-Nitrobenzylamin. Sm. 69°. HCl, Pikrat (B. 35, 1293 C. 1902 [1] 1094; A. 334, 243 C. 1904 [2] 901).
- 3) Äthylphenyl-4-Nitrobenzylamin. Sm. 67° (A. 334, 247 C. 1904 [2] 901).
- 4) Äthylbenzyl-2-Nitrophenylamin. Fl. (2HCl, PtCl<sub>4</sub>) (A. 334, 252 C. 1904 [2] 901).
- 5) Äthylbenzyl-4-Nitrophenylamin. Sm. 63° (A. 334, 258 C. 1904 [2] 902).
- 6)  $\beta$ -Nitroäthylphenylbenzylamin (J. pr. [2] 63, 427).
- 7)  $\beta$ -Nitro-4-Benzylamido-1,3-Dimethylbenzol (Bl. [3] 7, 52). — II, 543.
- 8) 2-[2-Nitrobenzyl]amido-1,3-Dimethylbenzol. Fl. HCl (B. 32, 1010). — \*II, 309.
- 9)  $\beta$ -Benzylnitrosamido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 95° (corr.) (B. 29, 211). — \*II, 649.
- 10) Methyläther d. 4-Oxy-1-[4-Methylphenyl]nitrosamidomethylbenzol. Sm. 108° (A. 241, 340). — II, 754.
- 11) Äthyläther d. 2-[4-Oxyphenyl]nitrosamido-1-Methylbenzol. Sm. 71—72° (A. 287, 175). — \*II, 400.
- 12)  $\beta$ -Ureido- $\alpha$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthan. Sm. 157° (A. 337, 352 C. 1905 [1] 341).
- 13) [ $\beta$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthyl]harnstoff. Sm. 215° u. Zers. (B. 28, 1898). — \*II, 660.
- 14) Methyläther d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -Benzylharnstoff. Sm. 87° (J. pr. [2] 56, 76). — \*II, 304.
- 15) Methyläther d. s-Phenyl-2-Oxybenzylharnstoff. Sm. 145° (B. 23, 2743). — II, 743.
- 16) Äthyläther d. 2-Oxy-s-Diphenylharnstoff. Sm. 169—170° (J. pr. [2] 41, 327). — II, 709.
- 17) Äthyläther d. 4-Oxy-s-Diphenylharnstoff. Sm. 178° (187°) (C. 1907 [1] 246; B. 40, 2400 C. 1907 [2] 317).
- 18) Benzyläther d. 2-Oxy-3-Methylphenylharnstoff. Sm. 113° (B. 39, 3247 C. 1906 [2] 1412).
- 19) Methyläther d. 2-Oxyphenyl-2-Amidobenzylformylamin. Sm. 98° (J. pr. [2] 54, 280). — IV, 629.
- 20) Dimethyläther d. 2-Oxyphenylimido-2-Oxyphenylamidomethan (Methenyl-di-o-Anisidin). Sm. 106° (C. 1899 [2] 949). — \*II, 388.
- 21) Dimethyläther d. 4-Oxyphenylimido-4-Oxyphenylamidomethan. Sm. 119° (112°) (C. 1898 [2] 523). — \*II, 401.
- 22)  $\beta$ -Benzyläther d.  $\beta$ -Oximido- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 102—103° (B. 18, 1080). — II, 1553.
- 23) Dibenzyläther d.  $\alpha$ -Oximido- $\alpha$ -Hydroxylamidomethan. Sm. 42°; Sd. 170°<sub>15</sub>. HCl (B. 31, 2192; 33, 1985). — \*II, 303.
- 24) 5,7-Di[Acetylamido]-1-Methylnaphtalin. Sm. 275° (Soc. 91, 1703 C. 1907 [2] 2055).
- 25) 5,7-Di[Acetylamido]-2-Methylnaphtalin. Sm. 256° (Soc. 91, 1707 C. 1907 [2] 2055).
- 26) 6,8-Di[Acetylamido]-2-Methylnaphtalin. Sm. 263° (Soc. 91, 1710 C. 1907 [2] 2055).
- 27)  $\gamma$ -Phenylhydrazon- $\alpha$ - $\beta$ -Dioxy- $\alpha$ -Phenylpropan. Sm. 170,5° (corr.) (B. 31, 1996). — \*IV, 497.
- 28)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,4 oder 3,5-Dioxyphenyl]propan. Sm. 115° (J. pr. [2] 43, 92). — IV, 772.

- $C_{15}H_{16}O_2N_2$  29)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,5-Dioxyphenyl]propan. Sm. 100° (*J. pr.* [2] 43, 94). — IV, 773.
- 30)  $\gamma$ -Diphenylhydrazon d.  $\alpha\beta$ -Dioxypropan. Sm. 133° (*B.* 33, 3101). — \*IV, 496.
- 31) 4-Methyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,4-Dioxyphenyl]äthan (Päonolphenylhydrazon). Sm. 107° (*B.* 24, 2854; *C.* 1907 [1] 960; 1908 [2] 307). — IV, 772.
- 32) 3-Methyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[3,4-Dioxyphenyl]äthan (Acetovanillonphenylhydrazon). Sm. 125° (126°) (*B.* 24, 2867; *Soc.* 93, 1516 *C.* 1908 [2] 1173). — IV, 772.
- 33) 6-Methyläther d. Phenyl-4,6-Dioxy-2-Methylbenzylidenhydrazin. Sm. 159° (*A.* 357, 347 *C.* 1908 [1] 355).
- 34) 3-Methyläther d.  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxybenzyliden]-hydrazin. Sm. 116° (*M.* 26, 342 *C.* 1905 [1] 1144).
- 35) Methyläther d.  $\beta$ -[4-Oxybenzoyl]- $\alpha$ -Methyl- $\alpha$ -Phenylhydrazin. Sm. 165—166,5° u. Zers. (*B.* 36, 366 *C.* 1903 [1] 577). — \*IV, 455.
- 36) Dimethyläther d. Phenyl-3,4-Dioxybenzylidenhydrazin. Sm. 115 bis 117° (*B.* 39, 4017 *Anm.* *C.* 1907 [1] 261).
- 37)  $\beta$ -Oxyäthyläther d. Phenyl-4-Oxybenzylidenhydrazin. Sm. 102 bis 103° (*A.* 357, 354 *C.* 1908 [1] 356).
- 38) 2-Oxyphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm. 113° (*Bl.* [3] 21, 292). — \*IV, 500.
- 39)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxy-3-Methylphenyl]hydrazin. Sm. 88 bis 89° (*B.* 25, 1331). — IV, 1505.
- 40)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[6-Oxy-3-Methylphenyl]hydrazin (Acetat d. 6-Oxy-3-Methyl-*s*-Diphenylhydrazin). Sm. 124—125° (119°) (*B.* 24, 2304; *B.* 40, 2155 *C.* 1907 [2] 144; *A.* 359, 370 *C.* 1908 [1] 1774). — IV, 1506.
- 41) 2',4'-Dioxy-2,4,5-Trimethylazobenzol (Resorcinazopseudocumol). Sm. 199° u. Zers. (*B.* 17, 882). — IV, 1445.
- 42) Resorcinazocumol. Sm. oberhalb 200° u. Zers. (*B.* 17, 132). — IV, 1445.
- 43) 4'-Äthyläther d. 6,4'-Dioxy-3-Methylazobenzol. Sm. 103—104° (*B.* 17, 883). — IV, 1423.
- 44) 3-Methyläther-4-Äthyläther d. 3,4-Dioxyazobenzol. Sm. 86—89° (*C.* 1908 [1] 127).
- 45) 1-[4-Nitro-1-Naphtyl]hexahydropyridin. Sm. 77° (*B.* 23, 1387). — IV, 10.
- 46) Acetylharmalin. Sm. 204—205° (*B.* 30, 2483; *C.* 1901 [1] 959). — \*III, 658.
- 47) 4'-Amido-2,4-Dimethyldiphenylamin-2'-Carbonsäure. Sm. 242° u. Zers. *HCl* (*A.* 279, 282). — II, 1274.
- 48) 2'-Amido-2,4-Dimethyldiphenylamin-4'-Carbonsäure. Sm. 179° (*A.* 332, 90 *C.* 1904 [1] 1570).
- 49)  $\gamma$ -[2-Naphtyl]hydrazonvaleriansäure (*A.* 242, 367). — IV, 930.
- 50) Säure (aus Hydrobenzamid). Sm. 120° (*B.* 14, 1139). — III, 36.
- 51) Methylester d. 2-Methyl-2,3-Dihydro-*peri*-Naphtimidazol-2-Methyl-carbonsäure. Sm. 145° (*A.* 365, 161 *C.* 1909 [1] 1823).
- 52) Äthylester d. 4-Amidobiphenyl-4'-Amidoameisensäure (Benzidin-semiurethan). Sm. 90—91°. *HCl*, (2*HCl*, *PtCl*<sub>4</sub>) (*A.* 258, 370). — IV, 964.
- 53) Äthylester d. 2-Amidodiphenylamin-4-Carbonsäure. Sm. 76—77° (*B.* 22, 3288). — II, 1275.
- 54) Äthylester d.  $\alpha$ -[1-Naphtyl]hydrazonpropionsäure. Sm. 100° (*A.* 239, 231). — IV, 927.
- 55) Äthylester d.  $\alpha$ -[2-Naphtyl]hydrazonpropionsäure. Sm. 131° (*A.* 236, 177). — IV, 929.
- 56) Äthylester d.  $\beta\beta$ -Diphenylhydrazidoameisensäure. Sm. 140° (*B.* 25, 1081). — IV, 738.
- 57)  $\alpha$ -Acetat d. 4'-Oxy-4-Methyl-*s*-Diphenylhydrazin. Sm. 106° (*B.* 24, 2310). — IV, 1505.
- 58)  $\beta$ -Acetat d. 4'-Oxy-4-Methyl-*s*-Diphenylhydrazin. Sm. 141° (*B.* 24, 2311). — IV, 1505.
- 59) Amid d.  $\alpha$ -[4-Methoxyphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 120° (*B.* 31, 2706). — \*II, 820.

- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 60) **Amid d.  $\alpha$ -Amido-6-Oxy-3-Methyldiphenylelessigsäure.** Sm. 146 bis 148° (B. 31, 2818). — \*II, 996.
- 61) **Piperidid d.  $\alpha$ -Cyan- $\beta$ -Keto- $\alpha$ -Phenyläthan- $\beta$ -Carbonsäure.** Sm. 155—156,5° (A. 282, 81). — IV, 16.
- 62) **Verbindung** (aus Benzylidenacetophenonoxim). 2 isom. Formen. Sm. 150° u. 218° (J. pr. [2] 54, 410). — \*III, 179.
- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>N<sub>4</sub>** C 63,4 — H 5,6 — O 11,3 — N 19,7 — M. G. 284.
- 1)  **$\alpha\gamma$ -Di[Phenylnitrosamido]propan.** Sm. 87° (B. 20, 781). — II, 345.
- 2) **4,4'-Di[Methylnitrosamidophenyl]methan.** Sm. 97—98° (B. 37, 2675 C. 1904 [2] 443).
- 3) **p-Dinitroso-4-Amido-4'-Dimethylamidodiphenylmethan.** Sm. 101,5° (B. 27, 3165). — IV, 973.
- 4)  **$\alpha$ -Phenylureido- $\alpha$ -Methyl- $\beta$ -Phenylharnstoff.** Sm. 204° (B. 37, 2324 C. 1904 [2] 312).
- 5) **Phenylamidooacetylphenylamidoharnstoff.** Sm. 202° (B. 29, 1948). — IV, 675.
- 6) **3-Methyläther d.  $\alpha$ -[3,4-Dioxybenzyliden]amido- $\alpha$ -Phenylguanidin.** Pikrat (G. 31 [1] 532). — \*IV, 889.
- 7)  **$\alpha$ -[ $\alpha$ -Phenylhydrazido]acetyl- $\beta$ -Phenylharnstoff.** Sm. 180° (C. 1899 [2] 422). — \*IV, 477.
- 8) **4-Amido-5-[4-Nitrophenylhydrazon]methyl-1,3-Dimethylbenzol.** Sm. 223—224° (B. 34, 1321 Anm.). — \*IV, 489.
- 9) **2-Dimethylamido-1-[4-Nitrophenylhydrazon]methylbenzol.** Sm. 190,5—191° (B. 37, 977 C. 1904 [1] 1079).
- 10) **5-Nitro-2-Dimethylamidobenzylidenphenylhydrazin.** Sm. 168° (M. 25, 369 C. 1904 [2] 322).
- 11) **3-Nitro-1-[Äthyl-4-Methylphenylamido]diazobenzol.** Sm. 55° (B. 20, 3018). — IV, 1571.
- 12) **4-Nitro-1-[Äthyl-4-Methylphenylamido]diazobenzol.** Sm. 114—115° (B. 20, 3018). — IV, 1572.
- 13) **4-Nitro-1-[2,4,6-Trimethylphenyl]amidodiazobenzol.** Sm. 135—136° u. Zers. (B. 28, 840). — IV, 1573.
- 14) **Dimethyläther d.  $\alpha$ -[4-Oxyphenyl]azo- $\alpha$ -[4-Oxyphenyl]hydrazonmethan.** Sm. 88° (B. 28, 1695). — IV, 1227.
- 15) **2-Nitro-4'-Dimethylamido-4-Methylazobenzol.** Sm. 159—160° (B. 20, 2995). — IV, 1383.
- 16) **3-Nitro-4'-Dimethylamido-4-Methylazobenzol.** Sm. 146—147° (B. 20, 2995). — IV, 1383.
- 17) **p-Nitro-4'-Dimethylamido-4-Methylazobenzol.** Sm. 181° (B. 20, 2995). — IV, 1383.
- 18) **4-Nitro-p-Dimethylamido-p-Methylazobenzol** (aus 2-Dimethylamido-1-Methylbenzol). Sm. 121—122° (B. 28, 843, 1892). — IV, 1383.
- 19) **Äthyläther d. 4-Ureido-3-Oxyazonaphtalin.** Sm. 206° (C. r. 143, 343 C. 1906 [2] 1055).
- 20) **3-Oxy-5-Keto-1-Phenyl-4,5-Dihydropyrazol + Phenylhydrazin.** Sm. 165° (B. 25, 1512). — IV, 702.
- 21) **2,6-Diketo-1,3,8-Trimethyl-7-Benzylpurin.** Sm. 159—160,5° (D.R.P. 128212 C. 1902 [1] 549). — \*IV, 933.
- 22)  **$\alpha$ -Tetramidopyrokresoloxyd.** Sm. oberhalb 300° (Soc. 55, 54). — III, 646.
- 23) **Phenylhydrazid d.  $\beta$ -Phenylureidoessigsäure.** Sm. 227° (J. pr. [2] 70, 251 C. 1904 [2] 1464).
- 24) **Di[ $\beta$ -Phenylhydrazid] d. Methandicarbonsäure.** Sm. 184° (187°) (B. 21, 1241; 25, 1504; 30, 1024). — IV, 702.
- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>N<sub>6</sub>** C 57,7 — H 5,1 — O 10,2 — N 26,9 — M. G. 312.
- 1) **8-Benzylidenamido-2,6-Diketo-1,3,7-Trimethylpurin** (Benzylidenhydrazidokaffein). Sm. 270° (B. 27, 3090). — III, 960.
- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>Cl<sub>3</sub>** 1) **Verbindung** (aus Santonin) = (C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>Cl<sub>3</sub>)<sub>x</sub>. Sm. 171—172° u. Zers. (B. 25, 3318; 26, 982). — II, 1786.
- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>S** 1)  **$\alpha$ -Phenylsulfon- $\beta$ -Phenylpropan.** Sm. 94° (B. 38, 652 C. 1905 [1] 739).
- 2) **2,4,4'-Trimethyldiphenylsulfonp** (B. 11, 2069). — II, 827.
- C<sub>15</sub>H<sub>16</sub>O<sub>8</sub>N<sub>2</sub>** C 66,2 — H 5,9 — O 17,6 — N 10,3 — M. G. 272.
- 1)  **$\alpha$ -Oxy-4-Nitro-4'-Äthylamidodiphenylmethan.** Sm. 99° (D.R.P. 45806). — \*II, 658.



- $C_{15}H_{16}O_3N_2$  2)  $\alpha$ -Oxy-3-Nitro-4'-Dimethylamidodiphenylmethan. Sm. 74° (D.R.P. 45806). — \*II, 658.
- 3)  $\alpha$ -Oxy-4-Nitro-4'-Dimethylamidodiphenylmethan. Sm. 96°. (2HCl, PtCl<sub>4</sub>) (B. 21, 3292; D.R.P. 45806). — II, 1078; \*II, 658.
- 4) Äthylphenyl-5-Nitro-2-Oxybenzylamin. Sm. 126° (A. 343, 248 C. 1906 [1] 924).
- 5) Äthyläther d. 4-[2-Nitrobenzyl]amido-1-Oxybenzol. Sm. 52°. HCl (J. pr. [2] 48, 555). — II, 718.
- 6) s-Di[2-Oxymethylphenyl]harnstoff. Sm. 108° (B. 22, 1669). — II, 1062.
- 7) 4-Methyläther d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxybenzyl]harnstoff. Sm. 161° (J. pr. [2] 56, 81). — \*II, 438.
- 8) Dimethyläther d. s-Di[2-Oxyphenyl]harnstoff. Sm. 182° (174°) (A. 207, 245; B. 21, 1654; C. 1897 [2] 113). — II, 709.
- 9) Dimethyläther d. s-Di[4-Oxyphenyl]harnstoff. Sm. 232—234° u. Zers. (A. 175, 295, 312; Bl. [3] 17, 732). — II, 720; \*II, 405.
- 10) Dibenzyläther d. s-Dioxyharnstoff. Sm. 88° (B. 26, 2157). — II, 532.
- 11) Dimethyläther d. 4,4'-Diamido-3,3'-Dioxydiphenylketon. Sm. 227° (J. pr. [2] 79, 496 C. 1909 [2] 362).
- 12) Methyläthyläther d. 4,4'-Dioxyazoxybenzol. Sm. 86° (B. 23, 1738). — IV, 1342.
- 13) Pyrazolverbindung (aus d. Dimethylester d. 2-Keto-R-Pentamethylen-1-Carbonsäure-1-Methylcarbonsäure). Sm. 146—147° (A. 350, 237 C. 1907 [1] 251).
- 14)  $\beta$ -Oxy- $\beta$ -[2-Nitrophenyl]- $\alpha$ -[5-Äthyl-2-Pyridyl]äthan. Sm. 110°. (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 34, 1897). — \*IV, 228.
- 15)  $\beta$ -Oxy- $\beta$ -[4-Nitrophenyl]- $\alpha$ -[5-Äthyl-2-Pyridyl]äthan. Sm. 147°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (B. 34, 2231). — \*IV, 228.
- 16) ?-Nitro-10-Keto-8-Methyl-9-Äthyl-3,4-Dihydrojulol (?-Nitro- $\alpha_1$ -Keto- $\gamma_1$ -Methyl- $\beta_1$ -Äthyljulolin). Sm. 168° (B. 25, 1192). — IV, 194.
- 17) 4'-Dimethylamido-4-Oxydiphenylamin-3-Carbonsäure. Sm. 175 bis 177° (D.R.P. 140733 C. 1903 [1] 1011). — \*IV, 382.
- 18)  $\alpha$ -[ $\beta$ -1-Naphtylureido]buttersäure. Sm. 194—195° (B. 38, 2363 C. 1905 [2] 460).
- 19) act.  $\beta$ -Phenylhydrazido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Na (B. 39, 793 C. 1906 [1] 1167).
- 20) i- $\beta$ -Phenylhydrazido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Na (B. 39, 793 C. 1906 [1] 1167).
- 21) Äthylester d. 6-Oxy-2-[4-Methylphenyl]-1,3-Diazin-4-Methylcarbon-säure. Sm. 164° (B. 28, 481). — IV, 990.
- 22) Äthylester d. 4-Keto-1-Äthyl-2-Phenyl-1,4-Dihydro-1,3-Diazin-5-Carbonsäure. Sm. 174° (B. 30, 823).
- 23) Äthylester d. 4-Oxy-2-Phenyl-1,3-Diazin-4-Äthyläther-5-Carbon-säure. Sm. 58—59° (B. 30, 1488). — IV, 987.
- 24) Äthylester d. 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin-5-Methylcarbon-säure. Sm. 178° (B. 22, 2619). — IV, 990.
- 25) Phenylhydrazid d.  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropionsäure. Sm. 215° (B. 30, 1604). — IV, 709.
- 26) Phenylhydrazid d. isom.  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropionsäure. Sm. 177° (B. 30, 1602). — IV, 709.
- 27) Methylphenylhydrazid d. Dehydracetsäure. Sm. 148° (J. pr. [2] 77, 392 C. 1908 [1] 2023).
- 28) Verbindung (aus Acetaldehyd u.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenylharnstoff). Zers. bei 129—130° (C. 1908 [1] 950).
- 29) isom. Verbindung (aus Acetaldehyd u.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenylharnstoff). Zers. bei 152° (C. 1908 [1] 951).
- 30) Verbindung (aus Dehydrodiacetylallavulinsäure). Zers. bei 185—187° (G. 22 [1] 441). — I, 734.
- 31) Verbindung (aus d. Verb.  $C_{15}H_{14}O_3N_2$ ). 2HCl (J. pr. [2] 70, 372 C. 1904 [2] 1566).
- $C_{15}H_{16}O_3N_4$  C 60,0 — H 5,3 — O 16,0 — N 18,7 — M. G. 300.
- 1)  $\beta\gamma$ -Di[Phenylnitrosamido]- $\alpha$ -Oxypropan. Sm. 108—109° (J. 1888, 1064). — II, 426.

- C<sub>15</sub>H<sub>16</sub>O<sub>8</sub>N<sub>4</sub>** 2) Diamid d. Di[Phenylamido]oxymethan-2,2'-Dicarbonsäure. Sm. 135° (*J. pr.* [2] 43, 217). — II, 1249.
- C<sub>16</sub>H<sub>16</sub>O<sub>8</sub>Cl<sub>2</sub>** 1) 6-Chloracetyl-2,4-Diacetyl-1,3,5-Trimethylbenzol. Sm. 130° (*B.* 34, 1827). — \*III, 243.
- 2) Dichlorsantonin. Zers. bei 175° (*Bl.* 5, 202; *A.* 63, 33; *B.* 38, 434 *C.* 1905 [1] 748). — II, 1787.
- C<sub>15</sub>H<sub>16</sub>O<sub>8</sub>Br<sub>2</sub>** 1) Dibrom- $\alpha$ -Metasantonin. Sm. 184° (*J.* 1880, 895). — II, 1787.
- 2) Dibrom- $\beta$ -Metasantonin. Sm. 186° (*J.* 1880, 895). — II, 1788.
- C<sub>16</sub>H<sub>16</sub>O<sub>8</sub>S** 1) Dibenzylrongalit. Sm. 80–81° (*B.* 41, 3418 *C.* 1908 [2] 1810).
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>** C 62,5 — H 5,6 — O 22,2 — N 9,7 — M. G. 288.
- 1)  $\beta$ -[1-Naphtylureido]- $\alpha$ -Oxybuttersäure (*C.* 1906 [2] 766).
- 2) 2,5-Dimethyl-1-[2-Amido-4-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Sm. 205° u. Zers. *Ag* (*B.* 35, 190). — \*IV, 78.
- 3) 2,5-Dimethyl-1-[3-Amido-4-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Zers. bei 203° (*A.* 236, 311; *B.* 33, 2365). — IV, 549; \*IV, 358.
- 4) 1-Methylphenylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Zers. bei 231°. *Ag* (*A.* 236, 309). — IV, 549.
- 5) Diäthylester d. 4-Phenylpyrazol-3,5-Dicarbonsäure. Sm. 96° (*B.* 35, 34 *C.* 1902 [1] 424; *B.* 35, 785 *C.* 1902 [1] 760). — \*IV, 628.
- 6)  $\alpha$ -Amid d.  $\alpha$ -Cyan- $\delta$ -Keto- $\beta$ -Phenylpentan- $\alpha\gamma$ -Dicarbonsäure- $\gamma$ -Methylester. Sm. 234–235° (*C.* 1907 [1] 333).
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>N<sub>4</sub>** C 57,0 — H 5,0 — O 20,3 — N 17,7 — M. G. 316.
- 1) Di[5-Nitro-2-Methylphenylamido]methan. Sm. 230° (*D.R.P.* 158543 *C.* 1905 [1] 707).
- 2) Di[3-Nitro-4-Methylphenylamido]methan. Sm. 254° (207°) (*D.R.P.* 158543 *C.* 1905 [1] 707; *B.* 41, 1579 *C.* 1908 [2] 56).
- 3) 4,6-Dinitro-5-Methylamido-2,4'-Dimethyldiphenylamin. Sm. 164° (*J. pr.* [2] 67, 537 *C.* 1903 [2] 239). — \*IV, 400.
- 4) 4,6-Dinitro-4'-Dimethylamido-2-Methyldiphenylamin (*B.* 25, 3008). — IV, 585.
- 5)  $\alpha$ -Isopropyl- $\alpha$ -Phenyl- $\beta$ -[2,4-Dinitrophenyl]hydrazin (*B.* 30, 2819). — IV, 1498.
- 6)  $\alpha$ -[2,4-Dinitrophenyl]- $\beta$ -[2,4,5-Trimethylphenyl]hydrazin. Sm. 198° u. Zers. (*J. pr.* [2] 71, 390 *C.* 1905 [2] 39).
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>S<sub>2</sub>** 1)  $\alpha\beta$ -Di[Phenylsulfon]propan. Sm. 113° (116°) (*B.* 23, 1410, 3233; *A.* 283, 199; *J. pr.* [2] 51, 286). — II, 784; \*II, 469.
- 2) isom.  $\alpha\beta$ -Di[Phenylsulfon]propan. Sm. 101–102° (*A.* 283, 196). — \*II, 469.
- 3)  $\alpha\gamma$ -Di[Phenylsulfon]propan. Sm. 127–128° (125–126°) (*B.* 23, 3235; *A.* 283, 199; *J. pr.* [2] 51, 292). — II, 784; \*II, 469.
- 4)  $\beta\beta$ -Di[Phenylsulfon]propan. Sm. 187–188° (182°) (*A.* 253, 162; *B.* 19, 2310; 25, 3429). — II, 784; \*II, 470.
- 5)  $\alpha$ -Phenylsulfon- $\alpha$ -Benzylsulfonäthan. Sm. 144° (*B.* 36, 301 *C.* 1903 [1] 500).
- 6)  $\alpha$ -Phenylsulfon- $\beta$ -[4-Methylphenyl]sulfonäthan. Sm. 162° (*J. pr.* [2] 30, 199). — II, 824.
- 7) Di[Benzylsulfon]methan. Sm. 207,5° (*B.* 25, 356). — II, 1053.
- 8)  $\alpha$ -Äthylsulfon- $\alpha$ -Phenylsulfon- $\alpha$ -Phenylmethan. Sm. 155–156° (*B.* 36, 301 *C.* 1903 [1] 500).
- C<sub>15</sub>H<sub>16</sub>O<sub>5</sub>N<sub>2</sub>** C 59,2 — H 5,3 — O 26,3 — N 9,2 — M. G. 304.
- 1) Dimethylester d. 5-Acetyl-4-Phenyl-4,5-Dihdropyrazol-3,5-Dicarbonsäure. Sm. 103° (*B.* 35, 785 *C.* 1902 [1] 760). — \*IV, 597.
- 2) Diamid d.  $\delta$ -Keto- $\delta$ -Phenyl- $\beta$ -Buten- $\alpha\beta\gamma$ -Tricarbonsäuremonoäthylester. Sm. 185–186° (*Soc.* 69, 1385; 77, 805). — \*II, 1200.
- 3) Verbindung (aus Formaldehyd u. Salicylamid). Sm. 114–116° (*A.* 343, 256 *C.* 1906 [1] 925).
- C<sub>15</sub>H<sub>16</sub>O<sub>6</sub>N<sub>4</sub>** C 54,2 — H 4,8 — O 24,1 — N 16,9 — M. G. 332.
- 1) Verbindung (aus 6-Methyl-3-Phenyl-1,4-Dihydro-1,2-Diazin-1,5-Dicarbonsäure-5-Äthylester-1-Amid). Sm. 270° u. Zers. (*A.* 331, 313 *C.* 1904 [2] 46).
- C<sub>15</sub>H<sub>16</sub>O<sub>6</sub>S<sub>2</sub>** 1)  $\alpha\gamma$ -Di[Phenylsulfon]- $\beta$ -Oxypropan. Fl. (*B.* 23, 758; *A.* 283, 192).
- C<sub>15</sub>H<sub>16</sub>O<sub>6</sub>N<sub>2</sub>** C 56,2 — H 5,0 — O 30,0 — N 8,7 — M. G. 320.
- 1) Pyromucino-nithursäure. Sm. 186° (*B.* 21, 3461). — II, 2111.
- C<sub>15</sub>H<sub>16</sub>O<sub>6</sub>N<sub>4</sub>** C 51,7 — H 4,6 — O 27,6 — N 16,1 — M. G. 348.
- 1) 5-Amido-1,2,4-Trimethylbenzol + 1,3,5-Trinitrobenzol. Sm. 115° (*Soc.* 85, 239 *C.* 1904 [1] 1006).

- $C_{15}H_{16}O_8N_4$  2) Verbindung (aus Dimethylamidobenzol u.  $\alpha$ -Trinitrotoluol) (A. 215, 365). — II, 328.
- $C_{15}H_{16}O_7N_2$  C 53,6 — H 4,8 — O 33,3 — N 8,3 — M. G. 336.
- 1) Nitrochinitrol (aus Desmotroposantonin). Sm. 120° (G. 38 [2] 44 C. 1908 [2] 1035).
- 2) Triketosanton säuredioxim (G. 29 [2] 255). — \*II, 1201.
- $C_{15}H_{16}O_8N_6$  C 44,1 — H 3,9 — O 31,4 — N 20,6 — M. G. 408.
- 1) Verbindung (aus 1,3,5-Trinitrobenzol u. 4-Nitro-3-Methylamido-1-Dimethylamidobenzol). Sm. 144° (R. 14, 70).
- $C_{15}H_{16}O_8S_2$  1) Benzylidenfurfurylidenebishydrosulfonsäure.  $K_2 + 2H_2O$  (B. 37, 4056 C. 1904 [2] 1649).
- $C_{15}H_{16}O_8S_6$  1) Thiorufinsäure. Sm. 173° u. Zers.  $Ba_5$  (B. 10, 702; 28, 2885). — \*I, 461.
- $C_{15}H_{16}O_9N_2$  C 48,9 — H 4,3 — O 39,1 — N 7,6 — M. G. 368.
- 1) Nornitrokodeinsäure (B. 42, 3507 C. 1909 [2] 1472).
- $C_{16}H_{16}O_9S_2$  1)  $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Diphenyläther- $\beta$ -Disulfonsäure.  $(NH_4)_2$ ,  $K_2$ ,  $Ba$  (B. 19, 66). — II, 830.
- $C_{16}H_{16}NJ$  1) Jodmethylat d. 4-Benzylidenamido-1-Methylbenzol. Sm. 147—148° (B. 34, 836). — \*III, 22.
- $C_{15}H_{16}N_2Br_2$  1) Bromid d. Di[2-Methylphenyl]formamidin (B. 10, 1260). — II, 459.
- $C_{15}H_{16}N_2J_2$  1) Bisjodmethylat d. 3-Methyl-4,7-Naphtisodiazin. Sm. 257° (B. 33, 2927). — \*IV, 675.
- $C_{15}H_{16}N_2S$  1)  $\alpha$ -Äthyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 89° (B. 17, 2090; 21, 106). — II, 397.
- 2) s-Phenyl-[ $\alpha$ -Phenyläthyl]thioharnstoff. Sm. 106° (B. 26, 2168). — II, 538.
- 3) s-Phenyl-[ $\beta$ -Phenyläthyl]thioharnstoff. Sm. 106° (B. 26, 2167). — II, 539.
- 4) s-Phenyl-[4-Äthylphenyl]thioharnstoff. Sm. 103—104° (B. 16, 2020). — II, 537.
- 5) s-Dibenzylthioharnstoff. Sm. 148° (146°) (B. 5, 696; 24, 2725; Soc. 59, 406; G. 23 [2] 553). — II, 528.
- 6) uns-Dibenzylthioharnstoff. Sm. 141° (134—135°) (B. 24, 2727; 26, 2502; 32, 1874; 33, 1452; G. 19, 427; 23 [2] 39). — II, 528; \*II, 298.
- 7) s-Di[2-Methylphenyl]thioharnstoff. Sm. 158° (165°); Sd. 216—218° (B. 4, 985; 12, 1854, 2301; 17, 3045; 33, 2727; B. 36, 3847 C. 1904 [1] 89; C. r. 139, 451 C. 1904 [2] 1114). — II, 465; \*II, 254.
- 8) s-Di[3-Methylphenyl]thioharnstoff. Sm. 111—111,5° (122°; 109 bis 109,5°) (B. 8, 718; Soc. 63, 328; 67, 559; C. r. 139, 451 C. 1904 [2] 1114; B. 39, 4374 C. 1907 [1] 337). — II, 479.
- 9) s-Di[4-Methylphenyl]thioharnstoff. Sm. 176° (178—179°) (J. 1869, 637; 1882, 384; A. 126, 160; B. 9, 815; 15, 1311; 32, 2246, 2247; B. 36, 3847 C. 1904 [1] 89; C. r. 139, 451 C. 1904 [2] 1114; C. 1907 [1] 4374 C. 1907 [1] 337). — II, 498; \*II, 273.
- 10) s-2-Methylphenyl-4-Methylphenylthioharnstoff. Sm. 172—173° (B. 6, 445; Soc. 67, 558). — II, 498; \*II, 273.
- 11) s-Benzyl-2-Methylphenylthioharnstoff. Sm. 138—139° (Soc. 59, 555). — II, 528.
- 12) s-Benzyl-3-Methylphenylthioharnstoff. Sm. 113—114° (Soc. 59, 555). — II, 528.
- 13) s-Benzyl-4-Methylphenylthioharnstoff. Sm. 120—121° (Soc. 59, 555). — II, 528.
- 14) s-Phenyl-2,4-Dimethylphenylthioharnstoff. Sm. 125,5—126° (Soc. 67, 558). — \*II, 313.
- 15) s-Phenyl-2,6-Dimethylphenylthioharnstoff. Sm. 204° (B. 32, 1011). — \*II, 310.
- 16) 4-Methyldiphenylmethylthioharnstoff (p-Homobenzhydrylthioharnstoff). Sm. 100—101° (B. 24, 2802). — II, 637.
- 17) isqm. 4-Methyldiphenylmethylthioharnstoff. Sm. 162—163° (C. 1902 [2] 789).
- 18)  $\alpha\beta$ -Dimethyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 72,5° (B. 20, 1631). — II, 397.
- 19)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -Benzylthioharnstoff. Sm. 84—85° (Soc. 59, 563). — II, 528.



- C<sub>15</sub>H<sub>16</sub>N<sub>2</sub>S** 20)  $\alpha$ -Methyl- $\beta$ -Phenyl- $\alpha$ -Benzylthioharnstoff (Phenylimidomethylbenzylamidomerkaptomethan). Sm. 129—130° (Soc. 75, 373). — \*II, 298.  
 21)  $\alpha$ -Methyl- $\beta$ -Phenyl- $\beta$ -Benzylthioharnstoff. Sm. 120—121° (Soc. 59, 563). — II, 528.  
 22)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]thioharnstoff. Sm. 121° (B. 17, 3035). — II, 465.  
 23)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. 124° (B. 17, 2091, 3035). — II, 498.  
 24)  $\alpha$ -Methyl- $\beta$ -Diphenylmethylthioharnstoff. Sm. 152° (Am. 26, 355).  
 25) Methylimidophenylbenzylamidomerkaptomethan. Sm. 121° (Soc. 75, 374).  
 26) Benzylimidomethylphenylamidomerkaptomethan. Sm. 85° (Soc. 75, 374).  
 27) Methyläther d. Methylphenylamidophenylimidomerkaptomethan. Sd. oberhalb 300°. HJ (B. 25, 57). — II, 397.  
 28) Äthyläther d. Phenylamidophenylimidomerkaptomethan. Sm. 79° (73°). HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HBr, HJ, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 14, 1490, 1777; 15, 338, 566, 1308). — II, 395.  
 29) Äthyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Merkaptobenzyliden]hydrazin. Sm. 115° (Soc. 89, 279 C. 1906 [1] 1487).  
 30) Phenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Merkaptopropan. Sm. 82,5° (A. 260, 256). — IV, 768.
- C<sub>15</sub>H<sub>16</sub>N<sub>2</sub>S<sub>2</sub>** 1) Benzylester d.  $\beta$ -[4-Methylphenyl]hydrazidodithioameisensäure. Sm. 146° (J. pr. [2] 60, 226°). — \*IV, 533.  
 2) Thiocarbamat d.  $r$ - $\alpha$ - $\beta$ -Diamido- $\alpha$ - $\beta$ -Diphenyläthan. Sm. 132° (B. 28, 3178). — IV, 979.
- C<sub>15</sub>H<sub>16</sub>N<sub>2</sub>S<sub>3</sub>** 1) Dimethyläther d.  $s$ -Di[2-Merkaptophenyl]thioharnstoff. Sm. 162° (B. 20, 1794). — II, 798.
- C<sub>15</sub>H<sub>16</sub>N<sub>3</sub>Se** 1) uns-Dibenzylselenharnstoff. Sm. 150° (J. 1877, 351). — II, 529.
- C<sub>15</sub>H<sub>16</sub>N<sub>3</sub>Cl** 1) 2-Chlor-4-Dimethylamidobenzylidenphenylhydrazin. Sm. 122° (B. 37, 864 C. 1904 [1] 1207).  
 2) Äthyläther d. 4-[4-Oxyphenyl]amido-2-Methyl-1-Diazobenzolchlorid (A. 287, 165). — IV, 1548.  
 3) Chlormethylat d. 5-Methyl-1-Benzyl-1,2,3-Benzotriazol. 2 + PtCl<sub>4</sub> (A. 249, 351). — IV, 1146.
- C<sub>15</sub>H<sub>16</sub>N<sub>3</sub>Br** 1) 4-Bromphenyl-4-Dimethylamidobenzylidenhydrazin. Sm. 181° (M. 29, 902 C. 1908 [2] 1925).
- C<sub>15</sub>H<sub>16</sub>N<sub>3</sub>J** 1) Äthyläther d. 4-[4-Oxyphenyl]amido-2-Methyl-1-Diazobenzoljodid (A. 287, 165). — IV, 1548.  
 2) Jodmethylat d. 5-Methyl-1-Benzyl-1,2,3-Benzotriazol. Sm. 190 bis 192° (A. 249, 351). — IV, 1146.
- C<sub>15</sub>H<sub>16</sub>N<sub>4</sub>S** 1)  $\alpha$ -[2-Methylphenyl]imido- $\beta$ -[2-Methylphenyl]amidothioharnstoff. Sm. 168° u. Zers. (B. 24, 4201). — IV, 802.  
 2)  $\alpha$ -[4-Methylphenyl]imido- $\beta$ -[4-Methylphenyl]amidothioharnstoff. Sm. 105° u. Zers. (B. 24, 4195). — IV, 806.  
 3)  $\alpha$ -Imido- $\alpha'$ -Phenylamido- $\alpha'$ -Merkapto- $\alpha'$ -[4-Methylphenyl]imidodimethylamin (Phenylguanido- $p$ -Tolylthioharnstoff). Sm. 182°. HCl (A. 361, 305 C. 1908 [2] 880).  
 4)  $\alpha$ -Imido- $\alpha'$ -Phenylamido- $\alpha'$ -Merkapto- $\alpha'$ -[4-Methylphenyl]imidodimethylamin (Phenyl- $p$ -Tolylguanidothioharnstoff). HCl + H<sub>2</sub>O (A. 361, 306 C. 1908 [2] 880).
- C<sub>15</sub>H<sub>16</sub>N<sub>4</sub>S<sub>4</sub>** 1) Methylenester d.  $\beta$ -Phenylhydrazidodithioameisensäure. Sm. 167° u. Zers. (J. pr. [2] 65, 475 C. 1902 [2] 28). — \*IV, 439.  
 2) Verbindung (aus Benzenylamidoxim). Sm. 134—136° u. Zers. (B. 24, 385). — II, 1202.
- C<sub>15</sub>H<sub>16</sub>ClJ** 1) 2-Methyl-4'-Äthylidiphenyljodoniumchlorid. Sm. 165°. 2 + PtCl<sub>4</sub> (A. 327, 294 C. 1903 [2] 352).  
 2) 2,4,6-Trimethyldiphenyljodoniumchlorid. Sm. 94°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (J. pr. [2] 61, 423). — \*II, 43.  
 3) 2,4,4'-Trimethyldiphenyljodoniumchlorid. 2 + HgCl<sub>2</sub> (B. 33, 849). — \*II, 43.
- C<sub>15</sub>H<sub>16</sub>ClP** 1) 2,4,5-Trimethyldiphenylchlorphosphin. Sd. 356° (A. 315, 72). — \*IV, 1182.
- C<sub>15</sub>H<sub>16</sub>Cl<sub>3</sub>P** 1) 2,4,5-Trimethyldiphenylphosphortrichlorid (A. 315, 73). — \*IV, 1182.

- C<sub>15</sub>H<sub>16</sub>BrJ** 1) **2-Methyl-4'-Äthyl**diphenyljodoniumbromid. Sm. 150° (A. 327, 294 C. 1903 [2] 352).  
 2) **2,4,4'-Trimethyl**diphenyljodoniumbromid. Sm. 179° (B. 33, 849). — \*II, 43.
- C<sub>15</sub>H<sub>17</sub>ON** C 79,3 — H 7,4 — O 7,1 — N 6,2 — M. G. 227.  
 1)  $\alpha$ -Oxy- $\alpha$ -[2-Amidophenyl]- $\alpha$ -Phenylpropan. Sm. 101–102° (B. 42, 3123 C. 1909 [2] 1354).  
 2)  $\alpha$ -Oxy- $\alpha$ -[2-Amidophenyl]- $\alpha$ -[4-Methylphenyl]äthan. Sm. 92–93° (B. 42, 3122 C. 1909 [2] 1353).  
 3)  $\alpha$ -Phenylamido- $\alpha$ -[6-Oxy-3-Methylphenyl]äthan. Sm. 98° (B. 40, 3472 C. 1907 [2] 1332).  
 4)  $\alpha$ -Oxy-2'-Amido-2,4-Dimethyldiphenylmethan. Sm. 103° (B. 32, 1263). — \*II, 662.  
 5) 4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 108–109° (A. 334, 339 C. 1904 [2] 989).  
 6)  $\alpha$ -Oxy-3-Dimethylamidodiphenylmethan. Sm. 102° (A. 354, 189 C. 1907 [2] 988).  
 7)  $\alpha$ -Oxy-4-Dimethylamidodiphenylmethan. Sm. 69–70° (B. 21, 3293; B. 37, 1742 C. 1904 [1] 1599). — II, 1078; \*II, 658.  
 8)  $\beta$ -Benzylamido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 104° (corr.) (B. 29, 210). — \*II, 649.  
 9) Oxymethyldibenzylamin. Sm. 96° (Bl. [3] 13, 159). — \*II, 301.  
 10) Äthylphenyl-4-Oxybenzylamin. Sm. 62–63° (J. pr. [2] 76, 497 C. 1908 [1] 861).  
 11) Äthylbenzyl-3-Oxyphenylamin (3-Äthylbenzylamido-1-Oxybenzol). Sm. 68°. Na + 2H<sub>2</sub>O, HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (D. R. P. 59996, 98971; J. pr. [2] 63, 423; B. 41, 489 C. 1908 [1] 1050). — \*II, 395.  
 12) 5-Oxy-4-Phenylamidomethyl-1,2-Dimethylbenzol. Sm. 139–140° (B. 35, 137 C. 1902 [1] 467).  
 13) 6-Oxy-4-Phenylamidomethyl-1,3-Dimethylbenzol. Sm. 109–110° (B. 35, 136 C. 1902 [1] 466, 467).  
 14) 5-Oxy-2-Phenylamidomethyl-1,4-Dimethylbenzol. Sm. 203–204° (B. 35, 139 C. 1902 [1] 467).  
 15) 4-[2-Oxybenzyl]amido-1,3-Dimethylbenzol. Sm. 114° (Ar. 240, 687 C. 1903 [1] 395).  
 16) 4-Methylphenyl-6-Oxy-3-Methylbenzylamin. Pikrat (J. pr. [2] 71, 162 C. 1905 [1] 929).  
 17) Methyläther d.  $\alpha$ -Phenylamido- $\alpha$ -[2-Oxyphenyl]äthan. Sm. 46° (B. 40, 3474 C. 1907 [2] 1332).  
 18) Methyläther d. Methylbenzyl-2-Oxyphenylamin. Sd. 217–220°<sub>65</sub>. Pikrat (B. 39, 486 C. 1906 [1] 921).  
 19) Methyläther d. Methylbenzyl-4-Oxyphenylamin. Sd. 220–222°<sub>30</sub> (B. 40, 1011 C. 1907 [1] 1252).  
 20) Methyläther d. 2-Methylphenyl-4-Oxybenzylamin. Sm. 55° (A. 241, 340; 315, 142). — II, 754.  
 21) Methyläther d. 4-Methylphenyl-2-Oxybenzylamin. Sm. 110° (A. 241, 347). — II, 742.  
 22) Methyläther d. 4-Methylphenyl-4-Oxybenzylamin. Sm. 68°. HCl (A. 241, 339). — II, 754.  
 23) Methyläther d. 4-Oxyphenyl-2-Methylbenzylamin. Sd. 335–336° (J. pr. [2] 34, 59). — II, 718.  
 24) Äthyläther d.  $\alpha$ -Amido-2-Oxydiphenylmethan. (2HCl, PtCl<sub>4</sub>) (M. 16, 269). — \*II, 539.  
 25) Äthyläther d. 4'-Oxy-2-Methyldiphenylamin. Sm. 81–82°; Sd. 354°<sub>760</sub> (A. 287, 175). — \*II, 400.  
 26) Äthyläther d. 3'-Oxy-4-Methyldiphenylamin. Sm. 30° (J. pr. [2] 65, 53 C. 1902 [1] 578).  
 27) Äthyläther d. Phenyl-4-Oxybenzylamin. Sm. 65° (A. 315, 142).  
 28) Äthyläther d. Benzyl-4-Oxyphenylamin. Sm. 45–46° (B. 28 [2] 991). — \*II, 400.  
 29) Phenyläther d.  $\gamma$ -Phenylamido- $\alpha$ -Oxypropan. Sm. 32°; Sd. oberhalb 300°. HCl (B. 24, 2638; B. 42, 2046 C. 1909 [2] 451). — II, 653.  
 30) 4-Methylphenyläther d.  $\alpha$ -Phenylamido- $\beta$ -Oxyäthan. Sm. 55°. HCl (B. 24, 194). — II, 748.

- C<sub>15</sub>H<sub>17</sub>ON** 31) Isobutyläther d. 2-Imidooxymethylnaphtalin (2-Naphtimidoisobutyläther). Sm. 38°. HCl (B. 11, 1486). — II, 1454.  
 32) 4-Oximido-6-Methyl-2-[ $\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 176—177° (A. 281, 93). — III, 177.  
 33) 4-Oximido-3-Benzyliden-2,6-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 133—134° (A. 281, 119; G. 23 [1] 572). — III, 177.  
 34) 1-[ $\alpha$ -Oximido- $\gamma$ -Methylbutyl]naphtalin. Sd. 200—205°<sub>10</sub> (Bl. [3] 15, 70). — III, 177.  
 35) 2-[ $\alpha$ -Oximido- $\gamma$ -Methylbutyl]naphtalin. Sm. 99°; Sd. 208—210°<sub>10</sub> (Bl. [3] 15, 71). — III, 177.  
 36) 1-Benzoylmethylamido-2,3-Dihydro-R-Hepten. Sm. 65—67° (A. 317, 284).  
 37)  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[5-Äthyl-2-Pyridyl]äthan. Sm. 88°. (2HCl, PtCl<sub>4</sub>) (HCl, AuCl<sub>3</sub>) (B. 34, 1900). — \*IV, 228.  
 38)  $\alpha$ -Oxy- $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Methyl-2-Pyridyl]äthan. Sm. 64°. (HCl, HgCl<sub>2</sub>) (2HCl, PtCl<sub>4</sub>) (B. 38, 3708 C. 1906 [1] 52).  
 39) 2-[ $\beta$ -Oxy- $\beta$ -Phenyläthyl]-4,6-Dimethylpyridin. Fl. HCl +  $\frac{1}{2}$ H<sub>2</sub>O, (HCl, HgCl<sub>2</sub> + H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> +  $\frac{1}{2}$ H<sub>2</sub>O), HBr, Pikrat (B. 27, 84). — IV, 380.  
 40) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[6-Methyl-2-Pyridyl]äthan. Sm. 90—91°. HCl (B. 42, 1455 C. 1909 [1] 1936).  
 41) 10-Keto-8-Methyl-9-Äthyl-3,4-Dihydrojulol ( $\alpha$ -Keto- $\gamma$ -Methyl- $\beta$ -Äthyljulolin). Sm. 80°. Pikrat (B. 25, 1191). — IV, 194.  
 42) Phenylamid d.  $\alpha$ -Camphylsäure. Sm. 111° (111—112°) (C. 1897 [1] 101; Soc. 83, 850 C. 1903 [2] 572).  
 43) Phenylamid d.  $\beta$ -Camphylsäure. Sm. 103° (C. 1897 [1] 102).  
 44) 1-Naphtylamid d. Valeriansäure. Sm. 111° (Soc. 93, 1037 C. 1908 [2] 504).  
 45) 1-Naphtylamid d. Isovaleriansäure. Sm. 125—126° (B. 27 [2] 593). — II, 607.  
 46) 2-Naphtylamid d. Isovaleriansäure. Sm. 138,5° (B. 21, 404). — II, 617.  
 47) Propyl-1-Naphtylamid d. Essigsäure. Sm. 93—94°; Sd. 342°<sub>771</sub> (B. 25, 2324). — II, 599.
- C<sub>15</sub>H<sub>17</sub>ON<sub>3</sub>** C 70,6 — H 6,6 — O 6,3 — N 16,5 — M. G. 255.  
 1) 4-Benzylnitrosamido-1-Dimethylamidobenzol. Sm. 127—128° (A. 241, 362). — IV, 586.  
 2)  $\alpha$ -[2-Methylphenyl]amido- $\beta$ -[2-Methylphenyl]harnstoff. Sm. 249°. — IV, 802.  
 3)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[3-Amido-4-Methylphenyl]harnstoff. HCl (Bl. [3] 21, 664). — \*IV, 401.  
 4) 4-Dimethylamido-2-Oxy-2'-Methylazobenzol. Sm. 125—127° (B. 31, 491). — IV, 1414.  
 5) 4-Dimethylamido-2-Oxy-4'-Methylazobenzol. Sm. 169—170° (B. 31, 493). — IV, 1414.  
 6) Methyläther d. 4-Dimethylamido-4'-Oxyazobenzol. Sm. 161° (Soc. 95, 1297 C. 1909 [2] 979).
- C<sub>15</sub>H<sub>17</sub>ON<sub>5</sub>** C 63,6 — H 6,0 — O 5,6 — N 24,7 — M. G. 283.  
 1) Phenyl-2-Methoxyphenylbiguanid. HNO<sub>3</sub> (B. 34, 2603).  
 2) Äthyläther d. Phenylazo-4-Oxyphenylazomethylamin. Sm. 71,5° (B. 40, 2399 C. 1907 [2] 317).  
 3) 2-[ $\alpha$ -Semicarbazonäthyl]-2-Methyl-2,3-Dihydro-peri-Naphtimidazol. Sm. 224—226° (A. 365, 153 C. 1909 [1] 1822).
- C<sub>15</sub>H<sub>17</sub>OBr** 1)  $\gamma$ -Brom- $\zeta$ -Keto- $\rho$ -Benzyliden- $\beta$ -Methyl- $\beta$ -Hepten. Sm. 155° (A. 319, 93). — \*III, 140.
- C<sub>15</sub>H<sub>17</sub>OJ** 1) 4-Methylphenyl-2,4-Dimethylphenyljodoniumhydroxyd. Salze, siehe (B. 33, 849). — \*II, 43.  
 2) Phenyl-2,4,6-Trimethylphenyljodoniumhydroxyd. Chlorid, 2 Chlorid + HgCl<sub>2</sub>, 2 Chlorid + PtCl<sub>4</sub> (J. pr. [2] 61, 427). — \*II, 43.
- C<sub>15</sub>H<sub>17</sub>OP** 1) Methylidi[4-Methylphenyl]phosphinoxyd. Sm. 143° (A. 315, 84). — \*IV, 1178.
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N** C 74,1 — H 7,0 — O 13,2 — N 5,7 — M. G. 243.  
 1) 4'-Äthylamido-2,4-Dioxydiphenylmethan. Sm. 154—155° (M. 23, 995 C. 1903 [1] 289).



- $C_{15}H_{17}O_2N$
- 2) Phenyl- $\alpha$ ,4-Dioxy-2,5-Dimethylbenzylamin. HCl (A. 357, 325 C. 1908 [1] 353).
  - 3) 3-Methyläther d. 4-Methylphenyl-3,4-Dioxybenzylidenamin. Fl. (C. 1900 [2] 458).
  - 4) Dimethyläther d.  $\alpha$ -Amidodi[4-Oxyphenyl]methan (4,4'-Dimethoxybenzhydramin). Fl. HCl (C. 1899 [2] 949). — \*II, 604.
  - 5) 4-Äthyläther d. 4-Oxyphenyl-2-Oxybenzylamin. Sm. 145—146° (Ar. 240, 683 C. 1903 [1] 395).
  - 6) 4-Äthyläther d. 4-Oxyphenyl-4'-Oxybenzylamin (1-Äthyläther d. 4-[4-Oxybenzyl]amido-1-Oxybenzol). Sm. 106° (B. 39, 3976 C. 1907 [1] 155).
  - 7) 3'-Äthyläther d. 6-Amido-3',4'-Dioxy-3-Methylbiphenyl. Sm. 139 bis 140° (A. 369, 19 C. 1909 [2] 1853).
  - 8) 4-Isovaleryl-amido-1-Oxynaphtalin. Sm. 204—205° (B. 29, 2954). — \*II, 507.
  - 9) 2-[ $\beta$ -Oxyäthyl]-6-[ $\beta$ -Oxy- $\beta$ -Phenyläthyl]pyridin. Fl. (2HCl, PtCl<sub>4</sub>) (B. 42, 135 C. 1909 [1] 554).
  - 10)  $\delta$ -Amido- $\alpha$ -Phenyl- $\epsilon$ -Methyl- $\alpha\gamma\epsilon$ -Heptatriën- $\zeta$ -Carbonsäure + H<sub>2</sub>O. Sm. 113° (142°) (A. 306, 245). — \*II, 991.
  - 11) 5-Diäthylamidonaphtalin-1-Carbonsäure. Sm. 166°. (2HCl, PtCl<sub>4</sub>) (B. 21, 3130). — II, 1451.
  - 12) Äthylester d.  $\alpha$ -[1-Naphtyl]amidopropionsäure. Sm. 65,5° (B. 25, 2310). — II, 614.
  - 13) Äthylester d.  $\alpha$ -[2-Naphtyl]amidopropionsäure. Sm. 84° (B. 25, 2311). — II, 621.
  - 14) Äthylester d. 2,5-Dimethyl-1-Phenylpyrrol-3-Carbonsäure. Sm. 43°; Sd. 225°<sub>40</sub> (B. 35, 1547 C. 1902 [1] 1226). — \*IV, 75.
  - 15) Äthylester d. 1,2-Dimethyl-5-Phenylpyrrol-3-Carbonsäure. Sm. 112° (B. 18, 2594). — IV, 356.
  - 16) Äthylester d. 2-Methyl-1-Allylindol-3-Carbonsäure (B. 26, 2177). — IV, 239.
  - 17) Äthylester d. 6-Methyl-2-Äthylechinolin-3-Carbonsäure + x H<sub>2</sub>O. Sm. 170—190° (wasserfrei) (B. 18, 3304). — IV, 359.
  - 18) Äthylester d. 1-Äthyliden-2-Methylchinolinammonium-3-Carbonsäure (A. 282, 114).
  - 19) Acetat d. 2-Methyläthylamido-1-Oxynaphtalin. Sd. 212—215°<sub>40</sub> (C. 1903 [1] 1419; Soc. 83, 761 C. 1903 [2] 448).
  - 20) Benzoat d. 3-Oximido-2,6-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 128—129° (C. 1898 [2] 1232). — \*I, 525.
  - 21) Benzoat d. 1-Oximido-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 126° (A. 281, 116). — II, 1209.
  - 22) Phenylamidoformiat d.  $\beta$ -Oxy- $\alpha$ -Phenylpropan. Sm. 94° (C. 1907 [1] 1579).
  - 23) 1-Naphtylamidoformiat d.  $\alpha$ -Oxybutan. Sm. 71—72° (C. 1909 [2] 1379).
  - 24) 1-Naphtylamidoformiat d.  $\beta$ -Oxybutan. Sm. 97—98° (C. 1909 [2] 1379).
  - 25) 1-Naphtylamidoformiat d.  $\alpha$ -Oxy- $\beta$ -Methylpropan. Sm. 103—105° (C. 1909 [2] 1379).
  - 26) 1-Naphtylamidoformiat d.  $\beta$ -Oxy- $\beta$ -Methylpropan. Sm. 100—101° (C. 1909 [2] 1379).
- $C_{15}H_{17}O_2N_3$
- C 66,4 — H 6,3 — O 11,8 — N 15,5 — M. G. 271.
- 1)  $\beta$ -Nitro- $\alpha\gamma$ -Di[Phenylamido]propan. Sm. 157° (B. 38, 2041 C. 1905 [2] 301).
  - 2) Äthyläther d.  $\beta$ -[4-Oxyphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 137 bis 138° u. Zers. (A. 334, 181 C. 1904 [2] 834).
  - 3) Dimethyläther d. Di[2-Oxyphenyl]guanidin. (2HCl, PtCl<sub>4</sub>) (B. 21, 1862). — II, 705.
  - 4) Dimethyläther d. Di[4-Oxyphenyl]guanidin. Sm. 153,5°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> (D. R. P. 68706). — \*II, 406.
  - 5)  $\alpha\gamma$ -Dioximido- $\gamma$ -[4-Amidophenyl]- $\alpha$ -Phenylpropen. Sm. 178,5—179° (C. 1906 [2] 1762).
  - 6) 4-[4-Methylphenyl]hydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 283°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), + HgCl<sub>2</sub> (A. 366, 372 C. 1909 [2] 288).

- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>** 7) Äthylester d. Di[4-Amidophenyl]amidoameisensäure. Sm. 101° u. Zers. (B. 18, 2576). — II, 374.  
 8) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Amido- $\alpha$ -Oxybenzyl]hydrazin. Sm. 105° (B. 34, 3792 C. 1902 [1] 41). — \*IV, 427.  
 9) Methyramid d.  $\alpha$ -Phenylhydrazonphenylessigsäure + H<sub>2</sub>O (A. 280, 293). — IV, 694.
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N<sub>5</sub>** C 60,2 — H 5,7 — O 10,7 — N 23,4 — M. G. 299.  
 1) Dimethyläther d. Di[2-Oxyphenylazo]methylamin. Sm. 140—141° (B. 22, 938). — IV, 1575.  
 2) Dimethyläther d. Di[4-Oxyphenylazo]methylamin. Sm. 111—112° (B. 22, 939). — IV, 1575.  
 3) 4'-Nitro-5-Methylamido-2,4-Dimethylazobenzol. HCl (Soc. 91, 368 C. 1907 [1] 1404).  
 4) 8-Benzylamido-2,6-Diketo-1,3,7-Trimethylpurin (Benzylamidokaffeïn). Sm. 231° (B. 31, 1141). — \*III, 706.  
 5) 8-[2-Methylphenyl]amido-2,6-Diketo-1,3,7-Trimethylpurin (2-Methylphenylamidokaffeïn). Sm. 230° (B. 27, 3092). — III, 960.  
 6) 8-[4-Methylphenyl]amido-2,6-Diketo-1,3,7-Trimethylpurin (4-Methylphenylamidokaffeïn). Sm. 270—275° (B. 27, 3092). — III, 960.
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>Br** 1)  $\alpha$ -Bromdihydrosantinsäure. Sm. 150—151° u. Zers. (G. 22 [2] 28). — II, 1444.
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>P** 1) Phenyl-2,4,5-Trimethylphenylphosphinsäure. Sm. 181°. Phenylhydrazinsalz (A. 315, 73). — \*IV, 1182.  
 2) Methylester d. Dibenzylphosphinsäure. Sm. 75° (B. 22, 2146). — IV, 1664.
- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>N** C 69,5 — H 6,5 — O 18,5 — N 5,4 — M. G. 259.  
 1) 3,4-Dimethyläther d. Phenyl- $\alpha$ ,3,4-Trioxybenzylamin. HCl (A. 357, 368 C. 1908 [1] 357).  
 2) 4-Äthyläther d. 4-Oxyphenyl-2',4'-Dioxybenzylamin? Sm. 156° (B. 39, 3977 C. 1907 [1] 156).  
 3)  $\gamma$ -Phtalylamido- $\beta$ -Ketoheptan. Sm. 71—72° (B. 42, 1254 C. 1909 [1] 1694).  
 4) 5-Keto-2-Benzoyl-3-Amyl-2,5-Dihydroisoxazol. Sm. 72—73° (C. r. 144, 1283 C. 1907 [2] 595).  
 5) 3,4-Methylenäther d.  $\gamma$ -Keto- $\gamma$ -Piperidyl- $\alpha$ -[3,4-Dioxyphenyl]propen (Piperidid d. Methylenätherkaffeesäure). Sm. 80° (B. 28, 1196). — IV, 16.  
 6) Oxim d. Verb. C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>. Sm. 118° (B. 37, 4501 C. 1905 [1] 251).  
 7) Benzoylscopolin. Sm. 68—70°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HNO<sub>3</sub>, Pikrat (C. 1895 [1] 435).  
 8) Benzoylscin (Benzoylscopolin). Sm. 59° (68—70°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, Pikrat (A. 271, 119; D. R. P. 79864). — III, 797; \*III, 618.  
 9) Methylester d.  $\gamma$ -Cyan- $\alpha$ -Keto- $\alpha$ -Phenylhexan- $\gamma$ -Carbonsäure. Sm. 88° (Bl. [3] 17, 410 Anm.). — \*II, 1137.  
 10) Äthylester d.  $\beta$ -Oxy- $\alpha$ -Cyan- $\gamma$ -Phenylpropenäthyläther- $\alpha$ -Carbonsäure. Sm. 66° (Soc. 91, 1905 C. 1908 [1] 251).  
 11) Äthylester d.  $\beta$ -Oxy- $\alpha$ -Cyan- $\beta$ -Phenylakrylpropyläthersäure. Sm. 95—96° (C. 1900 [2] 173). — \*II, 1130.  
 12) Äthylester d.  $\gamma$ -Cyan- $\alpha$ -Keto- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure. Sm. 64° (C. 1895 [2] 918). — \*II, 1136.  
 13) Äthylester d.  $\gamma$ -Cyan- $\beta$ -Keto- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure. Sd. 190—191°<sub>20</sub> (Soc. 91, 1906 C. 1908 [1] 251).  
 14) Äthylester d.  $\alpha$ -Cyan- $\delta$ -Keto- $\beta$ -Phenylpentan- $\gamma$ -Carbonsäure. Sm. 152—154° (C. 1907 [1] 333).  
 15) Phenylamidoformiat d. 6-Oxy-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 105—106° (B. 37, 4635 C. 1905 [1] 238).  
 16) Phenylamid d. 6-Oxy-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol-5-Carbonsäure. Sm. 93—94° (B. 37, 4635 C. 1905 [1] 238).
- C<sub>15</sub>H<sub>17</sub>O<sub>8</sub>N<sub>3</sub>** C 62,7 — H 5,9 — O 16,7 — N 14,6 — M. G. 287.  
 1) 2,4,6-Triketo-5-[4-Diäthylamidobenzyliden]hexahydro-1,3-Diazin. Sm. 129° (B. 39, 2170 C. 1908 [2] 234).  
 2) Methylester d. 3-Methoxyl-5-[ $\beta$ -Phenyläthenyl]-1,2,4-Triazol-1-[Äthyl- $\alpha$ -Carbonsäure]. Fl. (B. 33, 1532). — \*IV, 819.

- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>N<sub>3</sub>** 3) 1-Amid d. 6-Methyl-3-Phenyl-1,4-Dihydro-1,2-Diazin-1,5-Dicarbon-  
säure-5-Äthylester. Sm. 254,5° (A. 331, 312 C. 1904 [2] 45).  
4) Verbindung (aus Acetonylbenzoylessigsäureäthylester). Sm. 224—226°  
(B. 39, 1929 C. 1906 [2] 119).
- C<sub>16</sub>H<sub>17</sub>O<sub>3</sub>Cl** 1) Chlorsantonin (Bl. 5, 202). — II, 1787.  
2) isom. 1-Chlorsantonin + H<sub>2</sub>O. Sm. 235° u. Zers. (B. 38, 434 C. 1905  
[1] 748; B. 38, 1848 C. 1905 [2] 49).
- C<sub>16</sub>H<sub>17</sub>O<sub>3</sub>Cl<sub>5</sub>** 1) Oktylester-Pentachlorphenylester d. Kohlensäure. Fl. (Bl. [3] 23,  
821).
- C<sub>16</sub>H<sub>17</sub>O<sub>3</sub>Br** 1) Bromsantonin. Zers. bei 212—215° (B. 25, 3318; B. 40, 940 C. 1907  
[1] 1134; B. 41, 364 C. 1908 [1] 851). — II, 1787.  
2) Brom- $\alpha$ -Metasantonin. Sm. 212° (J. 1878, 829). — II, 1787.  
3) Brom- $\beta$ -Metasantonin. Sm. 114° (J. 1878, 829). — II, 1788.
- C<sub>16</sub>H<sub>17</sub>O<sub>3</sub>P** 1)  $\beta\beta$ -Diphenylisopropylphosphinsäure (Dibenzylmethylphosphinsäure).  
Sm. 142°. Ag<sub>2</sub>, Anilinsalz, Phenylhydrazinsalz (B. 7, 1628; 34, 1291).  
— II, 238; \*IV, 1184.  
2) Di[3-Methylphenylester] d. Methylphosphinsäure. Sd. 200—205°  
(B. 31, 1052). — \*II, 429.  
3) Di[4-Methylphenylester] d. Methylphosphinsäure. Sd. 220—225°  
(B. 31, 1052). — \*II, 435.
- C<sub>16</sub>H<sub>17</sub>O<sub>4</sub>N** 1) C 65,4 — H 6,2 — O 23,3 — N 5,1 — M. G. 275.  
Salicyscopolin. Sm. 105°. HCl, (2HCl, PtCl<sub>4</sub> + 2(1)H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>),  
HBr, H<sub>2</sub>SO<sub>4</sub> (C. 1895 [1] 61; 1898 [1] 1197). — \*III, 620.  
2) Oxim d. Oxydihydrolapachol. Sm. 165—170° u. Zers. (Soc. 65, 722).  
— III, 403.  
3)  $\zeta$ -[1,2-Phtalyl]amidohexan- $\alpha$ -Carbonsäure. Sm. 115—115,5° (B. 42,  
4053 C. 1909 [2] 1924).  
4) Cocaylbenzoxylelessigsäure. Sm. 230° u. Zers. HCl + 2H<sub>2</sub>O, (2HCl,  
PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 21, 3030; D. R. P. 48274). — III, 863; \*III, 644.  
5) Benzaltropinsäure + H<sub>2</sub>O. Sm. 190—191° u. Zers. HCl, (HCl, AuCl<sub>3</sub>),  
(2 + HCl, AuCl<sub>3</sub>), HBr (B. 31, 1590). — \*III, 615.  
6) Methyl ester d. i- $\alpha$ -[1,2-Phtalyl]amidopentan- $\alpha$ -Carbonsäure. Sm.  
65,5—66° (B. 37, 1695 C. 1904 [1] 1525).  
7) Dimethylester d.  $\delta$ -[4-Methylphenyl]amido- $\alpha\gamma$ -Butadien- $\alpha\gamma$ -Dicar-  
bonsäure. Sm. 130° (A. 273, 179).  
8) Äthylester d.  $\alpha$ -Phtalylamidoisovaleriansäure. Sd. 332—337°<sub>762</sub> (B.  
37, 1694 C. 1904 [1] 1525).  
9)  $\gamma$ -Äthylester d.  $\delta$ -Amido- $\beta$ -Phenyl- $\alpha\gamma$ -Pentadien- $\alpha\gamma$ -Dicarbonsäure.  
NH<sub>4</sub>, Ag (Soc. 75, 253).  
10) Diäthylester d.  $\alpha$ -Cyan- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 48,5°  
(A. 293, 342). — \*II, 1170.  
11) Diäthylester d. 1-Methylindol-2,3-Dicarbonsäure. Fl. (B. 42, 3038  
C. 1909 [2] 1252).  
12) Benzoat d. Nor-d-Egonin (B. 26, 1488). — III, 863.  
13) Phenylamid d. Anhydrocamphoronsäure. Sm. 202—203° (B. 28,  
318; A. 299, 141). — \*II, 222.  
14) 4-Methoxyphenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicar-  
bonsäure. Sm. 150—155° (B. 36, 999 C. 1903 [1] 1131).  
15)  $\beta\gamma$ -Phenylimid d. Propan- $\alpha\beta\gamma$ -Tricarbonsäure- $\alpha$ -Propylester. Sm.  
55° (B. 38, 1621 C. 1905 [1] 1533).  
C 59,4 — H 5,6 — O 21,1 — N 13,9 — M. G. 303.
- C<sub>16</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>** 1) 3-Nitrobenzoylhydrazon d. Aldehydalkohol C<sub>8</sub>H<sub>12</sub>O<sub>2</sub>. Sm. 154° (C.  
1897 [2] 364). — \*I, 487.  
2) Äthylester d. 3-Acetoxy-5-Phenyl-1,2,4-Triazol-1-[Äthyl- $\alpha$ -Carbon-  
säure]. Sm. 79° (B. 33, 1528). — \*IV, 818.  
3) 5-Äthylcarbonat d. 5-Oxy-3-Methyl-1-[4-Acetylamidophenyl]pyr-  
azol. Sm. 105° u. Zers. (C. 1898 [2] 525). — \*IV, 328.
- C<sub>16</sub>H<sub>17</sub>O<sub>4</sub>P** 1) Methyl dibenzylester d. Phosphorsäure. Fl. (A. 262, 217). — II, 1051.
- C<sub>16</sub>H<sub>17</sub>O<sub>5</sub>N** C 61,9 — H 5,8 — O 27,5 — N 4,8 — M. G. 291.  
1) Nitrodesmotroposantonin. Sm. 191° (C. 1897 [1] 196; G. 38 [2] 45  
C. 1908 [2] 1035). — \*II, 1046.  
2)  $\beta$ -[4,5-Dioxy-2, $\beta$ -Acetylmethylamidoäthylphenyl]akryl-4,5-Methy-  
lenäthersäure. Sm. 219°. Ba (A. 271, 389). — II, 1784.



- $C_{15}H_{17}O_5N$  3) Äthylester d.  $\alpha$ -[4-Äthoxylphthalyl]amidopropionsäure. Sm. 78° (B. 37, 1978 C. 1904 [2] 237).
- 4) Phenylmonamid d.  $\beta$ -Penten- $\beta\gamma\epsilon$ -Tricarbonsäure- $\epsilon$ -Monomethylester.  $NH_2$  (H. 54, 546 C. 1908 [1] 1398).
- $C_{15}H_{17}O_5N_3$  C 56,4 — H 5,3 — O 25,1 — N 13,2 — M. G. 319.
- 1) Piperidin + 2,4-Dinitro-1-Oxynaphthalin. Sm. 205° (Soc. 73, 144).
- 2) 2-Nitrobenzylidenderivat d. 4-Oximido-2-Hydroxylamido-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 239° (B. 40, 2242 C. 1907 [2] 590).
- 3) 3-Nitrobenzylidenderivat d. 4-Oximido-2-Hydroxylamido-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 216,5° (B. 40, 2243 C. 1907 [2] 590).
- 4) 4-Nitrobenzylidenderivat d. 4-Oximido-2-Hydroxylamido-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 207° (B. 40, 2243 C. 1907 [2] 590).
- 5) Lakton d. N-Phenylglycylglycylglycinäthylester-N-Carbonsäure. Sm. 182—183° (B. 41, 2590 C. 1908 [2] 1020).
- 6) Dimethylester d. 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Amidoessigsäure-4-N-Carbonsäure. Sm. 135—136° (D.R.P. 189842 C. 1908 [1] 427).
- $C_{15}H_{17}O_5N_7$  C 48,0 — H 4,5 — O 21,3 — N 26,1 — M. G. 375.
- 1) Azid d. Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 245—258° (J. pr. [2] 70, 87 C. 1904 [2] 1034).
- $C_{15}H_{17}O_5P$  1)  $\beta\beta'$ -Diphenoxylisopropylphosphorigesäure. Sm. 119—120°. Ca + 2H<sub>2</sub>O, Anilinsalz, p-Toluidinsalz (Soc. 79, 1224; Soc. 83, 1137 C. 1903 [2] 1059).
- $C_{15}H_{17}O_6N$  C 58,6 — H 5,5 — O 31,3 — N 4,6 — M. G. 307.
- 1) Nitrooxydesmotroposantonin. Sm. 240° u. Zers. (C. 1897 [1] 169; G. 38 [2] 49 C. 1908 [2] 1035). — \*II, 1046.
- 2) Nitrochinol (aus l-Desmotroposantonin). Sm. 218—220° (G. 38 [2] 51 C. 1908 [2] 1035).
- 3) Diäthylester d. Benzoylamidooxalessigsäure. Sm. 73—74°. Na (B. 24, 1257). — II, 1193.
- $C_{15}H_{17}O_6P$  1) 2,2-Diäthylester d. 2-Naphtylphosphorsäure-1-Carbonsäure. Sm. 113° (B. 22, 393; A. 346, 364 C. 1906 [2] 336). — II, 1690.
- $C_{15}H_{17}O_7N$  C 55,7 — H 5,3 — O 34,7 — N 4,3 — M. G. 323.
- 1) Diäthylester d.  $\alpha$ -Oxypropan-4-Nitrophenyläther- $\alpha\alpha$ -Dicarbonsäure. Sm. 142° (B. 40, 3150 C. 1907 [2] 979).
- 2) 3,5-Diacetat d. 2-Diacetylamido-1,3,5-Trioxybenzol-1-Methyläther. Sm. 127—129° (M. 23, 953 C. 1903 [1] 285).
- $C_{15}H_{17}O_7N_3$  C 51,3 — H 4,8 — O 31,9 — N 12,0 — M. G. 351.
- 1) Diäthylester d.  $\alpha$ -[4-Nitrophenyl]azo- $\beta$ -Ketopropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 110° (B. 34, 77). — \*IV, 1063.
- $C_{15}H_{17}O_7Br$  1) Brompikrotoxininsäure + H<sub>2</sub>O. Sm. 245—246° (248° u. Zers.). K + 2H<sub>2</sub>O, Ca + 5H<sub>2</sub>O, Hg (B. 31, 2967; G. 39 [1] 296 C. 1909 [1] 1482). — \*III, 472.
- $C_{15}H_{17}O_8N$  C 53,1 — H 5,0 — O 37,8 — N 4,1 — M. G. 339.
- 1) 2-Oxychinolinglykuronsäure. K (H. 30, 558). — \*IV, 183.
- 2) Diäthylester d. 2,6-Diacetoxyipyridin-3,5-Dicarbonsäure. Sm. 69 bis 70° (B. 26, 2798). — IV, 174.
- $C_{15}H_{17}O_9N$  C 50,7 — H 4,8 — O 40,6 — N 3,9 — M. G. 355.
- 1) Diäthylester d. Mono[3-Nitrobenzoyl]weinsäure. Sm. 113,5° (Soc. 83, 170 C. 1903 [1] 389, 628).
- $C_{15}H_{17}O_{10}N$  C 48,5 — H 4,6 — O 43,1 — N 3,8 — M. G. 371.
- 1) Methylester d. 6-Nitro-3,4-Dioxy-1-Diacetoxydimethylbenzol-3,4-Dimethyläther-2-Carbonsäure. Sm. 159—160° (M. 29, 733 C. 1908 [2] 1592).
- $C_{15}H_{17}O_{10}N_3$  C 45,1 — H 4,2 — O 40,1 — N 10,5 — M. G. 399.
- 1) Äthylester d.  $\beta\beta$ -Dioxy- $\alpha$ -[2,4,6-Trinitrophenyl]akryldiäthyläthersäure. Sm. 81° (B. 42, 2128 C. 1909 [2] 191).
- $C_{15}H_{17}N_2J$  1)  $\gamma$ -Jod- $\alpha\alpha$ -Di[Phenylamido]propan (A. ch. [6] 16, 159). — II, 444.
- $C_{15}H_{17}N_2P$  1) Phenylhydrazon-2,4,6-Trimethylphenylphosphin. Sm. 135° (A. 294, 47). — IV, 1680.

- C<sub>15</sub>H<sub>17</sub>N<sub>3</sub>S** 1)  $\alpha$ -Amido- $\alpha$ -Phenyl- $\beta$ -[2,4-Dimethylphenyl]thioharnstoff. Sm. 145° (B. 32, 1084). — \*IV, 443.  
 2)  $\alpha$ -Äthylamido- $\alpha$ - $\beta$ -Diphenylthioharnstoff. Sm. 163—164° (B. 42, 3529 C. 1909 [2] 1461).  
 3)  $\alpha$ -Phenylamido- $\beta$ -[2,4-Dimethylphenyl]thioharnstoff. Sm. 159° (B. 32, 1084). — \*IV, 443.  
 4)  $\alpha$ -Phenylamido- $\beta$ -[2,6-Dimethylphenyl]thioharnstoff. Sm. 210° u. Zers. (B. 32, 1012). — \*IV, 443.  
 5)  $\beta$ -Äthylphenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 149° (A. 252, 273). — IV, 680.  
 6)  $\alpha$ -Methylphenylamido- $\beta$ -Methyl- $\beta$ -Phenylthioharnstoff. Sm. 113° (B. 27, 863). — IV, 680.  
 7) syn- $\alpha$ -[2-Methylphenyl]amido- $\alpha$ -[2-Methylphenyl]thioharnstoff. Sm. 148—149° u. Zers. (Soc. 61, 1017). — IV, 802.  
 8) syn- $\alpha$ -[2-Methylphenyl]amido- $\alpha$ -[4-Methylphenyl]thioharnstoff. Sm. 141—142° u. Zers. (Soc. 61, 1017). — IV, 802.  
 9)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -[2-Methylphenyl]thioharnstoff. Labile Form Sm. 130—131°; stabile Form Sm. 162—163° (Soc. 61, 1018). — IV, 806.  
 10)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -[4-Methylphenyl]thioharnstoff. Labile Form Sm. 120—125°; stabile Form Sm. 153,5—154° (Soc. 61, 1018). — IV, 806.  
 11)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Benzylthioharnstoff. Sm. 120—121° (Soc. 61, 1022; J. pr. [2] 67, 258 Anm. C. 1903 [1] 1265). — IV, 806.  
 12) isom.  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Benzylthioharnstoff. Sm. 156° (J. pr. [2] 67, 258 C. 1903 [1] 1265). — \*IV, 534.  
 13)  $\alpha$ -[2,4-Dimethylphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 149° (B. 32, 1085). — \*IV, 544.  
 14)  $\alpha$ -[2,6-Dimethylphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 181 bis 182° (B. 32, 1012). — \*IV, 544.  
 15)  $\beta$ -[4-Methylbenzyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 132—133° (J. pr. [2] 62, 110). — \*IV, 545.  
 16) Methyläther d.  $\alpha$ -[ $\alpha$ -Benzylhydrazido]- $\alpha$ -Phenylimido- $\alpha$ -Merkapto-methan. Fl. (B. 37, 2329 C. 1904 [2] 313).  
 17) Methyläther d.  $\alpha$ -[ $\beta$ -Benzylhydrazido]- $\alpha$ -Phenylimido- $\alpha$ -Merkapto-methan. Fl. (B. 37, 2329 C. 1904 [2] 313).  
 18) Rhodanmethylat d. 4-Phenylamido-2,6-Dimethylpyridin. Sm. 172° (A. 354, 98 C. 1907 [2] 610).
- C<sub>15</sub>H<sub>17</sub>N<sub>5</sub>S** 1) Amidophenylguanido-p-Tolylthioharnstoff. Sm. 168° (A. 361, 316 C. 1908 [2] 881).
- C<sub>15</sub>H<sub>17</sub>Cl<sub>4</sub>P** 1) Dimethylphenyl- $\alpha$ -Chlorbenzylphosphoniumchlorid. 2 + PtCl<sub>4</sub> (B. 25, 1520). — IV, 1662.
- C<sub>15</sub>H<sub>17</sub>Cl<sub>2</sub>As** 1) Äthylphenyl-4-Methylphenylarsendichlorid. Sm. 148° (A. 321, 158 C. 1902 [2] 43). — \*IV, 1194.  
 2) Dimethylphenyl- $\alpha$ -Chlorbenzylarsoniumchlorid. 2 + PtCl<sub>4</sub> (B. 25, 1521). — IV, 1691.
- C<sub>15</sub>H<sub>17</sub>JS** 1) Jodäthylat d. Di[2-Methylphenyl]sulfid (G. 20, 30). — II, 820.  
 2) Methylbibenzylsulfinjodid. + HgJ<sub>2</sub> (Soc. 91, 1398 C. 1907 [2] 1322).
- C<sub>15</sub>H<sub>18</sub>ON<sub>2</sub>** C 74,4 — H 7,4 — O 6,6 — N 11,6 — M. G. 242.  
 1)  $\beta\gamma$ -Di[Phenylamido]- $\alpha$ -Oxypropan (Dianilglycerin). Sm. 53—54°; Sd. 290°<sub>10</sub> u. Zers. (J. 1888, 1062). — II, 426.  
 2)  $\alpha\gamma$ -Di[Phenylamido]- $\beta$ -Oxypropan. (2HCl, PtCl<sub>4</sub>) (B. 8, 243). — II, 426.  
 3)  $\alpha$ -Oxydi[4-Amido-3-Methylphenyl]methan. Sm. 135° (C. 1903 [2] 442).  
 4) 4-Amido-4'-Dimethylamido- $\alpha$ -Oxydiphenylmethan. Sm. 165° (B. 21, 3295). — II, 1078.  
 5) Äthyl-3-Oxyphenyl-2-Amidobenzylamin. Sm. 145° (B. 23, 1781). — IV, 629.  
 6) 4-Äthylamido-4'-Oxy-3-Methyldiphenylamin. Sm. 105° (D.R.P. 133481 C. 1902 [2] 555). — \*IV, 403.  
 7) 4'-Dimethylamido-4-Oxy-3-Methyldiphenylamin. Sm. 153—154° (D.R.P. 140733 C. 1903 [1] 1011). — \*IV, 382.

- $C_{15}H_{18}ON_2$
- 8) Äthyläther d. 2'-Amido-5'-Oxy-2-Methyldiphenylamin. Sm. 82 bis 83° (B. 36, 3860 C. 1904 [1] 91).
  - 9) Äthyläther d. 4'-Amido-4-Oxy-2-Methyldiphenylamin. Sm. 61° (A. 287, 157). — \*IV, 382.
  - 10) Äthyläther d. 4-Amido-4'-Oxy-2-Methyldiphenylamin. Sm. 92 bis 93° HCl (A. 287, 173). — \*IV, 403.
  - 11) Äthyläther d. 4'-Amido-4-Oxy-3-Methyldiphenylamin. Sm. 110 bis 111° (A. 287, 153). — \*IV, 382.
  - 12) Äthyläther d. 4-Amido-4'-Oxy-3-Methyldiphenylamin. Sm. 82°. HCl (A. 287, 163). — \*IV, 403.
  - 13) Äthyläther d. 6-Amido-2-Oxy-3-Methyldiphenylamin. Sm. 75 bis 77° (A. 369, 17 C. 1909 [2] 1853).
  - 14) Äthyläther d. 6'-Amido-3'-Oxy-3-Methyldiphenylamin. HCl (A. 287, 170). — \*II, 414.
  - 15) Äthyläther d. 6-Amido-3-Oxy-4-Methyldiphenylamin. Sm. 94 bis 95° (A. 287, 149). — \*II, 427.
  - 16) Äthyläther d. 4'-Amido-3'-Oxy-4-Methyldiphenylamin. Sm. 75°. HCl (A. 369, 11 C. 1909 [2] 1853).
  - 17) Äthyläther d. 4-Oxyphenyl-2-Amidobenzylamin. Sm. 78°.  $H_2SO_4$ , Oxalat (J. pr. [2] 52, 396). — IV, 629.
  - 18) Äthyläther d. 4,4'-Diamido-5-Oxy-2-Methylbiphenyl. Sm. 107° (103—104°) (B. 23, 3263; D.R.P. 42006). — IV, 976; \*II, 539.
  - 19) Äthyläther d. 4,4'-Diamido-3'-Oxy-3-Methylbiphenyl. Sm. 117,5°.  $H_2SO_4$  (B. 20, 3177). — II, 898.
  - 20) Äthyläther d. 6,4'-Diamido-3'-Oxy-3-Methylbiphenyl. Sm. 88 bis 89° (A. 369, 14 C. 1909 [2] 1853).
  - 21)  $\gamma$ -Oximido- $\beta$ -[1-Naphtyl]amido- $\beta$ -Methylbutan. Sm. 173—174° (A. 262, 338). — II, 624.
  - 22) Äthyläther d. 4-Oxy-2-Methyl-s-Diphenylhydrazin. Sm. 100° (B. 36, 3853 C. 1904 [1] 90).
  - 23) Äthyläther d. 6-Oxy-3-Methyl-s-Diphenylhydrazin. Sm. 105° (B. 23, 3262). — IV, 1505.
  - 24) Äthyläther d. 4'-Oxy-4-Methyl-s-Diphenylhydrazin. Sm. 96—97° (B. 23, 3258; B. 36, 3850 C. 1904 [1] 89). — IV, 1505.
  - 25) 5-Keto-3-Hexahydrophenyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 126° (Bl. [4] 3, 962 C. 1908 [2] 1688).
  - 26)  $\alpha$ -Oxy- $\alpha$ -[2-Amidophenyl]- $\beta$ -[5-Äthyl-2-Piperidyl]äthan. Sm. 76°. HCl, (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ) (B. 34, 1898). — \*IV, 658.
  - 27) 6-Oxy-4,5-Dimethyl-2-[4-Isopropylphenyl]-1,3-Diazin. Sm. 208° (B. 30, 2008). — IV, 985.
  - 28) 6-Oxy-4-Methyl-2-Propyl-5-Benzyl-1,3-Diazin. Sm. 167° (PINNER, Imidoäther 228). — IV, 984.
  - 29) 6-Oxy-4-Methyl-2-Isopropyl-5-Benzyl-1,3-Diazin. Sm. 184° (PINNER, Imidoäther 230). — IV, 984.
  - 30) 6-Oxy-2-Amyl-4-Phenyl-1,3-Diazin. Sm. 164° (PINNER, Imidoäther 232). — IV, 984.
  - 31) 8-Oxy-P-Piperidylmethylechinolin. Sm. 117° (D.R.P. 92309). — \*IV, 658.
  - 32) Phenylamidomethylentropinon. Sm. 158° (B. 33, 363). — \*III, 612.
  - 33) Base (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl). Sm. 216°.  $H_2SO_4$  (C. 1898 [1] 1251). — \*IV, 655.
  - 34) Verbindung (aus d. Verb.  $C_{18}H_{18}NCl_2$ ). Sm. 55°. HCl (J. pr. [2] 47, 108). — II, 1195.
- $C_{15}H_{18}ON_4$
- C 66,7 — H 6,7 — O 5,9 — N 20,7 — M. G. 270.
  - 1) s-Di[Methylphenylamido]harnstoff (s-Di[Methylphenylhydrazid] d. Kohlensäure). Sm. 149—150° (Bl. [3] 23, 53; M. 29, 918 C. 1908 [2] 2008). — \*IV, 430.
  - 2) s-Di[3-Methylphenylamido]harnstoff. Sm. 184° (D. R. P. 160471 C. 1905 [1] 1575).
  - 3) s-Di[4-Methylphenylamido]harnstoff. Sm. 210° (B. 24, 4197). — IV, 805.
  - 4) s-Di[4-Amido-2-Methylphenyl]harnstoff. Sm. 264—265°. 2HCl (Bl. [3] 21, 660). — \*IV, 404.
  - 5) s-Di[5-Amido-2-Methylphenyl]harnstoff (Bl. [3] 21, 662). — \*IV, 401.



- $C_{15}H_{18}ON_4$  6) s-Di[2-Amido-4-Methylphenyl]harnstoff. 2HCl (*Soc.* 37, 700; *Bl.* [3] 21, 661). — IV, 614; \*IV, 407.
- 7) 4-Methylamido-4'-Dimethylamidoazoxybenzol. Sm. 144° (*B.* 29, 1482). — IV, 1338.
- 8) Verbindung (aus 6-Nitroso-1,2,3,4-Tetrahydrochinolin u. Phenylhydrazin). Sm. 126° (*B.* 21, 864). — IV, 190.
- 9) Verbindung (aus 4-Nitroso-1-Dimethylamidobenzol u. uns-Methylphenylhydrazin). Sm. 141° (*B.* 22, 624). — IV, 797.
- 10) Verbindung (aus d. Verb.  $C_9H_{12}O_5N_4$ ). Sm. oberhalb 275° (*J. pr.* [2] 39, 280). — IV, 1134.
- $C_{15}H_{18}O_2N_2$  C 69,8 — H 7,0 — O 12,4 — N 10,8 — M. G. 258.
- 1)  $\beta\beta$ -Di[ $\beta$ -Amido-4-Oxyphenyl]propan. Sm. 218—219° (*C.* 1904 [2] 1737).
- 2) 6,6'-Diamido-4,4'-Dioxy-3,3'-Dimethyldiphenylmethan (*C.* 1901 [1] 1130).
- 3) 4,4'-Diamido-6,6'-Dioxy-3,3'-Dimethyldiphenylmethan. Sm. 225° (*D.R.P.* 75373). — \*II, 605.
- 4) Di[2-Methylphenylhydroxylamido]methan. Sm. 116—116,5° (*B.* 35, 1882 *C.* 1902 [2] 33).
- 5) Di[3-Methylphenylhydroxylamido]methan. Sm. 118° (*B.* 33, 951, 958). — \*II, 262.
- 6) Di[4-Methylphenylhydroxylamido]methan. Sm. 103° (*B.* 33, 950, 958). — \*II, 285.
- 7) 4'-Dimethylamido-3-Oxy-4-Oxymethyldiphenylamin? Sm. noch nicht bei 300° (*J. pr.* [2] 69, 239 *C.* 1904 [1] 1269).
- 8) Dimethyläther d. Di[2-Oxyphenylamido]methan. Sm. 86°; Sd. 160°<sub>25</sub> (*B.* 36, 48 *C.* 1903 [1] 505; *B.* 39, 3972 *C.* 1907 [1] 155).
- 9) Dimethyläther d. Di[4-Oxyphenylamido]methan. Sm. 66° (*B.* 36, 49 *C.* 1903 [1] 505).
- 10) Dimethyläther d. 4,4'-Diamido-3,3'-Dioxydiphenylmethan. Sm. 100° (*J. pr.* [2] 79, 495 *C.* 1909 [2] 362).
- 11) Dimethyläther d. 3,3'-Diamido-4,4'-Dioxydiphenylmethan. Sm. 107° (*D.R.P.* 140690 *C.* 1903 [1] 1010).
- 12) Pyrazolon (aus  $\beta\beta$ -Diacetylpropionsäureäthylester). Sd. 242°<sub>83</sub> (*C.* 1909 [2] 799).
- 13) 2'-Äthyläther d. 6-Oxy-4-Methyl-5-Äthyl-2-[4-Oxyphenyl]-1,3-Diazin. Sm. 194° (*B.* 23, 2955). — IV, 977.
- 14) Acetyldihydroharmalin. Sm. 239° (*B.* 30, 2485). — \*III, 569.
- 15) Laktam d. 4-[ $\beta$ -Phenylureido]-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 184° (*B.* 41, 2933 *C.* 1908 [2] 1514).
- 16) Äthylester d.  $\beta$ -Imido- $\alpha$ -Cyan- $\gamma$ -Phenylpentan- $\alpha$ -Carbonsäure. Sm. 60° (*Soc.* 89, 1926 *C.* 1907 [1] 729).
- 17) Äthylester d.  $\alpha$ -Cyan- $\beta$ -[2,4,5-Trimethylphenyl]amidoakrylsäure. Sm. 195° (*B.* 35, 2511 *C.* 1902 [2] 439).
- 18) Äthylester d. 2,4-Diamido-1-Äthyl-naphtalin-3-Carbonsäure. Sm. 63°. 2HCl (*Soc.* 89, 1923 *C.* 1907 [1] 729).
- 19) Äthylester d. 3,5-Dimethyl-1-Phenylpyrazol-4-Methylcarbonsäure. Sm. 88° (*C. r.* 130, 1194). — \*IV, 355.
- 20) Amylester d.  $\alpha$ -Cyan- $\beta$ -Phenylamidoakrylsäure. Sm. 90° (*Bl.* [3] 25, 45).
- 21) Acetat d. 2-Oximidomethyl-3,3-Diäthylpseudoindol. Sm. 100° (*G.* 28 [2] 408). — \*IV, 169.
- 22) Verbindung (aus Parasantonid). Sm. 171—172° (*C.* 1903 [2] 1377).
- $C_{15}H_{18}O_3N_4$  C 62,9 — H 6,3 — O 11,2 — N 19,6 — M. G. 286.
- 1) Dimethyläther d.  $\alpha$ -Hydrazido- $\alpha$ -[2-Oxyphenyl]imido- $\alpha$ -[2-Oxyphenyl]amidomethan. Pikrat (*B.* 35, 1725 *C.* 1902 [2] 31).
- 2) 4-Methylamido-4'-Dimethylamidoazoperoxybenzol? Sm. 183° (*B.* 29, 1483).
- 3) Äthylester d. 3-[ $\alpha$ -Phenylhydrazonäthyl]-4-Methylpyrazol-5-Carbonsäure. Sm. 197—198° (*B.* 36, 1130 *C.* 1903 [1] 1138). — \*IV, 530.
- 4) Amid d. 5-Keto-1-Phenyl-3-Hexahydrophenyl-4,5-Dihydro-1,2,4-Triazol-4-Carbonsäure. Sm. oberhalb 300° (*B.* 36, 1095 *C.* 1903 [1] 1140). — \*IV, 781.
- $C_{15}H_{18}O_3N_6$  C 57,3 — H 5,7 — O 10,2 — N 26,8 — M. G. 314.
- 1) Di[4-Semicarbazidophenyl]methan. Sm. 250° (*J. pr.* [2] 74, 156 *C.* 1906 [2] 1125).

- $C_{15}H_{18}O_3N_2$  C 65,7 — H 6,6 — O 17,5 — N 10,2 — M. G. 274.  
 1) 3,3'-Dimethyläther d. 4,4'-Diamido- $\alpha$ ,3,3'-Trioxydiphenylmethan. Sm. 160° (*J. pr.* [2] 79, 496 *C.* 1909 [2] 362).  
 2) Benzylidenderivat d. 4-Oximido-2-Hydroxylamido-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 218° (*B.* 40, 2241 *C.* 1907 [2] 590).  
 3) Base (aus Acetylharmalin). Sm. 164—165°. (2HCl, PtCl<sub>4</sub>) (*C.* 1901 [1] 959). — \*III, 658.  
 4) Methylester d. 1-[2,4-Dimethyl-3-Pyrrolyl]-2,4-Dimethylpyrrol-3-Carbonsäure. Sm. 163—163,5° (*B.* 22, 36). — IV, 86.  
 5) Acetat d. 3-Oxy-5-Keto-4,4-Diäthyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 97° (*B.* 39, 2286 *C.* 1906 [2] 435).  
 6) Äthylphenylamidoimid d.  $\beta$ -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 195° (*A.* 295, 123). — IV, 715.
- $C_{15}H_{18}O_3N_4$  C 59,6 — H 6,0 — O 15,9 — N 18,5 — M. G. 302.  
 1) 6,7-Di[Acetylamido]-1-Acetyl-2,4-Dimethylbenzimidazol + H<sub>2</sub>O? Sm. 305° (*B.* 23, 3219). — IV, 1245.  
 2) Verbindung (aus d. Verb. C<sub>28</sub>H<sub>36</sub>O<sub>8</sub>N<sub>8</sub>). Sm. 190—191° u. Zers. (*G.* 23 [1] 410). — III, 35.
- $C_{15}H_{18}O_3N_6$  C 54,5 — H 5,4 — O 14,5 — N 25,5 — M. G. 330.  
 1) Verbindung + H<sub>2</sub>O (aus Parabansäure u. Phenylhydrazin). Sm. 170° u. Zers. (*Soc.* 53, 556). — IV, 701.
- $C_{15}H_{18}O_3Cl_2$  1) Dichlordihydrosantonin. Sm. 160° u. Zers. (*G.* 31 [2] 311).  
 $C_{15}H_{18}O_3Br_2$  1) Dibromdihydrosantonin. Zers. bei 103°. + C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (*B.* 25, 3317; *B.* 40, 940 *C.* 1907 [1] 1134; *B.* 41, 363 *C.* 1908 [1] 851). — II, 1787.
- $C_{15}H_{18}O_4N_2$  C 62,1 — H 6,2 — O 22,1 — N 9,6 — M. G. 290.  
 1) 2-Naphtylhydrazon d. l-Arabinose. Sm. 176—177° (*B.* 35, 1843 *C.* 1902 [2] 109). — \*IV, 616.  
 2) 2-Naphtylhydrazon d. l-Xylose. Sm. 123—124° (*B.* 35, 4444 *C.* 1903 [1] 392). — \*IV, 616.  
 3) Pernitrososantonin. Sm. 190° u. Zers. (*G.* 31 [2] 307; *G.* 33 [1] 195 *C.* 1903 [2] 45).  
 4) Diäthylester d. 4-Phenyl-4,5-Dihydropyrazol-3,5-Dicarbonsäure (D. d. Zimtdiazoessigsäure). Sm. 79°. Ag (*B.* 21, 2643; 26, 259). — IV, 893, 1556.  
 5) 2-Amid d. 5-Keto-2-Methyl-1-Phenyltetrahydropyrrol-1<sup>4</sup>,2-Dicarbonsäure-1<sup>4</sup>-Äthylester. Sm. 149° (*B.* 40, 4051 *C.* 1907 [2] 1837).  
 6)  $\alpha\beta$ -Imid d.  $\beta$ -[2-Methylphenyl]amidopropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\gamma$ -Äthylester. Sm. 90,5—91,5° (*B.* 38, 3189 *C.* 1905 [2] 1323).  
 7)  $\alpha\beta$ -Imid d.  $\beta$ -[3-Methylphenyl]amidopropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\gamma$ -Äthylester. Sm. 135—136° (*B.* 38, 3189 *C.* 1905 [2] 1323).  
 8)  $\alpha\beta$ -Imid d.  $\beta$ -[4-Methylphenyl]amidopropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\gamma$ -Äthylester. Sm. 208—209° (*B.* 38, 3189 *C.* 1905 [2] 1323).
- $C_{15}H_{18}O_4N_4$  C 56,6 — H 5,7 — O 20,1 — N 17,6 — M. G. 318.  
 1)  $\epsilon$ -[2,4-Dinitrophenyl]imido- $\alpha$ -Diäthylamido- $\alpha\gamma$ -Pentadien. HCl (*A.* 341, 375 *C.* 1905 [2] 1435).
- $C_{15}H_{18}O_4N_6$  C 52,0 — H 5,2 — O 18,5 — N 24,3 — M. G. 346.  
 1) Azid d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidopropionsäure. Sm. 145° u. Zers. (*J. pr.* [2] 70, 125 *C.* 1904 [2] 1037).
- $C_{15}H_{18}O_4Cl_2$  1) Diäthylester d.  $\gamma\gamma$ -Dichlor- $\alpha$ -Phenylpropan- $\beta\beta$ -Dicarbonsäure. Sd. 207—209°<sub>16</sub> (*J. pr.* [2] 74, 447 *C.* 1907 [1] 230).
- $C_{15}H_{18}O_4Br_2$  1) Dibromparasantoninsäure. Sm. 176—177° u. Zers. (*C.* 1903 [2] 1447).  
 2) 2-Acetat-5-Isobutytrat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 90—91° (*A.* 301, 281). — \*II, 690.  
 3) 5-Acetat-2-Isobutytrat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 79—80° (*A.* 301, 279). — \*II, 690.
- $C_{15}H_{18}O_5N_2$  C 53,8 — H 5,9 — O 26,1 — N 9,1 — M. G. 306.  
 1) Oxim d. Diacetylhydrastinin. Sm. 121—122° (*B.* 22, 1156). — III, 105.  
 2) 1-Nitroso-2,6-Dimethyl-4-Phenylhexahydropyridin-3,5-Dicarbonsäure. Sm. 190° u. Zers. (*B.* 25, 2789). — IV, 215.  
 3) Diäthylester d.  $\beta$ -[2-Methylphenyl]hydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 86—87° (*Bl.* [3] 31, 81 *C.* 1904 [1] 580).  
 4) Diäthylester d. isom.  $\beta$ -[2-Methylphenyl]hydrazon- $\alpha$ -Ketoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 155—156° (*Bl.* [3] 31, 82 *C.* 1904 [1] 580).

- C<sub>15</sub>H<sub>18</sub>O<sub>5</sub>Br<sub>2</sub>** 1) 3,6-Diacetat d. 2,5-Dibrom-6-Oxy-3,4-Di[Oxymethyl]-1-Methylbenzol-4-Äthyläther. Sm. 84–85° (B. 32, 3461). — \*II, 697.  
2) 2-Acet-5-Isobutytrat d. 3,6-Dibrom-2,5-Dioxy-1,4-Dimethylbenzol-2-Oxymethyläther. Sm. 55° (B. 35, 440 C. 1902 [1] 641).
- C<sub>15</sub>H<sub>18</sub>O<sub>6</sub>N<sub>2</sub>** C 55,9 — H 5,6 — O 29,8 — N 8,7 — M. G. 322.  
1) Choletelin (J. 1869, 817; J. Th. 1871, 226; 1881, 213). — III, 662.  
2) Dimethylester d. α-Benzoylamidoacetylamidoäthan-αβ-Dicarbon-säure. Sm. 136–137° (J. pr. [2] 70, 173 C. 1904 [2] 1396).  
3) Äthylester d. Benzoxylacetylamidoacetylamidoessigsäure. Sm. 131° (B. 39, 1382 C. 1906 [1] 1872).  
4) Äthylester d. Benzoylamidoacetoxyacetylamidoessigsäure. Sm. 88° (B. 39, 1378 C. 1906 [1] 1872).  
5) Diäthylester d. 1-Methylbenzol-2,4-Dioxaminsäure (Toluylendioxam-äthan). Sm. 130° (A. 268, 340). — IV, 605.  
6) αβ-Diacetat d. 3,4-Dioxy-1-[αβ-Dioximidopropyl]benzol-3,4-Dimethyläther. Sm. 98° (G. 24 [2] 14). — II, 977.  
7) αβ-Diacetat d. isom. 3,4-Dioxy-1-[αβ-Dioximidopropyl]benzol-3,4-Dimethyläther. Sm. 105° (G. 24 [2] 16). — II, 977.  
8) Acetylderivat d. Verb. C<sub>15</sub>H<sub>16</sub>O<sub>5</sub>N<sub>2</sub>. Sm. 114° (Am. 23, 511). — \*II, 230.  
**C<sub>15</sub>H<sub>18</sub>O<sub>6</sub>N<sub>4</sub>** C 51,4 — H 5,1 — O 27,4 — N 16,0 — M. G. 350.  
1) Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 233° (235°). Ag (B. 35, 3227 C. 1902 [2] 1043; B. 37, 1283 C. 1904 [1] 1335; J. pr. [2] 70, 84 C. 1904 [2] 1034; B. 37, 2505 C. 1904 [2] 426).
- C<sub>15</sub>H<sub>18</sub>O<sub>6</sub>S** 1) Santoninsulfonsäure. Na (Ar. 244, 631 C. 1907 [1] 637).  
**C<sub>15</sub>H<sub>18</sub>O<sub>7</sub>N<sub>2</sub>** C 53,3 — H 5,3 — O 33,1 — N 8,3 — M. G. 338.  
1) Noramidokodeinsäure (B. 42, 3507 C. 1909 [2] 1472).  
2) Methylester d. 2,6-Dinitro-5-Pseudobutyl-1,3-Dimethylbenzol-4-Carbonsäure. Sm. 127° (B. 31, 1346). — \*II, 977.  
**C<sub>15</sub>H<sub>18</sub>O<sub>7</sub>N<sub>4</sub>** C 49,2 — H 4,9 — O 30,6 — N 15,3 — M. G. 366.  
1) Diäthylester d. α-[4-Nitrophenyl]azo-β-Oximidopropan-αγ-Dicarbonsäure. Sm. 160° (B. 34, 89). — \*IV, 1063.  
**C<sub>15</sub>H<sub>18</sub>O<sub>8</sub>N<sub>2</sub>** C 50,8 — H 5,1 — O 36,2 — N 7,9 — M. G. 354.  
1) αγ-Dimethylester-ββ-Diäthylester d. αγ-Dicyanpropan-αββγ-Tetracarbonsäure. Sm. 103° (C. r. 140, 1401 C. 1905 [2] 120).  
2) ββ-Dimethylester-αγ-Diäthylester d. αγ-Dicyanpropan-αββγ-Tetracarbonsäure. Sm. 73° (C. 1908 [1] 235).
- C<sub>15</sub>H<sub>18</sub>NCl** 1) Dimethylphenylbenzylammoniumchlorid. Sm. 110° (B. 10, 2079). — II, 517.  
2) 4-[α-Chloräthyl]-1,3-Dimethylbenzol + Pyridin + H<sub>2</sub>O. Sm. 153°. 2 + PtCl<sub>4</sub> + AuCl<sub>3</sub> (B. 35, 2249 C. 1902 [2] 273; B. 36, 1637 C. 1903 [2] 26). — \*IV, 90.
- C<sub>15</sub>H<sub>18</sub>NBr** 1) 4-[α-Bromäthyl]-1,3-Dimethylbenzol + Pyridin. Sm. 144–145° (B. 36, 1638 C. 1903 [2] 26). — \*IV, 90.
- C<sub>15</sub>H<sub>18</sub>NJ** 1) Dimethylphenylbenzylammoniumjodid. Sm. 165° (Soc. 83, 1409 C. 1904 [1] 438; C. 1905 [2] 1726; Soc. 91, 2088 C. 1908 [1] 628).
- C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>S** 1) 1-[α-Methyl-β-Phenylthioureido]-2,3-Dihydro-R-Hepten. α-Modif. Sm. 117–118°; β-Modif. Sm. 125° (A. 317, 285).  
2) α-[d-sec. Butyl]-β-[1-Naphtyl]thioharnstoff. Sm. 135° (Ar. 242, 63 C. 1904 [1] 998).  
3) α-[d-sec. Butyl]-β-[2-Naphtyl]thioharnstoff. Sm. 120° (Ar. 242, 63 C. 1904 [1] 998).  
4) 2-[α-Phenylhydrazonäthyl]-5-Propylthiophen. Sm. 60° (B. 20, 1744). — III, 766.
- C<sub>15</sub>H<sub>18</sub>N<sub>3</sub>Cl** 1) Chlormethylat d. 4-Dimethylamidoazobenzol. Sm. 193° (194°). HCl, 2 + ZnCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (B. 36, 1487 C. 1903 [1] 1350; D.R.P. 88557; A. 345, 307 C. 1906 [1] 1536). — \*IV, 1010.
- C<sub>15</sub>H<sub>18</sub>N<sub>3</sub>Br** 1) Brommethylat d. 4-Dimethylamidoazobenzol. Sm. 189° (A. 345, 307 C. 1906 [1] 1536).
- C<sub>15</sub>H<sub>18</sub>N<sub>3</sub>J** 1) Jödmethylat d. 4-Dimethylamidoazobenzol. Sm. 185° (173°) (B. 17, 1402; B. 36, 1486 C. 1903 [1] 1350; A. 327, 113 C. 1903 [1] 1213; D.R.P. 88557; A. 345, 303 C. 1906 [1] 1536). — IV, 1356; \*IV, 1010.
- C<sub>15</sub>H<sub>18</sub>N<sub>4</sub>S** 1) s-Di[Methylphenylamido]thioharnstoff (Dimethyldiphenylsulfocarb-azid). Sm. 176° u. Zers. (168°) (A. 258, 250; B. 27, 863). — IV, 685.



- $C_{15}H_{18}N_4S$  2) s-Di[2-Methylphenylamido]thioharnstoff. Sm. 129—130° u. Zers. (B. 24, 4201). — IV, 802.
- 3) s-Di[4-Methylphenylamido]thioharnstoff. Sm. 121° (B. 24, 4194). — IV, 806.
- $C_{15}H_{18}ClP$  1) Methyläthyl-diphenylphosphoniumchlorid.  $2 + PtCl_4$  (A. 207, 212). — IV, 1658.
- $C_{15}H_{18}ClAs$  1) Methyläthyl-diphenylarsoniumchlorid.  $2 + PtCl_4$  (A. 207, 198). — IV, 1688.
- $C_{15}H_{18}JP$  1) Methyläthyl-diphenylphosphoniumjodid. Sm. 181° (A. 207, 212, 215). — IV, 1658.
- $C_{15}H_{18}JAs$  1) Methyläthyl-diphenylarsoniumjodid. Sm. 170° (A. 207, 196). — IV, 1688.
- $C_{15}H_{19}ON$  C 78,6 — H 8,3 — O 7,0 — N 6,1 — M. G. 229.
- 1) 3-[4-Methylphenyl]amido-5-Oxy-1,1-Dimethyl-1,2-Dihydrobenzol. Sm. 200° (202°). HCl (A. 294, 315; Soc. 89, 196 C. 1906 [1] 1420). — \*II, 284.
- 2) 2-Oxy-1-[ $\alpha$ -Amidoamyl]naphtalin. Sm. 114°. HCl, Pikrat (G. 33 [1] 11 C. 1903 [1] 925).
- 3)  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\eta$ -Methyl- $\alpha\zeta$ -Oktadien. Sd. 210—212°<sub>20</sub> (C. 1899 [1] 683).
- 4) 6-[2-Methylphenyl]amido-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 135°. HCl (C. 1906 [1] 34).
- 5) 6-[4-Methylphenyl]amido-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 202°. HCl (C. 1906 [1] 34).
- 6) Dimethylphenylbenzylammoniumhydroxyd. Fl. Chlorid, Jodid, d-Campfersulfonat (B. 10, 2079; Soc. 83, 1409 C. 1904 [1] 438). — II, 517, 518.
- 7) Furfuroamidopinen. Sm. 80—81° (A. 268, 205). — IV, 79.
- 8) 4-[ $\alpha$ -Oxyäthyl]-1,3-Dimethylbenzol + Pyridin. Chlorid, Bromid, Pikrat (B. 36, 1638 C. 1903 [2] 26). — \*IV, 90.
- 9) 4-Keto-5-Benzyliden-2,2,6-Trimethylhexahydropyridin. HCl + H<sub>2</sub>O (B. 41, 465 C. 1908 [1] 1052).
- 10) 4-Keto-2,2-Dimethyl-6-[ $\beta$ -Phenyläthenyl]hexahydropyridin (Cinnamaldiacetonamin). Sm. 49° (A. 227, 371). — III, 61.
- 11) Acetylderivat d. 2-Methylen-1,3-Dimethyl-3-Äthyl-2,3-Dihydroindol. Sm. 85—86° (G. 32 [2] 411 C. 1903 [1] 838).
- 12) Benzoylinfracampholen. Sm. 105° (Soc. 79, 119). — \*II, 729.
- 13) Benzoylgranatanin. Sm. 111° (B. 27, 2852). — IV, 52.
- 14) 1-Acetyl-2-Methylen-3,3-Diäthyl-2,3-Dihydroindol? Sd. 185—187°<sub>25</sub> (G. 28 [2] 357). — \*IV, 170.
- 15) 2-[ $\beta$ -Ketopropyl]-3,3-Diäthylpseudoindol. Sm. 113—114° (G. 28 [2] 360). — \*IV, 175.
- 16) Isoamyläther d. 2-Oxy-4-Methylchinolin. Sm. 120—140°; Sd. bei 360° (C. 1909 [1] 1937).
- 17) 1-Acetyl-1,2,3,4,7,8,9,10-Oktahydro- $\alpha$ -Naphtochinolin. Sm. 68—69° (B. 24, 2489). — IV, 231.
- 18) 4-Acetyl-1,2,3,4,7,8,9,10-Oktahydro- $\beta$ -Naphtochinolin. Sm. 68,5 bis 69° (B. 24, 2660). — IV, 232.
- 19) isom-4-Acetyloktahydro- $\beta$ -Naphtochinolin. Sm. 110,5° (B. 24, 2656). — IV, 232.
- 20) Diäthylamid d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 106° (A. 361, 104 C. 1908 [2] 34).
- 21) Butylamid d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 119—120° (A. 361, 103 C. 1908 [2] 34).
- 22) Phenylamid d. 1,3-Dimethyl- $\beta$ -Tetrahydrobenzol-4-Carbonsäure. Sm. 131—132° (Soc. 79, 354). — \*II, 710.
- 23) Phenylamid d. Isolauronolsäure. Sm. 103° (C. 1897 [1] 102; Bl. [3] 15, 1198). — \*II, 179.
- 24) 2-Methylphenylamid d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sm. 59,5—60,5° (C. 1901 [1] 1149).
- 25) 4-Methylphenylamid d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sm. 68° (C. 1901 [1] 1149).
- $C_{15}H_{19}ON_3$  C 70,0 — H 7,4 — O 6,2 — N 16,3 — M. G. 257.
- 1) 9-Semicarbazol-1,2,3,4,9,10-Hexahydroanthracen. Sm. 250° (C. r. 140, 251 C. 1905 [1] 679).

- C<sub>15</sub>H<sub>19</sub>ON<sub>3</sub>** 2) Äthyläther d.  $\alpha$ -[4-Oxyphenyl]- $\alpha$ -[2-Amidobenzyl]hydrazin. Sm. 98°. Oxalat (B. 27, 2903). — IV, 1130.
- 3) Methylhydroxyd d. 4-Dimethylamidoazobenzol. Salze, siehe (B. 17, 1402; A. 345, 303 C. 1906 [1] 1536). — IV, 1356.
- C<sub>15</sub>H<sub>19</sub>OCl** 1) Chlorid d. 2-Phenyl-1,1,2-Trimethyl-R-Pentamethylen-3-Carbon-säure. Sm. bei 60° (Bl. [3] 21, 839). — \*II, 861.
- C<sub>15</sub>H<sub>19</sub>OP** 1) Methyläthylidiphenylphosphoniumhydroxyd. Fl. 2 Chlorid + PtCl<sub>4</sub>, Jodid, Pikrat (A. 207, 212). — IV, 1658.
- C<sub>15</sub>H<sub>19</sub>OAs** 1) Methyläthylidiphenylarsoniumhydroxyd. 2 Chlorid + PtCl<sub>4</sub>, Jodid, Pikrat (A. 207, 198). — IV, 1688.
- C<sub>15</sub>H<sub>19</sub>O<sub>2</sub>N** C 73,5 — H 7,7 — O 13,1 — N 5,7 — M. G. 245.
- 1) 5-Keto-2-Propionyl-2-Methyl-1-Benzyltetrahydropyrrrol. Sm. 66 bis 67° (B. 42, 3955 C. 1909 [2] 1811).
- 2) 1,3-Diketo-2,4,4-Triäthyl-1,2,3,4-Tetrahydroisochinolin. Sm. 50°; Sd. 308—309° (B. 20, 2493). — II, 1859.
- 3) Benzoyltropein + 2H<sub>2</sub>O. Sm. 58°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HNO<sub>3</sub>, Pikrat (B. 13, 1083; C. 1900 [1] 1082; A. 217, 96; 317, 295; Soc. 95, 1028 C. 1909 [2] 544). — III, 787; \*III, 606.
- 4) Benzoylpseudotropin (Tropacocain). Sm. 49°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr (B. 24, 2336, 2337; 29, 943; C. 1899 [1] 705; A. 271, 208). — III, 795; \*III, 617.
- 5) Parasantonimid. Sm. 216—217° (C. 1903 [2] 1067).
- 6) Mandragorin. Fl. (HCl, AuCl<sub>3</sub>) (J. pr. [2] 64, 283). — \*III, 666.
- 7) Äthylester d.  $\delta$ -Cyan- $\gamma$ -Phenyl- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 176° u. Zers. (Am. 33, 355 C. 1905 [1] 1392).
- 8) Äthylester d. 6-Phenylamido-1,2,3,4-Tetrahydrobenzol-5-Carbon-säure. Sm. 29° (J. pr. [2] 79, 122 C. 1909 [1] 856).
- 9) Benzoat d. 3-Oximido-1,1-Dimethylhexahydrobenzol. Sm. 69° (Soc. 91, 82 C. 1907 [1] 1039).
- 10) Benzoat d. Oxygranatanin. Sm. 69—70° (B. 29, 483; G. 26 [2] 145). — IV, 52.
- 11) 4-Methoxyphenylamid d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sm. 44° (C. 1901 [1] 1149).
- 12) 4-Methylphenylimid d. mal. Hexan- $\gamma$ - $\delta$ -Dicarbonsäure. Sm. 92 bis 93° (A. 309, 340). — \*II, 279.
- 13) 4-Methylphenylimid d.  $\beta$ -Methylpentan- $\delta$ - $\epsilon$ -Dicarbonsäure. Sm. 104 bis 108° (B. 32, 529). — \*II, 279.
- 14) 4-Methylphenylimid d.  $\beta$ - $\gamma$ -Dimethylbutan- $\beta$ - $\gamma$ -Dicarbonsäure. Sm. 90° (A. 292, 176). — \*II, 279.
- C<sub>15</sub>H<sub>19</sub>O<sub>2</sub>N<sub>3</sub>** C 65,9 — H 7,0 — O 11,7 — N 15,4 — M. G. 273.
- 1) 4-[3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydro-4-Pyrazolyl]tetrahydro-1,4-Oxazin. Sm. 157°. Pikrat (B. 38, 4047 C. 1906 [1] 469).
- 2) 6-[2-Methylphenyl]imido-2,4-Diketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 230° (D.R.P. 172979 C. 1906 [2] 984).
- 3) 6-[4-Methylphenyl]imido-2,4-Diketo-5,5-Diäthylhexahydro-1,3-Diazin. Sm. 239—240° (D.R.P. 172979 C. 1906 [2] 984).
- 4) 5-Hexyl-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 126° u. ger. Zers. Cu + H<sub>2</sub>O, HCl (B. 25, 186). — IV, 1118.
- C<sub>15</sub>H<sub>19</sub>O<sub>2</sub>N<sub>5</sub>** C 59,8 — H 6,3 — O 10,6 — N 23,2 — M. G. 301.
- 1) Isopropylidenhydrazid d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Amidoameisensäure. Sm. 209—210° (Bl. [3] 33, 504 C. 1905 [1] 1650).
- C<sub>15</sub>H<sub>19</sub>O<sub>3</sub>N** C 68,9 — H 7,3 — O 18,4 — N 5,4 — M. G. 261.
- 1) 2-Oxybenzoyltropein. Sm. 58—60° (61—63°). HCl +  $\frac{1}{2}$ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 13, 106, 1083; A. 217, 89; Soc. 95, 1031 C. 1909 [2] 544). — III, 787.
- 2) 3-Oxybenzoyltropein. Sm. 226° (233—234°). HCl, (2HCl, PtCl<sub>4</sub>), HJ, H<sub>2</sub>SO<sub>4</sub> + 4H<sub>2</sub>O (B. 13, 1081; A. 217, 91; Soc. 95, 1032 C. 1909 [2] 544). — III, 788.
- 3) 4-Oxybenzoyltropein + 2H<sub>2</sub>O. Sm. 227° (232—233°). HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, Pikrat (B. 13, 1082; A. 217, 93; Soc. 95, 1032 C. 1909 [2] 544). — III, 788.
- 4) Santoninoxim + H<sub>2</sub>O. Sm. 216—217° (207—209°) (B. 18, 2746; 26, 412; 32, 1413; G. 19, 369). — II, 1786; \*II, 1044.

- C<sub>15</sub>H<sub>19</sub>O<sub>8</sub>N** 5) Chromosantoninoxim. Sm. 214—216° (*G.* 32 [1] 335 *C.* 1902 [1] 1406).  
 6) Isosantoninoxim + H<sub>2</sub>O (Metasantoninoxim). Sm. 220° (*G.* 25 [2] 465). — \*II, 1044.  
 7) Parasantoninoximid (*C.* 1903 [2] 1377).  
 8) Oxyparasantoninimid? Sm. 256° (*C.* 1903 [2] 1377).  
 9)  $\alpha$ -1-Benzoylamidomethylhexahydrobenzol-4-Carbonsäure. Sm. 177 bis 178° u. Zers. (*A.* 310, 200). — \*II, 748.  
 10) Lakton d.  $\beta$ -[ $\beta$ -Oxyisobutyryl-2-Methylphenyl]amidoisobuttersäure? Sm. 95° (*B.* 25, 2337; *Ph. Ch.* 10, 663). — II, 472.  
 11) Lakton d.  $\beta$ -[ $\beta$ -Oxyisobutyryl-4-Methylphenyl]amidoisobuttersäure? Sm. 170° (*B.* 25, 2342; *Ph. Ch.* 10, 663). — II, 509.  
 12) Methylester d. 5-Keto-2-Methyl-1-[2,3-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Fl. (*B.* 38, 1228 *C.* 1905 [1] 1258).  
 13) Methylester d. 5-Keto-2-Methyl-1-[2,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure. Sm. 97,5° (*B.* 38, 1226 *C.* 1905 [1] 1257).  
 14) Methylester d. 5-Keto-2-Methyl-1-[3,4-Dimethylphenyl]tetrahydropyrrol-2-Carbonsäure (*B.* 38, 1227 *C.* 1905 [1] 1258).  
 15) 2-Benzat d. 2-Oximido-1-Oxy-1-Methylhexahydrobenzol-1-Methyläther. Sm. 97—98° (*A.* 359, 301 *C.* 1908 [1] 2158).  
 16) Phenylmonamid d. cis-1,1-Dimethyl-R-Pentamethylen-2,5-Dicarbonsäure. Sm. 211° (212°) (*B.* 34, 2474; *Soc.* 69, 83; *A.* 315, 292). — \*II, 218.  
 17) Piperidid d.  $\alpha$ -Acetoxyphenylessigsäure. Sm. 98° (*A.* 368, 62 *C.* 1909 [2] 1444).  
 18)  $\alpha$ -Piperidid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 165° (*A.* 354, 145 *C.* 1907 [2] 694).  
 19)  $\beta$ -Piperidid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 95°. Ag (*A.* 354, 144 *C.* 1907 [2] 694).  
 20) 4-Äthoxyphenylimid d.  $\beta$ -Methylbutan- $\gamma\gamma$ -Dicarbonsäure (Trimethylpyrantin). Sm. 87—88° (*C.* 1901 [1] 377; *Soc.* 81, 799 *C.* 1902 [2] 108).  
 21) 4-Äthoxyphenylimid d.  $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure (Isopropylpyrantin). Sm. 98—99° (*C.* 1901 [1] 377; *Soc.* 81, 801 *C.* 1902 [2] 108).  
 22) Anhydrid d. Verb. C<sub>15</sub>H<sub>21</sub>O<sub>4</sub>N. Sm. 171—172° (*C.* 1904 [1] 1447).  
 23) Verbindung (aus Oxysantoninoxim). Zers. bei 250° (*G.* 39 [2] 122 *C.* 1909 [2] 1341).
- C<sub>15</sub>H<sub>19</sub>O<sub>8</sub>Cl** 1) Chlorid d. Santonsäure. Sm. 170—171° (*J.* 1877, 810; 1878, 822; *G.* 29 [2] 202; *B.* 13, 2210). — II, 1789; \*II, 1045.  
 2) Chlorid d. Metasantonsäure. Sm. 139° (*J.* 1876, 824; *G.* 8, 325). — II, 1789.
- C<sub>15</sub>H<sub>19</sub>O<sub>8</sub>Br** 1) d-P-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (d-Bromsantonige Säure).  $\alpha$ -Modif. Sm. 116°;  $\beta$ -Modif. Sm. 159—160° (*B.* 28 [2] 394; *G.* 25 [1] 502). — II, 1672; \*II, 977.  
 2) l-P-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (l-Bromsantonige Säure). Sm. 116° (*B.* 28 [2] 394; *G.* 25 [1] 519). — II, 1672; \*II, 978.  
 3) i-P-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Bromisosantonige Säure). Sm. 193—195° (*B.* 28 [2] 394; *G.* 25 [1] 528). — II, 1672; \*II, 978.  
 4) Bromdesmotroposantonige Säure. Sm. 92° (*G.* 25 [1] 537). — \*II, 979.  
 5) Acetat d. 7-Brom-2-Oxy-2,5,6,8-Tetramethyl-3,4-Dihydro-1,2-Benzpyran. Sm. 86—87° (*A.* 353, 379 *C.* 1907 [2] 402).  
 6) Bromid d. Santonsäure. Sm. 145,5° (*J.* 1878, 823; *B.* 13, 2210). — II, 1789.
- C<sub>15</sub>H<sub>19</sub>O<sub>8</sub>J** 1) Jodid d. Santonsäure. Sm. 136° (*J.* 1878, 823; *B.* 13, 2210). — II, 1789.
- C<sub>15</sub>H<sub>19</sub>O<sub>4</sub>N** C 65,0 — H 6,8 — O 23,1 — N 5,1 — M. G. 277.  
 1) Anhydrocotarninaceton. Sm. 83°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 37, 212 *C.* 1904 [1] 590).  
 2) Protokatechyltropein. Sm. 253—254°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*Soc.* 89, 364 *C.* 1906 [1] 1618).  
 3) Oxim d. Artemisin. Sm. 233—234° (*C.* 1901 [2] 938). — \*III, 456.



- C<sub>15</sub>H<sub>19</sub>O<sub>4</sub>N** 4) 2-Phenylamidoformoxyl-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 193—194° (B. 28, 2144). — \*II, 181.
- 5) α-[1-Piperidyl]-α-Phenyläthan-ββ-Dicarbonsäure. Na<sub>2</sub>, K<sub>2</sub> (B. 29, 815). — IV, 21.
- 6) 2,6-Dimethyl-4-Phenylhexahydropyridin-3,5-Dicarbonsäure. HCl, Hg (B. 25, 2789). — IV, 215.
- 7) Diäthylester d. β-Phenylamidopropen-αγ-Dicarbonsäure. Sm. 97 bis 98° (87°) (B. 33, 3442). — \*II, 232.
- 8) Diäthylester d. β-Benzylamidoäthen-αα-Dicarbonsäure. Sm. 73 bis 74° (B. 30, 2024). — \*II, 300.
- 9) Acetat d. 4-Diacetylamido-3-Oxy-1-Isopropylbenzol. Sm. 138 bis 139° (Bl. [3] 9, 38). — II, 762.
- C<sub>15</sub>H<sub>19</sub>O<sub>4</sub>N<sub>3</sub>** C 59,0 — H 6,2 — O 21,0 — N 13,8 — M. G. 305.
- 1) 2,5-Diketo-4,4-Dimethyl-1-Phenyltetrahydroimidazol-3-α-Amidoisobuttersäure. Sm. 205° (C. 1904 [2] 1029).
- 2) Äthylester d. α-Cinnamoylsemicarbazidopropionsäure. Sm. 178 bis 179° (B. 33, 1530). — \*II, 852.
- C<sub>15</sub>H<sub>19</sub>O<sub>4</sub>N<sub>5</sub>** C 54,0 — H 5,7 — O 19,2 — N 21,0 — M. G. 333.
- 1) Äthylester d. Antipyrilsemicarbazidoameisensäure. Sm. 207° (Bl. [3] 33, 505 C. 1905 [1] 1650).
- C<sub>15</sub>H<sub>19</sub>O<sub>4</sub>Cl** 1) Diäthylester d. 1-Methylbenzol-3-β-Chloräthyl-ββ-Dicarbonsäure. Sd. 260°<sub>150</sub> (B. 23, 112). — II, 1856.
- C<sub>15</sub>H<sub>19</sub>O<sub>4</sub>Br** 1) 5-Acetat-2-Isobutytrat d. 6-Brom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 49—50° (A. 302, 129). — \*II, 687.
- 2) 2-Acetat-5-Isobutytrat d. 6-Brom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 39—40° (A. 302, 130). — \*II, 687.
- C<sub>15</sub>H<sub>19</sub>O<sub>5</sub>N** C 61,4 — H 6,5 — O 27,3 — N 4,8 — M. G. 293.
- 1) Oxim d. Mekoninmethylpropylketon. Sm. 153—157° (M. 25, 1056 C. 1904 [2] 1644).
- 2) Oxim d. Mekoninmethylisopropylketon. Sm. 110° (M. 25, 1057 C. 1904 [2] 1644).
- 3) isom. Oxim d. Mekoninmethylisopropylketon. Sm. 223° (M. 25, 1059 C. 1904 [2] 1644).
- 4) Methylester d. Hydrocotarninessigsäure. Sm. 63°. (2HCl, PtCl<sub>4</sub>) (B. 38, 2874 C. 1905 [2] 1103).
- 5) Dimethylester d. β-[4-Acetylamidophenyl]propan-αγ-Dicarbonsäure. Sm. 103° (B. 35, 2075 C. 1902 [2] 206).
- 6) Diäthylester d. α-Benzoylamidoäthan-αβ-Dicarbonsäure. Sm. 97 bis 98° (A. 369, 284 C. 1909 [2] 2140).
- 7) Diäthylester d. Benzol-1-Carbonsäure-2-Acetylamidopessigsäure. Sm. 61° (63—64°); Sd. 214—218°<sub>15</sub> (B. 33, 556, 3184; B. 35, 1686 C. 1902 [1] 1362). — \*II, 785.
- 8) Phenylmonamid d. d-Camphoronsäure (d-Camphoronanilsäure). Sm. 147—148° (Soc. 71, 1192 Ann.). — \*II, 222.
- 9) Phenylmonamid d. i-Camphoronsäure (i-Camphoronanilsäure). Sm. 149° u. Zers. (Soc. 71, 1192). — \*II, 222.
- 10) α-Phenylamid d. Butan-ααδ-Tricarbonsäure-α-Äthylester. Sm. 148 bis 150° (A. 317, 61).
- C<sub>15</sub>H<sub>19</sub>O<sub>5</sub>N<sub>3</sub>** C 56,1 — H 5,9 — O 24,9 — N 13,1 — M. G. 321.
- 1) α-[α-Benzoylamidoacetylamidopropionyl]amidopropionsäure. Sm. 120—130°. Ag (J. pr. [2] 70, 122 C. 1904 [2] 1037).
- 2) Äthylester d. Benzoylbis[Amidoacetyl]amidoessigsäure. Sm. 173° (B. 35, 3227 C. 1902 [2] 1043; J. pr. [2] 70, 82, 94 C. 1904 [2] 1033; B. 38, 614 C. 1905 [1] 811).
- 3) Verbindung (aus Biuret, Benzaldehyd u. Acetessigäthylester). Sm. 184 bis 185° (G. 24 [1] 291). — III, 35.
- C<sub>15</sub>H<sub>19</sub>O<sub>5</sub>Cl** 1) Chlorhydrin d. Dehydrodioxyparasantonsäure. Sm. 204—205° (C. 1903 [2] 1447).
- C<sub>15</sub>H<sub>19</sub>O<sub>5</sub>N** C 58,2 — H 6,1 — O 31,1 — N 4,5 — M. G. 309.
- 1) Diäthylester d. Phenylamidoformyläpfelsäure. Sm. 48° (C. 1908 [2] 2006).
- 2) Diäthylester d. α-[4-Nitrophenyl]propan-ββ-Dicarbonsäure. Sm. 59 bis 60,5° (C. 1905 [2] 324; G. 35 [1] 117 C. 1905 [1] 1384).

- C<sub>15</sub>H<sub>19</sub>O<sub>6</sub>N** 3) Diäthylester d. 1-Acetyl-4-Keto-2,6-Dimethyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 65° (B. 20, 155). — II, 2005.  
 4) Urethan (aus Phenylglycincarbonsäurediäthylester u. Chlorameisensäuremethylester). Sm. 60—61° (D.R.P. 126962 C. 1902 [1] 83).  
 5) 6-Acetat d. 5-Diacetyl-amido-2,4,6-Trioxyl-1-Methylbenzol-2,4-Dimethyläther. Sm. 152—155° (M. 22, 1007 C. 1902 [1] 186).  
 6) Triacetat d. 2-[ββ'β''-Trioxypseudobutyl]pyridin. Fl. (2HCl, PtCl<sub>4</sub>) (B. 39, 1050 C. 1906 [1] 1355).  
 7) Verbindung (aus Santonin). Sm. 120—140° (C. 1897 [1] 169).  
**C<sub>15</sub>H<sub>19</sub>O<sub>8</sub>N<sub>3</sub>** C 53,4 — H 5,6 — O 28,5 — N 12,5 — M. G. 337.  
 1) N-Carbäthoxyl-N-Phenylglycylglycin. Sm. 145—146° (B. 41, 2589 C. 1908 [2] 1020).  
 2) Äthylester d. 2-[2,4-Dinitrophenyl]hexahydrobenzol-1-Carbonsäure. Sm. 136—137° (A. 295, 205). — \*II, 705.  
**C<sub>15</sub>H<sub>19</sub>O<sub>7</sub>N** C 55,4 — H 5,8 — O 34,5 — N 4,3 — M. G. 325.  
 1) Glykocumaraldoxim + 2H<sub>2</sub>O. Sm. 230° (wasserfrei) (B. 18, 1961). — III, 94.  
 2) Diäthylester d. α-Oxypropan-3-Nitrophenyläther-αα-Dicarbonsäure. Sd. 218°<sub>35</sub> (B. 40, 3144 C. 1907 [2] 978).  
**C<sub>15</sub>H<sub>19</sub>O<sub>8</sub>N** C 52,8 — H 5,6 — O 37,5 — N 4,1 — M. G. 341.  
 1) 4-Dimethylamidobenzolglykuronsäure. Sm. 205—206°. Ca + 2H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Ag (H. 43, 378 C. 1905 [1] 548; C. 1906 [1] 450).  
**C<sub>15</sub>H<sub>19</sub>O<sub>8</sub>N<sub>5</sub>** C 45,3 — H 4,8 — O 32,2 — N 17,6 — M. G. 397.  
 1) Verbindung (aus Blutserum). Ca<sub>2</sub> + 12H<sub>2</sub>O (H. 53, 88 C. 1907 [2] 1538).  
**C<sub>15</sub>H<sub>19</sub>O<sub>9</sub>N** C 50,4 — H 5,3 — O 40,3 — N 3,9 — M. G. 357.  
 1) Lithursäure. Sm. 204,5—205°. Mg (A. 165, 104). — II, 2110.  
**C<sub>15</sub>H<sub>19</sub>N<sub>2</sub>J** 1) Jodmethylat d. 4-Methylphenylamido-2,6-Dimethylpyridin. Sm. 166° (A. 354, 98 C. 1907 [2] 610).  
**C<sub>15</sub>H<sub>20</sub>ON<sub>2</sub>** C 73,8 — H 8,2 — O 6,5 — N 11,5 — M. G. 244.  
 1) Phenylureidoinfracampholen. Sm. 180° (Soc. 79, 120).  
 2) 3-Keto-5-Hexyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 270° (C. r. 142, 1535 C. 1906 [2] 434).  
 3) 3-Keto-5-Hexyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 84—85° (C. r. 142, 1535 C. 1906 [2] 434).  
 4) 1-Benzoyl-4,4-Dimethyl-5-Isopropyl-4,5-Dihydropyrazol. Sm. 70° (M. 20, 864). — \*IV, 309.  
 5) Phenylhydrazid d. Isolaurenolsäure. Sm. 130° (Bl. [3] 15, 1198; A. ch. [7] 18, 233). — IV, 667; \*IV, 426.  
**C<sub>15</sub>H<sub>20</sub>ON<sub>4</sub>** C 66,2 — H 7,3 — O 5,9 — N 20,6 — M. G. 272.  
 1) Amid d. 5-Hexyl-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 82 bis 82,5° (B. 25, 187). — IV, 1118.  
**C<sub>15</sub>H<sub>20</sub>O<sub>2</sub>N<sub>2</sub>** C 69,2 — H 7,7 — O 12,2 — N 10,8 — M. G. 260.  
 1) Furylidenpinennitrolamin. Sm. 164° (Soc. 91, 8 C. 1907 [1] 1040).  
 2) 5-Keto-2-[α-Oximidopropyl]-2-Methyl-1-Benzyltetrahydropyrrrol. Sm. 135—136° (B. 42, 3955 C. 1909 [2] 1811).  
 3) 3-Oxy-5-Keto-4,4-Dipropyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 103 bis 105° (B. 39, 2286 C. 1906 [2] 435).  
 4) 2-Keto-3-[γ-Benzoylamidopropyl]hexahydropyridin. Sm. 151° (B. 27, 981). — \*IV, 491.  
 5) N-Nitroso-α-Methylacetylcamphenpyrrrol. Sm. 119° (A. 313, 36). — \*IV, 155.  
 6) Phenylamidoformyltropein (Uretropin). Sm. 170° (171—172°). HCl, (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> + 4H<sub>2</sub>O, Pikrat (Bl. [3] 9, 1017; Soc. 95, 1027 C. 1909 [2] 544). — III, 787.  
 7) Anagyrinoxyd. Sm. 195°. (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (C. 1900 [1] 1163). — \*III, 601.  
 8) Phenylhydrazoncamphononsäure. Sm. 174° (Soc. 75, 1001). — \*IV, 454.  
**C<sub>15</sub>H<sub>20</sub>O<sub>8</sub>N<sub>2</sub>** C 65,2 — H 7,2 — O 17,4 — N 10,1 — M. G. 276.  
 1) 3,6-Diketo-2-Isobutyl-5-[4-Oxybenzyl]hexahydro-1,4-Diazin + H<sub>2</sub>O (Anhydrid d. Leucyl-L-Tyrosin). Sm. 310° u. Zers. (B. 37, 2498 C. 1904 [2] 426).  
 2) Isosafrolnitrolpiperidid. Sm. 134° (G. 22 [2] 467; 26 [1] 9). — IV, 20; \*IV, 15.  
 3) 4-[β-Phenylureido]-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 190° (B. 41, 2932 C. 1908 [2] 1514).

- $C_{15}H_{20}O_3N_2$  4) Äthylester d.  $\beta$ -[ $\beta$ -Phenylpropionyl]hydrazonbuttersäure. Sm. 95° (*J. pr.* [2] 64, 303).
- $C_{15}H_{20}O_3N_4$  C 59,2 — H 6,6 — O 15,8 — N 18,4 — M. G. 304.  
1) Isopropylidenhydrazid d.  $\alpha$ -Benzoylamidopropionylamidoessigsäure. Sm. 177° (*J. pr.* [2] 70, 155 *C.* 1904 [2] 1395).
- $C_{15}H_{20}O_3Br_2$  1) 5-Isobutyrat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol-2-Äthyläther. Sm. 74–75° (*B.* 32, 3328). — \*II, 690.
- $C_{15}H_{20}O_4N_2$  C 61,6 — H 6,8 — O 21,9 — N 9,6 — M. G. 292.  
1)  $\alpha$ -Safrolnitrosit + Piperidin. Sm. 83° (*G.* 23 [2] 127). — II, 980.  
2) Isosafrolnitrosit + Piperidin. Sm. 134° (*G.* 26 [1] 9). — IV, 4.  
3)  $\alpha$ -Benzoylamidoisocapronylamidoessigsäure. Sm. 167° corr. (*A.* 340, 148 *C.* 1905 [2] 225).  
4)  $\delta$ -Phenylhydrazonheptan- $\alpha\eta$ -Dicarbonsäure. Sm. 151° u. Zers. (*B.* 37, 3819 *C.* 1904 [2] 1606).  
5) Dimethylester d.  $\gamma$ -Phenylhydrazonpentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 88–90° (*A.* 253, 223). — IV, 714.  
6) Dimethylester d.  $\gamma$ -Phenylhydrazonbutan- $\alpha$ -Carbonsäure- $\beta$ -Methylcarbonsäure. Sm. 83° (*A.* 295, 107). — IV, 714.  
7) Äthylester d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 80° (*J. pr.* [2] 70, 207 *C.* 1904 [2] 1459).  
8) Äthylester d.  $\gamma$ -Benzoylamidoacetylamidobuttersäure. Sm. 94° (*J. pr.* [2] 70, 226 *C.* 1904 [2] 1461).  
9) Äthylester d.  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidopropionsäure. Sm. 148–149° (*J. pr.* [2] 70, 149 *C.* 1904 [2] 1394).  
10) Äthylester d. isom.  $\alpha$ -[ $\alpha$ -Benzoylamidopropionyl]amidopropionsäure. Sm. 114–116° (*B.* 38, 2379 *C.* 1905 [2] 543).  
11) Monoäthylester d.  $\gamma$ -Phenylhydrazonpentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 112° (*B.* 21, 1402). — IV, 714.  
12) Diäthylester d.  $\beta$ -[6-Amido-3-Methylphenyl]amidoäthen- $\alpha\alpha$ -Dicarbonsäure. Sm. 145–146° (*B.* 30, 2027). — IV, 617.  
13) Diäthylester d.  $\gamma$ -Phenylallylidendi[amidoameisensäure] (Cinnamolarethan). Sm. 135–143° (*B.* 7, 1079). — III, 61.  
14) Diäthylester d.  $\beta$ -Phenylhydrazonpropan- $\alpha\alpha$ -Dicarbonsäure. Sm. 119–121° (*Am.* 14, 497).  
15) Diäthylester d.  $\alpha$ -Phenylhydrazonpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 99–100° (*A.* 246, 330). — IV, 713.  
16) Diäthylester d. 4-Phenyltetrahydropyrazol-3,5-Dicarbonsäure. Sm. 91°; Sd. 280° (*B.* 36, 3779 *C.* 1904 [1] 41).  
17)  $\beta$ -Diäthylamidoäthylester d.  $\beta$ -[3-Nitrophenyl]akrylsäure. Sm. 165° (*D.R.P.* 187593 *C.* 1907 [2] 1131).  
18)  $\beta$ -Diäthylamidoäthylester d.  $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 44°. HCl (*D.R.P.* 187593 *C.* 1907 [2] 1131).  
19) Acetat d. 4,6-Di[Acetylamido]-2-Oxy-1,3,5-Trimethylbenzol. Sm. 204–205° (*M.* 19, 254). — \*II, 457.  
20) 4-Nitrobenzoat d. 1-[ $\beta$ -Oxypropyl]hexahydropyridin. Fl. HCl (*D.R.P.* 179627 *C.* 1907 [1] 1364).  
21) Verbindung (aus Cyanessigsäureäthylester u. 4-Keto-1-Methylhexahydrobenzol). Sm. 186° (*Soc.* 93, 1965 *C.* 1909 [1] 289).
- $C_{15}H_{20}O_4Br_2$  1) Verbindung (aus Oxypipitzahönsäure) (*A.* 237, 124). — II, 1674.
- $C_{15}H_{20}O_4S_2$  1) Diäthylester d. Merkaptocessigbenzylidenäthersäure. Fl. (*A.* 353, 129 *C.* 1907 [1] 1617).
- $C_{15}H_{20}O_5N_2$  C 58,4 — H 6,5 — O 26,0 — N 9,1 — M. G. 308.  
1) Diäthylester d.  $\alpha$ -Oxy- $\beta$ -[N-Carboxylphenylamido]äthylidenamidoessigsäure. Sm. 105–106° (*B.* 40, 3249 *C.* 1907 [2] 974).  
2) Diäthylester d. Amidoacetylphenylamidoessigsäure-N-Carbonsäure. Sm. 58–59° (*B.* 40, 3239 *C.* 1907 [2] 973).  
3) Diäthylester d. N-Carboxylphenylamidoacetylamidoessigsäure. Sm. 62–63° (*B.* 40, 3244 *C.* 1907 [2] 974).  
4) 4-Nitrobenzoat d. 1-[ $\beta$ -Dioxypropyl]hexahydropyridin. Fl. HCl (*D.R.P.* 179627 *C.* 1907 [1] 1364).  
5) Verbindung (aus Santoninhydroxylaminoxim). Zers. bei 200° (*G.* 39 [2] 117 *C.* 1909 [2] 1341).



- $C_{15}H_{20}O_5N_4$  C 53,6 — H 5,9 — O 23,8 — N 16,7 — M. G. 336.  
 1) Äthylester d.  $\beta$ -Phenylureidoacetyl-amidoacetyl-amidoessigsäure. Sm. 203° u. Zers. (*J. pr.* [2] 70, 259 C. 1904 [2] 1464).
- $C_{15}H_{20}O_5N_6$  C 49,4 — H 5,5 — O 22,0 — N 23,1 — M. G. 364.  
 1) Hydrazid d. Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 268° (*J. pr.* [2] 70, 86 C. 1904 [2] 1034).
- $C_{15}H_{20}O_6S_3$  1) Diäthylester d. 2,6-Dimerkapto-4-Keto-1,4-Thiopyran-2,6-Diäthyl-äther-3,5-Dicarbonsäure. Sm. 47–49° (*B.* 41, 4033 C. 1909 [1] 82).
- $C_{15}H_{20}O_6N_2$  C 55,6 — H 6,2 — O 29,6 — N 8,6 — M. G. 324.  
 1) Äthylester d.  $\alpha$ -[4-Nitrobenzoxyl]- $\beta$ -Dimethylamidoisobuttersäure. Fl. HCl (D. R. P. 202167 C. 1908 [2] 1220; *Bl.* [4] 5, 240 C. 1909 [1] 1319).  
 2) 4-Äthylcarbonat d. 1- $\alpha$ -Amido- $\beta$ -[4-Oxyphenyl]propionsäureamid-N-Carbonsäureäthylester. Sm. 185° (*B.* 41, 4441 C. 1909 [1] 440).
- $C_{15}H_{20}O_6N_4$  C 51,1 — H 5,7 — O 27,3 — N 15,9 — M. G. 352.  
 1) 1-[2,4,6-Trinitrophenyl]-2,2,6,6-Tetramethylhexahydropyridin. Sm. 225° (*R.* 24, 414 C. 1905 [2] 1186).
- $C_{15}H_{20}O_7N_2$  C 52,9 — H 5,9 — O 32,9 — N 8,3 — M. G. 340.  
 1) Amidokodeinsäure. HCl (*B.* 42, 3507 C. 1909 [2] 1472).
- $C_{15}H_{20}O_8N_2$  C 50,6 — H 5,6 — O 36,0 — N 7,8 — M. G. 356.  
 1) Dinitrolaserpitin. Sm. 100–115° (*J.* 1883, 1361). — III, 635.
- $C_{15}H_{20}O_8S_2$  1) 4-Methyl-1,3-Phenylendi[ $\alpha$ -Sulfonbuttersäure]. Fl. Ba (*J. pr.* [2] 68, 338 C. 1903 [2] 1172).  
 2) Diäthylester d. 4-Methyl-1,3-Phenylendi[Sulfonessigsäure]. Fl. (*J. pr.* [2] 68, 337 C. 1903 [2] 1172).
- $C_{15}H_{20}NCl$  1) Chlormethylat d. 3-Äthyl-2-Propylchinolin. 2 + PtCl<sub>4</sub> (*B.* 18, 3364). — IV, 342.  
 2) Chloräthylat d. 3,6-Dimethyl-2-Äthylchinolin. 2 + PtCl<sub>4</sub> + H<sub>2</sub>O (*B.* 18, 3387). — IV, 340.
- $C_{15}H_{20}NJ$  1) Jodmethylat d. 3-Äthyl-2-Propylchinolin + H<sub>2</sub>O. Sm. 172° (*B.* 18, 3364). — IV, 342.  
 2) Jodmethylat d. 3,6,8-Trimethyl-2-Äthylchinolin (*B.* 23, 2271). — IV, 343.  
 3) Jodäthylat d. 3,6-Dimethyl-2-Äthylchinolin +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 112 bis 114° (*B.* 18, 3387). — IV, 340.  
 4) Jodisoamylat d. 2-Methylchinolin. Sm. 175° (*A.* 242, 308). — IV, 308.  
 5) Jodisoamylat d. 3-Methylchinolin. Sm. 215° (*B.* 18, 1643). — IV, 314.  
 6) Jodisoamylat d. 4-Methylchinolin. Sm. 158–160° (*R.* 3, 352; *J.* 1855, 551). — IV, 314.
- $C_{15}H_{20}N_2S$  1) 4-[ $\beta$ -Phenylthioureido]-2,6-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 172° (*A.* 281, 126). — IV, 52.
- $C_{15}H_{20}N_4S$  1) Amid d. 5-Hexyl-1-Phenyl-1,2,4-Triazol-3-Thiocarbonsäure. Sm. 76–77° (*B.* 25, 188). — IV, 1118.
- $C_{15}H_{20}N_4S_2$  1) 2,3-Di[ $\beta$ -Allylthioureido]-1-Methylbenzol. Sm. 152° (*A.* 228, 246). — IV, 600.  
 2) 2,4-Di[ $\beta$ -Allylthioureido]-1-Methylbenzol. Sm. 150,5° (*A.* 228, 205). — IV, 604.  
 3) 2,5-Di[ $\beta$ -Allylthioureido]-1-Methylbenzol. Sm. 175,5° (*A.* 228, 209). — IV, 609.  
 4) 3,4-Di[ $\beta$ -Allylthioureido]-1-Methylbenzol. Sm. 150° (*A.* 221, 24). — IV, 615.
- $C_{15}H_{21}ON$  C 77,9 — H 9,1 — O 6,9 — N 6,1 — M. G. 231.  
 1) 3-[ $\alpha$ -Oximidobenzyl]-1-Isopropyl-R-Pentamethylen. Sm. 128° (*C. r.* 148, 1400 C. 1909 [2] 126).  
 2) Furfurolfencholenamin. Sd. 167°<sub>18</sub> (*A.* 269, 373). — IV, 59.  
 3) 1-Benzoyl-2,2,5,5-Tetramethyltetrahydropyrrol. Sm. 67,5–68° (*C.* 1905 [2] 830).  
 4) 1-[3-Oxy-1,2,3,4-Tetrahydro-2-Naphtyl]piperidin. Sm. 46–48° (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 26, 1837; *A.* 288, 123). — II, 855; IV, 34.  
 5) 1-[4-Isopropylbenzoyl]hexahydropyridin (1-Cuminyhexahydropyridin) (*A. ch.* [3] 38, 88). — IV, 15.  
 6) 1-Benzoyl-2-Propylhexahydropyridin (Benzoylconiin). Sd. 203–204°<sub>16</sub> (*B.* 17, 2549; 19, 512; 26, 860; *B.* 38, 3108 C. 1905 [2] 1261). — IV, 34.  
 7) 1-Benzoyl-2-Methyl-5-Äthylhexahydropyridin. Fl. (*B.* 34, 2429). — \*IV, 32.

- C<sub>15</sub>H<sub>21</sub>ON** 8) isom. 1-Benzoyl-2-Methyl-5-Äthylhexahydropyridin. Fl. (B. 34, 2429).  
 9)  $\alpha$ -Methylacetylcamphenpyrrol. Sm. 231°; Sd. 325° (A. 313, 34). — \*IV, 155.  
 10)  $\beta$ -Methylacetylcamphenpyrrol. Sm. 134—135° (A. 313, 37). — \*IV, 156.  
 11) Base (aus Conicein u. Benzaldehyd). (2HCl, PtCl<sub>4</sub>) (B. 38, 3104 C. 1905 [2] 1260).  
 12) Amid d. Säure C<sub>15</sub>H<sub>20</sub>O<sub>2</sub> (aus Camphersäureanhydrid). Sm. 77° (C. 1895 [2] 1082).  
 13) Phenylamid d. 1,2-Dimethylhexahydrobenzol-4-Carbonsäure. Sm. 115° (Soc. 71, 171). — \*II, 707.  
 14) Phenylamid d. trans-1,3-Dimethylhexahydrobenzol-4-Carbonsäure. Sm. 180° (Soc. 71, 174). — \*II, 708.  
 15) Verbindung (aus Benzaldehyd u. d. Base C<sub>8</sub>H<sub>15</sub>N). Sm. 99—100° (A. 319, 105). — \*IV, 57.
- C<sub>15</sub>H<sub>21</sub>ON<sub>3</sub>** C 69,5 — H 8,1 — O 6,2 — N 16,2 — M. G. 259.  
 1)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropylphenyl]- $\alpha$ -Penten. Sm. 193° (A. 330, 258 C. 1904 [1] 946).  
 2)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropyl]- $\beta$ -Methyl- $\alpha$ -Buten. Sm. 177,5° (A. 330, 261 C. 1904 [1] 947).  
 3) 3-Semicarbazon-4-Benzyl-1-Methylhexahydrobenzol. Sm. 172° (A. 348, 103 C. 1906 [2] 783).  
 4) 4-Diäthylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 95° (D.R.P. 91504; C. 1897 [1] 1140; D.R.P. 144393 C. 1903 [2] 777). — \*IV, 758.
- C<sub>15</sub>H<sub>21</sub>ON<sub>5</sub>** C 62,7 — H 7,3 — O 5,6 — N 24,4 — M. G. 287.  
 1) Diazoantipyridindiäthylamin. Sm. 111—112° (B. 41, 3853 C. 1909 [1] 27).  
**C<sub>15</sub>H<sub>21</sub>O<sub>2</sub>N** C 72,9 — H 8,5 — O 12,9 — N 5,7 — M. G. 247.  
 1)  $\delta$ -Benzoylamido- $\beta$ -Ketooktan. Sm. 69° (B. 42, 4051 C. 1909 [2] 1924).  
 2)  $\delta$ -Benzoylamido- $\delta$ -Ketooktan (Propyl- $\delta$ -Benzoylamidobutylketon) (B. 38, 3096 C. 1905 [2] 1259).  
 3) Santoninamin. Sm. 96°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (G. 22 [1] 3; 29 [2] 204). — II, 1786; \*II, 1044.  
 4) Äthylester d.  $\beta$ -Diäthylamido- $\beta$ -Phenylakrylsäure. Sd. 188°<sub>14</sub> (Soc. 75, 956). — \*II, 857.  
 5)  $\beta$ -Diäthylamidoäthylester d.  $\beta$ -Phenylakrylsäure. (HCl, AuCl<sub>3</sub>), Pikrat (B. 14, 1879; 15, 1144). — II, 1406.  
 6) Phenylester d. d-2-Propylhexahydropyridin-1-Carbonsäure. Sd. 325° (Bl. [3] 19, 188). — \*IV, 30.  
 7) Benzoat d. 3-Oxy-2,2,5,5-Tetramethyltetrahydropyrrol. Fl. HCl (A. 322, 126 C. 1902 [2] 127). — \*IV, 32.  
 8) Benzoat d. 1-[ $\gamma$ -Oxypropyl]hexahydropyridin. (HCl, AuCl<sub>3</sub>), Pikrat (B. 17, 681). — IV, 19.  
 9) Benzoat d. 4-Oxy-2,2,6-Trimethylhexahydropyridin ( $\beta$ -Eucaïn). Sm. 91° (78°). HCl (C. 1897 [2] 597; 1902 [1] 478; Am. Soc. 23, 885; D.R.P. 97672). — \*IV, 33.  
 10) Benzoat d. Conhydrin. Sm. 132° (B. 15, 2315). — IV, 35.  
 11) Phenylacetat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridin. HCl, (HCl, AuCl<sub>3</sub>), HBr, HJ, (HJ, J<sub>2</sub>), Pikrat (B. 14, 1878; 15, 1144). — IV, 18.  
 12) Cinnamylat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylpropan. HCl (D.R.P. 169787 C. 1906 [1] 1683).  
 13) Phenylamidoformiat d. 1-Oxy-1-Äthylhexahydrobenzol. Sm. 83° (C. r. 138, 1324 C. 1904 [2] 219).  
 14) Phenylamidoformiat d. 4-Oxy-1,2-Dimethylhexahydrobenzol. Sm. 119° (C. r. 142, 554 C. 1906 [1] 1248).  
 15) Phenylamidoformiat d. 1-Oxy-1,3-Dimethylhexahydrobenzol. Sm. 93° (C. r. 141, 21 C. 1905 [2] 483).  
 16) Phenylamidoformiat d. 4-Oxy-1,3-Dimethylhexahydrobenzol. Sm. 96° (C. r. 142, 554 C. 1906 [1] 1248).  
 17) Phenylamidoformiat d. cis-5-Oxy-1,3-Dimethylhexahydrobenzol. Sm. 110° (A. 297, 162). — \*II, 180.  
 18) Phenylamidoformiat d. trans-5-Oxy-1,3-Dimethylhexahydrobenzol. Sm. 107° (A. 289, 145).

- C<sub>15</sub>H<sub>21</sub>O<sub>2</sub>N** 19) Phenylamidoformiat d. 1-Oxy-1,4-Dimethylhexahydrobenzol. Sm. 103° (*C. r.* 141, 21 *C.* 1905 [2] 483).
- 20) Phenylamidoformiat d. 2-Oxy-1,4-Dimethylhexahydrobenzol. Sm. 115° (*C. r.* 142, 555 *C.* 1906 [1] 1249).
- 21) Amid d.  $\beta$ -Oxy- $\alpha$ -Oktenphenyläther- $\alpha$ -Carbonsäure. Fl. (*C. r.* 142, 895 *C.* 1906 [1] 1551; *Bl.* [3] 35, 537 *C.* 1906 [2] 760).
- 22) Amid d.  $\beta$ -Oxy- $\alpha$ -Hepten-2-Methylphenyläther- $\alpha$ -Carbonsäure. Fl. (*C. r.* 142, 895 *C.* 1906 [1] 1551; *Bl.* [3] 35, 536 *C.* 1906 [2] 760).
- 23) Amid d.  $\gamma$ -Keto- $\epsilon$ -Phenyl- $\beta\beta$ -Dimethylhexan- $\zeta$ -Carbonsäure. Sm. 133° (*B.* 30, 2270). — \*II, 979.
- 24) Verbindung (aus d. Base C<sub>8</sub>H<sub>15</sub>N u. Benzoylchlorid). Sm. 86° (*A.* 319, 106). — \*IV, 57.
- C<sub>15</sub>H<sub>21</sub>O<sub>2</sub>N<sub>3</sub>** C 65,4 — H 7,6 — O 11,6 — N 15,3 — M. G. 275.
- 1) 1-[2,4-Diacetyldiamidophenyl]hexahydropyridin. Sm. 183°. HCl (*B.* 39, 2634 *C.* 1906 [2] 1201).
- 2) Eserin (Physostigmin). Sm. 105–106°. (HJ, HgJ<sub>2</sub>), H<sub>2</sub>SO<sub>3</sub>, Benzoat, m-Kresotinat (*J.* 1865, 456; 1889, 1970; *M.* 18, 389; *Fr.* 28, 134; *A.* 129, 115; 141, 82; *Bl.* [3] 9, 753, 1008; D.R.P. 166310 *C.* 1905 [2] 1111; 1906 [1] 619). — III, 882; \*III, 657.
- C<sub>15</sub>H<sub>21</sub>O<sub>2</sub>N<sub>5</sub>** C 59,4 — H 6,9 — O 10,6 — N 23,1 — M. G. 303.
- 1) Di[Isopropylidenhydrazid] d. 2,6-Dimethylpyridin-3,5-Dicarbon-säure. Sm. 298° (*B.* 33, 1117). — \*IV, 126.
- C<sub>15</sub>H<sub>21</sub>O<sub>2</sub>Cl** 1) Lakton d. Chlordihydroalantolsäure. Sm. 117° (*A.* 285, 366). — II, 1595.
- 2) Lakton d. Chlordihydroisocalantolsäure. Sm. 153° (*B.* 34, 780). — \*II, 939.
- C<sub>15</sub>H<sub>21</sub>O<sub>2</sub>Br** 1) Lakton d. Bromdihydroalantolsäure. Sm. 106° (*A.* 285, 367). — II, 1595.
- 2) 2-Methyl-5-Isopropylester d.  $\alpha$ -Bromisovaleriansäure. Sd. 172,5° (*B.* 39, 3841 *C.* 1907 [1] 93).
- 3) 3-Methyl-6-Isopropylphenylester d.  $\alpha$ -Bromisovaleriansäure. Sd. 166° (*B.* 39, 3844 *C.* 1907 [1] 93).
- C<sub>15</sub>H<sub>21</sub>O<sub>8</sub>N** C 68,4 — H 8,0 — O 18,2 — N 5,3 — M. G. 263.
- 1) Methylätherd. 5-Diacetylamido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 104° (*B.* 28, 1662). — \*II, 460.
- 2) 6,7-Methylenäther-8-Methyläther d. 6,7,8-Trioxy-2-Methyl-1-Propyl-1,2,3,4-Tetrahydroisochinolin (Propylhydrocotarnin). Sm. 66–67°. HJ (*B.* 39, 2227 *C.* 1906 [2] 440).
- 3) 6,7-Methylenäther-8-Methyläther d. 6,7,8-Trioxy-2-Methyl-1-Isopropyl-1,2,3,4-Tetrahydroisochinolin (Isopropylhydrocotarnin). Fl. HJ (*B.* 39, 2228 *C.* 1906 [2] 440).
- 4) Dihydrometasantoninoxim. Sm. 196° u. Zers. (*G.* 25 [2] 466). — \*II, 1038.
- 5)  $\gamma$ -Oximido- $\epsilon$ -Phenyl- $\beta\beta$ -Dimethylhexan- $\zeta$ -Carbonsäure. Sm. 131° (*B.* 30, 2271). — \*II, 979.
- 6) d-Amidodesmotroposantonige Säure. Sm. 206°. HCl (*H.* 43, 242 *C.* 1905 [1] 372).
- 7) Amidopipitzahöinsäure (Perezonoxim). Sm. 153–154° u. Zers. (*B.* 18, 938; *A.* 237, 106). — II, 1673.
- 8) Benzoylhomocoininsäure. Sm. 142–143°. Cu, Ag (*B.* 17, 2549; 19, 500). — IV, 34.
- 9) Methylester d. 4-Oxy-2,2-Dimethyl-6-Phenylhexahydropyridin-4-Carbonsäure (D.R.P. 90245). — \*IV, 155.
- 10) Methylester d. d-Cyanampher- $\alpha$ -Propionsäure. Sm. 44° (*C. r.* 140, 1433 *C.* 1905 [2] 135).
- 11) Methylester d. l-Cyanampher- $\alpha$ -Propionsäure. Sm. 80–81° (*C. r.* 140, 1433 *C.* 1905 [2] 135).
- 12) Äthylester d.  $\alpha$ -Benzoylamidoisocaproinsäure. Sm. 73–75° (*A.* 369, 280 *C.* 1909 [2] 2140).
- 13) Äthylester d.  $\alpha$ -Benzoylamido- $\beta$ -Methylbutan- $\alpha$ -Carbonsäure. Sm. 52°; Sd. 213–214° (*C. r.* 141, 116 *C.* 1905 [2] 615; *Bl.* [3] 35, 968 *C.* 1906 [2] 1829).
- 14) Äthylester d. Dihydrocarvonyleyanessigsäure. Sd. 150–151° (*i. V.*) (*B.* 37, 4466 *C.* 1905 [1] 245).



- C<sub>15</sub>H<sub>21</sub>O<sub>3</sub>N** 15) Äthylester d. Cyancampheressigsäure. *Sd.* 190—200°<sub>15</sub> (*C. r.* 140, 1431 *C.* 1905 [2] 135).
- 16) Amid d.  $\gamma$ -Keto- $\epsilon$ -[4-Methoxyphenyl]- $\beta$ -Methylhexan- $\zeta$ -Carbonsäure. *Sm.* 158—159° (*A.* 294, 335). — \*II, 1043.
- 17) Phenylmonamid d. Heptan- $\gamma\epsilon$ -Dicarbonsäure. *Sm.* 133—134° (*A.* 292, 209). — \*II, 215.
- 18) Phenylmonamid d.  $\beta$ -Methylhexan- $\beta\gamma$ -Dicarbonsäure. *Sm.* 166 bis 167° (*Soc.* 77, 1306).
- 19) Phenylmonamid d.  $\beta$ -Methylhexan- $\beta\epsilon$ -Dicarbonsäure. *Sm.* 176 bis 178° (*A.* 329, 93 *C.* 1903 [2] 1071).
- 20)  $\zeta$ -Phenylmonamid d.  $\beta$ -Methylhexan- $\gamma\zeta$ -Dicarbonsäure. *Sm.* 117 bis 118° (*Bl.* [4] 3, 453 *C.* 1908 [1] 1928).
- 21) Phenylmonamid d. cis- $\beta$ -Methylhexan- $\delta\epsilon$ -Dicarbonsäure. *Sm.* 94 bis 96° (*Soc.* 77, 1303).
- 22) Phenylmonamid d. trans- $\beta$ -Methylhexan- $\delta\epsilon$ -Dicarbonsäure. *Sm.* 132 bis 133° (*Soc.* 77, 1303).
- 23) Phenylmonamid d.  $\beta\delta$ -Dimethylpentan- $\beta\gamma$ -Dicarbonsäure. *Sm.* 197 bis 199° (*Soc.* 77, 1306).
- 24) 4-Methylphenylmonamid d. fum. Hexan- $\gamma\delta$ -Dicarbonsäure. *Sm.* 189 bis 190° (*A.* 309, 339). — \*II, 279.
- 25) 4-Methylphenylmonamid d. mal. Hexan- $\gamma\delta$ -Dicarbonsäure. *Sm.* 148 bis 149° (*A.* 309, 339). — \*II, 279.
- 26) 4-Methylphenylmonamid d.  $\beta$ -Methylpentan- $\delta\epsilon$ -Dicarbonsäure. *Sm.* 135—136° (*B.* 32, 529). — \*II, 279.
- C<sub>15</sub>H<sub>21</sub>O<sub>3</sub>N<sub>3</sub>** C 61,9 — H 7,2 — O 16,5 — N 14,4 — M. G. 291.
- 1)  $\gamma$ -Semicarbazon- $\epsilon$ -Phenyl- $\beta$ -Methylhexan- $\zeta$ -Carbonsäure. *Sm.* 165° (*B.* 41, 1274 *C.* 1908 [1] 1878).
- 2) Benzoat d. 4-Benzoylamido-3-Oxy-4-Methyl-1-[4-Methylphenyl]-2,3-Dihydropyrazol. *Sm.* 193° (*A.* 350, 316 *C.* 1907 [1] 736).
- C<sub>15</sub>H<sub>21</sub>O<sub>4</sub>N** C 64,5 — H 7,5 — O 22,9 — N 5,0 — M. G. 279.
- 1) 2,6-Dimethyl-4-Hexylpyridin-3,5-Dicarbonsäure. *Pb* + 1½H<sub>2</sub>O (*A.* 246, 39). — IV, 171.
- 2)  $\alpha$ -Oxysantoninoxim. *Sm.* 199—200° (*G.* 39 [2] 121 *C.* 1909 [1] 1342).
- 3)  $\beta$ -Oxysantoninoxim. *Sm.* 175° (*G.* 39 [2] 119 *C.* 1909 [2] 1342).
- 4) Santonsäureoxim. *Sm.* 186—187° (*G.* 22 [1] 186; 29 [2] 192). — II, 1789; \*II, 1045.
- 5) Metasantonsäureoxim (*G.* 25 [2] 470).
- 6) Parasantoninhydroxamsäure? *Sm.* 180° (*C.* 1903 [2] 1377).
- 7) Oxim d. Isophotosantonsäurelaktone. *Sm.* 220° u. Zers. (*G.* 32 [1] 315 *C.* 1902 [1] 1405).
- 8) Anhydrid d. Hydroxamsantonsäure. *Sm.* 226—227°. *Ba* + H<sub>2</sub>O (*G.* 33 [1] 199 *C.* 1903 [1] 45).
- 9) Methylester d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha$ -[4-Diäthylamidophenyl]propan- $\alpha$ -Carbonsäure. *Sm.* 56° (*C. r.* 148, 848 *C.* 1909 [1] 1759).
- 10) Äthylester d.  $\gamma$ -Phenylamidoformoxypentan- $\gamma$ -Carbonsäure. *Sm.* 68° (*Bl.* [3] 27, 871 *C.* 1902 [2] 934).
- 11) Äthylester d.  $\gamma$ -Phenylamidoformoxyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. *Sm.* 86° (*Bl.* [3] 35, 117 *C.* 1906 [1] 999).
- 12) Äthylester d.  $\beta$ -Dimethylamido- $\alpha$ -Benzoxylisobuttersäure. *HCl* (D.R.P. 198306 *C.* 1908 [1] 1957; D.R.P. 202167 *C.* 1908 [2] 1219; *Bl.* [4] 5, 240 *C.* 1909 [1] 1319).
- 13) Monäthylester d. 2,6-Dimethyl-4-Isobutylpyridin-3,5-Dicarbonsäure. *Sm.* 135°. *Ca* + 4H<sub>2</sub>O, *Ba* + 5H<sub>2</sub>O, *HCl* + 2H<sub>2</sub>O (*A.* 231, 60). — IV, 171.
- 14) Diäthylester d. Phenylmethyläthylamin- $\alpha\alpha'$ -Dicarbonsäure. *Sd.* 182 bis 183°<sub>13</sub> (*C.* 1909 [2] 1989).
- 15) Diäthylester d.  $\beta$ -Phenylimidopropionsäureessigsäure. *Sd.* 210 bis 211°<sub>16</sub> (*Soc.* 87, 442 *C.* 1905 [1] 1639).
- 16) Diäthylester d. 2-Methylphenylimidodiessigsäure. *Sm.* 59—60°; *Sd.* 205—207°<sub>18</sub> (*Soc.* 87, 440 *C.* 1905 [1] 1639).
- 17) Diäthylester d.  $\alpha$ -Methyl- $\alpha'$ -Phenyldimethylamin- $\alpha\alpha'$ -Dicarbonsäure. *Sd.* 182—183°<sub>13</sub> (*B.* 41, 4368 *C.* 1909 [1] 370).
- 18) Diäthylester d. 2,6-Dimethyl-4-Äthylpyridin-3,5-Dicarbonsäure. *Sd.* 305—308°. (2HCl, PtCl<sub>4</sub>) (*A.* 231, 40). — IV, 170.

- $C_{15}H_{21}O_4N$  19) 4-Äthoxyphenylmonamid d.  $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 128—129° (*C.* 1901 [1] 376; *Soc.* 81, 792 *C.* 1902 [2] 108).
- 20) 4-Äthoxyphenylmonamid d.  $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 151—152° (*C.* 1901 [1] 376; *Soc.* 81, 792 *C.* 1902 [2] 108).
- 21) Verbindung (aus Parasantonsäure). Sm. 239—240° u. Zers. (*C.* 1903 [2] 1446).
- $C_{15}H_{21}O_4N_3$  C 58,6 — H 6,8 — O 20,8 — N 13,7 — M. G. 307.
- 1) Äthylester d.  $\beta$ -Benzoylamidoacetylamidopropylamidoameisensäure. Sm. 151° (*J. pr.* [2] 70, 215 *C.* 1904 [2] 1460).
- $C_{15}H_{21}O_4N_5$  C 53,8 — H 6,2 — O 19,1 — N 20,9 — M. G. 335.
- 1) Amid d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidoäthylamidoameisensäure. Sm. 199° (*J. pr.* [2] 70, 126 *C.* 1904 [2] 1037).
- 2) Hydrazidd.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidopropionsäure. Sm. 213° (*J. pr.* [2] 70, 124 *C.* 1904 [2] 1037).
- $C_{15}H_{21}O_4J$  1) Diacetat d. 4-Jodoso-1-Isoamylbenzol. Sm. 78° u. Zers. (*B.* 34, 3682).
- $C_{15}H_{21}O_5N$  C 61,0 — H 7,1 — O 27,1 — N 4,8 — M. G. 295.
- 1) 4,5-Methylenäther-3-Methyläther- $\alpha\alpha$ -Diäthyläther d.  $\alpha\alpha$ -Dioxy- $\beta$ -[3,4,5-Trioxybenzyliden]amidoäthan. Sd. 244°<sub>25</sub> (*Soc.* 95, 1211 *C.* 1909 [2] 813).
- 2) Dimethylester d. 4-Diäthylamidophenyloxymalonsäure. Sm. 103° (*C. r.* 148, 230 *C.* 1909 [1] 920).
- 3) Diäthylester d. 4-Dimethylamidophenyloxymalonsäure. Sm. 76,5° (*C. r.* 148, 230 *C.* 1909 [1] 920).
- 4) Äthylester d. Benzylaminoxaleessigsäure. Sm. 88° (*A.* 295, 362). — \*II, 286.
- 5) Amid d. 3,4-Dioxy-1-[ $\alpha$ -Oxy- $\gamma$ -Ketoisohexyl]benzol-3,4-Dimethyläther-2-Carbonsäure. Sm. 141—143° (*M.* 25, 1061 *C.* 1904 [2] 1644).
- 6) l- $\alpha$ -Phenyläthylamid d. l-Chinasäure. Sm. 220° (*B.* 38, 805 *C.* 1905 [1] 871).
- 7) Verbindung (aus Diacetyl u. 4-Methylphenylhydroxylamin). Sm. 106° (*A.* 357, 45 *C.* 1907 [2] 1969).
- 8) isom. Verbindung (aus Diacetyl u. 4-Methylphenylhydroxylamin). Sm. 132° (*A.* 357, 45 *C.* 1907 [2] 1969).
- $C_{15}H_{21}O_5N_3$  C 55,7 — H 6,5 — O 24,8 — N 13,0 — M. G. 323.
- 1) Nitrosohydroxylaminsantonin- $\alpha$ -Oxim. Zers. bei 164° (*G.* 39 [2] 120 *C.* 1909 [2] 1342).
- 2) Nitrosohydroxylaminsantonin- $\beta$ -Oxim. Zers. bei 172° (*G.* 39 [2] 118 *C.* 1909 [2] 1341).
- $C_{15}H_{21}O_5N_5$  C 51,3 — H 6,0 — O 22,8 — N 19,9 — M. G. 351.
- 1) Äthylester d.  $\beta$ -Phenylureidoacetylamidocetylamidomethylamidoameisensäure. Sm. 244° u. Zers. (*J. pr.* [2] 70, 262 *C.* 1904 [2] 1465).
- $C_{15}H_{21}O_6N$  C 57,9 — H 6,7 — O 30,9 — N 4,5 — M. G. 311.
- 1) Diäthylester d. 6-Oxy-2-Keto-1-Äthyl-1,2-Dihydropyridinäthyläther-3,5-Dicarbonsäure. Sm. 56° (*A.* 285, 66, 95). — \*IV, 130.
- 2) Triäthylester d.  $\delta$ -Cyan- $\beta$ -Penten- $\beta\gamma\delta$ -Tricarbonsäure. Sd. 205 bis 207°<sub>25</sub> (*Soc.* 89, 646 *C.* 1906 [2] 22).
- $C_{15}H_{21}O_6N_3$  C 53,1 — H 6,2 — O 28,3 — N 12,4 — M. G. 339.
- 1) p-Trinitro-p-[tert.]Dibutyl-1-Methylbenzol. Sm. 152—153° (*B.* 27, 1608). — \*II, 65.
- $C_{15}H_{21}O_8N$  C 52,5 — H 6,1 — O 37,3 — N 4,1 — M. G. 343.
- 1) Verbindung (aus d. Verb.  $C_{21}H_{25}O_8N_2$ ) (*B.* 13, 2135). — IV, 1641.
- $C_{15}H_{21}O_9N_3$  C 46,5 — H 5,4 — O 37,2 — N 10,9 — M. G. 387.
- 1) Tripropyläther d. 2,4,6-Trinitro-1,3,5-Trioxybenzol. Sm. 109 bis 110° (*Am.* 15, 629). — II, 1022.
- 2) Triisopropyläther d. 2,4,6-Trinitro-1,3,5-Trioxybenzol. Sm. 130° (*Am.* 15, 631). — II, 1022.
- 3) Triäthylester d. 2,4,6-Trioximidohexahydrobenzol-1,3,5-Tricarbonsäure. Zers. bei 169—171° (*B.* 21, 1768). — II, 2089.
- $C_{15}H_{21}O_{11}N_4$  1) Verbindung (aus Guttapercha) (*C.* 1906 [1] 561).
- $C_{15}H_{21}NS$  1) Phenyläther d. 4-Merkapto-2,2,6,6-Tetramethyl-1,2,3,6-Tetrahydropyridin +  $H_2O$ . HCl (*B.* 31, 3150). — \*IV, 35.
- $C_{15}H_{21}N_3S$  1) s-Phenyltropylthioharnstoff. Sm. 142—143° (*B.* 31, 1212, 2664 Anm.). — \*III, 614.

- C<sub>15</sub>H<sub>21</sub>N<sub>3</sub>S** 2) **s-Phenylisotropylthioharnstoff**. Sm. 138—139° (B. 31, 2663). — \*III, 614.
- 3) **s-Phenylpseudotropylthioharnstoff**. Sm. 172° (B. 31, 1210). — \*III, 614.
- C<sub>15</sub>H<sub>22</sub>ON<sub>2</sub>** C 73,2 — H 8,9 — O 6,5 — N 11,4 — M. G. 246.
- 1) **4-Benzyl-3-Methylhexahydrophenylharnstoff**. Sm. 185° (B. 29, 2961). — \*II, 329.
- 2) **α-Äthyl-α-Hexahydrophenyl-β-Phenylharnstoff**. Sm. 125° (C. r. 138, 1258 C. 1904 [2] 105).
- 3) **sec. Butyleytisin**. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (C. 1900 [1] 1163). — \*III, 653.
- 4) **Isobutyleytisin**. (2HCl, PtCl<sub>4</sub> + 1½H<sub>2</sub>O) (C. 1900 [1] 1163). — \*III, 653.
- 5) **6-Oxy-4,5-Dimethyl-2-Camphryl-1,3-Diazin**. Sm. 133° (PINNER, Imidoäther 290). — IV, 889.
- 6) **α-[3-Oxyphenyl]-αα-Di[2-Methyl-3-Indenyl]methan**. Sm. 222° (B. 38, 2649 C. 1905 [2] 630).
- 7) **Dicyklopentadiennitrolpiperidin**. Sm. 157°. HCl, Pikrat (Soc. 89, 1343 C. 1906 [2] 1403).
- 8) **Anagryrin** (siehe auch C<sub>14</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>). HCl + H<sub>2</sub>O, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 1½H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr + H<sub>2</sub>O, HJ + H<sub>2</sub>O, HJ + J, HJ + J<sub>2</sub> (G. 17, 325; Bl. 50, 626; C. 1896 [1] 375; 1899 [1] 1130; 1900 [1] 1162, 1163). — III, 777; \*III, 600.
- 9) **Phenylamid d. 2-Methyl-5-Äthylhexahydropyridin-1-Carbonsäure**. Sm. 97—98° (B. 34, 2430). — \*IV, 31.
- 10) **Phenylamid d. isom. 2-Methyl-5-Äthylhexahydropyridin-1-Carbonsäure**. Sm. 232—233° (B. 34, 2429). — \*IV, 32.
- 11) **Verbindung** (aus Anagryris foetida). Sd. 245°<sub>30</sub> (Ar. 244, 23 C. 1906 [1] 1365).
- C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>N** 1) **Emetin** = (C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>N)<sub>x</sub>. Sm. 68° (C. 1895 [1] 802).
- C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>N<sub>2</sub>** C 68,7 — H 8,4 — O 12,2 — N 10,7 — M. G. 262.
- 1) **α-[γ-Ketoamyl]-α-Propyl-β-Phenylharnstoff**. Sm. 115° (Bl. [4] 3, 550 C. 1908 [1] 2086).
- 2) **Piperidinverbindung d. Anetholnitrosochlorid**. Sm. 107° (C. 1904 [2] 1038).
- 3) **prim. 1-Phenylamidoformyl-4-Oxy-2,2,6-Trimethylhexahydropyridin**. Sm. 136°. HCl (B. 34, 2977).
- 4) **sec. 1-Phenylamidoformyl-4-Oxy-2,2,6-Trimethylhexahydropyridin**. Sm. 147°. HCl (B. 34, 2978).
- 5) **Äthylester d. β-[2,4,5-Trimethylphenyl]hydrazonbuttersäure**. Sm. 77—78° (B. 18, 707). — IV, 813.
- 6) **β-Diäthylamidoäthylester d. β-[2-Amidophenyl]akrylsäure**. Fl. HCl (D.R.P. 187593 C. 1907 [2] 1131).
- 7) **β-Diäthylamidoäthylester d. β-[3-Amidophenyl]akrylsäure**. Fl. HCl (D.R.P. 187593 C. 1907 [2] 1131).
- 8) **β-Diäthylamidoäthylester d. β-[4-Amidophenyl]akrylsäure**. Sm. 89° (D.R.P. 187593 C. 1907 [2] 1131).
- 9) **4-Amidobenzoat d. 1-[β-Oxypropyl]hexahydropyridin**. Sm. 82° (D.R.P. 179627 C. 1907 [1] 1364; D.R.P. 194748 C. 1908 [1] 1005).
- 10) **4-Methylamidobenzoat d. 1-[β-Oxyäthyl]hexahydropyridin**. Fl. HCl (D.R.P. 180291 C. 1907 [1] 1365).
- 11) **Benzylidenamid d. Buttersäure** (A. 154, 76). — III, 33.
- C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>Cl<sub>2</sub>** 1) **Lakton d. Dichlortetrahydroalantolsäure**. Sm. 127—134° u. Zers. (A. 285, 368). — II, 1595.
- 2) **Lakton d. Dichlortetrahydroisocalantolsäure**. Fl. (B. 34, 780). — \*II, 939.
- C<sub>15</sub>H<sub>22</sub>O<sub>2</sub>Br<sub>2</sub>** 1) **Lakton d. Dibromtetrahydroalantolsäure**. Sm. bei 117° u. Zers. (A. 285, 371). — II, 1595.
- C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>N<sub>2</sub>** C 64,7 — H 7,9 — O 17,3 — N 10,1 — M. G. 278.
- 1) **Hexyl-β-Nitro-4<sup>p</sup>-Dimethylamidophenylketon**. Sm. 65° (Bl. 47, 47). — III, 156.
- 2) **α-[α-Amido-β-Phenylpropionyl]amidoisocaprinsäure**. Sm. 224,5° (A. 354, 9 C. 1907 [2] 458).
- 3) **isom. α-[α-Amido-β-Phenylpropionyl]amidoisocaprinsäure**. Sm. 196° corr. (A. 354, 10 C. 1907 [2] 458).



- C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>N<sub>2</sub>** 4)  $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -Phenylpropionsäure + H<sub>2</sub>O. Sm. 220—223° (B. 37, 3308 C. 1904 [2] 1306).  
 5) isom.  $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 259° u. Zers. (B. 37, 3308 C. 1904 [2] 1306).  
 6) Oxim d. Dihydrocarvonylcyanessigsäure. Sm. 119—121° (B. 37, 4466 C. 1905 [1] 245).  
 7) 4-Amidobenzoat d. 1-[ $\beta$ -Dioxypropyl]hexahydropyridin. Fl. HCl (D.R.P. 179627 C. 1907 [1] 1364).  
 8) Phenylmonohydrazid d. Heptan- $\delta\delta$ -Dicarbonsäure. Sm. 148° (B. 39, 2287 C. 1906 [2] 435).
- C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>S** 1)  $\gamma$ -Keto- $\epsilon$ -Äthylsulfon- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 122—124° (B. 37, 506 C. 1904 [1] 883).
- C<sub>15</sub>H<sub>22</sub>O<sub>4</sub>N<sub>2</sub>** C 61,2 — H 7,5 — O 21,8 — N 9,5 — M. G. 294.  
 1)  $\beta$ -Dinitro-4-Oktyl-1-Methylbenzol. Fl. (B. 31, 941). — \*II, 65.  
 2) d-Caryophyllennitrosat. Sm. 131—131,5° (A. 356, 19 C. 1907 [2] 1793; A. 359, 250 C. 1908 [1] 1933; A. 369, 42, 44 C. 1909 [2] 1999).  
 3) 4-Methyläther-6-Butyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]-benzol. Sm. 189° (C. 1905 [1] 815).  
 4) 4-Methyläther-6-Isobutyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]-benzol. Sm. 210° (C. 1905 [1] 815).  
 5) 4-Äthyläther-6-Propyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]-benzol. Sm. 218° (C. 1905 [1] 815).  
 6) 4-Äthyläther-6-Isopropyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]-benzol. Sm. 235° (C. 1905 [1] 815).  
 7) Allylphenylhydrazon d. Rhamnose. Sm. 135° (R. 15, 226). — \*IV, 518.  
 8) Bisdiäthylmalonylmethylendiamin. Sm. 138° (A. 343, 309 C. 1906 [1] 929).  
 9)  $\alpha$ -Santoninhydroxylaminoxim. Zers. bei 229—230°. HCl (G. 19, 367; C. 1908 [1] 957; G. 39 [2] 111 C. 1909 [2] 1341).  
 10)  $\beta$ -Santoninhydroxylaminoxim. Zers. bei 232—233°. HCl (C. 1908 [1] 957; G. 39 [2] 113 C. 1909 [2] 1341).  
 11) Santonsäuredioxim. Sm. 120—125°. Ba (G. 29 [2] 227). — \*II, 1045.  
 12) Metasantonsäuredioxim. Sm. 115—120° (G. 29 [2] 234). — \*II, 1045.  
 13) d- $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido-1- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 264—265° u. Zers. (B. 41, 2847 C. 1908 [2] 1734).  
 14) l- $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure (Leucyl-l-Tyrosin) (B. 37, 2498 C. 1904 [2] 426).  
 15) Äthylester d. 5-Diäthylamidoacetylamido-2-Oxybenzol-1-Carbonsäure. Fl. HCl (A. 311, 177). — \*II, 899.  
 16) Diäthylester d.  $\beta\zeta$ -Dicyanheptan- $\beta\zeta$ -Dicarbonsäure. Sd. 220—240°<sub>40-50</sub> (B. 24, 4004). — I, 1226.  
 17) Diäthylester d. 4-Methyl-1,3-Phenylendi[amidoessigsäure]. Sm. 70° (B. 16, 516). — IV, 602.  
 18) Diäthylester d. 1-Isopropylidenamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sd. 247—253°<sub>60</sub> (B. 40, 4755 C. 1908 [1] 260).  
 19) Dipropylester d. Benzylidendi[amidoameisensäure]. Sm. 143° (B. 7, 1082). — III, 33.  
 20) 4-Nitrobenzoat d.  $\alpha$ -Diäthylamido- $\beta$ -Oxy- $\beta$ -Methylpropan. Sm. 47 bis 48° (D.R.P. 179627 C. 1907 [1] 1364).  
 21) 4-Nitrobenzoat d.  $\beta$ -Diisopropylamido- $\alpha$ -Oxyäthan. Fl. (D.R.P. 179627 C. 1907 [1] 1364).
- C<sub>15</sub>H<sub>22</sub>O<sub>5</sub>N<sub>2</sub>** C 58,1 — H 7,1 — O 25,8 — N 9,0 — M. G. 310.  
 1) Allylphenylhydrazon d. Galaktose. Sm. 157° (R. 15, 226). — \*IV, 521.  
 2) Allylphenylhydrazon d. Glykose. Sm. 155° (R. 15, 226). — \*IV, 522.  
 3) Allylphenylhydrazon d. Mannose. Sm. 142° (R. 15, 226). — \*IV, 523.
- C<sub>15</sub>H<sub>22</sub>O<sub>7</sub>N<sub>2</sub>** C 52,6 — H 6,4 — O 32,7 — N 8,2 — M. G. 342.  
 1) Triäthylester d.  $\delta\delta$ -Diimido- $\beta$ -Ketohehexan- $\gamma\zeta\zeta$ -Tricarbonsäure. Sm. 93° (B. 31, 2943; A. 332, 144 C. 1904 [2] 191). — \*I, 448.
- C<sub>15</sub>H<sub>22</sub>O<sub>8</sub>N<sub>4</sub>** C 46,6 — H 5,7 — O 33,2 — N 14,5 — M. G. 386.  
 1) Helicinarnstoff (B. 16, 800; G. 12, 464). — III, 69.
- C<sub>15</sub>H<sub>25</sub>O<sub>8</sub>Br<sub>2</sub>** 1) Tetraäthylester d.  $\alpha\gamma$ -Dibrompropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sm. 54—55° (Soc. 83, 782 C. 1903 [2] 201, 439).
- C<sub>15</sub>H<sub>25</sub>NCI** 1) Chlormethylat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. 2 + PtCl<sub>4</sub> + AuCl<sub>3</sub> (Sm. 144—146°) (G. 21 [2] 329; 28 [2] 49). — IV, 230; \*IV, 170.

- C<sub>15</sub>H<sub>22</sub>NCl** 2) isom. Chlormethylat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. + AuCl<sub>3</sub> (Sm. 164—165°) (*G.* 28 [2] 50). — \*IV, 170.
- C<sub>15</sub>H<sub>22</sub>NBr** 1) Bromallylat d. 1-Benzylhexahydropyridin. Zers. bei 161° (*B.* 35, 182 *C.* 1902 [1] 429). — \*IV, 8.
- C<sub>15</sub>H<sub>22</sub>NJ** 1) Jodmethylat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. Sm. 180° (174—175°) (*G.* 21 [2] 328; 28 [2] 48). — \*IV, 170.
- C<sub>15</sub>H<sub>22</sub>N<sub>2</sub>S** 1)  $\alpha$ -Äthyl- $\alpha$ -Hexahydrophenyl- $\beta$ -Phenylthioharnstoff. Sm. 126° (*C. r.* 138, 1258 *C.* 1904 [2] 105).
- 2) Phenylamid d. d-2-Propylhexahydropyridin-1-Thiocarbonsäure. Sm. 88° (*B.* 17, 3041). — IV, 34.
- 3) Phenylamid d. 3-Propylhexahydropyridin-1-Thiocarbonsäure. Sm. 90,5° (*B.* 30, 1061). — \*IV, 30.
- C<sub>15</sub>H<sub>28</sub>ON** C 77,3 — H 9,9 — O 6,8 — N 6,0 — M. G. 233.
- 1)  $\alpha$ -Nitrosocaryophyllen. Sm. 128—129° (*A.* 369, 48 *C.* 1909 [2] 1999).
- 2)  $\beta$ -Nitrosocaryophyllen. Sm. 120—121° (*A.* 356, 12 *C.* 1907 [2] 1793).
- 3) Isonitrosolumulen. Sd. 185—195°<sub>13</sub> (*B.* 32, 3184). — \*III, 403.
- 4)  $\alpha$ -Oxy-4-Dimethylamidophenylhexahydrophenylmethan. Sm. 85 bis 86° (*B.* 41, 449 *C.* 1908 [1] 846).
- 5) Hexyl-4[*p*]-Dimethylamidophenylketon. Sm. 48,5°; Sd. 190°<sub>20</sub> (*Bl.* 47, 47). — III, 156.
- 6)  $\zeta$ -Oximido- $\delta$ -Phenyl- $\gamma$ -Methyloktan. Sd. 185° (*Am.* 38, 533 *C.* 1908 [1] 227).
- 7)  $\gamma$ -Oximido- $\varepsilon$ -Phenyl- $\beta\beta$ -Dimethylheptan. Sm. 36° (*Am.* 38, 539 *C.* 1908 [1] 227).
- 8) isom.  $\gamma$ -Oximido- $\varepsilon$ -Phenyl- $\beta\beta$ -Dimethylheptan. Sm. 83° (*Am.* 38, 539 *C.* 1908 [1] 227).
- 9) 2-[ $\alpha$ -Oximidoisocamyl]-4-Isopropyl-1-Methylbenzol. Fl. (*J. pr.* [2] 46, 489). — III, 157.
- 10) Oxim d. Cedron. Sd. 175—180°<sub>7,5</sub> (*Bl.* [3] 17, 487; *B.* 40, 3527 *C.* 1907 [2] 1694). — \*III, 403.
- 11) Oxim d. d-Santalal. Sm. 104—105°; Sd. 182—185°<sub>10</sub> (*B.* 40, 1129 *C.* 1907 [1] 1327).
- 12) Phenyläther d. 1-[ $\varepsilon$ -Oxyamyl]tetrahydropyrrol. Sd. 317—318°<sub>780</sub>. HCl, (HCl, AuCl<sub>3</sub>), HJ, Pikrat (*B.* 42, 552 *C.* 1909 [1] 860).
- 13) 1-[6-Oxy-2,3,5-Trimethylbenzyl]hexahydropyridin. Sm. 69—70° (*A.* 344, 287 *C.* 1906 [1] 1612).
- 14) Phenyläther d. 1-[ $\delta$ -Oxybutyl]hexahydropyridin. HCl, (HCl, HgCl<sub>2</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ, Pikrat (*B.* 42, 549 *C.* 1909 [1] 860).
- 15) Methylhydroxyd d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. Fl. 2Chlorid + PtCl<sub>4</sub>, Chlorid + AuCl<sub>3</sub> (Sm. 142—145°), Jodid, Pikrat (Sm. 159—160°) (*G.* 21 [2] 328; 28 [2] 48). — IV, 230; \*IV, 170.
- 16) isom. Methylhydroxyd d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. Sm. 73—74°. Chlorid + AuCl<sub>3</sub> (Sm. 164—165°), Pikrat (121—122°) (*G.* 28 [2] 50). — \*IV, 170.
- 17)  $\alpha$ -Methylacetylcamphendihydropyrrol. Sd. 226—228°<sub>120</sub>. HCl, Pikrat (*A.* 313, 39). — \*IV, 134.
- 18)  $\delta$ -Benzoylamidomethylheptan. Sm. 66—67° (*G.* 26 [2] 247). — \*II, 728.
- 19) Diisobutylamid d.<sup>5</sup> Benzolcarbonsäure. Sm. 65° (*Am.* 24, 207).
- 20) Phenylamid d. Oktan- $\alpha$ -Carbonsäure. Sm. 57° (*Soc.* 93, 1037 *C.* 1908 [2] 503).
- 21) 4-Methylphenylamid d. Heptan- $\alpha$ -Carbonsäure. Sm. 67° (*Soc.* 93, 1037 *C.* 1908 [2] 503).
- 22) 2,4,5-Trimethyl-3,6-Diäthylphenylamid d. Essigsäure. Sm. 182° (*B.* 19, 2384). — II, 565.
- 23) 4-[norm.]Oktylphenylamid d. Ameisensäure. Sm. 56° (*B.* 18, 135). — II, 566.
- C<sub>15</sub>H<sub>23</sub>ON<sub>3</sub>** C 69,0 — H 8,8 — O 6,1 — N 16,1 — M. G. 261.
- 1)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropylphenyl]pentan. Sm. 214,5° (*A.* 330, 260 *C.* 1904 [1] 947).
- 2)  $\gamma$ -Semicarbazon- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylbutan. Sm. 148,5° (*A.* 330, 263 *C.* 1904 [1] 947).
- 3)  $\zeta$ -Phenylhydrazon- $\gamma$ -Oximido- $\beta$ -Methyloktan. Sm. 115—116° (*G.* 28 [2] 278; *J. pr.* [2] 58, 400). — \*IV, 509.

- $C_{15}H_{23}OCl$  1) Verbindung (aus Santelöl). Sm. 119—120,5° (*J. r.* 24, 688). — III, 549.
- $C_{15}H_{23}OBr$  1) 3-Methyl-6-Isopropylphenyläther d.  $\epsilon$ -Brom- $\alpha$ -Oxypentan. Sd. 190° (D.R.P. 184968 *C.* 1907 [2] 862).
- $C_{15}H_{23}O_2N$  C 72,3 — H 9,2 — O 12,8 — N 5,6 — M. G. 249.
- 1) 2[oder 3]-Nitro-4-Oktyl-1-Methylbenzol. Sm. 19—20° (*B.* 31, 941). — \*II, 65.
- 2) Anhydroacetylacetonamidocampher. Sm. 88° (*A.* 313, 32). — \*III, 361.
- 3) 2-Methoxyphenyläther d. 1-[ $\gamma$ -Oxypropyl]hexahydropyridin. Sd. 170—173°<sub>10</sub>. HCl (D.R.P. 184968 *C.* 1907 [2] 861).
- 4) Benzoat d.  $\beta$ -Äthylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Fl. HCl (D.R.P. 181287 *C.* 1907 [1] 1650).
- 5) Benzoat d.  $\gamma$ -Oxy- $\gamma$ -Dimethylamidomethylpentan. HCl (D.R.P. 169746 *C.* 1906 [1] 1584).
- 6) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylpentan. HCl (*C. r.* 138, 767 *C.* 1904 [1] 1196; D.R.P. 169746 *C.* 1906 [1] 1585).
- 7) Benzoat d.  $\beta$ -Dimethylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Fl. HCl (D.R.P. 181287 *C.* 1907 [1] 1650).
- 8) Phenylamidoformiat d.  $\alpha$ -Oxyoktan. Sm. 69° (74°) (*Bl.* [3] 31, 50 *C.* 1904 [1] 507; *C. r.* 136, 1677 *C.* 1903 [2] 419).
- 9) Phenylamidoformiat d.  $\beta$ -Oxyoktan. Fl. (*Bl.* [3] 31, 51 *C.* 1904 [1] 507).
- 10) Amid d. Alantolsäure. Sm. 194—197° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 9, 156; *A.* 285, 362). — II, 1595.
- 11) Amid d. Isocalantolsäure. Sm. 237—239° (*B.* 34, 779). — \*II, 939.
- 12) Phenylamid d.  $\alpha$ -Oxyoktan- $\alpha$ -Carbonsäure. Sm. 69—70° (*C. r.* 138, 698 *C.* 1904 [1] 1066).
- 13) Verbindung (aus Anhydroacetylacetonamidocampher) (*A.* 313, 33). — \*III, 361.
- 14) Verbindung (aus Caryophyllen). Sm. 162,5—163,5° (164°) (*A.* 356, 7 *C.* 1907 [2] 1792; *A.* 369, 46 *C.* 1909 [2] 1999).
- 15) isom. Verbindung (aus Caryophyllen). Sm. 125—125,5° (*A.* 369, 46 *C.* 1909 [2] 1999).
- 16) isom. Verbindung (aus Caryophyllennitrosit). Sm. 162—163° (*A.* 356, 16 *C.* 1907 [2] 1793; *A.* 369, 43 *C.* 1909 [2] 1999).
- $C_{15}H_{23}O_2N_3$  C 65,0 — H 8,3 — O 11,6 — N 15,1 — M. G. 277.
- 1) 4-Acetylbenzylamid d. Diäthylamidoessigsäure. Sm. 116—117° (*A.* 343, 300 *C.* 1906 [1] 928).
- $C_{15}H_{23}O_2Cl$  1) Laktone d. Chlortetrahydroalantolsäure. Sm. 120° u. Zers. (*A.* 285, 375). — II, 1595.
- $C_{15}H_{23}O_3N$  C 67,9 — H 8,7 — O 18,1 — N 5,3 — M. G. 265.
- 1) Triäthyläther d.  $\beta$ -[3-Oxybenzyliden]amido- $\alpha\alpha$ -Dioxyäthan. Sd. 228,5°<sub>50</sub> (*A.* 286, 7; D.R.P. 85566). — III, 79; \*III, 58.
- 2) Heptylamidomethyl-3,4-Dioxyphenylketon. Sm. 125° (*C.* 1905 [2] 1459).
- 3) Methylhydroxyd d. 6-Keto-2,4-Dimethyl-2-Äthyl-5-Phenyltetrahydro-1,4-Oxazin. Sm. 163° (*Bl.* [4] 3, 1143 *C.* 1909 [1] 192).
- 4) Cantharidinisoamylimid. Sm. 46° (*G.* 21 [1] 464). — III, 623.
- 5) Hydrosantonamid. Sm. 190° u. Zers. (*J.* 1876, 620). — II, 1770.
- 6)  $\alpha$ -Jononoximessigsäure. Sm. 98—99° (*B.* 31, 877). — \*III, 89.
- 7)  $\beta$ -Jononoximessigsäure. Sm. 103° (*B.* 31, 872). — \*III, 89.
- $C_{15}H_{23}O_3N_3$  C 61,4 — H 7,8 — O 16,4 — N 14,3 — M. G. 293.
- 1)  $\alpha\alpha$ -Dibutyl- $\beta$ -[2-Nitrophenyl]harnstoff. Fl. (*Am.* 19, 317).
- $C_{15}H_{23}O_4N$  C 64,0 — H 8,2 — O 22,8 — N 5,0 — M. G. 281.
- 1) Terebyltropein. Sm. 66—67°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ, Pikrat (*See.* 89, 362 *C.* 1906 [1] 1618).
- 2) Diäthylester d. Dihydroparvolidincarbonsäure. Sm. 110° (*A.* 231, 38). — IV, 95.
- 3) Diäthylester d. Säure C<sub>11</sub>H<sub>15</sub>O<sub>4</sub>N (aus  $\beta$ -Methylamido- $\beta$ -Oxybuttersäure-äthylester). Sm. 86° (*B.* 18, 620, 2580). — IV, 95.
- $C_{15}H_{23}O_4N_3$  C 58,3 — H 7,4 — O 20,7 — N 13,6 — M. G. 309.
- 1) Äthylester d. 3-Semicarbazon-4,5-Dimethyl-1-Isopropyl-R-Penten-2-Carbonsäure. Sm. 168—169° (*A.* 348, 116 *C.* 1906 [2] 783).
- 2) Äthylester d. 2-Semicarbazon-4,5-Methylen-1-Methyl-4-Isopropyl-R-Pentamethylen-3-Ketocarbonsäure. Sm. 156—157° (*A.* 348, 116 *C.* 1906 [2] 783).



- $C_{15}H_{23}O_4N_3$  3) Äthylester d. Semicarbazidocamphoformancarbonsäure. Sm. 202° (191°) (*Am.* 23, 227; *Am.* 36, 261 *C.* 1906 [2] 1425). — \*I, 825.
- $C_{15}H_{23}O_5N$  4) 3-Nitro-4-Dimethylamidobenzoat d.  $\beta$ -Diäthylamido- $\alpha$ -Oxyäthan. Fl. HCl (D. R. P. 194365 *C.* 1908 [1] 1004).  
C 60,6 — H 7,7 — O 26,9 — N 4,7 — M. G. 297.
- 1) 4,5-Methylenäther-3-Methyläther- $\alpha\alpha$ -Diäthyläther d.  $\alpha\alpha$ -Dioxy- $\beta$ -[3,4,5-Trioxybenzyl]amidoäthan. Sd. 240°<sub>27</sub>. HCl (*Soc.* 95, 1212 *C.* 1909 [2] 813).
- 2) Oxim d. Isophotosantonsäure. Sm. 151° (*G.* 32 [1] 313 *C.* 1902 [1] 1404).
- 3) Oxim d. Santolsäure. Sm. 202—205° u. Zers. (*G.* 33 [1] 205 *C.* 1903 [2] 45).
- 4) Semicarbazon d. Dimethylester d. Ketonsäure  $C_{13}H_{16}O_5$ . Sm. 168° (*C.* 1896 [2] 1115).  
C 55,4 — H 7,1 — O 24,6 — N 12,9 — M. G. 325.
- $C_{15}H_{23}O_5N_3$  1) Semicarbazon d. Keto- $\beta$ -Santorsäuredimethylester. Sm. 168° (*C.* 1896 [2] 1114). — \*II, 1115.
- $C_{15}H_{23}O_6N$  C 57,5 — H 7,3 — O 30,7 — N 4,5 — M. G. 313.
- 1) Triäthylester d.  $\beta$ -Cyanpentan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 208°<sub>21</sub> (*Soc.* 79, 1348 *C.* 1902 [1] 51).
- 2) Triäthylester d.  $\gamma$ -Cyanpentan- $\alpha\gamma\delta$ -Tricarbonsäure. Sd. 212°<sub>25</sub> (*Soc.* 93, 581 *C.* 1908 [1] 1782).
- 3) Triäthylester d.  $\gamma$ -Cyanpentan- $\alpha\gamma\epsilon$ -Tricarbonsäure. Fl. (*Soc.* 85, 422 *C.* 1904 [1] 1439).
- 4) Triäthylester d.  $\gamma$ -Cyanpentan- $\beta\gamma\delta$ -Tricarbonsäure. Sd. 204—210°<sub>25</sub> (*A. ch.* [6] 27, 280; *B.* 29, 333; *Soc.* 81, 32 *C.* 1902 [1] 409). — I, 1227; \*I, 688.
- 5) Triäthylester d.  $\gamma$ -Cyan- $\beta$ -Methylbutan- $\beta\gamma\delta$ -Tricarbonsäure. Sd. 233—235°<sub>25</sub> (*Bl.* [3] 17, 1037; *C.* 1900 [2] 316; *Soc.* 81, 33 *C.* 1902 [1] 409). — \*I, 688.
- $C_{15}H_{23}O_6N_5$  C 48,8 — H 6,2 — O 26,0 — N 19,0 — M. G. 369.
- 1) Fibroin (*Berz. J.* 17, 380; *H.* 26, 541; 33, 179; 35, 221; *A.* 111, 12; *Z.* 1866, 23; *J.* 1853, 616; 1875, 883; *Bl.* [3] 7, 799; *J. pr.* [2] 44, 345; *B.* 21, 1529). — IV, 1631; \*IV, 1165.
- 2) Hautfibroin (*J.* 1872, 1017; *J. pr.* [2] 44, 345). — IV, 1632.
- $C_{15}H_{23}O_7N_3$  C 50,4 — H 6,4 — O 31,4 — N 11,8 — M. G. 357.
- 1) Acetat d. trim.  $\beta\gamma$ -Diketobutansemicarbazon. Sm. 206° (*B.* 35, 3297 *C.* 1902 [2] 1247).
- 2) Verbindung (aus Caryophyllennitrosit). Sm. 159° u. Zers. (*A.* 356, 18 *C.* 1907 [2] 1793).
- $C_{15}H_{23}O_8N$  C 52,2 — H 6,6 — O 37,1 — N 4,1 — M. G. 345.
- 1) Verbindung (aus  $\delta\epsilon$ -Diimido- $\beta$ -Ketohehexan- $\gamma\zeta\zeta$ -Tricarbonsäuretriäthylester). Sm. 110° (*A.* 332, 144 *C.* 1904 [2] 191).
- $C_{15}H_{23}O_8N_5$  C 44,9 — H 5,7 — O 31,9 — N 17,5 — M. G. 401.
- 1) Pepton (aus Leim) (*H.* 38, 322 *C.* 1903 [2] 213).
- 2) Dimethylester d. Semicarbazonglyoximperoxydihydrotetramethyldimalonsäure. Sm. 170—172° (*Soc.* 83, 1261 *C.* 1903 [2] 1423).
- $C_{15}H_{23}O_9Br$  1) Tetraäthylester d.  $\beta$ -Brompropan- $\alpha\alpha\beta\gamma$ -Tetracarbonsäure. Fl. (*Soc.* 73, 1008).
- 2) Tetraäthylester d.  $\alpha$ -Brompropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure (*J. pr.* [2] 75, 476 *C.* 1907 [2] 450).
- $C_{15}H_{23}NBr_2$  1) *r*-Methylallyloamyl-4-Bromphenylammoniumbromid. Sm. 161 bis 162° (*Soc.* 93, 304 *C.* 1908 [1] 1618).
- $C_{15}H_{23}N_4J$  1) Propyljodid + 2 Molec. Phenylhydrazin. Sm. 122° (*C.* 1899 [2] 378). — \*IV, 423.
- $C_{15}H_{24}ON_2$  C 72,6 — H 9,7 — O 6,4 — N 11,3 — M. G. 248.
- 1)  $\alpha$ -Oximido- $\alpha$ -[4( $\beta$ )-Dimethylamidophenyl]heptan. Sm. 99° (*Bl.* 47, 47). — III, 156.
- 2)  $\alpha$ -Oxy- $\alpha$ -[2-Amidophenyl]- $\beta$ -[5-Äthyl-2-Hexahydropyridyl]äthan. Fl. (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 34, 1900). — \*IV, 577.
- 3) 2-[Dipiperidyl]methylofuran (Furaldipiperidin). Sd. 157—158°<sub>14</sub> (*A.* 271, 14). — IV, 22.

- C<sub>15</sub>H<sub>24</sub>ON<sub>2</sub>** 4) d-Lupanin. Sm. 44°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O), HCl, AuCl<sub>3</sub>, HBr + 2H<sub>2</sub>O, HJ, CHNS + H<sub>2</sub>O (*G.* 23 [1] 149; 25 [1] 352; *A.* 230, 367; *C.* 1896 [1] 709; 1897 [1] 1232, 1233; 1897 [2] 554; 1900 [1] 138; 1903 [1] 930; *G.* 33 [1] 428 *C.* 1903 [2] 839; *Ar.* 242, 415 *C.* 1904 [2] 781; *Ar.* 242, 432 *C.* 1904 [2] 783). — III, 891; \*III, 661, 1897 [1] 1233). — \*III, 662.
- 5) l-Lupanin. Sm. 44°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*C.* 1896 [1] 709; 1897 [1] 1233). — \*III, 662.
- 6) i-Lupanin. Sm. 99°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HJ + 2H<sub>2</sub>O, CHNS + H<sub>2</sub>O (*G.* 23 [1] 145; 25 [1] 365; *C.* 1896 [1] 709; 1897 [1] 1232; 1906 [2] 669). — III, 891; \*III, 662.
- 7) Matrin. Sm. 80° (*C.* 1895 [2] 827).
- 8) Oxysparteïn. Sm. 83–84° (87,5°); Sd. 209°<sub>12,5</sub>. HCl + 4H<sub>2</sub>O, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr + 2½H<sub>2</sub>O, HJ + H<sub>2</sub>O, HNO<sub>3</sub> + H<sub>2</sub>O, Pikrat (*B.* 24, 1095; 25, 3607; 30, 197; *Bl.* [3] 33, 1237 *C.* 1906 [1] 245; *B.* 38, 1779 *C.* 1905 [1] 1652; *B.* 38, 3268 *C.* 1905 [2] 1497). — III, 932.
- 9) Pillijanin. Sm. 64–65°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> + 2½H<sub>2</sub>O (*G.* 22 [1] 149). — III, 924.
- C<sub>15</sub>H<sub>24</sub>ON<sub>4</sub>** C 65,2 — H 8,7 — O 5,8 — N 20,3 — M. G. 276.
- 1) Diisocamylhypoxanthin. HCl (*H.* 18, 444).
- C<sub>15</sub>H<sub>24</sub>O<sub>2</sub>N<sub>2</sub>** C 68,2 — H 9,1 — O 12,1 — N 10,6 — M. G. 264.
- 1) Oxyilupanin + 2H<sub>2</sub>O. Sm. 76–77° (172–174° wasserfrei). HCl + 2H<sub>2</sub>O, 2HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), CHNS + H<sub>2</sub>O (*Ar.* 242, 419 *C.* 1904 [2] 782).
- 2) Base (aus Oxysparteïnhydrochlorid u. H<sub>2</sub>O<sub>2</sub>). HCl + 3½H<sub>2</sub>O, (2HCl + 3½H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr + 4H<sub>2</sub>O (*B.* 26, 3035). — III, 933.
- 3) 4-Amidobenzoat d. α-Diäthylamido-β-Oxy-β-Methylpropan. Fl. HCl (D.R.P. 179627 *C.* 1907 [1] 1364).
- 4) 4-Amidobenzoat d. β-Diisopropylamido-α-Oxyäthan. Sm. 48°. HCl (D.R.P. 179627 *C.* 1907 [1] 1364).
- 5) 2-Dimethylamidobenzoat d. β-Diäthylamido-α-Oxyäthan. Fl. HCl (D.R.P. 172447 *C.* 1906 [2] 473).
- 6) 3-Dimethylamidobenzoat d. β-Diäthylamido-α-Oxyäthan. HCl (D.R.P. 172447 *C.* 1906 [2] 473).
- 7) 4-Äthylamidobenzoat d. β-Diäthylamido-α-Oxyäthan. Fl. HCl (D.R.P. 180291 *C.* 1907 [1] 1365).
- C<sub>15</sub>H<sub>24</sub>O<sub>2</sub>N<sub>4</sub>** C 61,6 — H 8,2 — O 10,9 — N 19,2 — M. G. 292.
- 1) Amid d. 2,4-Di[β-Carboxypopylamido]-l-Methylbenzol. Sm. 200° (*B.* 39, 1002 *C.* 1906 [1] 1342).
- 2) Verbindung (aus Acetonoxim u. 2,4,5-Trimethyldiazobenzol). Sm. 98° (*B.* 39, 878 *C.* 1906 [1] 1242).
- C<sub>15</sub>H<sub>24</sub>O<sub>3</sub>N<sub>2</sub>** C 64,3 — H 8,6 — O 17,1 — N 10,0 — M. G. 280.
- 1) Caryophyllennitrosit. Sm. 113–114° (*C.* 1899 [1] 108; 1899 [2] 943; *A.* 369, 42 *C.* 1909 [2] 1999). — \*III, 402.
- 2) isom. Caryophyllennitrosit. Sm. 146–148° (139–139,5°) (*C.* 1899 [2] 944; *A.* 356, 14 *C.* 1907 [2] 1793). — \*III, 402.
- 3) Caryophyllennitrosit. Sm. 53–54° (*C.* 1899 [2] 944). — \*III, 402.
- 4) Humulennitrosit. α-Derivat Sm. 120–121° (127°); β-Derivat Sm. 166 bis 168° u. Zers. (172°) (*Soc.* 67, 782; *B.* 32, 3184). — III, 538; \*III, 403.
- 5) Zingiberennitrosit. Sm. 97–98° (*C.* 1901 [2] 544, 1007; 1902 [1] 41). — \*III, 404.
- 6) Trioxysparteïn. (2HCl, PtCl<sub>4</sub> + 3½H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (*B.* 25, 3611). — III, 933.
- C<sub>15</sub>H<sub>24</sub>O<sub>5</sub>N<sub>6</sub>** C 53,6 — H 7,1 — O 14,3 — N 25,0 — M. G. 336.
- 1) Bis-2-Keto-4,5,6-Trimethylpyrimidin-harnstoff. Sm. 209–210° u. Zers. (*R.* 27, 181 *C.* 1908 [2] 35).
- 2) Tri[Carbonylpiperazin] (*J. pr.* [2] 53, 21). — \*I, 730.
- C<sub>15</sub>H<sub>24</sub>O<sub>5</sub>S** 1) 4-Oktyl-1-Methylbenzol-2[oder 3]-Sulfonsäure. Ba + H<sub>2</sub>O, Pb + 4H<sub>2</sub>O, Cu + 2½H<sub>2</sub>O (*B.* 31, 940). — \*II, 83.
- 2) 1,3,5-Triisopropylbenzol-2-Sulfonsäure. Na + 6H<sub>2</sub>O, Mg + 7H<sub>2</sub>O, Ba + 6H<sub>2</sub>O (*C. r.* 140, 940 *C.* 1905 [1] 1379; *J. pr.* [2] 72, 63 *C.* 1905 [2] 818).

- $C_{15}H_{24}O_4N_2$  C 60,8 — H 8,1 — O 21,6 — N 9,4 — M. G. 296.
- 1)  $\alpha$ -Caryophyllennitrosat. Sm. 148—149° (152°; 162°) (A. 279, 391; C. 1899 [1] 108; Ar. 241, 38 C. 1903 [1] 712; A. 369, 41 C. 1909 [2] 1999). — III, 538; \*III, 402.
  - 2) Humulennitrosat. Sm. 162—163° u. Zers. (Soc. 67, 781; B. 32, 3184; C. 1899 [1] 108). — III, 538.
  - 3) Zingiberennitrosat. Sm. 86—88° u. Zers. (C. 1901 [2] 1007; 1902 [1] 41). — \*III, 404.
  - 4) Metasantonsäuredioxim. Sm. 115—120° (G. 29 [2] 234).
  - 5) Phenylhydrazon d. Trimethylrhamnose. Sm. 126—128° u. Zers. (Soc. 89, 1203 C. 1906 [2] 1046).
  - 6) Säure (aus Oxysparteïn). Ba (B. 30, 198).
  - 7) Verbindung +  $H_2O$  (aus Sparteïn). Sm. 158° u. Zers. (B. 38, 1779 C. 1905 [1] 1653).
- $C_{15}H_{24}O_4Br_2$  1)  $\beta$ -Dibrom- $\beta\kappa$ -Dimethyl- $\delta$ -[oder  $\eta$ ]-Undeken- $\varepsilon\eta$ -Dicarbonsäure. Sm. 185—186° u. Zers. (A. 282, 361). — \*I, 347.
- $C_{15}H_{24}O_4Br_4$  1)  $\delta\varepsilon\eta\theta$ -Tetrabrom- $\beta\kappa$ -Dimethylundekan- $\varepsilon\eta$ -Dicarbonsäure. Sm. 172° (A. 282, 361). — \*I, 315.
- $C_{15}H_{24}O_4S$  1) 3-Oxy-4-Isopropyl-1-Methylbenzolisocamyläther-6-Sulfonsäure. K, Ba +  $3H_2O$ , Pb (Z. 1869, 49). — II, 847.
- 2) 3-Oxy-4-Isopropyl-1-Methylbenzolisocamyläther- $\beta$ -Sulfonsäure (Z. 1869, 49). — II, 848.
- $C_{15}H_{24}O_4S_2$  1) 2,4-Di[Butylsulfon]-1-Methylbenzol. Fl. (J. pr. [2] 68, 336 C. 1903 [2] 1172).
- $C_{15}H_{24}O_5N_2$  C 57,7 — H 7,7 — O 25,6 — N 9,0 — M. G. 312.
- 1) Santoninsäure. Zers. bei 140° (C. 1908 [1] 1461).
  - 2) Äthylester d. 6-Keto-2,4-Dioxy-5-Cyan-2-Methyl-5-Propylhexahydropyridin-4-Äthyläther-3-Carbonsäure. Sm. 260° (G. 33 [2] 165 C. 1903 [2] 1283).
  - 3) Diäthylester d. Isopilocarpoësäure. Fl. HCl, (2HCl, PtCl<sub>4</sub>) (B. 38, 1521 C. 1905 [1] 1567).
  - 4)  $\alpha$ -Verbindung (aus Cyklogallipharsäure). Sm. 63,5° (Ar. 242, 266 C. 1904 [1] 1654).
  - 5)  $\beta$ -Verbindung (aus Cyklogallipharsäure). Sm. 59,5° (Ar. 242, 267 C. 1904 [1] 1654).
- $C_{15}H_{24}O_6N_2$  C 54,9 — H 7,3 — O 29,3 — N 8,5 — M. G. 328.
- 1) 5-Äthylester d. 2-Äthylamido-2,6-Dioxy-1-Äthyl-1,2-Dihydropyridin-6-Äthyläther-3,5-Dicarbonsäure. Äthylaminsalz (A. 285, 67).
- $C_{15}H_{24}O_6N_4$  C 50,6 — H 6,7 — O 26,9 — N 15,7 — M. G. 356.
- 1) Diäthylester d.  $\beta\beta'$ -Malonyldi[Hydrazonbuttersäure]. Sm. 96—96,5° (B. 41, 643 C. 1908 [1] 1262).
  - 2) Verbindung (aus Caryophyllennitrosit). Sm. 159° (A. 369, 45 C. 1909 [2] 1999).
- $C_{15}H_{24}O_6S_8$  1) Trimethyltriallyltrimethylentrisulfon. Sm. 267° (B. 27, 1675). — \*I, 515.
- $C_{15}H_{24}O_8N_2$  C 50,0 — H 6,7 — O 35,6 — N 7,7 — M. G. 360.
- 1) Phenylhydrazon d. Glykononose. Sm. 195—200° u. Zers. (A. 270, 105). — IV, 793.
  - 2) Phenylhydrazon d. d-Mannononose. Sm. bei 223° u. Zers. (B. 23, 2237). — IV, 794.
  - 3) Phenylhydrazid d. Rhamnooktonsäure. Sm. 220° u. Zers. (B. 23, 3110). — IV, 732.
- $C_{15}H_{24}O_9N_2$  C 47,9 — H 6,4 — O 38,3 — N 7,4 — M. G. 376.
- 1) Phenylhydrazid d. Glykonononsäure. Sm. 234° u. Zers. (A. 270, 104). — IV, 732.
- $C_{15}H_{24}O_9N_4$  C 44,6 — H 5,9 — O 35,6 — N 13,9 — M. G. 404.
- 1) Phenylhydrazid d. d-Mannonononsäure. Sm. 254° u. Zers. (B. 22, 2236). — IV, 732.
- $C_{15}H_{24}O_{12}N_6$  C 37,5 — H 5,0 — O 40,0 — N 17,5 — M. G. 480.
- 1) Cyanursäures Oxamäthan. Sm. 155—160° (Bl. 21, 154). — I, 1362.
- $C_{15}H_{24}O_{15}N_8$  1) Karakin. Sm. 100° (C. 1903 [2] 379).
- $C_{15}H_{24}O_{19}N_{12}$  C 26,6 — H 3,6 — O 45,0 — N 24,8 — M. G. 676.
- 1) Verbindung (aus Guanidin u. Glyoxylsäure). Sm. 207° (B. 35, 3605 C. 1902 [2] 1412).



- C<sub>15</sub>H<sub>24</sub>NCI** 1) Triäthyl- $\gamma$ -Phenylallylammoniumchlorid. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*Ar.* 247, 343 *C.* 1909 [2] 1439; *Ar.* 247, 370 *C.* 1909 [2] 1441).
- C<sub>15</sub>H<sub>24</sub>NBr** 1) Bromäthylat d. d-2-Methyl-1-Benzylhexahydropyridin. Sm. 237° (*B.* 41, 2008 *C.* 1908 [2] 329).  
2) Bromäthylat d. i-2-Methyl-1-Benzylhexahydropyridin. Sm. 204° (*B.* 41, 2008 *C.* 1908 [2] 329).
- C<sub>15</sub>H<sub>24</sub>NJ** 1)  $\alpha$ -Methylallyl-1-Amylphenylammoniumjodid. Sm. 156—157° (*C.* 1904 [2] 952; 1905 [1] 675; *Soc.* 87, 140 *C.* 1905 [1] 1009).  
2)  $\beta$ -Methylallyl-1-Amylphenylammoniumjodid (*Soc.* 87, 140 *C.* 1905 [1] 1009).  
3) isom. Methylallyl-1-Amylphenylammoniumjodid (*C.* 1905 [1] 675).  
4) i-Methylallylisoamylphenylammoniumjodid. Sm. 135° (*C.* 1906 [1] 1152; *Soc.* 89, 303 *C.* 1906 [1] 1543).  
5) Jodmethylat d.  $\alpha$ -[4-Dimethylamidophenyl]- $\delta$ -Methyl- $\alpha$ -Penten. Sm. 180° (*B.* 40, 4365 *C.* 1908 [1] 34).  
6) Jodmethylat d. 1-Methyl- $\beta$ -Diäthyl-1,2,3,4-Tetrahydrochinolin. Sm. 192° u. Zers. (*B.* 29, 2481). — IV, 210.  
7) Jodäthylat d. 1-2-Methyl-1-Benzylhexahydropyridin. Sm. 230° (*B.* 41, 2007 *C.* 1908 [2] 329).  
8) Jodäthylat d. 1-3-Methyl-1-Benzylhexahydropyridin. Sm. 174° (*B.* 41, 2009 *C.* 1908 [2] 329).
- C<sub>15</sub>H<sub>24</sub>N<sub>2</sub>S** 1) s-Phenylloktylthioharnstoff. Sm. 52—53° (*B.* 8, 805). — II, 392.
- C<sub>15</sub>H<sub>25</sub>ON** 1) C 76,6 — H 10,6 — O 6,8 — N 6,0 — M. G. 235.  
2) 3-Oxy- $\beta$ -Diäthylamidomethyl-1-Methyl-4-Isopropylbenzol. Sm. 86° (*C.* 1906 [1] 255).  
3) 1-Methylallylisoamylphenylammoniumhydroxyd. d-Camphersulfonat (*C.* 1906 [1] 1152; *Soc.* 89, 303 *C.* 1906 [1] 1543).  
4) 4-Önanthylidenamido-1,3-Dimethylbenzol. Fl. (*B.* 16, 287). — II, 545.
- C<sub>15</sub>H<sub>25</sub>ON<sub>3</sub>** C 68,4 — H 9,5 — O 6,1 — N 16,0 — M. G. 263.  
1) Semicarbazon d.  $\alpha$ -Methyljonon. Sm. 144° (D.R.P. 150827 *C.* 1904 [1] 1379).  
2) Semicarbazon d. isom.  $\alpha$ -Methyljonon. Sm. 202° (D.R.P. 150827 *C.* 1904 [1] 1379).  
3) Semicarbazon d.  $\beta$ -Methyljonon. Sm. 138—139° (D.R.P. 150827 *C.* 1904 [1] 1379).  
4) Semicarbazon d. isom.  $\beta$ -Methyljonon. Sm. 175—176° (D.R.P. 150827 *C.* 1904 [1] 1379).
- C<sub>15</sub>H<sub>25</sub>O<sub>2</sub>N** C 71,7 — H 10,0 — O 12,7 — N 5,6 — M. G. 251.  
1) Äthylhydroxyd d. 8-Oxy-1-Äthyl-1,2,3,4-Tetrahydrochinolin-8-Äthyläther. Jodid (*B.* 19, 1045). — IV, 200.  
2)  $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -[4-Dimethylamidophenyl]- $\alpha$ -Phenylbutan. Sm. 157—158° (*C. r.* 145, 1291 *C.* 1908 [1] 643).  
3) Äthylester d. 6-[1-Piperidyl]-2-Methyl-1,2,3,4-Tetrahydrobenzol-5-Carbonsäure. Sm. 123° (*J. pr.* [2] 79, 118 *C.* 1909 [1] 855).  
4) Amid d. Dihydroisocalantolsäure. Sm. 176° (*B.* 34, 780). — \*II, 940.  
5) Amid d. Dihydroalantolsäure. Zers. bei 186° (*A.* 285, 375). — II, 1595.  
6) Diäthylamid d. Camphocarbonsäure. Sm. 60—61° (*A.* 361, 161 *C.* 1908 [2] 399).  
7) Verbindung (aus  $\alpha$ -Caryophyllennitrosochlorid). Sm. 116° (*A.* 356, 11 *C.* 1907 [2] 1792; *A.* 369, 47 *C.* 1909 [2] 1999).
- C<sub>15</sub>H<sub>25</sub>O<sub>2</sub>N<sub>8</sub>** C 64,5 — H 9,0 — O 11,5 — N 15,0 — M. G. 279.  
1) 3-Amido-4-Dimethylamidobenzoat d.  $\beta$ -Diäthylamido- $\alpha$ -Oxyäthan. Fl. HCl (D.R.P. 194365 *C.* 1908 [1] 1004).
- C<sub>15</sub>H<sub>25</sub>O<sub>2</sub>Br** 1) Borneolester d.  $\alpha$ -Bromisovaleriansäure. Sd. 175—178° u. Zers. (163°<sub>10</sub>) (*C.* 1908 [2] 1027; D.R.P. 205263 *C.* 1909 [1] 414; D.R.P. 205264 *C.* 1909 [1] 415).  
2) Isoborneolester d.  $\alpha$ -Bromisovaleriansäure. Sd. 160°<sub>8</sub> (D.R.P. 205263 *C.* 1909 [1] 414; D.R.P. 205264 *C.* 1909 [1] 415).
- C<sub>15</sub>H<sub>25</sub>O<sub>2</sub>B** 1) Diisobutylester d. Benzylborsäure. Sd. 189—196°<sub>88</sub> (*B.* 42, 3094 *C.* 1909 [2] 1210).  
2) Diisobutylester d. 3-Methylphenylborsäure. Sd. 195—207°<sub>88</sub> (*B.* 42, 3093 *C.* 1909 [2] 1210).

- C<sub>15</sub>H<sub>25</sub>O<sub>8</sub>N** C 67,4 — H 9,4 — O 18,0 — N 5,2 — M. G. 267.  
 1) Oxim d. Cedrenketosäure. Sm. 60° (B. 40, 3524 C. 1907 [2] 1694).  
 2) Nitrat d. Caryophyllenhydrat. Sm. 96° (A. 271, 291). — III, 513.  
 3) l-Menthylester d. α-Cyan-β-Oxybuttersäure + ½ H<sub>2</sub>O. Sm. 73° (B. 33, 734). — \*III, 335.
- C<sub>15</sub>H<sub>25</sub>O<sub>4</sub>N** C 63,6 — H 8,8 — O 22,6 — N 4,9 — M. G. 283.  
 1) Methylpellootinmethylammoniumhydroxyd. Sm. 185°. Salze, siehe diese (B. 29, 219). — III, 778.  
 2) Diäthylester d. δ-Cyanoktan-δε-Dicarbonsäure. Sd. 176—178°<sub>19–21</sub> (Soc. 77, 659).  
 3) Diäthylester d. γ-Cyan-β-Methylheptan-γδ-Dicarbonsäure. Sd. 175 bis 177°<sub>19–21</sub> (Soc. 77, 659).  
 4) Diäthylester d. δ-Cyan-β-Methylheptan-δζ-Dicarbonsäure. Sd. 196°<sub>25</sub> (C. 1900 [2] 369).  
 5) Diäthylester d. ε-Cyan-β-Methylheptan-εζ-Dicarbonsäure. Sd. 182°<sub>30</sub> (C. 1899 [2] 254). — \*I, 687.  
 6) Diäthylester d. ζ-Cyan-β-Methylheptan-εζ-Dicarbonsäure. Sd. 185°<sub>30</sub> (C. 1899 [2] 254). — \*I, 687.  
 7) Diäthylester d. γ-Cyan-βε-Dimethylhexan-βγ-Dicarbonsäure. Sd. 180°<sub>20</sub> (C. 1900 [2] 369).  
 8) Diäthylester d. γ-Cyan-βε-Dimethylhexan-γδ-Dicarbonsäure. Sd. 173—175°<sub>19–21</sub> (Soc. 77, 659).  
 9) Isovalerianat d. d-Ecgoninmethylester. Fl. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (B. 24, 10; D.R.P. 47713). — III, 866; \*III, 644.  
 10) Isovalerianat d. l-Ecgoninmethylester. Fl. (2HCl, PtCl<sub>4</sub>) (B. 21, 3337). — III, 864.  
 11) Monopiperidid d. Cineolsäure. Sm. 151—152°. Ag (A. 271, 21). — IV, 15.
- C<sub>15</sub>H<sub>25</sub>O<sub>4</sub>Cl** 1) Verbindung (aus d. Verb. C<sub>15</sub>H<sub>24</sub>O) (C. 1904 [2] 1227).
- C<sub>15</sub>H<sub>25</sub>O<sub>4</sub>P** 1) Diäthylester d. Oxymethylenecampherphosphinsäure. Sd. 195—205°<sub>20</sub> (B. 34, 1299). — \*IV, 1185.
- C<sub>15</sub>H<sub>25</sub>O<sub>5</sub>N** C 60,2 — H 8,3 — O 26,7 — N 4,7 — M. G. 299.  
 1) Diäthylester d. β-Methylamido-ζ-Keto-δ-Methyl-β-Hepten-γε-Dicarbonsäure. Sm. 103—104° (B. 32, 420). — \*I, 670.
- C<sub>15</sub>H<sub>25</sub>O<sub>5</sub>N<sub>3</sub>** C 55,0 — H 7,6 — O 24,5 — N 12,8 — M. G. 327.  
 1) Diäthylester d. 3-Semicarbazon-l-Methylhexahydrobenzol-4-Carbonsäure-4-Methylcarbonsäure. Sm. 126—127° (A. 350, 243 C. 1907 [1] 252).
- C<sub>15</sub>H<sub>25</sub>O<sub>5</sub>N<sub>5</sub>** C 50,7 — H 7,0 — O 22,5 — N 19,7 — M. G. 355.  
 1) Amid d. Oxypentinsäure. Sm. 203—204° (A. ch. [5] 20, 487).
- C<sub>15</sub>H<sub>25</sub>O<sub>8</sub>N<sub>5</sub>** C 44,6 — H 6,2 — O 31,8 — N 17,4 — M. G. 403.  
 1) Sericin (Seidenleim) (Berz. J. 17, 380; H. 35, 221; Z. 1866, 24; J. 1869, 1146). — IV, 1632; \*IV, 1165.
- C<sub>15</sub>H<sub>25</sub>N<sub>2</sub>Cl** 1) Verbindung (aus 2,4-Dinitrophenylpyridiniumchlorid u. Piperidin). + HgCl<sub>2</sub> (A. 341, 378 C. 1905 [2] 1436).
- C<sub>15</sub>H<sub>25</sub>N<sub>6</sub>S** 1) α-sec. Oktylamido-β-Phenylthioharnstoff. Sm. 116° (C. 1900 [1] 653; J. pr. [2] 64, 119). — \*II, 201.
- C<sub>15</sub>H<sub>26</sub>ON<sub>2</sub>** C 72,0 — H 10,4 — O 6,4 — N 11,2 — M. G. 250.  
 1) α-Dipentennitrolpiperidin. Sm. 154° (A. 245, 269; 252, 125). — IV, 23.  
 2) β-Dipentennitrolpiperidin. Sm. 152° (A. 252, 125). — IV, 23.  
 3) α-Limonennitrolpiperidin. Sm. 93—94° (A. 252, 115). — IV, 23.  
 4) β-Limonennitrolpiperidin. Sm. 110—111° (A. 252, 116). — IV, 23.  
 5) Origanennitrolpiperidin. Sm. 198° (Soc. 93, 869 C. 1908 [2] 249).  
 6) l-Pinennitrolpiperidin. Sm. 118—119°. HCl (A. 245, 253; C. 1908 [2] 1866). — IV, 23.  
 7) Terpinennitrolpiperidin. Sm. 153—154° (A. 241, 320). — IV, 23.  
 8) Terpenitrolpiperidin (aus Cascarillöl). Sm. 112° (C. 1900 [2] 575). — \*III, 409.  
 9) Retamin. Sm. 162°. HBr, 2HBr, 2HJ, H<sub>2</sub>SO<sub>4</sub> + 2(5)H<sub>2</sub>O (C. 1897 [2] 593; Bl. [3] 17, 958). — \*III, 690.  
 10) Base (aus Spartein). Fl. (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>), HJ (B. 26, 3036). — III, 933.  
 11) isom. Base (aus Spartein). Harz. (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>) (B. 26, 3037). — III, 933.

- C<sub>15</sub>H<sub>26</sub>ON<sub>2</sub>** 12) Isoamylamid d. 1-Isoamylpyrrol-2-Carbonsäure. Sm. 77° (B. 10, 1866). — IV, 80.  
C 67,7 — H 9,8 — O 12,0 — N 10,5 — M. G. 266.
- C<sub>15</sub>H<sub>26</sub>O<sub>2</sub>N<sub>2</sub>** 1) Dioxysparteïn (Sparteïnoxid). Sm. 128—129° u. Zers. (127—128°). (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ, Pikrat (B. 20, 2220; 25, 3610; B. 37, 3240 C. 1904 [2] 1154; Bl. [3] 33, 1236 C. 1906 [1] 245). — III, 933.
- 2) Pinolnitrolpiperidin. Sm. 154°. HCl (A. 253, 263). — IV, 23.  
C 61,2 — H 8,8 — O 10,9 — N 19,0 — M. G. 294.
- C<sub>15</sub>H<sub>26</sub>O<sub>3</sub>N<sub>4</sub>** 1) βξ-Di[Hydroxylamido]-δ-Phenylhydrazon-βξ-Dimethylheptan. Sm. 152° (B. 36, 657 C. 1903 [1] 762). — \*IV, 501.
- C<sub>15</sub>H<sub>26</sub>O<sub>2</sub>N<sub>6</sub>** C 55,9 — H 8,1 — O 9,9 — N 26,1 — M. G. 322.
- C<sub>15</sub>H<sub>26</sub>O<sub>3</sub>N<sub>2</sub>** 1) Disemicarbazon d. Acetonylisocampher. Sm. 215° (B. 34, 3060).  
C 63,8 — H 9,2 — O 17,0 — N 9,9 — M. G. 282.
- 1) Amidoderivat + H<sub>2</sub>O (aus d. Verb. C<sub>15</sub>H<sub>24</sub>O<sub>3</sub>N<sub>2</sub>). Sm. 47° (Ar. 242, 270 C. 1904 [1] 1654).
- C<sub>15</sub>H<sub>26</sub>O<sub>4</sub>N<sub>2</sub>** C 60,4 — H 8,7 — O 21,5 — N 9,4 — M. G. 298.
- 1) Diäthylester d. αγ-Propylendi[β-Amidopropen-α-Carbonsäure]. Fl. (B. 21, 2362). — I, 1348.
- C<sub>15</sub>H<sub>26</sub>O<sub>4</sub>Br<sub>2</sub>** 1) 2-Dibrom-βκ-Dimethylundekan-εη-Dicarbonsäure. Sm. 174° (A. 282, 362). — \*I, 315.
- C<sub>15</sub>H<sub>26</sub>O<sub>4</sub>S** 1) Sulfonsäure (aus Kohlengasen). NH<sub>4</sub> + 2H<sub>2</sub>O, Na + 6H<sub>2</sub>O, Ca + 2½H<sub>2</sub>O, Fe + 7H<sub>2</sub>O, Cu + 6H<sub>2</sub>O (J. pr. [2] 56, 262). — \*I, 138.
- C<sub>15</sub>H<sub>26</sub>O<sub>5</sub>N<sub>2</sub>** C 57,3 — H 8,3 — O 25,5 — N 8,9 — M. G. 314.
- 1) l-α-[1-β-Menthylureido]äthan-αβ-Dicarbonsäure. Sm. 182° (C. 1908 [2] 2007).
- 2) i-α-[1-β-Menthylureido]äthan-αβ-Dicarbonsäure. Sm. 170—171° (C. 1908 [2] 2007).  
C 54,5 — H 7,9 — O 29,1 — N 8,5 — M. G. 330.
- C<sub>15</sub>H<sub>26</sub>O<sub>6</sub>N<sub>2</sub>** 1) Diäthylester d. Dipropylmalonyldi[Amidoameisensäure] (D. R. P. 179946 C. 1907 [1] 433).
- 2) sec. Methylenamid d. Pentan-γγ-Dicarbonsäure. Sm. 189—190° (A. 343, 310 C. 1906 [1] 929).
- C<sub>15</sub>H<sub>26</sub>O<sub>6</sub>N<sub>6</sub>** C 46,6 — H 6,7 — O 24,9 — N 21,8 — M. G. 386.
- 1) Disemicarbazon d. α-Ketononan-α-Carbonsäure-γ-Methylketocarbonsäure + 2H<sub>2</sub>O (Bl. [4] 1, 93 C. 1907 [1] 1184).
- 2) Di[β-Semicarbazonpropylester] d. Pentan-αδ-Dicarbonsäure. Sm. 157—160° u. Zers. (C. r. 146, 139 C. 1908 [1] 1169).  
C 45,7 — H 6,6 — O 40,6 — N 7,1 — M. G. 394.
- C<sub>15</sub>H<sub>26</sub>O<sub>10</sub>N<sub>2</sub>** 1) Chitin (A. 54, 298; 98, 99, 115; H. 2, 214; 5, 384; Berx. J. 4, 247; J. 1858, 482; Bl. [3] 4, 231; B. 28, 821; J. pr. [2] 44, 345; M. 23, 123 C. 1902 [1] 1092; C. 1909 [1] 1945; Ar. 247, 282 C. 1909 [2] 1135). — III, 576; \*III, 434.
- C<sub>15</sub>H<sub>26</sub>NJ** 1) Trimethyl-2-Hexylphenylammoniumjodid + H<sub>2</sub>O. Sm. 154—155° u. Zers. (A. 242, 344). — II, 565.
- C<sub>15</sub>H<sub>27</sub>ON** C 75,9 — H 11,4 — O 6,7 — N 5,9 — M. G. 237.
- 1) ε-Oximido-δξ-Dimethyl-γγ-Diäthyl-γξ-Nonadiën? Sm. 52° (M. 28, 743 C. 1907 [2] 1155).
- 2) Methyloxyäthylcamphandihydropyrrol. Sm. 130—131°. Pikrat (A. 313, 45). — \*IV, 74.
- 3) isom. Methyloxyäthylcamphandihydropyrrol. Sm. 222°. Pikrat (A. 313, 45). — \*IV, 74.
- C<sub>15</sub>H<sub>27</sub>OC1** 1) Chlorid d. Cimicinsäure (A. 114, 154). — I, 524.
- C<sub>15</sub>H<sub>27</sub>O<sub>2</sub>N** C 71,2 — H 10,7 — O 12,6 — N 5,5 — M. G. 253.
- 1) Methylcarpän. Sm. 71°. (2HCl, PtCl<sub>4</sub>) (C. 1897 [1] 985; 1897 [2] 554). — \*III, 623.
- C<sub>15</sub>H<sub>27</sub>O<sub>2</sub>N<sub>3</sub>** C 64,0 — H 9,6 — O 11,4 — N 14,9 — M. G. 281.
- 1) β-[1-Piperidyl]methyläther d. γ-Oximido-β-Oxy-δ-[1-Piperidyl]-α-Buten? Sm. 165° (B. 38, 2043 C. 1905 [2] 302).
- C<sub>15</sub>H<sub>27</sub>O<sub>2</sub>Cl** 1) Calameonhydrochlorid. Sm. 119° (B. 35, 3199 C. 1902 [2] 1256).
- C<sub>15</sub>H<sub>27</sub>O<sub>2</sub>Br** 1) Menthylester d. α-Bromisovaleriansäure. Sd. 205—208°<sub>760</sub> (D. R. P. 208789 C. 1909 [1] 1521).
- C<sub>15</sub>H<sub>27</sub>O<sub>3</sub>N<sub>3</sub>** C 60,6 — H 9,1 — O 16,2 — N 14,1 — M. G. 297.
- 1) polym. γ-Oximido-β-Methyl-α-Buten. Sm. 111° (A. 262, 340). — I, 1032.



- C<sub>15</sub>H<sub>27</sub>O<sub>3</sub>N<sub>3</sub>** 2) **l-Menthylester d.  $\beta$ -Semicarbazidocrotonsäure.** Sm. 143—144° (C. 1902 [2] 208; Soc. 81, 1504 C. 1903 [1] 138). — \*III, 334.
- C<sub>15</sub>H<sub>27</sub>O<sub>6</sub>N** C 56,8 — H 8,5 — O 30,3 — N 4,4 — M. G. 317.
- 1) **Äthyl-diisoamylester d. Stickstofftricarbonsäure.** Sd. 184—186°<sub>13</sub> (B. 37, 3676 C. 1904 [2] 1495).
- C<sub>15</sub>H<sub>27</sub>O<sub>6</sub>N<sub>3</sub>** C 52,2 — H 7,8 — O 27,8 — N 12,2 — M. G. 345.
- 1) **Santoninhydroxylammoniumhydroxylaminoxim.** Zers. bei 230° (C. 1908 [1] 957).
- 2) **Carboxäthyl diglycylleucinester.** Sm. 109,5° (B. 35, 1100 C. 1902 [1] 910).
- C<sub>15</sub>H<sub>27</sub>O<sub>6</sub>B** 1) **Gem. Anhydrid d. Isovaleriansäure u. Borsäure.** Fl. (B. 36, 2223 C. 1903 [2] 421).
- C<sub>15</sub>H<sub>28</sub>ON<sub>2</sub>** C 71,4 — H 11,1 — O 6,3 — N 11,1 — M. G. 252.
- 1) **Terpinennitrolisoamylamin.** Sm. 118—119°. HCl (A. 241, 320; J. 1888, 683). — III, 532.
- 2) **Isoamylpinennitrolamin.** Sm. 105—106° (A. 268, 217). — IV, 57.
- 3) **Nitrolpiperidid d. l-l-Methyl-3-Propylidenhexahydrobenzol.** Sm. 96° (A. 360, 61 C. 1908 [1] 2162).
- 4) **Fenchelamid d. Hexahydropyridin-1-Carbonsäure.** Sm. 96° (A. 369, 81 C. 1909 [2] 2002).
- C<sub>15</sub>H<sub>28</sub>O<sub>2</sub>N<sub>2</sub>** C 67,2 — H 10,4 — O 11,9 — N 10,4 — M. G. 268.
- 1) **d-Terpineolnitrolpiperidid.** Sm. 154—155° (J. pr. [2] 62, 531). — \*IV, 19.
- 2) **l-Terpineolnitrolpiperidid.** Sm. 150° (A. 360, 90 C. 1908 [1] 2164).
- 3) **i-Terpineolnitrolpiperidid.** Sm. 159—160° (A. 277, 121). — IV, 23.
- C<sub>15</sub>H<sub>28</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) **Laurat d.  $\beta\gamma$ -Dichlor- $\alpha$ -Oxypropan.** Fl. (B. 42, 3754 C. 1909 [2] 1794).
- C<sub>15</sub>H<sub>28</sub>O<sub>3</sub>S** 1) **l-Menthylester d. Dimethylthetinhydroxyd.** Fl. Chlorid, Bromid (Soc. 87, 455 C. 1905 [1] 1217, 1587).
- C<sub>15</sub>H<sub>28</sub>O<sub>5</sub>N<sub>2</sub>** C 57,0 — H 8,8 — O 25,3 — N 8,8 — M. G. 316.
- 1)  **$\alpha$ -[ $\alpha$ -Carbäthoxylamidoisocapronyl]amidoisocapronsäure.** Sm. 149 bis 150° (corr.) (B. 39, 2920 C. 1906 [2] 1400).
- C<sub>15</sub>H<sub>28</sub>N<sub>2</sub>S** 1)  **$\alpha$ -Methyl- $\alpha$ -Hexyl- $\beta$ -3-Methylhexahydrophenyl]thioharnstoff.** Sm. 119° (B. 35, 831 C. 1902 [1] 713).
- C<sub>15</sub>H<sub>29</sub>ON** C 75,3 — H 12,1 — O 6,7 — N 5,9 — M. G. 239.
- 1) **Nitril d.  $\alpha$ -Oxytetradekan- $\alpha$ -Carbonsäure.** Sm. 50,5° (Soc. 87, 1901 C. 1906 [1] 653).
- C<sub>15</sub>H<sub>29</sub>OBr** 1) **Menthyläther d.  $\epsilon$ -Brom- $\alpha$ -Oxypentan.** Sd. 158—160° (D.R.P. 184968 C. 1907 [2] 862).
- C<sub>15</sub>H<sub>29</sub>O<sub>2</sub>N** C 70,6 — H 11,4 — O 12,6 — N 5,4 — M. G. 255.
- 1) **Äthylester d.  $\beta$ -Diäthylamido- $\alpha$ -Okten- $\alpha$ -Carbonsäure.** Sd. 185 bis 195°<sub>24</sub> (C. r. 143, 597 C. 1907 [1] 25; Bl. [3] 35, 1194 C. 1907 [1] 562).
- 2) **Butylester d. l-Menthylamidoameisensäure.** Sm. 37° (Soc. 89, 95 C. 1906 [1] 1019).
- 3) **Isobutylester d. l-Menthylamidoameisensäure.** Sm. 38—40° (Soc. 89, 96 C. 1906 [1] 1019).
- 4) **l-Menthylamidoformiat d.  $\beta$ -Oxy- $\beta$ -Methylpropan.** Sm. 112° (C. 1908 [2] 2007).
- C<sub>15</sub>H<sub>29</sub>O<sub>2</sub>Cl** 1) **Verbindung (aus Convolvulinolsäure).** Fl. (C. 1897 [1] 419).
- C<sub>15</sub>H<sub>29</sub>O<sub>2</sub>Br** 1)  **$\alpha$ -Bromtetradekan- $\alpha$ -Carbonsäure.** Sm. 42,5° (Soc. 87, 1899 C. 1906 [1] 653).
- 2)  **$\beta$ -Bromtetradekan- $\beta$ -Carbonsäure.** Sm. 65° (B. 29, 1815). — \*I, 178.
- 3) **Verbindung (aus Convolvulinolsäure).** Fl. (C. 1897 [1] 419).
- C<sub>15</sub>H<sub>29</sub>O<sub>2</sub>J** 1)  **$\beta$ -Jodtetradekan- $\beta$ -Carbonsäure.** Sm. 78—79° (B. 29, 1815). — \*I, 180.
- C<sub>15</sub>H<sub>29</sub>O<sub>3</sub>N** C 66,4 — H 10,7 — O 17,7 — N 5,2 — M. G. 271.
- 1)  **$\alpha$ -Laurylamidopropionsäure (Laurylalanin).** Sm. 103—104°. Na (C. 1909 [2] 269).
- 2) **Isovalerat d.  $\alpha$ -Isovaleryl- $\beta$ -Oxy- $\beta$ -Methylbutan.** Sm. 50°; Sd. 190°<sub>32</sub> (D.R.P. 189481 C. 1907 [2] 2004; D.R.P. 194051 C. 1908 [1] 1222).
- C<sub>15</sub>H<sub>29</sub>O<sub>3</sub>N<sub>3</sub>** C 60,2 — H 9,7 — O 16,0 — N 14,0 — M. G. 299.
- 1)  **$\beta$ -Nitro- $\beta$ -[ $\beta$ -Oxyäthyl]- $\alpha\gamma$ -Di[l-Hexahydropyridyl]propan.** Sm. 70 bis 71° (C. 1897 [2] 337). — \*IV, 15.
- C<sub>15</sub>H<sub>29</sub>O<sub>3</sub>Cl** 1)  **$\alpha$ -Laurat d.  $\gamma$ -Chlor- $\alpha\beta$ -Dioxypropan.** Fl. (B. 42, 3753 C. 1909 [2] 1794).

- $C_{15}H_{30}ON_2$  C 70,9 — H 11,8 — O 6,3 — N 11,0 — M. G. 254.  
 1)  $\beta$ -Oxy- $\alpha$ -Piperidyl- $\beta$ -Piperidylmethylbutan. Sd.  $174^\circ_{16}$  (D.R.P. 173 610 C. 1906 [2] 932).  
 2) Diäthylamid d. l-Menthylamidoameisensäure. Sm.  $142^\circ$  (Soc. 91, 305 C. 1907 [1] 1331).  
 3) Butylamid d. l-Menthylamidoameisensäure. Sm.  $61^\circ$  (Soc. 91, 304 C. 1907 [1] 1331).  
 4) Isobutylamid d. l-Menthylamidoameisensäure. Sm.  $80^\circ$  (Soc. 91, 304 C. 1907 [1] 1331).  
 5) tert. Butylamid d. l-Menthylamidoameisensäure. Sm.  $223^\circ$  (Soc. 91, 304 C. 1907 [1] 1331).
- $C_{15}H_{30}OS_2$  1) Diamyläther d.  $\beta\beta$ -Dimerkapto- $\gamma$ -Ketopentan. Fl. (B. 35, 500 C. 1902 [1] 637).
- $C_{15}H_{30}O_2N_6$  C 55,2 — H 9,2 — O 9,8 — N 25,8 — M. G. 326.  
 1) Semicarbazidsemicarbazon d. Citronellidenaceton. Sm.  $167^\circ$  (B. 36, 2802 C. 1903 [2] 878; B. 36, 4378 C. 1904 [1] 454).
- $C_{15}H_{30}O_2S_2$  1)  $\gamma\gamma$ -Dimerkaptovaleriandiisocamyläthersäure. Fl. Ba (B. 34, 2655).  
 $C_{15}H_{30}O_5S_2$  1)  $\delta\delta$ -Diamylsulfon- $\beta$ -Ketopentan. Fl. (B. 35, 501 C. 1902 [1] 637).  
 2)  $\beta\beta$ -Diamylsulfon- $\gamma$ -Ketopentan. Fl. (B. 35, 500 C. 1902 [1] 637).
- $C_{15}H_{30}O_6S_2$  1)  $\gamma\gamma$ -Di[Isocamylsulfon]valeriansäure. Sm.  $98-100^\circ$ . Ba (B. 34, 2651).
- $C_{15}H_{30}O_6S_3$  1) Hexaäthyltrimethylentrisulfon. Sm.  $208^\circ$  (B. 25, 243). — I, 998.  
 $C_{15}H_{30}O_7N_4$  C 47,6 — H 7,9 — O 29,6 — N 14,8 — M. G. 378.  
 1) Sericinsäure. Ba, Pb (J. 1871, 857). — II, 2113.
- $C_{15}H_{30}NJ$  1) Dimethylpropylbornylammoniumjodid. Sm.  $204-205^\circ$  (Soc. 75, 949). — \*IV, 59.
- $C_{15}H_{30}N_2Cl_2$  1) R-Äthylentrimethylendi[Piperidylumchlorid]. +  $2HgCl_2$ , +  $PtCl_4$  (Ph. Ch. 46, 307 C. 1904 [1] 674).  
 2) isom. R-Äthylentrimethylendi[Piperidylumchlorid]. +  $2HgCl_2$ , +  $PtCl_4$  (Ph. Ch. 46, 309 C. 1904 [1] 674).
- $C_{15}H_{30}N_2Br_2$  1) R-Äthylentrimethylendi[Piperidylumbromid]. Sm. noch nicht bei  $300^\circ$  (B. 35, 3052 C. 1902 [2] 1127; Ph. Ch. 46, 306 C. 1904 [1] 674). — \*IV, 298.  
 2) isom. R-Äthylentrimethylendi[Piperidylumbromid]. Sm. oberhalb  $300^\circ$  (Ph. Ch. 46, 309 C. 1904 [1] 674).
- $C_{15}H_{30}N_2J_2$  1) Bisjodmethylat d. Des-N-Dimethyltetrahydrosesoxycytisin. Sm.  $293^\circ$  (B. 39, 824 C. 1906 [1] 1172).  
 2) R-Äthylentrimethylendi[Piperidylumjodid]. Sm.  $300^\circ$  u. Zers. (Ph. Ch. 46, 308 C. 1904 [1] 674).  
 3) isom. R-Äthylentrimethylendi[Piperidylumjodid]. Sm.  $282^\circ$  u. Zers. (Ph. Ch. 46, 310 C. 1904 [1] 674).
- $C_{15}H_{30}N_2J_4$  1) Di[Dijodmethylat] d.  $\alpha\beta$ -Di[1-Piperidyl]propan. Sm.  $195-196^\circ$  (B. 35, 3052 C. 1902 [2] 1127). — \*IV, 9.
- $C_{15}H_{30}N_3J_3$  1) Tri[Jodmethylat] d. 1,2,4-Tri[Dimethylamido]benzol. +  $2CH_4O$  (Sm.  $164^\circ$  u. Zers.) (B. 30, 3117). — IV, 1122.
- $C_{15}H_{30}N_3P$  1) l-Tripiperidylphosphin. Sm.  $37-38^\circ$  (B. 28, 1238 Anm., 2207). — IV, 11.
- $C_{15}H_{31}ON$  C 74,7 — H 12,9 — O 6,6 — N 5,8 — M. G. 241.  
 1)  $\alpha$ -Oximidopentadekan. Sm.  $86^\circ$  (Soc. 87, 1896 C. 1906 [1] 652).  
 2)  $\beta$ -Oximidopentadekan. Sm.  $19,5-20^\circ$  (Soc. 63, 454). — \*I, 550.  
 3) Amid d. Tetradekan- $\alpha$ -Carbonsäure. Sm.  $102,5^\circ$  (Soc. 87, 1899 C. 1906 [1] 653).  
 4) Amid d. Lactarsäure. Sm.  $108^\circ$  (Bl. [3] 2, 158). — I, 1249.  
 5) Diisocamylamid d. Isovaleriansäure. Sd.  $270-275^\circ$  (D.R.P. 129 967 C. 1902 [1] 959).
- $C_{15}H_{31}ON_3$  C 66,9 — H 11,5 — O 5,9 — N 15,6 — M. G. 269.  
 1)  $\alpha$ -Semicarbazontetradekan. Sm.  $106,5^\circ$  ( $100-101^\circ$ ) (Soc. 87, 1900 C. 1906 [1] 653; B. 39, 653 C. 1906 [1] 1021).  
 2)  $\gamma$ -Semicarbazontetradekan. Sm.  $92^\circ$  (Bl. [3] 29, 1211 C. 1904 [1] 355).
- $C_{15}H_{31}O_2N$  C 70,0 — H 12,1 — O 12,4 — N 5,4 — M. G. 257.  
 1) Methyl ester d. Tridekylamidoameisensäure. Sm.  $53-54^\circ$  (M. 26, 99 C. 1905 [1] 505).  
 2) Äthylester d.  $\mu$ -Amidododekancarbonsäure. Sm.  $73^\circ$ . HCl (B. 26, 1871). — \*I, 663.

- C<sub>15</sub>H<sub>31</sub>O<sub>2</sub>N** 3) Amid d.  $\alpha$ -Oxytetradekan- $\alpha$ -Carbonsäure. Sm. 149—150° (*Soc.* 89, 1901 C. 1906 [1] 653).
- 4) Verbindung (Base aus Isovaleraldehyd) (*B.* 6, 1461). — I, 951.
- C<sub>15</sub>H<sub>31</sub>NS<sub>2</sub>** 1) Valeraldin. Sm. 41°. HCl (*A.* 90, 109; *B.* 4, 468). — I, 951.
- C<sub>15</sub>H<sub>32</sub>ON<sub>2</sub>** C 70,3 — H 12,5 — O 6,2 — N 10,9 — M. G. 256.
- 1) s-Diheptylharnstoff. Sm. 91° (*G.* 29 [2] 135, 148). — \*I, 729.
- C<sub>15</sub>H<sub>32</sub>O<sub>2</sub>N<sub>2</sub>** C 66,2 — H 11,7 — O 11,7 — N 10,3 — M. G. 272.
- 1) R-Äthylentrimethylendi[Piperidylumhydroxyd]. d-Camphersulfonat (*Ph. Ch.* 46, 313 C. 1904 [1] 675).
- 2) isom. R-Äthylentrimethylendi[Piperidylumhydroxyd]. d-Camphersulfonat (*Ph. Ch.* 46, 314 C. 1904 [1] 675).
- C<sub>15</sub>H<sub>32</sub>O<sub>4</sub>S<sub>2</sub>** 1) Amylmerkaptal d. l-Arabinose. Sm. 132—134° (*B.* 33, 2253).
- 2) Amylmerkaptal d. r-Arabinose. Sm. 125—130° (*B.* 33, 2251).
- 3)  $\beta\beta$ -Diäthylsulfonundekan. Sm. 67—68° (*C.* 1901 [1] 525).
- C<sub>15</sub>H<sub>32</sub>O<sub>8</sub>S<sub>4</sub>** 1)  $\alpha\alpha\gamma\gamma$ -Tetra[Propylsulfon]propan. Sm. 156—157° (*B.* 33, 1124).
- 2)  $\alpha\alpha\gamma\gamma$ -Tetra[Isopropylsulfon]propan. Sm. 129,5° (*B.* 33, 1124).
- C<sub>15</sub>H<sub>32</sub>NCl** 1) Chlorisoamylat d. l-Isoamylhexahydropyridin. 2 + PtCl<sub>4</sub> (*B.* 41, 2160 C. 1908 [2] 705).
- C<sub>15</sub>H<sub>33</sub>NBr** 1) Bromisoamylat d. l-Isoamylhexahydropyridin. Sm. 115° (*B.* 41, 2160 C. 1908 [2] 705).
- C<sub>15</sub>H<sub>32</sub>N<sub>2</sub>S** 1) s-Diheptylthioharnstoff. Sm. 58—59° (*G.* 26 [1] 327). — \*I, 739.
- 2)  $\alpha$ -[d-sec. Butyl]- $\beta\beta$ -Diisoamylthioharnstoff. Fl. (*Ar.* 242, 61 C. 1904 [1] 998).
- C<sub>15</sub>H<sub>33</sub>OP** 1) Triisoamylphosphinoxyd. Sm. 60—65° (*B.* 6, 305). — I, 1505.
- C<sub>15</sub>H<sub>33</sub>OSb** 1) Antimontriisoamyloxyd (*A.* 97, 318; *J.* 1855, 590). — I, 1516.
- C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>N** C 65,4 — H 12,0 — O 17,4 — N 5,1 — M. G. 275.
- 1) Verbindung (Base aus Isovaleraldehydammoniak). HCl (*A.* 130, 211; *J. r.* 6, 39; *B.* 6, 1461). — I, 951.
- C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>N<sub>3</sub>** C 59,4 — H 10,9 — O 15,8 — N 13,9 — M. G. 303.
- 1) trim. Aldehyd d.  $\beta$ -Äthylamidopropionsäure (*B.* 38, 4172 C. 1906 [1] 448).
- C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>P** 1) Phosphorigsäuretriisoamylester. Sd. 270—275°. + PtCl<sub>2</sub> (*A.* 92, 350; 256, 285; *Bl.* 18, 151). — I, 338.
- C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>Al** 1) Aluminiumamylat. Sd. 291°<sub>12</sub> (*Am.* 19, 603).
- 2) Aluminiumisoamylat. Sm. 225—230°; Sd. 282°<sub>4</sub> (*C.* 1900 [1] 11).
- 3) sec. Aluminiumamylat. Sd. 210—212°<sub>8</sub> (*C.* 1900 [1] 11).
- 4) tert. Aluminiumamylat. Sm. 199—200° (*C.* 1900 [1] 11).
- C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>As** 1) Triisoamylester d. Arsenigensäure. Sd. 185°<sub>30</sub> (193—194°<sub>80</sub>) (*Bl.* 14, 105; *Soc.* 93, 1367 C. 1908 [2] 849). — I, 343.
- C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>B** 1) Triisoamylester d. Borsäure. Sd. 254° (270—275°; 258°) (*A. Spl.* 5, 187; *A.* 60, 253; *B.* 26 [2] 573; *G.* 23 [1] 456; 23 [2] 9; *B.* 36, 2221 C. 1903 [2] 420). — I, 345; \*I, 127.
- C<sub>15</sub>H<sub>33</sub>O<sub>3</sub>Sb** 1) Triamylester d. Antimonigensäure. Sd. 170°<sub>80</sub> (*Soc.* 95, 607 C. 1909 [1] 1976).
- 2) Triisoamylester d. Antimonigensäure. Sd. 163°<sub>30</sub> (*Soc.* 95, 607 C. 1909 [1] 1977).
- C<sub>15</sub>H<sub>33</sub>O<sub>4</sub>N** C 61,9 — H 11,3 — O 22,0 — N 4,8 — M. G. 291.
- 1) Tetraäthyläther d. Methyl-di[ $\gamma\gamma$ -Dioxypropyl]amin. Sd. 112°<sub>0,48</sub> (*B.* 40, 4713 C. 1908 [1] 381).
- C<sub>15</sub>H<sub>33</sub>O<sub>4</sub>As** 1) Arsensäuretriisoamylester. Fl. (*Bl.* 14, 101). — I, 344.
- C<sub>15</sub>H<sub>33</sub>ClPb** 1) Bleitriisoamylchlorid (*J.* 1860, 383). — I, 1530.
- C<sub>15</sub>H<sub>33</sub>ClSn** 1) Zinntriisoamylchlorid. Fl. (*A.* 92, 393). — I, 1529.
- C<sub>15</sub>H<sub>33</sub>ClSb** 1) Antimontriisoamylchlorid (*A.* 97, 318). — I, 1516.
- C<sub>15</sub>H<sub>33</sub>BrSi** 1) Siliciumtriisoamylbromid. Sd. 278—280° (*B.* 38, 1665 C. 1905 [1] 1527).
- C<sub>15</sub>H<sub>33</sub>Br<sub>2</sub>Sb** 1) Antimontriisoamylbromid (*A.* 97, 319). — I, 1516.
- C<sub>15</sub>H<sub>33</sub>JPb** 1) Bleitriisoamyljodid. + HgJ<sub>2</sub> (*J.* 1860, 383). — I, 1530.
- C<sub>15</sub>H<sub>33</sub>JSn** 1) Zinntriisoamyljodid. Sd. 302—305° (*Bl.* 34, 477). — I, 1529.
- C<sub>15</sub>H<sub>33</sub>J<sub>2</sub>Sb** 1) Antimontriisoamyljodid (*A.* 97, 319). — I, 1516.
- C<sub>15</sub>H<sub>33</sub>SSb** 1) Antimontriisoamylsulfid. + Sb<sub>2</sub>S<sub>3</sub> (*A.* 97, 320). — I, 1516.
- C<sub>15</sub>H<sub>33</sub>S<sub>4</sub>P** 1) Perthiophosphorsäuretriisoamylester. Fl. (*A.* 119, 310). — I, 342.
- C<sub>15</sub>H<sub>34</sub>OSi** 1) Triisoamylsilic. Sd. 269—270° (*B.* 38, 1666 C. 1905 [1] 1527).
- C<sub>15</sub>H<sub>34</sub>OSn** 1) Zinntriisoamylhydroxyd. Sd. 335—338° (*Bl.* 34, 477). — I, 1529.
- C<sub>15</sub>H<sub>34</sub>O<sub>3</sub>Si** 1) Siliciumtriisoamylat. Sd. 302° (*B.* 38, 1662 C. 1905 [1] 1526).



- $C_{15}H_{35}O_4P$  1) Trioxyisocamylidenphosphoniumhydroxyd. Sm. 125—126° (*A. ch.* [6] 2, 33). — I, 952.
- $C_{15}H_{36}N_2Cl_2$  1) Bischloräthylat d.  $\alpha\gamma$ -Di[Diäthylamido]propan. +  $PtCl_4$  (*Ar.* 245, 253 *C.* 1907 [2] 790).
- $C_{15}H_{36}N_2Br_2$  1) Bisbromäthylat d.  $\alpha\gamma$ -Di[Diäthylamido]propan. Sm. 245° (*Ar.* 245, 253 *C.* 1907 [2] 790).
- $C_{15}H_{36}N_2J_2$  1) Bisjodmethylat d. Di[Dipropylamido]methan. Sm. 96° (*B.* 36, 1199 *C.* 1903 [1] 1215).
- $C_{15}H_{38}O_2N_2$  C 64,7 — H 13,7 — O 11,5 — N 10,1 — M. G. 278.
- 1) Bisäthylhydroxyd d.  $\alpha\gamma$ -Di[Diäthylamido]propan (*Ar.* 245, 253 *C.* 1907 [2] 790).

### $C_{15}$ -Gruppe mit vier Elementen.

- $C_{15}H_8ONCl_5$  1) 2,4,5,6,7-Pentachlor-3-Phenylamido-1-Ketoinden. Sm. 236—237° (*A.* 272, 256). — III, 169; \*III, 136.
- $C_{15}H_6O_8Cl_4Br_4$  1) Di[2,6-Dichlor-3,5-Dibrom-4-Methylphenylester] d. Kohlensäure. Sm. oberhalb 275° (*B.* 39, 4150 *C.* 1907 [1] 240).
- $C_{15}H_7O_2NS$  1) 1-Rhodan-9,10-Anthrachinon. Sm. 231° (*D.R.P.* 206054 *C.* 1909 [1] 703).
- 2) 2-Rhodan-9,10-Anthrachinon (*D.R.P.* 206054 *C.* 1909 [1] 703).
- $C_{15}H_7O_2NS_2$  1) Carbindophtenin (*B.* 37, 3351 *C.* 1904 [2] 1058).
- $C_{15}H_7O_3NS$  1) 4-Rhodan-1-Oxy-9,10-Anthrachinon (*D.R.P.* 206054 *C.* 1909 [1] 703).
- $C_{15}H_7O_4NBr_2$  1) Dibromamido-9,10-Anthrachinon-2-Carbonsäure (*D.R.P.* 142997 *C.* 1903 [2] 169).
- $C_{15}H_8ON_8Cl$  1) 7-Chlor-8-Oxychinolin-5,6-Phenazin. Zers. oberhalb 200° (*A.* 290, 380). — IV, 558.
- $C_{15}H_8O_2N_2Br_8$  1) Di[ $p$ -Tribromphenylamid] d. Malonsäure. Sm. 145—146° (*B.* 17, 782). — II, 413.
- $C_{15}H_8O_4NCl$  1) 6-Chlor-1-Nitro-2-Methyl-9,10-Anthrachinon (*D.R.P.* 211927 *C.* 1909 [2] 396).
- 2) 7-Chlor-1-Nitro-2-Methyl-9,10-Anthrachinon (*D.R.P.* 211927 *C.* 1909 [2] 396).
- $C_{15}H_8O_4NCl_3$  1) 2,3,5-Trichlor-1,4-Benzochinon-6-Amidozimtsäure (*Bl.* [3] 15, 1031). — \*III, 259.
- $C_{15}H_8O_5N_4S$  1) Verbindung (aus Thiocarbanilidothiooxanilid). Sm. 235° (*J. pr.* [2] 31, 6). — II, 412.
- $C_{15}H_9ONBr_2$  1) Nitril d.  $p$ -Brom- $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 182° (*B.* 34, 3086).
- $C_{15}H_9ONS$  1) Thiocarbamidophenanthrol (Merkaptophenanthrenoxazol) (*B.* 22, 3242). — III, 442.
- $C_{15}H_9ON_2Cl_3$  1) 5,5,7-Trichlor-8-Phenylamido-6-Keto-5,6-Dihydrochinolin. Sm. 200—202° u. Zers. (*A.* 264, 223; 290, 334). — IV, 278.
- $C_{15}H_9ON_2Br$  1)  $\alpha$ -Brom-1,2-Naphto- $\beta$ -Ketopentamethylenazin. Sm. noch nicht bei 275° (*Bl.* [3] 23, 443). — \*IV, 689.
- 2) 1,2-Anhydrid d. 5[oder 7]-Brom-6[oder 5]-Methyl-2-Phenylbenzimidazol-2-Carbonsäure (Bromtoluylphenylamidon). Sm. 234 235°. +  $C_2H_6O$  (*B.* 25, 1986). — IV, 618.
- $C_{15}H_9OCIS$  1)  $\beta$ -Thiocarbonyl- $\alpha$ -Keto- $\beta$ -[4-Chlorphenyl]- $\alpha$ -Phenyläthan( $p$ -Chlor-desaurin). Sm. 280° (*B.* 25, 2241). — III, 221.
- $C_{15}H_9O_2NCl_2$  1) 2,4-Dichlor-1-Methylamido-9,10-Anthrachinon (*D.R.P.* 164791 *C.* 1905 [2] 1758).
- $C_{15}H_9O_2NBr_2$  1) 2,4-Dibrom-1-Methylamido-9,10-Anthrachinon. Sm. 158° (*D.R.P.* 164791 *C.* 1905 [2] 1758).
- 2) 3,5-Dibrombenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 185° (*Am.* 40, 348 *C.* 1908 [2] 1865).
- 3) 4-Brom-1-Naphtylimid d. Bromcitronensäure. Sm. 199° (*M.* 9, 290). — II, 612.
- 4)  $p$ -Brom-2-Naphtylimid d. Bromcitronensäure. Sm. 181° (*M.* 9, 292). — II, 621.
- $C_{15}H_9O_2NBr_3$  1) Äthylester d. Hexabromdiphenylamidoameisensäure. Sm. 184° (*B.* 18, 2577). — II, 374.

- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>NBr<sub>8</sub>** 1) Methyldi[3,4,5,6-Tetrabrom-2-Oxybenzyl]amin. Sm. 205—207° (A. 344, 147 C. 1906 [1] 1157).  
2) Methyldi[2,3,5,6-Tetrabrom-4-Oxybenzyl]amin. Sm. 215° (A. 344, 164 C. 1906 [1] 1158).
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) 1-Chlor-3-[3-Nitrophenyl]isochinolin. Sm. 220—223° (B. 29, 2546). — IV, 431.  
2) 1-Chlor-4-Nitro-3-Phenylisochinolin. Sm. 155—156° (B. 19, 834). — IV, 431.  
3) 7-Chlor-8-Phenylimido-6-Oxy-5-Keto-5,8-Dihydrochinolin. Sm. 175° (195°) u. Zers. (A. 264, 226; 290, 369). — IV, 278.  
4) Nitril d. α-[4-Chlorphenyl]-β-[2-Nitrophenyl]akrylsäure. Sm. 161° (J. pr. [2] 61, 191). — \*II, 874.  
5) Nitril d. α-[4-Chlorphenyl]-β-[3-Nitrophenyl]akrylsäure. Sm. 191° (J. pr. [2] 61, 192). — \*II, 874.  
6) Nitril d. α-[4-Chlorphenyl]-β-[4-Nitrophenyl]akrylsäure. Sm. 166° (J. pr. [2] 61, 192). — \*II, 874.  
7) Nitril d. α-[4-Nitrophenyl]-β-[4-Chlorphenyl]akrylsäure. Sm. 180° (J. pr. [2] 65, 282 C. 1902 [1] 1216).  
8) Nitril d. α-Benzoximido-α-[2-Chlorphenyl]essigsäure. Sm. 105° (J. pr. [2] 66, 379 C. 1902 [2] 1503).  
9) Nitril d. α-Benzoximido-α-[4-Chlorphenyl]essigsäure. Sm. 115 bis 116° (J. pr. [2] 66, 374 C. 1902 [2] 1502).
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) ?-Trichlor-1,5-Diamido-2-Methyl-9,10-Anthrachinon. Sm. noch nicht bei 300° (D.R.P. 131402 C. 1902 [2] 614).
- C<sub>15</sub>H<sub>9</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>8</sub>** 1) ?-Tribrom-1,5-Diamido-2-Methyl-9,10-Anthrachinon. Sm. noch nicht bei 300° (D.R.P. 131402 C. 1902 [2] 614).  
2) Methyläther d. 5,6,8-Tribrom-7-Oxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 240—242° u. Zers. (A. 361, 237 C. 1908 [2] 411).
- C<sub>15</sub>H<sub>9</sub>O<sub>3</sub>NS** 1) 2-Keto-1-[2-Nitrobenzyliden]-1,2-Dihydrobenzthiofuran. Sm. 171° (M. 30, 350 C. 1909 [2] 281).  
2) 2-Keto-1-[3-Nitrobenzyliden]-1,2-Dihydrobenzthiofuran. Sm. 223—224° (M. 30, 350 C. 1909 [2] 282).  
3) 2-Keto-1-[4-Nitrobenzyliden]-1,2-Dihydrobenzthiofuran. Sm. 231° (M. 30, 350 C. 1909 [2] 282).
- C<sub>15</sub>H<sub>9</sub>O<sub>4</sub>N<sub>2</sub>Cl** 1) Azochlordiphenylmethandicarbonsäure (C. r. 144, 1162 C. 1907 [2] 407).
- C<sub>15</sub>H<sub>9</sub>O<sub>4</sub>N<sub>2</sub>Br** 1) 4-Brom-5-Nitro-1-Methylamido-9,10-Anthrachinon (D.R.P. 164791 C. 1905 [2] 1758).
- C<sub>15</sub>H<sub>9</sub>O<sub>5</sub>NBr<sub>2</sub>** 1) γ-Keto-γ-[3,5-Dibrom-2,4-Dioxyphenyl]-α-[3-Nitrophenyl]propen. Sm. 236° u. Zers. (B. 41, 1622 C. 1908 [2] 69).  
2) γ-Keto-γ-[3,5-Dibrom-2,4-Dioxyphenyl]-α-[4-Nitrophenyl]propen. Sm. 228° (B. 41, 1622 C. 1908 [2] 69).
- C<sub>15</sub>H<sub>9</sub>O<sub>9</sub>N<sub>8</sub>Br<sub>3</sub>** 1) Verbindung (aus Mukobromphenylbenzylhydrazonsäure). Sm. 227° (B. F. HALVORSEN, Dissert. Freiburg, Schweiz, 1901).
- C<sub>15</sub>H<sub>9</sub>O<sub>18</sub>N<sub>7</sub>S** 1) O-Äthyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 138° (Soc. 81, 436 C. 1902 [1] 861, 989).
- C<sub>15</sub>H<sub>10</sub>ONCl** 1) 2-Chlor-3-Phenylamido-1-Ketoinden. Sm. 203—204° (A. 247, 148). — III, 169.  
2) ?-Chlor-3-Keto-1-Benzyliden-1,3-Dihydroisindol (Chlorbenzalphtalimidin). Sm. 230—232° (B. 18, 1260). — II, 1709.  
3) 1-Chlor-4-Oxy-3-Phenylisochinolin. Sm. 119° (B. 37, 1691 C. 1904 [1] 1524).  
4) 4-Chlor-1-Keto-3-Phenyl-1,2-Dihydroisochinolin? Sm. 211—212° (B. 19, 2358). — IV, 431.  
5) Nitril d. α-Benzoyl-α-[4-Chlorphenyl]essigsäure. Sm. 92° (J. pr. [2] 67, 378 C. 1903 [1] 1356).
- C<sub>15</sub>H<sub>10</sub>ONCl<sub>5</sub>** 1) Benzylpentachlorphenylamid d. Essigsäure. Sm. 140° (D.R.P. 176474 C. 1907 [1] 142).
- C<sub>15</sub>H<sub>10</sub>ONBr** 1) 2-Brom-3-Phenylamido-1-Ketoinden. Sm. 170° (A. 247, 148). — III, 169; \*III, 136.  
2) ?-Brom-3-Keto-1-Benzyliden-1,3-Dihydroisindol (Brombenzalphtalimidin). Sm. 210—211° (B. 18, 1260, 2435). — II, 1709.

- C<sub>15</sub>H<sub>10</sub>ONBr** 3) 2-Keto-3-[4-Bromphenyl]-1,2-Dihydrochinolin. Sm. 266—267° (B. 39, 3118 C. 1906 [2] 1330).
- C<sub>15</sub>H<sub>10</sub>ONBr<sub>3</sub>** 1) Nitril d.  $\alpha\beta$ P-Tribrom- $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]propionsäure. Sm. 135° (B. 37, 3166 C. 1904 [2] 983).
- C<sub>15</sub>H<sub>10</sub>ONJ** 1) 1-Jod-6[oder 7]-Oxy-3-Phenylisochinolin. Sm. 141—143° (B. 34, 3745 C. 1902 [1] 40). — \*IV, 258.
- C<sub>15</sub>H<sub>10</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1)  $\alpha\gamma$ -Dichlor- $\alpha\gamma$ -Di[Phenylimido]- $\beta$ -Ketopropan (Mesoxanilidimidchlorid). Sd. 145—152°<sub>15-20</sub> (A. 270, 286). — II, 421.
- 2) 5,7-Dichlor-8-Phenylamido-6-Oxychinolin. Sm. 154°. HCl (A. 264, 219). — IV, 278.
- C<sub>15</sub>H<sub>10</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) 2-Keto-4,5-Di[4-Bromphenyl]-2,3-Dihydroimidazol. Sm. 333°. + C<sub>2</sub>H<sub>4</sub>O<sub>3</sub> (B. 41, 1755 C. 1908 [2] 421; Ar. 368, 264 C. 1909 [2] 1568).
- C<sub>15</sub>H<sub>10</sub>ON<sub>2</sub>Br<sub>4</sub>** 1) 4,5-Dibrom-2-Keto-4,5-Di[4-Bromphenyl]tetrahydroimidazol (B. 41, 1757 C. 1908 [2] 421).
- C<sub>15</sub>H<sub>10</sub>ON<sub>2</sub>S** 1) 4-Benzoyl-5-Phenyl-1,2,3-Thiodiazol. Sm. 90—91° (B. 39, 1491 C. 1906 [1] 1747).
- C<sub>15</sub>H<sub>10</sub>ON<sub>2</sub>S<sub>3</sub>** 1) Benzoat d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 154° (J. pr. [2] 60, 188). — \*IV, 445.
- C<sub>15</sub>H<sub>10</sub>ON<sub>3</sub>Br** 1) P-[4-Bromphenyl]azo-6-Oxychinolin (B. 21, 1643). — IV, 1486.
- 2) P-[4-Bromphenyl]azo-8-Oxychinolin (B. 21, 1644). — IV, 1486.
- C<sub>15</sub>H<sub>10</sub>OCl<sub>2</sub>Br<sub>2</sub>** 1)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha\gamma$ -Di[4-Chlorphenyl]propan. Sm. 160—161° u. Zers. (B. 42, 1813 C. 1909 [2] 131).
- C<sub>15</sub>H<sub>10</sub>OBr<sub>3</sub>S** 1) 1-Brom-2-Keto-1-[ $\alpha$ -Brombenzyl]-1,2-Dihydrobenzthiofuran. Sm. 114—115° (B. 42, 543 C. 1909 [1] 759).
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>NCl** 1) 4-Chlor-1-Amido-2-Methyl-9,10-Anthrachinon (D.R.P. 176956 C. 1906 [2] 1796).
- 2) P-Chlor-1-Amido-2-Methyl-9,10-Anthrachinon (D.R.P. 158951 C. 1905 [1] 842).
- 3) isom. P-Chlor-P-Amido-2-Methyl-9,10-Anthrachinon. Sm. 166° (D.R.P. 205218 C. 1909 [1] 603).
- 4) isom. P-Chlor-P-Amido-2-Methyl-9,10-Anthrachinon. Sm. 200° (D.R.P. 205218 C. 1909 [1] 603).
- 5) isom. P-Chlor-P-Amido-2-Methyl-9,10-Anthrachinon. Sm. 255 bis 256° (D.R.P. 131402 C. 1902 [2] 614).
- 6) 4-Chlor-1-Methylamido-9,10-Anthrachinon (D.R.P. 164791 C. 1905 [2] 1758).
- 7) 5-Chlor-1-Methylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
- 8) 5-Keto-4-[4-Chlorphenyl]-3-Phenyl-4,5-Dihydroisoxazol. Sm. 147° (J. pr. [2] 67, 382 C. 1903 [1] 1356).
- 9) Nitril d.  $\alpha$ -Benzoxyl-4-Chlorphenylelessigsäure. Sm. 57—58° (Soc. 95, 1406 C. 1909 [2] 1228).
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>NCl<sub>3</sub>** 1) 3,5-Dichlor-4-Acetylchloramidodiphenylketon. Sm. 118° (Soc. 85, 345 C. 1904 [1] 1405).
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>NBr** 1) P-Brom-P-Amido-2-Methyl-9,10-Anthrachinon. Sm. 215—216° (D.R.P. 131402 C. 1902 [2] 614).
- 2) 4-Brom-1-Methylamido-9,10-Anthrachinon. Sm. 192° (194°) (D.R.P. 144634 C. 1903 [2] 750; D.R.P. 164791 C. 1905 [2] 1758).
- 3) 5-Brom-1-Methylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
- 4) 1-Naphtylimid d.  $\alpha$ -Brompropen- $\alpha\beta$ -Dicarbonsäure. Sm. 169° (J. pr. [2] 74, 302 C. 1906 [2] 1820).
- 5) 2-Naphtylimid d.  $\alpha$ -Brompropen- $\alpha\beta$ -Dicarbonsäure. Sm. 185° (J. pr. [2] 74, 303 C. 1906 [2] 1820).
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>4</sub>** 1) Acetat d. 2,4,5,6-Tetrachlor-3-Oxy-1-Phenylhydrazonmethylbenzol. Sm. 188—189° (B. 34, 4124 C. 1902 [1] 190). — \*IV, 492.
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) 2,5-Diketo-4,4-Di[4-Bromphenyl]tetrahydroimidazol. Sm. 307° (B. 41, 1387 C. 1908 [1] 2103; A. 368, 270 C. 1909 [2] 1568).
- 2) Nitril d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]propionsäure. Sm. 155—160° u. Zers. (B. 41, 2294 C. 1908 [2] 599).
- 3) Nitril d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]propionsäure. Sm. 127—128° u. Zers. (A. 250, 160). — II, 1467.
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>S** 1) 2-Thiocarbonyl-4,5-Diketo-1,3-Diphenyltetrahydroimidazol (Diphenylthioparabansäure). Sm. 228° (B. 31, 138). — \*II, 209.



- $C_{15}H_{10}O_2N_3Cl$  1) 5-Chlor-3-Phenyl-1-[3-Nitrophenyl]pyrazol. Sm. 105° (A. 358, 180 C. 1908 [1] 857).  
 2) 3-Chlor-5-Phenyl-1-[3-Nitrophenyl]pyrazol. Sm. 115° (A. 358, 168 C. 1908 [1] 856).
- $C_{15}H_{10}O_3N_4S_2$  1) 5-[3-Nitrobenzyliden]sulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiadiazol. Sm. 173—174° (J. pr. [2] 60, 200). — \*IV, 446.
- $C_{16}H_{10}O_3NCl$  1)  $\alpha$ -Chlor- $\gamma$ -Keto- $\alpha$ [oder  $\gamma$ ]-Phenyl- $\gamma$ [oder  $\alpha$ ]-[4-Nitrophenyl]propen. Sm. 131° (B. 37, 1152 C. 1904 [1] 1267).  
 2) Acetat d. 4-Chlor-2-[4-Oxyphenyl]benzspseudooxazol. Sm. 171° (B. 39, 1933 C. 1906 [2] 113).  
 3) Chlorid d.  $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 100° (G. 36 [2] 279 C. 1906 [2] 1500).
- $C_{15}H_{10}O_3NCl_2$  1) Benzoat d. 2-Trichloracetylamido-1-Oxybenzol. Sm. 104—105° (B. 40, 1737 C. 1907 [1] 1570).
- $C_{15}H_{10}O_3N_2Cl_2$  1) Verbindung (aus Phenylisocyanat u.  $COCl_2$ ) (B. 17, 1284; 18, 874, 1178). — II, 375.
- $C_{16}H_{10}O_3N_2Cl_4$  1) Benzyl-3,4,5,6-Tetrachlor-2-Nitrophenylamid d. Essigsäure (D.R.P. 178299 C. 1907 [1] 197).
- $C_{15}H_{10}O_3N_2Br_2$  1) s-Di[4-Brombenzoyl]harnstoff. Sm. 250° (Am. 35, 307 C. 1906 [1] 1545; B. 41, 1759 C. 1908 [2] 421).
- $C_{15}H_{10}O_3ClBr$  1) 4-Chlor-2-Brom-3-Methyldiphenylketon-2'-Carbonsäure. Sm. 208 bis 210° (A. 202, 162). — II, 1888.
- $C_{15}H_{10}O_4NCl$  1) Äthylester d. 3-Chlor-1,4-Naphtochinon-2-Cyanmethylcarbon-säure. Sm. 118° (B. 32, 917). — \*II, 1180.  
 2) Chlorid d. 3-Nitro-4-Methyldiphenylketon-2'-Carbonsäure. Sm. 142° (A. 299, 311). — \*II, 1005.
- $C_{15}H_{10}O_4NBr$  1)  $\alpha$ -[4-Bromphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 187° (B. 39, 3117 C. 1906 [2] 1330).
- $C_{15}H_{10}O_4N_2S$  1) 1,2-Naphto- $\beta$ -Ketopentamethylenazin-4-Sulfonsäure +  $H_2O$ . Sm. noch nicht bei 230° (Bl. [3] 23, 450). — \*IV, 689.  
 2) Nitril d.  $\alpha$ -Phenylsulfon- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 159° (J. pr. [2] 78, 128 C. 1908 [2] 1170).
- $C_{15}H_{10}O_6N_2S$  1) 6-Phenylazo-1,2-Benzpyron-6'-Sulfonsäure (B. 37, 4127 C. 1904 [2] 1735).
- $C_{15}H_{10}O_6N_2S_2$  1) Methylenimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 290° (B. 30, 1266). — \*II, 801.
- $C_{15}H_{10}O_6N_3Cl$  1) Inden + 2-Chlor-1,3,5-Trinitrobenzol. Sm. 39° (C. 1905 [1] 1147).
- $C_{16}H_{11}ONCl_4$  1) Benzyl-2,3,4,5-Tetrachlorphenylamid d. Essigsäure. Sm. 97° (D.R.P. 180203 C. 1907 [1] 682).  
 2) Benzyl-2,3,4,6-Tetrachlorphenylamid d. Essigsäure. Sm. 80 bis 81° (D.R.P. 176474 C. 1907 [1] 142).  
 3) Benzyl-2,3,5,6-Tetrachlorphenylamid d. Essigsäure. Sm. 97° (D.R.P. 176474 C. 1907 [1] 142).
- $C_{15}H_{11}ONS$  1)  $\beta$ -Rhodan- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (Desylthiocyanat). Sm. 110 bis 111° (Am. 26, 202). — \*III, 165.  
 2) 2-Keto-3,4-Diphenyl-2,3-Dihydrothiazol. Sm. 124° (J. pr. [2] 75, 204, 207 C. 1907 [1] 1501).  
 3) 1-[4-Methylphenyl]imido-2-Keto-2,3-Dihydrobenzthiofuran. Sm. 159° (B. 41, 234 C. 1908 [1] 1062).
- $C_{15}H_{11}ON_2Cl$  1) 5-Chlor-8-Phenylamido-6-Oxychinolin. Sm. 127—128° (Ar. 244, 615 C. 1907 [1] 673).  
 2) 4-Keto-2-[4-Chlorbenzyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 246° u. Zers. (J. pr. [2] 69, 22 C. 1904 [1] 640).  
 3) Nitril d.  $\beta$ -Oximido- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. Sm. 168° (J. pr. [2] 67, 381 C. 1903 [1] 1356).  
 4) Chlorid d. Azobenzol-4-Akrylsäure (C. r. 135, 1117 C. 1903 [1] 286).
- $C_{15}H_{11}ON_2Br$  1) 6-Brom-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 185—186° (C. 1906 [1] 944).
- $C_{15}H_{11}ON_2Br_2$  1) 4-Brom-2-Keto-4,5-Di[4-Bromphenyl]tetrahydroimidazol (B. 41, 1758 C. 1908 [2] 421).
- $C_{15}H_{11}ON_3S$  1) 5-Phenylbenzoylamido-1,2,3-Thiadiazol. Sm. 157° (B. 29, 2593). — IV, 1103.  
 2) 2-Benzoylimido-3-Phenyl-2,3-Dihydro-1,3,4-Thiadiazol. Sm. 119 bis 120° (Am. 27, 269 C. 1902 [1] 1299). — \*IV, 424.

- $C_{15}H_{11}ON_3S_2$  1) Anhydrodiphenyldithiobiuretecarbonsäure. Sm. 234—235° u. Zers. (*Soc.* 95, 455 *C.* 1909 [1] 1871).
- $C_{15}H_{11}ON_4Cl$  1) 3-Chlor-5-Keto-4-Phenylazo-1-Phenyl-4,5-Dihydropyrazol. Sm. 164° (*A.* 338, 219 *C.* 1905 [1] 1158).
- $C_{15}H_{11}ON_4Br$  1) p-Brom-5-Keto-4-Phenylazo-1-Phenyl-4,5-Dihydropyrazol. Sm. 224°. +  $Br_3$  (*B.* 39, 2025 *C.* 1906 [2] 433).
- $C_{15}H_{11}O_2NCl_2$  1) 3,5-Dichlor-4-Acetylamidodiphenylketon. Sm. 185° (*Soc.* 85, 345 *C.* 1904 [1] 1405).
- 2) 5-Chlor-2-Acetylchloramidodiphenylketon. Sm. 107° (*Soc.* 85, 344 *C.* 1904 [1] 1405).
- 3) 3-Chlor-4-Acetylchloramidodiphenylketon. Sm. 102° (*Soc.* 85, 342 *C.* 1904 [1] 1405).
- 4) Amid d.  $\beta\beta$ -Dichlor- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan- $\alpha^2$ -Carbonsäure (*A.* d.  $\beta$ -Dichlor- $\alpha$ -Desoxybenzoin-o-Carbonsäure). Sm. 197° u. Zers. (*B.* 29, 2744). — \*II, 1004.
- 5) Verbindung (aus d. Inn. Anhydrid d. Benzoylamidoessigsäurephenylester). Sm. 150° u. Zers. (*H.* 20, 415). — II, 1184.
- $C_{15}H_{11}O_2NBr_2$  1) 1-Naphtylimid d.  $\alpha\beta$ -Dibrompropan- $\alpha\beta$ -Dicarbonsäure. Sm. 161,5 bis 162° (*J. pr.* [2] 74, 302 *C.* 1906 [2] 1820).
- 2) 2-Naphtylimid d.  $\alpha\beta$ -Dibrompropan- $\alpha\beta$ -Dicarbonsäure. Sm. 169,5 bis 170° (*J. pr.* [2] 74, 302 *C.* 1906 [2] 1820).
- $C_{15}H_{11}O_2NBr_4$  1) N-Acetylphenyl-3,4,5,6-Tetrabrom-2-Oxybenzylamin. Sm. 157 bis 158° (*A.* 332, 178 *C.* 1904 [2] 209).
- $C_{15}H_{11}O_2NS$  1) 2-Acetylamidothioxanthon. Sm. 236—237° (*B.* 42, 3057 *C.* 1909 [2] 1457).
- 2) 3-Acetylamidothioxanthon. Sm. 267° (*B.* 42, 3067 *C.* 1909 [2] 1458).
- 3) 4-Acetylamidothioxanthon. Sm. 233—234° (*B.* 42, 3063 *C.* 1909 [2] 1458).
- 4) 2,4-Diketo-3,5-Diphenyltetrahydrothiazol. Sm. 173—174° (*Am. Soc.* 24, 690). — \*IV, 196.
- 5) 2,4-Diketo-5,5-Diphenyltetrahydrothiazol. Sm. 144—145° (*C.* 1902 [2] 578). — \*IV, 254.
- 6) Nitril d.  $\alpha$ -Phenylsulfon- $\beta$ -Phenylakrylsäure. Sm. 135° (*J. pr.* [2] 78, 126 *C.* 1908 [2] 1170).
- $C_{15}H_{11}O_2NS_2$  1) Dithienyl-2-Nitrophenylmethan. Sm. 84° (*B.* 29, 2207; 30, 2033). — III, 769.
- 2) Dithienyl-3-Nitrophenylmethan. Sm. 72—73° (*B.* 29, 2206; 30, 2033). — III, 769.
- 3) Dithienyl-4-Nitrophenylmethan. Sm. 89—90° (*B.* 29, 2207; 30, 2033). — III, 769.
- 4) 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-[2-Furyliden]tetrahydrothiazol. Sm. 144° (*M.* 26, 1212 *C.* 1905 [2] 1676).
- 5) 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-[2-Furyliden]tetrahydrothiazol. Sm. 186° (*M.* 26, 1215 *C.* 1905 [2] 1676).
- $C_{15}H_{11}O_2N_2Cl$  1) Benzyläther d. Chlorisatinoxim. Sm. 224,5° (*B.* 35, 4337 *C.* 1903 [1] 293).
- $C_{15}H_{11}O_2N_2Cl_3$  1)  $\alpha$ -Trichloracetyl- $\beta$ -Benzoyl- $\alpha$ -Phenylhydrazin. Sm. 178° (*B.* 40, 1740 *C.* 1907 [1] 1570).
- $C_{15}H_{11}O_2N_2Br$  1) Benzyläther d. Bromisatinoxim. Sm. 200° (*B.* 35, 4337 *C.* 1903 [1] 293).
- 2) 5[oder 7]-Brom-6[oder 5]-Methyl-2-Phenylbenzimidazol-2<sup>2</sup>-Carbonsäure. Sm. 267° u. Zers. (*B.* 23, 1044). — IV, 618.
- $C_{15}H_{11}O_2N_3S$  1) 2-Benzoylimido-5-Keto-3-Phenyltetrahydro-1,3,4-Thiodiazol. Sm. 206—207°. Ag (*Am.* 34, 129 *C.* 1905 [2] 1031).
- $C_{15}H_{11}O_3NBr_2$  1)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[2-Nitrophenyl]- $\alpha$ -Phenylpropan. Sm. 167 bis 168° (*B.* 35, 1067 *C.* 1902 [1] 929). — \*III, 166.
- 2)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[3-Nitrophenyl]- $\alpha$ -Phenylpropan. Sm. 187° (*B.* 35, 1068 *C.* 1902 [1] 929). — \*III, 166.
- 3)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[4-Nitrophenyl]- $\alpha$ -Phenylpropan. Sm. 148° (151°) (*B.* 35, 1069 *C.* 1902 [1] 929; *B.* 37, 1149 *C.* 1904 [1] 1267). — \*III, 166.
- $C_{15}H_{11}O_3NS$  1) 2-Phenylechinolin-2<sup>3</sup>-Sulfonsäure.  $K + H_2O$ ,  $Ba + 1\frac{1}{2}H_2O$ ,  $Ag + 2\frac{1}{2}H_2O$  (*M.* 13, 59). — IV, 426.
- 2) 2-Phenylechinolin-2<sup>4</sup>-Sulfonsäure +  $H_2O$ .  $NH_4$ ,  $Ba$  (*M.* 13, 60). — IV, 426.



- C<sub>15</sub>H<sub>11</sub>O<sub>3</sub>NS** 3) 6-Phenylchinolin-6<sup>+</sup>-Sulfonsäure + 2H<sub>2</sub>O. Zers. bei 300°. NH<sub>4</sub>, Na + H<sub>2</sub>O (A. 230, 30). — IV, 430.  
4) 6-Phenylchinolin- $\beta$ -Sulfonsäure + H<sub>2</sub>O. Sm. noch nicht bei 300°. NH<sub>4</sub> (A. 230, 37). — IV, 430.  
5) Nitril d.  $\alpha$ -Phenylsulfon- $\beta$ -[2-Oxyphenyl]akrylsäure. Sm. 160° (J. pr. [2] 78, 126 C. 1908 [2] 1170).
- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>NS** 1) 6-Phenylsulfonamido-1,2-Benzpyron. Sm. 159° (Soc. 85, 1234 C. 1904 [2] 1124).  
2) 4-Acetylamidophenoxthin-2-Carbonsäure. Sm. 294—295° u. Zers. (B. 39, 1343 C. 1906 [1] 1787).  
3) Benzoylmethylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 194,5° (B. 29, 331). — III, 127.
- C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>N<sub>3</sub>S** 1)  $\beta$ -Phenylazo-6-Oxychinolin- $\beta^+$ -Sulfonsäure (B. 21, 1642). — IV, 1486.  
2)  $\beta$ -Phenylazo-8-Oxychinolin- $\beta^+$ -Sulfonsäure (B. 17, 1642). — IV, 1486.
- C<sub>15</sub>H<sub>11</sub>O<sub>5</sub>NS** 1) 1-Methylamido-9,10-Anthrachinon-5-Sulfonsäure (B. 37, 70 C. 1904 [1] 666; D. R. P. 181722 C. 1907 [1] 1652; D. R. P. 205881 C. 1909 [1] 882).  
2) 1-Methylamido-9,10-Anthrachinon-8-Sulfonsäure (B. 37, 70 C. 1904 [1] 666; D. R. P. 181722 C. 1907 [1] 1652).  
3)  $\beta$ -Methylamido-9,10-Anthrachinon-1-Sulfonsäure. Na (D. R. P. 144634 C. 1903 [2] 750).
- C<sub>15</sub>H<sub>11</sub>O<sub>6</sub>NS** 1) 4-Methylamido-1-Oxy-9,10-Anthrachinon-3-Sulfonsäure (D. R. P. 164727 C. 1905 [2] 1703).  
2) 4-Methylamido-1-Oxy-9,10-Anthrachinon-7-Sulfonsäure (D. R. P. 155440 C. 1904 [2] 1356).  
3) 4-Methylamido-1-Oxy-9,10-Anthrachinon-8-Sulfonsäure (D. R. P. 164727 C. 1905 [2] 1703).
- C<sub>15</sub>H<sub>11</sub>O<sub>7</sub>N<sub>3</sub>S** 1) Methylester d. 6-Nitro-1-Phenylisindazol-3-Carbonsäure (B. 23, 716). — IV, 1465.
- C<sub>15</sub>H<sub>11</sub>O<sub>11</sub>NS<sub>5</sub>** 1) Dithiänyl-3-Nitrophenylmethan- $\beta$ -Trisulfonsäure. Ba<sub>3</sub>, Cu<sub>3</sub> (B. 30, 2034). — \*III, 597.
- C<sub>15</sub>H<sub>11</sub>N<sub>4</sub>ClS** 1) 3-Chlor-5-Merkapto-4-Phenylazo-1-Phenylpyrazol. Sm. 138° (A. 338, 220 C. 1905 [1] 1158).
- C<sub>15</sub>H<sub>12</sub>ONCl** 1)  $\gamma$ -Oximido- $\gamma$ -Phenyl- $\alpha$ -[4-Chlorphenyl]propen. Sm. 153° (J. pr. [2] 65, 281 C. 1902 [1] 1216). — \*III, 179.  
2) Phenylamid d.  $\alpha$ -Chlor- $\beta$ -Phenylakrylsäure. Sm. 116—116,5° (Soc. 89, 113 C. 1906 [1] 1016).  
3) Phenylamid d. Allo- $\alpha$ -Chlor- $\beta$ -Phenylakrylsäure. Sm. 138—139° (Soc. 89, 114 C. 1906 [1] 1016).
- C<sub>15</sub>H<sub>12</sub>ONCl<sub>3</sub>** 1) Äthyl-2,4,6-Trichlorphenylamid d. Benzolcarbonsäure. Sm. 127 bis 128° (D. R. P. 180204 C. 1907 [1] 682; D. R. P. 180208 C. 1907 [1] 1474).  
2) Benzyl-2,4,6-Trichlorphenylamid d. Essigsäure. Sm. 61° (D. R. P. 176474 C. 1907 [1] 142; D. R. P. 180204 C. 1907 [1] 682).
- C<sub>15</sub>H<sub>12</sub>ONBr** 1) 9-[ $\alpha$ -Brompropionyl]carbazon. Sm. 125° (B. 31, 2849). — \*IV, 233.  
2) Phenylamid d.  $\alpha$ -Brom- $\beta$ -Phenylakrylsäure. Sm. 80° (B. 20, 1387). — II, 1412.
- C<sub>15</sub>H<sub>12</sub>ONJ** 1) 4-Jodphenylamid d.  $\beta$ -Phenylakrylsäure. Sm. 204°. — II, 1407.
- C<sub>15</sub>H<sub>12</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) 4,5-Dichlor-2-Keto-4,5-Diphenyltetrahydroimidazol (A. 368, 185, 193 C. 1909 [2] 1464).
- C<sub>15</sub>H<sub>12</sub>ON<sub>2</sub>Cl<sub>4</sub>** 1) Äthyläther d. 2,4,5,6-Tetrachlor-3-Oxy-1-Phenylhydrazon-methylbenzol. Sm. 111—112° (B. 34, 4125 C. 1902 [1] 190). — \*IV, 492.  
2) Benzyl-3,4,5,6-Tetrachlor-2-Amidophenylamid d. Essigsäure. Sm. 135—137° (D. R. P. 178299 C. 1907 [1] 197).
- C<sub>15</sub>H<sub>12</sub>ON<sub>3</sub>S** 1) 2-Thiocarbonyl-5-Keto-1,4-Diphenyltetrahydroimidazol. Sm. 233° (B. 24, 4152). — II, 1326.  
2) 2-Thiocarbonyl-5-Keto-4,4-Diphenyltetrahydroimidazol. Sm. 235°. Na (B. 42, 1795 C. 1909 [2] 203).  
3) 2-Imido-4-Keto-3,5-Diphenyltetrahydrothiazol. Sm. 185—186° (Am. 26, 353; Am. Soc. 24, 690). — \*IV, 595.  
4) 2-Phenylimido-4-Keto-3-Phenyltetrahydrothiazol (Diphenylthiohydantoïn). Sm. 176°. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (B. 12, 595; A. 207, 123; C. r. 139, 1032 C. 1905 [1] 226). — II, 403.



- C<sub>15</sub>H<sub>12</sub>ON<sub>2</sub>S** 5) 1-Acetylphenylamidobenzthiazol. Sm. 167° (162—163°) (B. 24, 1411; B. 34, 3138; B. 36, 3128 C. 1903 [2] 1070). — II, 797.  
6) 4-Acetylamido-1-Phenylbenzthiazol. Sm. 192—193° (B. 32, 3535). — \*II, 740.  
7) 2-Thiocarbonyl-3-[2-Methylphenyl]-5-Phenyl-2,3-Dihydro-1,3,4-Oxiazol. Sm. 96° (B. 26, 2876). — IV, 802.  
8) 2-Thiocarbonyl-4-Keto-1-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 288—289° (J. pr. [2] 55, 132). — \*IV, 599.  
9) 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 270—271° (B. 39, 1735 C. 1906 [2] 59).  
10) Methyläther d. 2-Merkapto-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 125° (B. 30, 1690 Ann.; Am. 21, 150). — \*IV, 599.  
11) Carbonylphenyl-[4-Methylphenyl]thioharnstoff. Sm. 89° (B. 25, 1466). — II, 500.
- C<sub>15</sub>H<sub>12</sub>ON<sub>2</sub>Se** 1) Diphenylamid d. Selencyanessigsäure. Sm. 103° (Ar. 241, 221 C. 1903 [2] 104).
- C<sub>15</sub>H<sub>12</sub>ON<sub>3</sub>Cl** 1) p-Chlor-3-[2-Methylphenyl]hydrazon-2-Oxypseudoindol (o-Tolylhydrazon d. m-Chlorisatin). Sm. 273—274° (B. 28, 545). — IV, 803.  
2) p-Chlor-3-[4-Methylphenyl]hydrazon-2-Oxypseudoindol (p-Tolylhydrazon d. m-Chlorisatin). Sm. 253° (B. 28, 545). — IV, 809.
- C<sub>15</sub>H<sub>12</sub>ON<sub>3</sub>Br** 1) 3-Oxy-2-[3-Brom-2-Amidophenyl]-6[oder 7]-Methyl-1,4-Benzdiazin. Sm. 243° (B. 35, 4334 C. 1903 [1] 293). — \*IV, 847.
- C<sub>15</sub>H<sub>12</sub>ON<sub>4</sub>Cl<sub>2</sub>** 1) αγ-Di[4-Chlorphenylhydrazon]-β-Ketopropan. Sm. 191° (B. 27, 221). — IV, 762.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>NCl** 1) Methyl-3-Chlor-4-Benzoylamidophenylketon. Sm. 132° (Soc. 85, 342 C. 1904 [1] 1404).  
2) Methyl-4-Benzoylchloramidophenylketon. Sm. 77° (C. 1903 [1] 832).  
3) 2-Acetylchloramidodiphenylketon. Sm. 102° (C. 1903 [1] 1137).  
4) 4-Acetylchloramidodiphenylketon. Sm. 124° (C. 1903 [1] 1137).  
5) 5-Chlor-2-Acetylamidodiphenylketon. Sm. 117° (Soc. 85, 344 C. 1904 [1] 1405).  
6) 3-Chlor-4-Acetylamidodiphenylketon. Sm. 99,5° (Soc. 85, 342 C. 1904 [1] 1405).  
7) Acetat d. anti-α-Oximido-4-Chlordiphenylmethan. Sm. 147 bis 148° (B. 23, 3612). — III, 189.  
8) Acetat d. syn-α-Oximido-4-Chlordiphenylmethan. Sm. 105—106° (B. 23, 3612). — III, 189.  
9) Amid d. α-Benzoyl-α-[4-Chlorphenyl]essigsäure. Sm. 196° (J. pr. [2] 67, 384 C. 1903 [1] 1356).  
10) Phenylamid d. 2-[Chloracetyl]benzol-1-Carbonsäure. Sm. 175 bis 176° (A. 255, 381). — II, 1648.  
11) Chlorid d. 3-[3,4-Dimethylbenzoyl]pyridin-2-Carbonsäure. Fl. (M. 22, 117).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>NBr** 1) 2-Acetylbromamidodiphenylketon. Sm. 121° (C. 1903 [1] 1137).  
2) 4-Acetylbromamidodiphenylketon. Sm. 151° (C. 1903 [1] 1137).  
3) α-[4-Bromphenyl]-β-[2-Amidophenyl]akrylsäure. Sm. 222—223° (B. 39, 3118 C. 1906 [2] 1330).  
4) Acetat d. anti-α-Oximido-3-Bromdiphenylmethan. Sm. 89,5° (A. 264, 172). — III, 190.  
5) Acetat d. syn-α-Oximido-3-Bromdiphenylmethan. Sm. 78—79° (A. 264, 172). — III, 190.  
6) Acetat d. anti-α-Oximido-4-Bromdiphenylmethan. Sm. 160,5° (A. 264, 155). — III, 190.  
7) Acetat d. syn-α-Oximido-4-Bromdiphenylmethan. Sm. 121° (A. 264, 157). — III, 190.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>NBr<sub>3</sub>** 1) N-Acetylphenyl-2,4,6-Tribrom-3-Oxybenzylamin. Sm. 180° (A. 332, 182 C. 1904 [2] 209).  
2) Acetat d. Phenyl-2,4,6-Tribrom-3-Oxybenzylamin. Sm. 99—100° (A. 332, 181 C. 1904 [2] 209).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) α-Acetyl-α-Phenyl-β-[3,5-Dibrom-2-Oxybenzyliden]hydrazin. Sm. 188° (B. 17, 3008; A. 365, 339 C. 1909 [1] 1867). — IV, 760.  
2) Acetat d. α-Phenyl-β-[3,5-Dibrom-2-Oxybenzyliden]hydrazin. Sm. 166—167° (A. 365, 338 C. 1909 [1] 1867).

- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 3) Acetat d.  $\beta$ -Dibrom-4'-Oxy-2-Methylazobenzol. Sm. 153° (Soc. 79, 1091). — \*IV, 1037.
- 4) Acetat d.  $\beta$ -Dibrom-4'-Oxy-3-Methylazobenzol. Sm. 118° (Soc. 79, 1092). — \*IV, 1038.
- 5) Acetat d.  $\beta$ -Dibrom-4'-Oxy-4-Methylazobenzol. Sm. 148° (Soc. 79, 1093). — \*IV, 1038.
- 6) Di[Phenylamid] d. Dibrommalonsäure. Sm. 143—144° (B. 41, 4465 C. 1909 [1] 354).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>S** 1) 2-Acetylrimido-4-Keto-3-[2-Naphtyl]tetrahydrothiazol. Sm. 139 bis 140° (C. 1903 [2] 110). — \*IV, 305.
- 2) 2-[2-Naphtyl]rimido-4-Keto-3-Acetyltetrahydrothiazol. Sm. 142 bis 143° (C. 1903 [2] 110). — \*IV, 305.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>3</sub>Cl** 1)  $\beta$ -Chlor- $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Nitrophenyl]propen. Sm. 140 bis 141° (B. 24, 248). — IV, 754.
- 2)  $\beta$ -Chlor- $\gamma$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]propen. Sm. 154 bis 156° (B. 24, 249). — IV, 754.
- 3)  $\beta$ -Chlor- $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Nitrophenyl]propen. Sm. 179° (B. 24, 249). — IV, 754.
- 4) 3-Chlor-4,6-Dimethyl-2-Phenyl-2,1,5-Benzotriazol-2<sup>3</sup>-Carbonsäure. Sm. 195° u. Zers. Na + H<sub>2</sub>O (A. 366, 399 C. 1909 [2] 290).
- 5) Benzoat d.  $\alpha$ -Oximido- $\alpha$ -[4-Chlorphenyl]azoäthan. Sm. 167 bis 167,5° (B. 35, 76 C. 1902 [1] 403). — \*IV, 1067.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>N<sub>3</sub>Br** 1)  $\beta$ -Brom- $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Nitrophenyl]propen. Sm. 134° (B. 24, 248). — IV, 755.
- 2)  $\beta$ -Brom- $\gamma$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]propen. Sm. 120° (B. 18, 485). — IV, 755.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>ClBr** 1)  $\beta$ -Bromäthyläther d. 3-Chlor-4-Oxydiphenylketon. Sm. 79—80° (B. 40, 3661 C. 1907 [2] 1419).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>Cl<sub>2</sub>S** 1) Dimethyläther d. Di[ $\beta$ -Chlor- $\beta$ -Oxyphenyl]thioketon. Sm. 178 bis 179° (B. 28, 2872). — III, 211.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>2</sub>S** 1) Dimethyläther d. Di[ $\beta$ -Brom- $\beta$ -Oxyphenyl]thioketon. Sm. 189 bis 190° (B. 28, 2873). — III, 211.
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>NCl** 1)  $\beta$ -Oximido- $\alpha$ -[4-Chlorphenyl]- $\beta$ -Phenylpropionsäure. Sm. 153° (J. pr. [2] 67, 385 C. 1903 [1] 1357).
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>NCl<sub>3</sub>** 1) Verbindung (aus Chloral u.  $\beta$ -2-Methyl-5-Chinolylakrylsäure). Sm. 201°. Ag. HCl (B. 22, 283; 38, 2775). — IV, 382.
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>NBr** 1) Methyläther d. 10-Brom-10-Nitro-9-Oxy-9,10-Dihydroanthracen. Sm. 93° u. Zers. (A. 323, 238 C. 1902 [2] 803).
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>NBr<sub>3</sub>** 1) Acetat d. 3,5,6-Tribrom-2-Phenylamido-1-Oxy-4-Keto-1-Methyl-1,2-Dihydrobenzol. Sm. 190° u. Zers. (A. 341, 334 C. 1905 [2] 1424).
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>Br<sub>2</sub>** 1) 4,5-Dioxy-2-Keto-4,5-Di[4-Bromphenyl]tetrahydroimidazol. Sm. 320° u. Zers. (320—325°) (A. 368, 210 C. 1909 [2] 1466; A. 368, 266 C. 1909 [2] 1568).
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>S** 1) 4,5-Diphenylimidazol-2-Sulfonsäure + H<sub>2</sub>O. Sm. 271—273° (wasserfrei) u. Zers. (A. 284, 18). — III, 225.
- 2) Nitril d. Benzoylphenylsulfonamidoessigsäure. Sm. 110—112° (Am. 35, 65 C. 1906 [1] 756).
- C<sub>15</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>S<sub>2</sub>** 1) 4-Nitrobenzylester d. Benzoylamidodithioameisensäure. Sm. 155 bis 156° (Am. 26, 196).
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>NCl** 1) 2,6-Dimethyl-4-[4-Chlorphenyl]pyridin-3,5-Dicarbonensäure. Sm. 274° (J. pr. [2] 65, 289 C. 1902 [1] 1216). — \*IV, 232.
- 2) Salicylat d. 4-Chloracetylamido-1-Oxybenzol. Sm. 158° (D.R.P. 84654). — \*II, 888.
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>Br<sub>2</sub>** 1) N-Acetyl-3-Nitrophenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 158 bis 159° (A. 332, 189 C. 1904 [2] 210).
- 2) N-Acetyl-4-Nitrophenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 155 bis 157° (A. 332, 190 C. 1904 [2] 210; A. 369, 237 C. 1909 [2] 1996).
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>S** 1) s-Diphenylthioharnstoff-3,3'-Dicarbonensäure. Sm. oberhalb 300° u. Zers. Ba (B. 3, 812; A. 169, 102). — II, 1264.
- 2) Verbindung (aus 4,4'-Dinitrodibenzylketon) oder C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>N<sub>2</sub>S. Sm. 137° (A. 337, 180 C. 1905 [1] 234).
- C<sub>15</sub>H<sub>12</sub>O<sub>4</sub>N<sub>3</sub>Br** 1) Bromgallaminblau (J. pr. [2] 63, 93). — \*III, 494.
- 2)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]hydrazin. Sm. 248° (B. 37, 3937 C. 1904 [2] 1596).



- $C_{15}H_{12}O_4N_3Br$  3)  $\alpha$ -[4-Bromphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 189° u. Zers. (*J. pr.* [2] 75, 132 *C.* 1907 [1] 1037).
- 4) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]hydrazin. Sm. 209—210° (*B.* 37, 3936 *C.* 1904 [2] 1596).
- 5) Acetat d. 5'-Brom-3'-Nitro-4'-Oxy-4-Methylazobenzol. Sm. 124° (*Soc.* 89, 186 *C.* 1906 [1] 1339).
- 6) Phenylamidoformiat d. syn- $\beta$ -Brom- $\alpha$ -Oximido- $\alpha$ -[3-Nitrophenyl]-äthan. Sm. 145—146° (*B.* 34, 1910). — \*III, 101.
- $C_{15}H_{12}O_4N_4Br_2$  1) Dibromricininsäure. Sm. 180° (*C.* 1895 [1] 853).
- $C_{15}H_{12}O_4N_6S$  1) s-Di[ $\beta$ -Nitrobenzylidenamido]thioharnstoff. Sm. 227° (*B.* 41, 1100 *C.* 1908 [1] 1682).
- $C_{15}H_{12}O_4ClBr$  1) Diacetat d. 4-Chlor-6-Brom-2,3-Dioxy-1-Methylnaphtalin. Sm. 184° (*B.* 42, 3385 *C.* 1909 [2] 1650).
- $C_{15}H_{12}O_5NBr_3$  1) 2[oder 3]-Brom-4-Äthoxyphenylamid d. 2,6-Dibrom-3,4,5-Trioxybenzol-1-Carbonsäure + 2H<sub>2</sub>O. Sm. 209—210° (218—219° wasserfrei) (*J. pr.* [2] 63, 85). — \*II, 1112.
- $C_{15}H_{12}O_6N_2Br_2$  1)  $\beta\beta$ -Di[5-Brom-3-Nitro-4-Oxyphenyl]propan. Sm. 176° (*A.* 343, 87 *C.* 1906 [1] 132).
- $C_{15}H_{12}O_6N_2S$  1) 4-Oxyazobenzol-3-Akrylsäure-4'-Sulfonsäure (*B.* 37, 4127 *C.* 1904 [2] 1735).
- $C_{15}H_{12}O_6N_8Cl$  1) Acetat d.  $\beta$ -Chlor-4,6-Dinitro-4'-Oxy-3-Methyldiphenylamin. Sm. 128° (*B.* 37, 2093 *C.* 1904 [2] 34).
- $C_{15}H_{12}O_9N_4S$  1) Methylester d. [4-Sulfofenyl]azo-2,4-Dinitrophenylessigsäure. Na (*B.* 22, 326). — IV, 1465.
- $C_{15}H_{12}O_{11}N_4S$  1) 2[oder 3]-Nitro-4-Methylbenzolsulfonat d. 2,6-Dinitro-4-Oxyphenylamidoessigsäure. Sm. 194° (*B.* 42, 4113 *C.* 1909 [2] 2074).
- $C_{15}H_{12}NCl_3S$  1) 4-Methylphenyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha$ -[4-Merkaptophenyl]-imidoäthan. Sm. 107—108° (*J. pr.* [2] 68, 271 *C.* 1903 [2] 993).
- $C_{15}H_{13}NBrMg$  1) Chinolinphenylmagnesiumbromid (*B.* 37, 3091 *C.* 1904 [2] 995; *C.* 1907 [1] 1543).
- $C_{15}H_{12}N_2Br_2S_2$  1) Methyläther d. 2, $\beta$ -Dibrom-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiadiazol. Sm. 196° u. Zers. (*J. pr.* [2] 67, 237 *C.* 1903 [1] 1263). — \*IV, 482.
- $C_{15}H_{12}N_3ClS$  1) anti- $\alpha$ -[4-Chlorphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 150° (*B.* 32, 1084).
- 2) syn- $\alpha$ -[4-Chlorphenyl]amido- $\beta$ -Phenylthioharnstoff. Sm. 176 bis 177° (*B.* 32, 1084).
- $C_{15}H_{13}ONCl_2$  1)  $\beta$ -Dichlor-5-Benzoylamido-1,3-Dimethylbenzol. Sm. 158° (*B.* 29, 312). — \*II, 314.
- 2) Äthyläther d. 4-[2,5-Dichlorbenzyliden]amido-1-Oxybenzol. Sm. 59° (*B.* 29, 876; *A.* 296, 70). — \*III, 24.
- $C_{15}H_{13}ONBr_2$  1)  $\alpha\beta$ -Dibrom- $\gamma$ -[4-Oxyphenyl]imido- $\alpha$ -Phenylpropan. Sm. 287° (*B.* 25, 2754). — III, 54.
- 2) 2,4-Dimethylphenyl-3,5-Dibrom-4-Oxybenzylidenamin. Sm. 161° (*B.* 41, 1057 *C.* 1908 [1] 1775).
- 3) Phenylamid d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 174°. — II, 1359.
- $C_{15}H_{13}ONBr_4$  1) 3,5,6-Tribrom-2-Oxy-4-Brommethyl-1-[2-Methylphenylamido]-methylbenzol. Erweicht bei 120—125° (*B.* 35, 149 *C.* 1902 [1] 468).
- 2) 3,4,5,6-Tetrabrom-4'-Dimethylamido-2-Oxydiphenylmethan. Sm. 121—123°. HBr (*A.* 334, 327 *C.* 1904 [2] 988).
- $C_{15}H_{13}ONS$  1) 2-Merkapto-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 185° (*B.* 29, 1312). — \*II, 661.
- 2) Äthyläther d. 1-[4-Oxyphenyl]benzthiazol. Sm. 120° (*J. pr.* [2] 59, 578; *B.* 25, 3529).
- 3) Methyläther d. 3-[4-Oxyphenyl]-2,4-Benzthiazin. Sm. 124,5° (*B.* 30, 1143). — IV, 420.
- 4) Benzoylamid d. 1-Methylbenzol-4-Thiocarbonsäure. Sm. 135 bis 136° (*Am.* 26, 360).
- $C_{15}H_{13}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-Allyl-5-Cinnamylidentetrahydrothiazol. Sm. 166° (*M.* 24, 514 *C.* 1903 [2] 837).
- 2) Benzylester d. Benzoylamidodithioameisensäure. Sm. 108° (*C.* 1901 [2] 276).



- C<sub>15</sub>H<sub>13</sub>ON<sub>2</sub>Cl** 1)  $\alpha$ -[3-Chlorphenyl]imido- $\alpha$ -Acetylamidophenylmethan. Sm. 128 bis 129° (*Am.* 20, 574). — \*IV, 567.  
 2) Chlorid d.  $\alpha$ -Benzyliden- $\beta$ -[3-Methylphenyl]hydrazin- $\beta$ -Carbon-säure. Sm. 69—70° (D.R.P. 163035 C. 1905 [2] 1299).  
 3) Verbindung (aus Dimethylanilin u. 2-Nitrobenzaldehyd). Sm. 162 bis 163°. (2HCl, PtCl<sub>4</sub>) (*B.* 38, 4119 C. 1906 [1] 363; *B.* 42, 1715 C. 1909 [2] 210).
- C<sub>15</sub>H<sub>13</sub>ON<sub>2</sub>Br** 1) Monophenylhydrazon d.  $\alpha\beta$ -Diketo- $\alpha$ -[4-Bromphenyl]propan. Sm. 199° (*Am.* 41, 424 C. 1909 [2] 198).  
 2) 4-Brom-2-Keto-4,5-Diphenyltetrahydroimidazol (*B.* 41, 1759 C. 1908 [2] 421).  
 3) Äthyläther d. 6-Oxy-1-[2-Bromphenyl]benzimidazol. Pikrat (*B.* 36, 3867 C. 1904 [1] 92).  
 4) Äthyläther d. 6-Oxy-1-[3-Bromphenyl]benzimidazol. Sm. 130°. Pikrat (*B.* 36, 3869 C. 1904 [1] 92).  
 5) Phenylhydrazid d.  $\alpha$ -Brom- $\beta$ -Phenylakrylsäure. Sm. 120° (*Soc.* 61, 282). — IV, 671.
- C<sub>15</sub>H<sub>13</sub>ON<sub>3</sub>S** 1) 5-Thiocarbonyl-3-Keto-4-Phenyl-1-Benzyltetrahydro-1,2,4-Triazol. Sm. 218° (*B.* 37, 2336 C. 1904 [2] 315).  
 2) 5-Merkapto-4-Phenyl-1-Benzyl-4,5-Dihydro-1,2,4-Triazol-3,5-Oxyd. Sm. 147° (*B.* 37, 2335 C. 1904 [2] 315).  
 3) Methyläther d. 3-Merkapto-5-Keto-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 103° (*B.* 34, 309, 342). — \*IV, 748.  
 4) 5-Methyläther d. 5-Merkapto-2-Keto-1,3-Diphenyl-2,3-Dihydro-1,3,4-Triazol? Sm. 185°. (4 + 2HCl, PtCl<sub>4</sub>), (2 + HJ) (*B.* 25, 3111; 34, 340; *B.* 35, 973 C. 1902 [1] 880). — IV, 686; \*IV, 447.  
 5) 5-Phenylamido-2-Keto-3-[2-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 197° (*B.* 32, 1085). — \*IV, 531.  
 6) 3-Merkapto-5-Keto-1,4-Diphenyl-1,4,5,6-Tetrahydro-1,2,4-Triazin. Sm. 201° u. Zers. (*B.* 36, 3888 C. 1904 [1] 27; *B.* 40, 1026 C. 1907 [1] 1191).
- C<sub>15</sub>H<sub>13</sub>ON<sub>4</sub>Cl** 1) 2-Chlorphenylat d. 4-Acetyl-1-Phenyl-1,2,3,5-Tetrazol. 2 + PtCl<sub>4</sub> (*B.* 30, 2997). — IV, 1241.
- C<sub>15</sub>H<sub>13</sub>OCIBr<sub>2</sub>** 1) Methyläther d.  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Chlorphenyl]- $\beta$ -[4-Oxyphenyl]-äthan (*J. pr.* [2] 61, 197). — \*II, 540.
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>NCl<sub>4</sub>** 1) Verbindung (aus 4-Dimethylamido-1-Methylbenzol u. 2,3,5,6-Tetrachlor-1,4-Benzochinon). Sm. 114° (*Am.* 34, 455 C. 1906 [1] 31).
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>NBr<sub>2</sub>** 1) 3,6-Dibrom-5-Phenylamido-2-Isopropyl-1,4-Benzochinon. Sm. 170° (*B.* 34, 1559). — \*III, 270.  
 2) Phenyl-3,5-Dibrom-2-Oxybenzoylamid d. Essigsäure. Sm. 152° (*B.* 33, 1923; *A.* 332, 177 C. 1904 [2] 209). — \*II, 428.
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>NBr<sub>4</sub>** 1) Methylidi[3,5-Dibrom-4-Oxybenzyl]amin. Sm. 180° (*A.* 344, 158 C. 1906 [1] 1157).  
 2) Verbindung (aus 4-Dimethylamido-1-Methylbenzol u. 2,3,5,6-Tetrabrom-1,4-Benzochinon). Sm. 109° (*Am.* 34, 456 C. 1906 [1] 31).
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>NS** 1) Methylester d. Benzoylphenylamidothiolsäure. Sm. 93° (*Am.* 24, 436). — \*II, 743.  
 2) Äthylester d. Thiodiphenylamin-N-Carbonsäure. Sm. 109—110° (*B.* 18, 1845). — II, 806.
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) Methyläther d. Benzoylimido-3-Chlorphenylamidooxymethan. Fl. (*Am.* 24, 220).  
 2)  $\alpha$ -Acetyl- $\alpha$ -[2-Chlorphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 153—154° (*A.* 365, 324 C. 1909 [1] 1866).  
 3) Methylester d. 4'-Chlor-4-Oxyazobenzolmethyläther-2-Carbonsäure. Sm. 89—90° (*C.* 1908 [1] 127).  
 4) Acetat d.  $\alpha$ -[2-Chlorphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 105—106° (*A.* 365, 324 C. 1909 [1] 1866).  
 5) Acetat d. 3'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 73—74° (*B.* 25, 1330). — IV, 1420.  
 6) Acetat d. 4'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 118—119° (*B.* 25, 1327). — IV, 1420.  
 7) Phenylamidoformiat d. syn- $\beta$ -Chlor- $\alpha$ -Oximido- $\alpha$ -Phenyläthan. Sm. 118—120° (*B.* 34, 1904). — \*III, 100.

- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Verbindung (aus Chloral u. Benzenylphenylamidoxim). Sm. 128 bis 130° (B. 22, 2402). — II, 1204.
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) 2-Brom-4-[4-Nitrobenzyliden]amido-1,3-Dimethylbenzol. Sm. 182 bis 183° (B. 34, 2255). — \*III, 23.  
 2) 5-Brom-4-[4-Nitrobenzyliden]amido-1,3-Dimethylbenzol. Sm. 130° (B. 34, 2256). — \*III, 23.  
 3) 6-Brom-4-[4-Nitrobenzyliden]amido-1,3-Dimethylbenzol. Sm. 139° (B. 34, 2253). — \*III, 23.  
 4)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Brom-2-Oxybenzyliden]hydrazin. Sm. 152° (B. 37, 3935 C. 1904 [2] 1596).  
 5)  $\alpha$ -Acetyl- $\alpha$ -[2-Bromphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 142 bis 143° (A. 365, 328 C. 1909 [1] 1867).  
 6)  $\alpha$ -Acetyl- $\alpha$ -[4-Bromphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 148 bis 149° (A. 365, 330 C. 1909 [1] 1867).  
 7) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Brom-2-Oxybenzyliden]hydrazin. Sm. 138° (B. 37, 3934 C. 1904 [2] 1596).  
 8) Acetat d.  $\alpha$ -[2-Bromphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 114° (A. 365, 328 C. 1909 [1] 1867).  
 9) Acetat d.  $\alpha$ -[4-Bromphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 119 bis 120° (A. 365, 329 C. 1909 [1] 1867).  
 10) Acetat d. 5-Brom-6-Oxy-3-Methylazobenzol. Sm. 83° (Soc. 79, 134). — \*IV, 1041.  
 11) Acetat d. 2'-Brom-6-Oxy-3-Methylazobenzol. Sm. 85° (Soc. 79, 165). — \*IV, 1040.  
 12) Acetat d. 3'-Brom-6-Oxy-3-Methylazobenzol. Sm. 61—62° (Soc. 79, 166). — \*IV, 1040.  
 13) Acetat d. 4'-Brom-6-Oxy-3-Methylazobenzol. Sm. 123° (Soc. 79, 166). — \*IV, 1040.  
 14) Acetat d. 2-Brom-4'-Oxy-4-Methylazobenzol. Sm. 84—85° (B. 31, 1783). — IV, 1413.  
 15) Phenylamidoformiat d. syn- $\beta$ -Brom- $\alpha$ -Oximido- $\alpha$ -Phenyläthan. Sm. 120—121° (B. 34, 1908). — \*III, 100.
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>3</sub>** 1)  $\beta$ -Tribrom- $\alpha\alpha$ -Di[Phenylamido]propionsäure (Tribromdianilido-brenztraubensäure). Sm. 264° u. Zers. (A. 263, 126). — II, 405.
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>S** 1)  $\alpha$ -Phenylamidooxalyl- $\beta$ -Phenylthioharnstoff. Sm. 172—173° (Soc. 75, 410). — \*II, 207.  
 2) 5-Methylsulfon-1,2-Diphenyl-1,3,4-Triazol. Sm. 176° (B. 29, 2919). — IV, 1159.
- C<sub>15</sub>H<sub>13</sub>O<sub>4</sub>N<sub>4</sub>Cl** 1) Phenylamidoformiat d.  $\alpha$ -Oximido- $\alpha$ -[4-Chlorphenyl]azoäthan. Sm. 129—130° (B. 35, 76 C. 1902 [1] 403). — \*IV, 1067.
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>NBr<sub>2</sub>** 1) 2-Äthyläther d.  $\alpha$ -Oximido-5,5'-Dibrom-2,2'-Dioxydiphenylmethan. Sm. 181—182° (B. 39, 2360 C. 1906 [2] 526).  
 2) Methylester d. 3-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 120—123° (A. 332, 197 C. 1904 [2] 210).
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>NS** 1) 2'-Acetylamidodiphenylsulfid-2-Carbonsäure. Sm. 188—196° (B. 42, 3062 C. 1909 [2] 1458).  
 2) 4'-Acetylamidodiphenylsulfid-2-Carbonsäure. Sm. 236—237° (B. 42, 3054 C. 1909 [2] 1457).  
 3) 1,3-Dimethyl- $\beta$ -Naphtochinolin- $\beta$ -Sulfonsäure + 1½ H<sub>2</sub>O (J. pr. [2] 35, 306). — IV, 419.
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>N<sub>2</sub>Cl** 1) Äthylester d. 2'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 90 bis 96° (Soc. 69, 1259). — IV, 1469.  
 2) Äthylester d. 3'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 102 bis 103° (Soc. 69, 1263). — IV, 1469.  
 3) Äthylester d. 4'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 113° (Soc. 69, 1264). — IV, 1469.
- C<sub>15</sub>H<sub>13</sub>O<sub>3</sub>N<sub>2</sub>Br** 1) Methylester d. 2-Brom-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 134° (B. 31, 1785). — IV, 1469.  
 2)  $\beta$ -Bromphenyl-2-Nitrobenzylamid d. Essigsäure. Sm. 137—138° (J. pr. [2] 47, 349). — II, 524.  
 3) Bromderivat d. Verb. C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>. Sm. 212° (J. pr. [2] 70, 374 C. 1904 [2] 1566).

- $C_{15}H_{13}O_3N_3S$  1) Methyläther d. Benzoylimido-3-Nitrophenylamidomerkapto-methan (Benzoyl-3-Nitrophenylthioldimethylpseudothioharnstoff). Sm. 71 bis 72° (*Am.* 26, 412).
- $C_{15}H_{13}O_4NS$  1) *p*-Oxy-1,3-Dimethyl- $\beta$ -Naphtochinolin-*p*-Sulfonsäure +  $1\frac{1}{2}H_2O$  (*J. pr.* [2] 35, 310). — IV, 419.  
2) Äthylester d. 2'-Nitrodiphenylsulfid-2-Carbonsäure. Sm. 75—76° (*B.* 42, 3060 *C.* 1909 [2] 1457).  
3) Äthylester d. 4'-Nitrodiphenylsulfid-2-Carbonsäure. Sm. 127° (*B.* 42, 3051 *C.* 1909 [2] 1456).  
4)  $\beta$ -Phenoxyäthylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 81—82° (*B.* 30, 1268). — \*II, 801.
- $C_{15}H_{13}O_4N_2Br$  1)  $\alpha$ '-[4-Bromphenyl]hydrazon- $\alpha$ '-[4,6-Dioxyphenyl]äthan- $\alpha$ '-Carbon-säure. Sm. 243° (*B.* 40, 3578 *C.* 1907 [2] 1745).
- $C_{15}H_{13}O_4N_3Br_2$  1)  $\alpha$ -Acetyl- $\alpha$ '-[3,5-Dibrom-2-Oxybenzyl]- $\beta$ '-[4-Nitrophenyl]hydrazin. Sm. 258—259° u. Zers. (*A.* 364, 173 *C.* 1909 [1] 919).
- $C_{15}H_{13}O_4N_3S$  1) Nitril d. 4-Nitrobenzylphenylsulfonamidoessigsäure. Sm. 123 bis 125° (*Am.* 35, 63 *C.* 1906 [1] 756).
- $C_{15}H_{13}O_4N_4Cl$  1) 2-Chlor-6-Nitro-2-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin (*B.* 36, 3121 *C.* 1903 [2] 1132).
- $C_{15}H_{13}O_4BrS_2$  1) 1,3- $\alpha$ -Brombenzylidendi[Sulfonmethyl]benzol. Sm. 268° u. Zers. (*B.* 34, 1777). — \*III, 15.
- $C_{15}H_{13}O_5NS$  1) 5-Acetylamidodiphenylsulfon-2-Carbonsäure. Sm. 212° u. Zers. (*B.* 38, 737 *C.* 1905 [1] 877).  
2) 4'-Acetylamidodiphenylsulfon-2-Carbonsäure. Sm. 215° (*B.* 42, 3055 *C.* 1909 [2] 1457).  
3) Äthylester d. 2'-Nitrodiphenylsulfoxyd-2-Carbonsäure. Sm. 120° (*B.* 42, 3061 *C.* 1909 [2] 1458).  
4) Äthylester d. 4'-Nitrodiphenylsulfoxyd-2-Carbonsäure. Sm. 107 bis 107,5° (*B.* 42, 3053 *C.* 1909 [2] 1457).  
5) 2-Benzoylmethylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 160° (*B.* 29, 332). — III, 127.
- $C_{15}H_{13}O_6NS$  1) 3'-Nitro-2,4-Dimethyldiphenylketon-*p*-Sulfonsäure. Ba +  $2H_2O$  (*A.* 286, 335). — III, 232.  
2)  $\beta$ -Phenylsulfon- $\beta$ '-[2-Nitrophenyl]propionsäure. Sm. 157—160° (*B.* 40, 4792 *C.* 1908 [1] 232).  
3)  $\beta$ -Phenylsulfon- $\beta$ '-[3-Nitrophenyl]propionsäure. Sm. 170° (*B.* 40, 4793 *C.* 1908 [1] 233).  
4)  $\beta$ -Phenylsulfon- $\beta$ '-[4-Nitrophenyl]propionsäure. Sm. 197—200° (*B.* 40, 4793 *C.* 1908 [1] 233).  
5) Phenylsulfonphenylamidoessigsäure-2-Carbonsäure. Sm. 190° u. Zers. (*B.* 35, 1685 *C.* 1902 [1] 1362).  
6) Äthylester d. 4'-Nitrodiphenylsulfon-2-Carbonsäure. Sm. 101° (*B.* 42, 3054 *C.* 1909 [2] 1457).
- $C_{15}H_{13}O_6NS_2$  1) 1,3-Dimethyl- $\beta$ -Naphtochinolin-*p*-Disulfonsäure +  $4\frac{1}{2}H_2O$ . Ba +  $7H_2O$ , Cu +  $5H_2O$  (*J. pr.* [2] 35, 307). — IV, 419.
- $C_{15}H_{13}O_6N_3Br_2$  1) Methyl-di[5-Brom-3-Nitro-4-Oxybenzyl]amin. Sm. 184—185° (*A.* 344, 267 *C.* 1906 [1] 1610).
- $C_{15}H_{13}O_6N_3S$  1) 6,8-Dinitro-1-Phenylsulfon-1,2,3,4-Tetrahydrochinolin. Sm. 215° (*B.* 23, 321 *C.* 1905 [1] 102).  
2) 4-Acetylamido-1-[4-Nitrobenzyliden]amidobenzol-1'-Sulfonsäure (D.R.P. 135335 *C.* 1902 [2] 1167).
- $C_{15}H_{13}O_6N_3S_2$  1) 5-Äthylxanthogenat d. 2,4-Dinitro-2'-Oxydiphenylamin. Sm. 155 bis 156° (*C.* 1901 [2] 383).  
2) 5-Äthylxanthogenat d. 2,4-Dinitro-4'-Oxydiphenylamin. Sm. 125 bis 130° (*C.* 1901 [2] 383).
- $C_{15}H_{13}O_8NBr_2$  1) Acetylamid d. 2,6-Dibrom-3,4,5-Triacetoxybenzol-1-Carbon-säure. Sm. 233° (*J. pr.* [2] 63, 88). — \*II, 1112.
- $C_{15}H_{13}O_8N_3S$  1) *p*-Nitro-4-Methylbenzolsulfonat d. 3-Nitro-4-Acetylamido-1-Oxy-benzol. Sm. 146° (*B.* 40, 2854 *C.* 1907 [2] 455).
- $C_{15}H_{13}O_9NS_5$  1) Dithiänyl-2-Amidophenylmethan-*p*-Trisulfonsäure. Ba<sub>3</sub> (*B.* 30, 2037). — \*III, 597.  
2) Dithiänyl-3-Amidophenylmethan-*p*-Trisulfonsäure. Ba<sub>3</sub> (*B.* 30, 2037). — \*III, 597.



- C<sub>15</sub>H<sub>13</sub>O<sub>9</sub>NS<sub>5</sub>** 3) Dithiänyl-4-Amidophenylmethan-*p*-Trisulfonsäure. Ba<sub>3</sub> (B. 30, 2037). — \*III, 597.
- C<sub>15</sub>H<sub>13</sub>O<sub>9</sub>N<sub>3</sub>S** 1) 4-Methylbenzolsulfonat d. 2,6-Dinitro-4-Oxyphenylamidoessigsäure<sup>p</sup> Sm. 222° u. Zers. (B. 42, 4112 C. 1909 [2] 2074).
- C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>BrS<sub>2</sub>** 1) Methyläther d. 2-Brom-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. + Br<sub>2</sub> (Sm. 172°) (J. pr. [2] 67, 237 C. 1903 [1] 1263). — \*IV, 482.
- C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>JS<sub>2</sub>** 1) Methyläther d. 2-Jod-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 188°. + J<sub>2</sub> (J. pr. [2] 67, 222 C. 1903 [2] 1261). — \*IV, 482.
- C<sub>15</sub>H<sub>14</sub>ONCl** 1) 4-Chlor-5-Benzoylamido-1,3-Dimethylbenzol. Sm. 128° (B. 29, 312). — \*II, 314.  
 2)  $\alpha$ -Phenylamido- $\alpha$ -[4-Chlorbenzoyl]äthan. Sm. 111—111,5° (C. 1898 [2] 203). — \*III, 114.  
 3) Aldehyd d. 4-Chlor-6-Benzylamido-1-Methylbenzol-3-Carbonsäure (C. 1900 [1] 238).  
 4) 2-Methylphenylamid d. Phenylchloroessigsäure. Sm. 123—124° (A. 279, 126). — II, 1316.  
 5) 4-Methylphenylamid d. Phenylchloroessigsäure. Sm. 142° (A. 279, 127). — II, 1316.  
 6) Phenylbenzylamid d. Chloroessigsäure. Sm. 80—81° (Ar. 241, 218 C. 1903 [2] 104).  
 7) 2-Methylphenylamid d. 2-Chlorphenylessigsäure. Sm. 174° (J. pr. [2] 62, 559). — \*II, 816.  
 8) 4-Methylphenylamid d. 2-Chlorphenylessigsäure. Sm. 169,5° (J. pr. [2] 62, 559). — \*II, 816.  
 9) 2-Methylphenylamid d. 4-Chlorphenylessigsäure. Sm. 179° (J. pr. [2] 62, 562). — \*II, 816.  
 10) 4-Methylphenylamid d. 4-Chlorphenylessigsäure. Sm. 189,5° (J. pr. [2] 62, 562). — \*II, 816.  
 11) Chlorid d. Dibenzylamidoameisensäure (Dibenzylharnstoffchlorid). Fl. (B. 25, 1819). — II, 524.  
 12) Chlorid d. Di[4-Methylphenyl]amidoameisensäure. Sm. 103° (J. pr. [2] 56, 12; B. 25, 1821). — II, 490; \*II, 271.  
 13) Chlorid d. Benzyl-4-Methylphenylamidoameisensäure. Fl. (B. 25, 1822). — II, 524.
- C<sub>15</sub>H<sub>14</sub>ONBr** 1)  $\alpha$ -Phenylamido- $\alpha$ -[4-Brombenzoyl]äthan. Sm. 109,5—110° (C. 1898 [2] 203). — \*III, 114.  
 2) Diphenylamid d.  $\alpha$ -Brompropionsäure. Sm. 109° (B. 31, 2682). — \*II, 176.  
 3) *p*-Bromphenyl-[4-Methylphenyl]amid d. Essigsäure. Sm. 72° (A. 239, 57). — II, 493.
- C<sub>15</sub>H<sub>14</sub>ONBr<sub>3</sub>** 1) 2,3,5-Tribrom-4-Dimethylamido-4-Oxydiphenylmethan. Sm. 127°. HBr (A. 334, 331 C. 1904 [2] 988).  
 2) 2,5,6-Tribrom-4-Oxy-3-Methyldibenzylamin. Sm. 138° (A. 344 C. 1906 [1] 1159).
- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) *s*-Di[6-Chlor-3-Methylphenyl]harnstoff. Sm. 271° (B. 20, 1568). — II, 479.
- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) Äthyläther d. *p*-Dibrom-4'-Oxy-2-Methylazobenzol. Sm. 95° (Soc. 79, 1091). — \*IV, 1037.  
 2) Äthyläther d. *p*-Dibrom-4'-Oxy-3-Methylazobenzol. Sm. 88° (Soc. 79, 1092). — \*IV, 1038.  
 3) Äthyläther d. *p*-Dibrom-4'-Oxy-4-Methylazobenzol. Sm. 95° (Soc. 79, 1093). — \*IV, 1038.
- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>S** 1)  $\alpha$ -Acetyl- $\beta\beta$ -Diphenylthioharnstoff. Sm. 141° (Soc. 93, 689 C. 1908 [2] 234).  
 2) Acetyldiphenylisothioharnstoff ( $\alpha$ -Acetyl- $\alpha\beta$ -Diphenylthioharnstoff). Sm. 91° (96°). Hg, + HgCl<sub>2</sub> (B. 28, 1322; 32, 3655). — \*II, 197.  
 3)  $\alpha$ -Benzyl- $\beta$ -Benzoylthioharnstoff. Sm. 145° (A. ch. [5] 11, 324). — II, 1172.  
 4)  $\alpha$ -[2-Methylphenyl]- $\beta$ -Benzoylthioharnstoff. Sm. 118—119° (116 bis 117°) (Soc. 55, 622; C. 1900 [2] 531; 1901 [2] 198). — II, 1172.  
 5)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Benzoylthioharnstoff. Sm. 165° (A. ch. [5] 11, 324; Soc. 91, 140 C. 1907 [1] 1110). — II, 1172.

- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>S** 6)  $\alpha$ -Phenylacetyl- $\alpha$ -Phenylthioharnstoff. Sm. 113—114° (Soc. 91, 925 C. 1907 [2] 227).  
 7)  $\alpha$ -Phenacetyl- $\beta$ -Phenylthioharnstoff. Sm. 109—110° (Soc. 69, 866). — \*II, 814.  
 8) Methyläther d. Benzoylimidophenylamidomerkaptomethan (Benzoylpseudomethylphenylthioharnstoff). Sm. 104—105° (C. 1901 [2] 275).  
 9) Methyläther d. Benzoylphenylamidoimidomerkaptomethan (unsubstituiertes Benzoylphenylpseudomethylthioharnstoff). Sm. 86° (Am. 27, 278 C. 1902 [1] 1300).  
 10) Methyläther d.  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oxybenzyliden]thioharnstoff (Phenylthiocarbamidimidomethylbenzoat). Sm. 132° (C. 1900 [2] 530). — \*II, 760.  
 11) Benzyläther d. Benzoylimidoamidomerkaptomethan. Sm. 161° (Am. 29, 76 C. 1903 [1] 523).  
 12) 4-Phenylimido-5-Phenyl-5,6-Dihydro-1,3,5-Oxthiazin. Sm. 78° (C. 1905 [2] 1422).  
 13) 6-Äthyläther d. 2-Merkapto-6-Oxy-1-Phenylbenzimidazol. Sm. 229°. Hg (B. 25, 1001; B. 36, 3848 C. 1904 [1] 89). — II, 723.  
 14) Methyläther d. 2-Thiocarbonyl-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 237° u. Zers. (J. pr. [2] 52, 403; [2] 55, 370). — IV, 634; \*IV, 409.  
 15) Dithiocarbaminsaures Dibenzylidenammonium? (A. 168, 240). — III, 34.  
 16) Benzoat d. 4-Methylphenylamidoimidomerkaptomethan. HCl (Soc. 91, 139 C. 1907 [1] 1110).  
 17) Phenylacetat d. Phenylamidoimidomerkaptomethan. HCl (Soc. 91, 924 C. 1907 [2] 227).  
 18) Verbindung (aus s-Diphenylthioharnstoff u. Acetylchlorid). HCl (Soc. 91, 137 C. 1907 [1] 1110).
- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>S<sub>2</sub>** 1) Monomethyläther d.  $\alpha$ -Dimerkaptomethylen- $\beta$ -Benzoyl- $\beta$ -Phenylhydrazin. Sm. 202° (J. pr. [2] 61, 341; J. pr. [2] 67, 223 C. 1903 [1] 1261). — \*IV, 440.  
 2) Äthylester d. Azobenzol-4-Xanthogensäure. Sm. 65° (J. pr. [2] 41, 210). — IV, 1411.
- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>Cl** 1) 4-Propionylchloramidoazobenzol. Sm. 57° (Soc. 81, 983 C. 1902 [2] 360). — \*IV, 1011.  
 2) 5-Chlor-2-[2,4,5-Trimethylphenyl]-2,1,3-Benztriazol-1-Oxyd. Sm. 137° (B. 38, 396 C. 1905 [2] 39).
- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>Br** 1)  $\beta$ -Oximido- $\alpha$ -[4-Bromphenyl]hydrazon- $\alpha$ -Phenylpropan. Sm. 206 bis 207° (G. 30 [2] 457). — \*IV, 510.  
 2) 4-[ $\alpha$ -Brompropionyl]amidoazobenzol. Sm. 185° (B. 31, 2851). — \*IV, 1011.
- C<sub>15</sub>H<sub>14</sub>ON<sub>4</sub>Br<sub>2</sub>** 1)  $\beta\gamma$ -Di[4-Bromphenylhydrazon]- $\alpha$ -Oxypropan. Sm. 168° (B. 33, 3101). — \*IV, 496.
- C<sub>15</sub>H<sub>14</sub>ON<sub>4</sub>S** 1) 4-Phenylamido-5-Thiocarbonyl-3-Oxy-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 219° (B. 34, 2331). — \*IV, 901.  
 2) 4-[4-Methylphenyl]amido-5-Thiocarbonyl-3-Oxy-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 190° (B. 34, 2330). — \*IV, 901.
- C<sub>15</sub>H<sub>14</sub>ON<sub>4</sub>S<sub>2</sub>** 1) s-Di[Phenylamidothioformyl]harnstoff. Sm. 166° (Soc. 83, 91 C. 1903 [1] 230, 447).
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>NCl** 1) 4-Chlor-1-[Acetyl-2-Oxybenzyl]amidobenzol. Sm. 95° (Ar. 240, 685 C. 1903 [1] 395).  
 2) 3-Methylphenylamido-4-Chlorphenylelessigsäure. Sm. 180° u. Zers. (J. pr. [2] 65, 274 C. 1902 [1] 1215).  
 3) 4-Methylphenylamido-4-Chlorphenylelessigsäure. Sm. 186° u. Zers. (J. pr. [2] 65, 273 C. 1902 [1] 1214).
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>NCl<sub>3</sub>** 1) Verbindung (aus 4-Dimethylamido-1-Methylbenzol u. 2,3,5-Trichlor-1,4-Benzochinon) (Am. 34, 455 C. 1906 [1] 31).  
 2) Verbindung (aus Dimethylamidobenzol u. 3,5,6-Trichlor-2-Methyl-1,4-Benzochinon). Sm. 68—73° (Am. 34, 452 C. 1906 [1] 31).
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>NBr** 1) N-Acetyl-4-Bromphenyl-2-Oxybenzylamin. Sm. 108° (Ar. 240, 686 C. 1903 [1] 395).  
 2) 4'-Äthyläther d.  $\alpha$ -Oximido-2-Brom-4'-Oxydiphenylmethan. Sm. 161—163° (B. 27, 1454). — III, 195.

- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>NBr** 3) Aldehyd d. Methylphenyl-5-Brom-4-Oxybenzylamin-3-Carbonsäure. Sm. 116—117° (A. 344, 264 C. 1906 [1] 1609).
- 4) Phenylamidoformiat d. 5-Brom-4-Oxy-1,3-Dimethylbenzol. Sm. 138—139° (B. 36, 2876 Anm. C. 1903 [2] 834).
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Di-[4-Chlorbenzyläther] d. Oximidomethylhydroxylamin. Sm. 92,5 bis 93,4° HCl (B. 33, 1986). — \*II, 303.
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Di-[4-Brombenzyläther] d. Oximidomethylhydroxylamin. Sm. 100°. HCl (B. 33, 1987). — \*II, 303.
- 2)  $\alpha$ -Acetyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm. 183° (A. 360, 6 C. 1908 [1] 2031).
- 3)  $\beta$ -Acetyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm. 129 bis 130° (A. 360, 6 C. 1908 [1] 2031).
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Methyläther d.  $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzoyl]thioharnstoff. Sm. 125,5 bis 126° (Soc. 75, 386). — \*II, 908.
- 2) Phenyläther d.  $\alpha$ -Oxyacetyl- $\beta$ -Phenylthioharnstoff. Sm. 112—113° (Soc. 89, 908 C. 1906 [2] 774).
- 3) Thioharnstoff (aus d. Dimethyläther d. 4,4'-Diamido-3,3'-Dioxybiphenyl) (J. pr. [2] 59, 217; B. 40, 3254 C. 1907 [2] 1072). — \*II, 601.
- 4) 3-[4-Dimethylamidophenyl]-1,2-Benzsulfonazol (4-Dimethylamidophenylbenzalsultim). Sm. 221° (B. 29, 2297).
- 5) Diphenylthiohydantoinsäure (B. 12, 597). — II, 403.
- 6) Methylester d.  $\alpha\alpha$ -Diphenylthioharnstoff- $\beta$ -Carbonsäure. Sm. 128 bis 129° (Soc. 93, 697 C. 1908 [2] 234).
- 7) Methylester d.  $\alpha\beta$ -Diphenylthioharnstoff- $\alpha$ -Carbonsäure (Methylester d. Diphenylthioallophansäure). Sm. 105° (106°) (Soc. 83, 557 C. 1903 [1] 1123; Soc. 93, 697 C. 1908 [2] 234).
- 8) Phenylester d. Merkaptoameisen-2-Methylphenylamidoimido-methyläthersäure. HCl (Soc. 91, 922 C. 1907 [2] 227).
- 9) Phenylester d. Merkaptoameisen-4-Methylphenylamidoimido-methyläthersäure. HCl (Soc. 91, 922 C. 1907 [2] 227).
- 10) Phenylester d.  $\alpha$ -Benzylthioharnstoff- $\beta$ -Carbonsäure. Sm. 153 bis 154° (Soc. 89, 899 C. 1906 [2] 774).
- 11) Phenylester d.  $\alpha$ -[2-Methylphenyl]thioharnstoff- $\alpha$ -Carbonsäure. Sm. 119—120° (Soc. 91, 922 C. 1907 [2] 227).
- 12) Phenylester d.  $\alpha$ -[4-Methylphenyl]thioharnstoff- $\alpha$ -Carbonsäure. Sm. 153° (Soc. 91, 922 C. 1907 [2] 227).
- 13) Phenylester d.  $\alpha$ -[2-Methylphenyl]thioharnstoff- $\beta$ -Carbonsäure. Sm. 164—165° (Soc. 89, 898 C. 1906 [2] 774).
- 14) Phenylester d.  $\alpha$ -[4-Methylphenyl]thioharnstoff- $\beta$ -Carbonsäure. Sm. 144—145° (Soc. 89, 899 C. 1906 [2] 774).
- 15) Benzylester d.  $\alpha$ -Phenylthioharnstoff- $\beta$ -Carbonsäure. Sm. 144—145° (Soc. 89, 904 C. 1906 [2] 774).
- 16) 2-Methylphenylester d.  $\alpha$ -Phenylthioharnstoff- $\alpha$ -Carbonsäure. Sm. 103—104° (Soc. 91, 921 C. 1907 [2] 227).
- 17) 4-Methylphenylester d.  $\alpha$ -Phenylthioharnstoff- $\alpha$ -Carbonsäure. Sm. 133—134° (Soc. 91, 922 C. 1907 [2] 227).
- 18) 2-Methylphenylester d.  $\alpha$ -Phenylthioharnstoff- $\beta$ -Carbonsäure. Sm. 155—156° (Soc. 89, 900 C. 1906 [2] 774).
- 19) 4-Methylphenylester d.  $\alpha$ -Phenylthioharnstoff- $\beta$ -Carbonsäure. Sm. 157—158° (Soc. 89, 903 C. 1906 [2] 774).
- 20) 2-Methylphenylester d. Merkaptoameisenphenylamidoimido-methyläthersäure. HCl (Soc. 91, 921 C. 1907 [2] 227).
- 21) 4-Methylphenylester d. Merkaptoameisenphenylamidoimido-methyläthersäure. HCl (Soc. 91, 922 C. 1907 [2] 227).
- 22) Acetat d. 4-Oxy-s-Diphenylthioharnstoff. Sm. 137° (B. 16, 1831). — II, 720.
- 23) Nitril d. Benzylphenylsulfonamidoessigsäure. Sm. 68—70° (Am. 35, 62 C. 1906 [1] 756).
- 24) 4-[4-Methylphenyl]merkaptophenylamid d. Oxaminsäure (p-Thiotolylphenyloxamid). Sm. 222° (J. pr. [2] 68, 268 C. 1903 [2] 993).
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>3</sub>Cl** 1) 2-Chlor-4-Nitro-1-[4-Dimethylamidophenyl]imidomethylbenzol (C. 1901 [2] 70).
- 2) 6-Chlor-3-Nitro-4-Dimethylamido-1-Phenylimidomethylbenzol. Sm. 118° (B. 37, 865 C. 1904 [1] 1207).



- $C_{15}H_{14}O_2N_3Cl$  3) 5'-Chlor-2'-Nitro-2,4,5-Trimethylazobenzol. Sm. 178° (*J. pr.* [2] 71, 396 *C.* 1905 [2] 39).
- $C_{15}H_{14}O_2N_3J$  1) Jodmethylat d. 1-Methyl-2-[2-Nitrophenyl]benzimidazol. Sm. oberhalb 280° (*J. pr.* [2] 74, 71 *C.* 1906 [2] 1503).  
 2) Jodmethylat d. 1-Methyl-2-[3-Nitrophenyl]benzimidazol (*J. pr.* [2] 74, 71 *C.* 1906 [2] 1503).  
 3) Jodmethylat d. 1-Methyl-2-[4-Nitrophenyl]benzimidazol. Sm. oberhalb 270° (*J. pr.* [2] 74, 73 *C.* 1906 [2] 1503).  
 4) Jodmethylat d. 5-Nitro-2-Methyl-1-Phenylbenzimidazol. Sm. 270° u. Zers. (*J. pr.* [2] 74, 195 *C.* 1906 [2] 1436).  
 5) Jodmethylat d. 6-Nitro-1-Methyl-2-Phenylbenzimidazol. Sm. 249° (*J. pr.* [2] 74, 70 *C.* 1906 [2] 1504).
- $C_{15}H_{14}O_2N_3S$  1) Thiocarbonyldibenzenylamidoxim. Sm. 96° (*B.* 28, 2232). — \*II, 752.
- $C_{15}H_{14}O_3NCl$  1) 1-Äthyläther d. 5-Chlor-6-Oximido-1,3-Dioxy-1,6-Dihydropentanthren (*B.* 34, 1556). — \*III, 160.
- $C_{15}H_{14}O_3NBr$  1) 1-Äthyläther d. 5-Brom-6-Oximido-1,3-Dioxy-1,6-Dihydropentanthren (*B.* 34, 1546). — \*III, 160.  
 2) Acetat d. 6-Brom-3-Acetylamido-2-Oxy-1-Methylnaphtalin. Sm. 240° (*B.* 39, 450 *C.* 1906 [1] 849).
- $C_{15}H_{14}O_3N_2S$  1) 2-Naphtylacetylthiohydantoinsäure. Sm. 167—173° (*C.* 1903 [2] 110).  
 2) Anhydrid d.  $\alpha$ -[ $\alpha$ -Diphenylureido]äthan- $\beta$ -Sulfonsäure (Anhydrid d. Diphenyltaurocarbaminsäure). Sm. 186—187° u. Zers. (*M.* 4, 136). — II, 380.  
 3) 2-Methoxyphenylester d.  $\alpha$ -Phenylthioharnstoff- $\beta$ -Carbonsäure. Sm. 154—155° (*Soc.* 87, 343 *C.* 1905 [1] 1098, 1315).
- $C_{15}H_{14}O_3N_2Hg$  1) Acetat d. 6-Oxy-3-Methylazobenzol-5-Quecksilberhydroxyd. Sm. 269° u. Zers. (*B.* 35, 2864 *C.* 1902 [2] 1039; *Soc.* 93, 851 *C.* 1908 [1] 2149). — \*IV, 1215.
- $C_{15}H_{14}O_3N_3Cl$  1)  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -[5-Chlor-2-Nitrophenyl]propan. Sm. 182° (*A.* 262, 167). — IV, 761.  
 2) 5-Chlor- $\beta$ -Nitro-2-Oxy-1,3-Dimethyl-2-Phenyl-2,3-Dihydrobenzimidazol. Sm. 188° (*J. pr.* [2] 74, 69 *C.* 1906 [2] 1503).
- $C_{15}H_{14}O_3N_3Br$  1)  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -[5-Brom-2-Nitrophenyl]propan. Sm. 201° (*A.* 284, 151). — IV, 761.
- $C_{15}H_{14}O_4N_2S_2$  1) Di[4-Nitrophenyläther] d.  $\beta\beta$ -Dimerkaptopropan. Sm. 122° (*B.* 41, 2271 *C.* 1908 [2] 692).
- $C_{15}H_{14}O_4N_3Cl$  1) Amid d. 9-Dimethylamido-2,3-Dioxyphenoxazoniumchlorid-5-Carbonsäure (Gallaminblau). Zers. oberhalb 320° (*D.R.P.* 48996; *J. pr.* [2] 72, 254 *C.* 1905 [2] 1450).
- $C_{15}H_{14}O_4N_4S$  1) s-Di[4-Nitrobenzyl]thioharnstoff. Sm. 202° u. Zers. (*B.* 23, 340). — II, 528.  
 2) s-Di[2-Nitro-4-Methylphenyl]thioharnstoff. Sm. 207° (*B.* 16, 2338; *B.* 36, 1139 *C.* 1903 [1] 1220). — II, 499.
- $C_{15}H_{14}O_5N_2S$  1) Aldehyd d. 4-Nitro-5-Dimethylamidodiphenylsulfon-2-Carbonsäure. Sm. 196° (*B.* 37, 866 *C.* 1904 [1] 1207).
- $C_{15}H_{14}O_5N_2S$  1) 4-Nitrobenzylphenylsulfonamidoessigsäure. Sm. 210—212° u. Zers. (*Ann.* 35, 63 *C.* 1906 [1] 756).  
 2) 4-Oxyazobenzol-2-Propionsäure-4'-Sulfonsäure (*B.* 37, 4131 *C.* 1904 [2] 1735).  
 3) 4-Oxyazobenzol-3-Propionsäure-4'-Sulfonsäure (*B.* 37, 4130 *C.* 1904 [2] 1735).  
 4) 6-Oxyazobenzol-3-Propionsäure-4'-Sulfonsäure (*B.* 37, 4131 *C.* 1904 [2] 1736).  
 5) 4-Methylbenzolsulfonat d. 3-Nitro-4-Acetylamido-1-Oxybenzol. Sm. 134° (*B.* 40, 2854 *C.* 1907 [2] 455).
- $C_{15}H_{14}O_7N_2S$  1) 3-Nitro-4-[4-Methylphenylsulfon]amidophenoxylessigsäure. Sm. 158° (*B.* 42, 4111 *C.* 1909 [2] 2074).
- $C_{15}H_{14}O_8NBr$  1) Acetylamid d. 2-Brom-3,4,5-Triacetylbenzol-1-Carbonsäure. Sm. 240° (*J. pr.* [2] 63, 87). — \*II, 1112.
- $C_{15}H_{14}O_8N_3P$  1)  $\beta$ -Trinitrophenyl-2,4,5-Trimethylphenylphosphinsäure. Sm. 197 bis 198° (*A.* 315, 74). — \*IV, 1182.

- $C_{15}H_{14}NClS$  1) Chlorid d. Dibenzylamidothioameisensäure. Sm. 49—50° (*G.* 23 [1] 38). — II, 524.
- $C_{15}H_{14}N_2ClJ$  1) Jodmethylat d. 5 [oder 6]-Chlor-1-Methyl-2-Phenylbenzimidazol. Sm. 263° (*J. pr.* [2] 74, 67 *C.* 1906 [2] 1503).
- $C_{15}H_{14}N_2Cl_2S$  1) s-Di[6-Chlor-3-Methylphenyl]thioharnstoff. Sm. 177° (*B.* 20, 1568). — II, 479.
- $C_{15}H_{14}N_2Br_2S$  1) s-Di[2-Brom-4-Methylphenyl]thioharnstoff. Sm. 170° u. Zers. (*J. pr.* [2] 64, 267).
- $C_{15}H_{14}N_3ClS$  1) Verbindung (aus  $\beta$ -Phenylamido- $\alpha$ -Phenylthioharnstoff u. Acetylchlorid). Sm. 218° (*J. pr.* [2] 67, 253 *C.* 1903 [1] 1265). — \*IV, 443.
- $C_{15}H_{14}N_3JS$  1) Methyläther d. 5-Jod-3-Merkapto-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 243° (*J. pr.* [2] 67, 250 *C.* 1903 [1] 1264). — \*IV, 742.
- $C_{15}H_{15}ONBr_2$  1) 3,5-Dibrom-4'-Dimethylamido-4-Oxydiphenylmethan. Fl. HBr (*A.* 334, 338 *C.* 1904 [2] 989).
- 2) Phenyl-3,6-Dibrom-5-Oxy-2,4-Dimethylbenzylamin. Sm. 148 bis 149° (*B.* 35, 135 *C.* 1902 [1] 466).
- 3) Phenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 134 bis 134,5°. HCl, HBr + H<sub>2</sub>O, HJ, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (*B.* 28, 2905; 29, 1128; *A.* 344, 222 *C.* 1906 [1] 1162). — II, 454.
- 4) Phenyl-3,5-Dibrom-4-Oxy-2,6-Dimethylbenzylamin. Sm. 146,5° (*A.* 344, 275 *C.* 1906 [1] 1610).
- 5) Phenyl-2,6-Dibrom-4-Oxy-3,5-Dimethylbenzylamin. Sm. 136—137° (*A.* 302, 81; *A.* 343, 248 *C.* 1906 [1] 1164). — \*II, 457.
- $C_{15}H_{15}ONJ_2$  1) 5-Acetylamido-2-Methyldiphenyljodoniumjodid. Sm. 145° (*B.* 41, 2816 *C.* 1908 [2] 1167).
- 2) 4-Acetylamido-3-Methyldiphenyljodoniumjodid. Sm. 152° (*B.* 40, 4081 *C.* 1907 [2] 1835).
- 3) 4'-Acetylamido-4-Methyldiphenyljodoniumjodid. Sm. 157° (*B.* 40, 4074 *C.* 1907 [2] 1834).
- $C_{15}H_{15}ONS$  1)  $\alpha$ -Acetylphenylamido- $\alpha$ -Merkapto- $\alpha$ -Phenylmethan. Sm. 75° (*B.* 34, 659). — \*III, 21.
- 2) 4'-Acetylamido-4-Methyldiphenylsulfid. Sm. 108° (*J. pr.* [2] 68, 267 *C.* 1903 [2] 993).
- 3) Methyläther d. 2-Benzoylamido-1-Merkaptomethylbenzol. Sm. 118° (*B.* 29, 164). — \*II, 738.
- 4) Äthyläther d. 4-Benzoylamido-1-Merkaptobenzol. Sm. 145° (*B.* 27, 1738). — II, 1179.
- 5) 4-Äthyläther d. anti- $\alpha$ -Oximido-4-Merkaptodiphenylmethan. Sm. 133—134° (*B.* 27, 1734). — III, 210.
- 6) 4-Äthyläther d. syn- $\alpha$ -Oximido-4-Merkaptodiphenylmethan. Sm. 96° (*B.* 27, 1734). — III, 210.
- 7) Phenylester d. Äthylphenylamidothiolsäure. Sm. 96,5 bis 97° (*Bl.* [4] 1, 737 *C.* 1907 [2] 1159).
- 8) Phenylester d. Äthylphenylamidothioameisensäure. Sm. 69,2° (*B.* 21, 104; *Bl.* [3] 35, 842 *C.* 1906 [2] 1760). — II, 663.
- 9) Phenylamid d. 5-Oxy-1-Methylbenzolzomethyläther-2-Thiocarbonsäure. Sm. 96° (*J. pr.* [2] 59, 579). — \*II, 918.
- 10) Phenylamid d. 6-Oxy-1-Methylbenzolzomethyläther-3-Thiocarbonsäure. Sm. 177° (*J. pr.* [2] 59, 579). — \*II, 921.
- 11) Phenylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbonsäure. Sm. 143° (*B.* 25, 3529; *J. pr.* [2] 59, 578). — II, 1541.
- 12) Phenylamid d. 4-Merkaptobenzolzomethyläther-1-Carbonsäure. Sm. 158° (*B.* 27, 1737). — II, 1541.
- 13) Phenylamid d. Merkaptobenzolzomethyläthersäure. Sm. 73,5° (*J. pr.* [2] 74, 28 *C.* 1906 [2] 752).
- 14) 2-Methylphenylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbonsäure. Sm. 95° (*B.* 25, 3530; *J. pr.* [2] 59, 585). — II, 1541.
- 15) 3-Methylphenylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbonsäure. Sm. 125° (*J. pr.* [2] 59, 586). — \*II, 914.
- 16) 4-Methylphenylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbonsäure. Sm. 157° (*B.* 25, 3530; *J. pr.* [2] 59, 586). — II, 1541.
- 17) 4-Äthoxyphenylamid d. Benzolthiocarbonsäure. Sm. 127° (*B.* 37, 876 *C.* 1904 [1] 1004).

- C<sub>15</sub>H<sub>15</sub>ONS<sub>2</sub>** 1) Amid d.  $\alpha\alpha$ -Dimerkaptopropiondiphenyläthersäure. Sm. 92—93° (B. 19, 1789). — II, 788.
- C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>Cl** 1) 2-Acetylamido-1-[4-Chlorphenylamido]methylbenzol. Sm. 188° (J. pr. [2] 52, 384). — IV, 626.  
 2) 5-Chlor-2-Amido-4'-Dimethylamidodiphenylketon. Sm. 185° (B. 38, 4120 C. 1906 [1] 363).  
 3) 5-Chlor-2-Oxy-1,3-Dimethyl-2-Phenyl-2,3-Dihydrobenzimidazol. Sm. 140° (J. pr. [2] 74, 68 C. 1906 [2] 1503).  
 4) Amid d. 2-Methylphenylamido-4-Chlorphenylessigsäure. Sm. 127° (J. pr. [2] 65, 275 C. 1902 [1] 1215).  
 5) Amid d. 3-Methylphenylamido-4-Chlorphenylessigsäure. Sm. 137 bis 138° (J. pr. [2] 65, 274 C. 1902 [1] 1215).  
 6) Amid d. 4-Methylphenylamido-4-Chlorphenylessigsäure. Sm. 132° (J. pr. [2] 65, 273 C. 1902 [1] 1214).
- C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>Br** 1) 2-Acetylamido-1-[4-Bromphenylamido]methylbenzol. Sm. 138° (148—149°) (J. pr. [2] 47, 359; [2] 52, 391). — IV, 630.  
 2) 2-Amido-1-[Acetyl-4-Bromphenyl]amidomethylbenzol (J. pr. [2] 47, 352). — IV, 630.  
 3)  $\beta$ -Bromäthyläther d. Phenyl-2-Oxybenzylidenhydrazin. Sm. 114° (J. pr. [2] 77, 366 C. 1908 [1] 1702).  
 4)  $\beta$ -Bromäthyläther d. Phenyl-4-Oxybenzylidenhydrazin. Sm. 127° (A. 357, 352 C. 1908 [1] 356).  
 5)  $\alpha$ -Brompropionyl-s-Diphenylhydrazin. Sm. 137° (B. 31, 3243). — IV, 1496.
- C<sub>15</sub>H<sub>15</sub>ON<sub>3</sub>Br<sub>2</sub>** 1) 5-Dibromid d. 3-Keto-1,4,6-Trimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benztriazol. Sm. 180° u. Zers. (A. 366, 391 C. 1909 [2] 289).
- C<sub>15</sub>H<sub>15</sub>ON<sub>3</sub>S** 1)  $\alpha$ -Acetylamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 131—132° (B. 27, 1516). — IV, 681.  
 2)  $\alpha$ -Methylphenylamidoformyl- $\beta$ -Phenylthioharnstoff. Sm. 158 bis 159° (Soc. 75, 401). — \*II, 198.  
 3)  $\alpha$ -Diphenylamidoformyl- $\beta$ -Methylthioharnstoff. Sm. 170—171° (Soc. 75, 396). — \*II, 199.  
 4) Phenylbenzylamidoformylthioharnstoff. Sm. 179—180° (Soc. 75, 408). — \*II, 297.  
 5)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[ $\alpha$ -Oximidobenzyl]thioharnstoff. Sm. 67° (B. 24, 397). — II, 1205.  
 6) s-Phenyl-[ $\alpha$ -Oximido-4-Methylbenzyl]thioharnstoff. Sm. 190° (B. 22, 2435). — II, 1343.  
 7) Phenylbenzylamidoformiat d. Imidoamidomerkaptomethan. HCl (Soc. 91, 144 C. 1907 [1] 1111).
- C<sub>15</sub>H<sub>15</sub>ON<sub>3</sub>S<sub>2</sub>** 1) Methylester d.  $\beta$ -Phenylamidoformyl- $\beta$ -Phenylhydrazidodithioameisensäure. Sm. 186° (B. 34, 319). — \*IV, 450.
- C<sub>15</sub>H<sub>15</sub>OCl<sub>2</sub>P** 1) Dichlorid d.  $\beta\beta$ -Diphenylisopropylphosphinsäure. Sd. 228°<sub>20</sub> (B. 34, 1294). — \*IV, 1184.
- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>NS** 1) 4'-Acetylamido-4-Methyldiphenylsulfoxyd. Sm. 182,5° (J. pr. [2] 68, 277 C. 1903 [2] 994).  
 2) 1-Phenylsulfon-2-Methyl-2,3-Dihydroindol. Sm. 90° (B. 37, 4582 C. 1905 [1] 183).  
 3) 1-Phenylsulfon-1,2,3,4-Tetrahydrochinolin. Sm. 67° (54—55°) (B. 24, 3697; B. 36, 2706 C. 1903 [2] 829; R. 23, 321 C. 1905 [1] 102). — IV, 195.  
 4) Phenylamid d. 3,4-Dioxybenzoldimethyläther-1-Thiocarbonsäure. Sm. 159° (J. pr. [2] 53, 254). — \*II, 1030.  
 5) Phenylbenzylamid d. Äthensulfonsäure. Sm. 87° (B. 34, 3477).  
 6) 4-Methoxyphenylamid d. 4-Oxybenzoldimethyläther-1-Thiocarbonsäure. Sm. 148° (J. pr. [2] 59, 587). — \*II, 914.
- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>NS<sub>2</sub>** 1) Äthylester d. 1-Naphtyldithiocarbaminessigsäure. Sm. 81° (M. 27, 1236 C. 1907 [1] 971).  
 2) Äthylester d. 2-Naphtyldithiocarbaminessigsäure. Sm. 83° (M. 27, 1239 C. 1907 [1] 971).
- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) 4-Benzoylchloroximido-1-Dimethylamidobenzol? Sm. 91—92° u. Zers. (B. 26, 1756). — II, 1156.  
 2) Äthyläther d. 4-Chlor-4'-Oxy-3-Methyldiphenylnitrosamin. Sm. 49—50° (A. 287, 169). — II, 1205.



- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>Cl** 3) Acetat d.  $\alpha$ -[3-Chlorphenyl]- $\beta$ -[6-Oxy-3-Methylphenyl]hydrazin. Sm. 89° (A. 365, 307 C. 1909 [1] 1865).
- 4) Acetat d.  $\alpha$ -[4-Chlorphenyl]- $\beta$ -[6-Oxy-3-Methylphenyl]hydrazin. Sm. 99° (B. 25, 1327; A. 365, 308 C. 1909 [1] 1865). — IV, 1506.
- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) 6-Brom-2',4'-Dioxy-2,4,5-Trimethylazobenzol. Sm. 214° (Soc. 93, 1019 C. 1908 [2] 409).
- 2) 6-Brom-4',6'-Dioxy-2,4,2'-Trimethylazobenzol. Sm. 192—194° (Soc. 93, 1020 C. 1908 [2] 410).
- 3) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Brom-6-Oxy-3-Methylphenyl]hydrazin. Sm. 91° (A. 365, 299 C. 1909 [1] 1865).
- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>S** 1) s-Di[2-Nitro-4-Methylphenyl]thioharnstoff. Sm. 169° (B. 16, 2337). — II, 499.
- 2) 3-Phenylsulfonamido-5,7-Dimethylindazol. Sm. 232—233° (A. 305, 326). — \*IV, 801.
- 3)  $\alpha\gamma$ -Diphenylthiosemicarbazidoessigsäure. Sm. 195° u. Zers. (B. 36, 3887 C. 1904 [1] 27).
- 4) Methylester d.  $\alpha\beta$ -Diphenylharnstoff- $\alpha$ -Amidothiolameisensäure. Sm. 186° (Am. 24, 440). — \*IV, 448.
- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) Methyläther-2-Nitrobenzyläther d.  $\alpha$ -Dimerkaptomethylen- $\beta$ -Phenylhydrazin. Sm. 60—61° (J. pr. [2] 61, 338). — \*IV, 438.
- 2) Methyläther-4-Nitrobenzyläther d. Phenylhydrazondimerkaptomethan. Sm. 84° (B. 34, 1124). — \*IV, 438.
- 3) isom. Methyläther-4-Nitrobenzyläther d. Phenylhydrazondimerkaptomethan. Sm. 89—90° (B. 34, 1124). — \*IV, 438.
- C<sub>15</sub>H<sub>15</sub>O<sub>2</sub>N<sub>4</sub>Cl** 1) 6-Chlor-3-Nitro-4-Dimethylamidobenzylidenphenylhydrazin. Sm. 166° (B. 37, 865 C. 1904 [1] 1207).
- C<sub>15</sub>H<sub>15</sub>O<sub>3</sub>NS** 1) p-Phenylsulfon-4-Acetylamido-1-Methylbenzol (Acetylamidotolylphenylsulfon). Sm. 201° (B. 29, 2023). — \*II, 487.
- 2) 5-Acetylamido-2-Methyldiphenylsulfon. Sm. 183° (B. 38, 737 C. 1905 [1] 877).
- 3) 4'-Acetylamido-4-Methyldiphenylsulfon. Sm. 195° (J. pr. [2] 68, 277 C. 1903 [2] 994).
- 4) Methyl-4-[4-Methylphenylsulfon]amidophenylketon. Sm. 203° (Soc. 85, 391 C. 1904 [1] 1404).
- 5) Äthyl-4-Phenylsulfonamidophenylketon. Sm. 165° (Soc. 85, 394 C. 1904 [1] 1404).
- 6) Amid d.  $\beta$ -Phenylsulfon- $\beta$ -Phenylpropionsäure. Sm. 123—124° (B. 40, 4791 C. 1908 [1] 232).
- 7) Phenylamid d. 4-Methylphenylsulfonessigsäure. Sm. 168° (C. 1900 [2] 1269). — \*II, 485.
- 8) Methylphenylamid d. Phenylsulfonessigsäure. Sm. 125° (C. 1900 [2] 1269). — \*II, 471.
- 9) 2-Methylphenylamid d. Phenylsulfonessigsäure. Sm. 150° (C. 1900 [2] 1269). — \*II, 471.
- 10) 4-Methylphenylamid d. Phenylsulfonessigsäure. Sm. 153° (C. 1900 [2] 1269). — \*II, 471.
- 11) Benzoylamid d. 1,3-Dimethylbenzol-4-Sulfonsäure. Sm. 149 bis 151°. Ca + H<sub>2</sub>O, Ba (Am. 4, 193). — II, 1175.
- 12) Methylbenzoylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 58° (Am. 8, 242). — II, 1175.
- 13) Propionylphenylamid d. Benzolsulfonsäure. Sm. 115° (Am. 19, 761). — \*II, 223.
- C<sub>15</sub>H<sub>15</sub>O<sub>3</sub>NS<sub>2</sub>** 1) Aldehyd d. 2-Thiocarbonyl-4-Keto-5-[4-Oxy-2-Methyl-5-Iso-propylbenzyliden]tetrahydrothiazol-5<sup>3</sup>-Carbonsäure? Sm. 239 bis 240° (C. 1906 [1] 1438).
- C<sub>15</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Acetylanhydrochloralantipyrin. Sm. 154—155° (A. ch. [6] 27, 333). — IV, 510.
- C<sub>15</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>S** 1) 5-Phenylazo-2-Methyl-2,3-Dihydroindol-5<sup>4</sup>-Sulfonsäure. Sm. noch nicht bei 260° (B. 26, 1289). — IV, 1484.
- 2) isom. 5-Phenylazo-2-Methyl-2,3-Dihydroindol-5<sup>4</sup>-Sulfonsäure (B. 26, 1289). — IV, 1484.
- 3) 6-Phenylazo-1,2,3,4-Tetrahydrochinolin-6<sup>4</sup>-Sulfonsäure (A. 257, 24). — IV, 1484.

- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>NS** 1)  $\beta$ -[4-Nitrophenyl]sulfon- $\beta$ -Phenylpropan. Sm. 169° (B. 41, 2270 C. 1908 [2] 692).  
 2) Benzylphenylsulfonamidoessigsäure (Am. 35, 62 C. 1906 [1] 756).  
 3) 4-Dimethylamidodiphenylketon-3-Sulfonsäure. Sm. 275—276° (296—298° u. Zers.). Ca, Ba, Ag (D.R.P. 41751; B. 39, 3773 C. 1907 [1] 45).  
 4) 1-1-[2-Naphtylsulfon]tetrahydropyrrol-2-Carbonsäure + H<sub>2</sub>O. Sm. 133,7° (138° wasserfrei) (B. 35, 3783 C. 1902 [2] 1470). — \*IV, 39.  
 5) Lakton d.  $\delta$ -[2-Naphtylsulfon]amido- $\gamma$ -Oxybutan- $\alpha$ -Carbonsäure. Sm. 143—144° (B. 40, 305 C. 1907 [1] 535).  
 6) Äthylester d. 2-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 92,5°. Na (J. pr. [2] 44, 419; B. 40, 1618 C. 1907 [1] 1630). — II, 1253.  
 7) 4-Acetylamidophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 145,5—146° (B. 34, 237; B. 40, 2850 C. 1907 [2] 454).  
 8) Acetat d. 4-[4-Methylphenyl]sulfonamido-1-Oxybenzol. Sm. 138 bis 139° (B. 40, 2849 C. 1907 [2] 454).
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>NS<sub>2</sub>** 1) 1-Di[Phenylsulfon]amido-R-Trimethylen. Sm. 119,5—120° (C. 1905 [1] 1704).
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) 3,4,6-Trichlor-2,5-Di[Diacetylamido]-1-Methylbenzol. Sm. 220° (A. 237, 144). — IV, 608.
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>BrS<sub>2</sub>** 1)  $\beta\gamma$ -Diphenylsulfon- $\alpha$ -Brompropan. Sm. 160° (B. 23, 1412). — II, 783.
- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>NS** 1)  $\alpha$ -Phenylsulfonamido- $\beta$ -[4-Oxyphenyl]propionsäure (B. 23, 3198). — II, 1569.  
 2) 4-[4-Methylphenylsulfon]amidophenoxylessigsäure. Sm. 187° (B. 42, 4109 C. 1909 [2] 2073).  
 3) 2,4-Dimethyldiphenylamin-2'-Carbonsäure- $\beta$ -Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).  
 4) 4-Dimethylamido-2-Oxydiphenylketon-3'-Sulfonsäure. K (B. 37, 208 C. 1904 [1] 665).  
 5) 4-Oxy-1-[2-Naphtyl]sulfontetrahydropyrrol-2-Carbonsäure. Sm. 186—187° corr. (B. 38, 1941 C. 1905 [2] 51).  
 6)  $\beta$ -Oxy-1-[2-Naphtylsulfon]tetrahydropyrrol-2-Carbonsäure + H<sub>2</sub>O. Sm. 91—92° (B. 35, 3785 C. 1902 [2] 1470). — \*IV, 41.  
 7) 2-[ $\beta$ -Phenoxyäthyl]amid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 139° (B. 30, 1268). — \*II, 800.  
 8) 4-Methylbenzolsulfonat d. 4-Oxyphenylamidoessigsäure. Sm. 161° (B. 42, 4109 C. 1909 [2] 2073).
- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>NS<sub>2</sub>** 1)  $\beta$ -Oximido- $\alpha\gamma$ -Di[Phenylsulfon]propan(s-Diphenyldisulfonacetoxim). Sm. 136—137° (J. pr. [2] 36, 420). — II, 791.
- C<sub>15</sub>H<sub>15</sub>O<sub>5</sub>N<sub>3</sub>S** 1) Azobenzol-4-Methylamidoessigsäure-3'-Sulfonsäure. Na<sub>2</sub>, Ba (B. 35, 578 C. 1902 [1] 580). — \*IV, 1015.  
 2) Azobenzol-4-Methylamidoessigsäure-4'-Sulfonsäure. HCl, Na<sub>2</sub>, Ba (B. 35, 577 C. 1902 [1] 580). — \*IV, 1015.
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>N<sub>3</sub>S** 1) 2-Methylphenylamid d. 2,4-Dinitro-1,3-Dimethylbenzol-6-Sulfonsäure. Sm. 135° (C. 1908 [2] 237).  
 2) 4-Methylphenylamid d. 2,4-Dinitro-1,3-Dimethylbenzol-6-Sulfonsäure. Sm. 162° (C. 1908 [2] 237).
- C<sub>15</sub>H<sub>15</sub>O<sub>6</sub>N<sub>4</sub>Br** 1) 3-Brom-2,4,6-Trinitro-1-Methylbenzol + Dimethylamidobenzol. Sm. 120° (B. 37, 178 C. 1904 [1] 653).
- C<sub>15</sub>H<sub>15</sub>O<sub>8</sub>NS<sub>2</sub>** 1) Acetyl-3'-Oxy-4-Methyldiphenylamin- $\beta$ -Disulfonsäure. Ba + H<sub>2</sub>O (J. pr. [2] 65, 55 C. 1902 [1] 578).
- C<sub>15</sub>H<sub>15</sub>O<sub>11</sub>NS<sub>3</sub>** 1) Acetyl-3'-Oxy-4-Methyldiphenylamin- $\beta$ -Trisulfonsäure. Ba<sub>3</sub> (J. pr. [2] 65, 56 C. 1902 [1] 578).
- C<sub>15</sub>H<sub>15</sub>N<sub>2</sub>JS** 1) Jodäthylat d. 1-Phenyl-3-Thiänylpyrazol. Sm. 173—174° (G. 21 [2] 278). — IV, 869.
- C<sub>15</sub>H<sub>16</sub>ONCl** 1) Äthyläther d. 4-Chlor-4'-Oxy-3-Methyldiphenylamin. Sm. 77 bis 78° (A. 287, 168). — \*II, 400.  
 2)  $\alpha$ -Chlorid d.  $\beta$ -Diäthylamidonaphtalin-2-Carbonsäure. Sm. 70° (Soc. 41, 185). — II, 1459.  
 3)  $\beta$ -Chlorid d.  $\beta$ -Diäthylamidonaphtalin-2-Carbonsäure. Sm. 225° u. Zers. (Soc. 41, 185). — II, 1459.
- C<sub>15</sub>H<sub>16</sub>ONBr** 1) 6-Brom-5-Oxy-2-Phenylamidomethyl-1,4-Dimethylbenzol. Sm. 75° (A. 302, 121). — \*II, 454.

- $C_{15}H_{16}ONBr$  2) Methyläther d. 2-Brommethyl-1-[2-Oxyphenylamido]methylbenzol (*B.* 31, 423). — \*II, 387.
- 3) *p*-Brom-10-Keto-8-Methyl-9-Äthyl-3,4-Dihydrojulol (?-Brom- $\alpha_1$ -Keto- $\gamma_1$ -Methyl- $\beta_1$ -Äthyljulolin). Sm. 140° (*B.* 25, 1191). — IV, 194.
- 4) 1-Naphtylamid d.  $\alpha$ -Bromisovaleriansäure. Sm. 172° (*B.* 31, 3237). — \*II, 334.
- 5) 2-Naphtylamid d.  $\alpha$ -Bromisovaleriansäure. Sm. 145° (*B.* 31, 3237). — \*II, 337.
- $C_{15}H_{16}ONBr_3$  1) 3,6-Dibrom-4-Methoxyl-2,5-Dimethylbrombenzylat d. Pyridin. Sm. 218—219° (*A.* 344, 226 *C.* 1906 [1] 1162).
- 2) 2,6-Dibrom-4-Methoxyl-3,5-Dimethylbrombenzylat d. Pyridin. Sm. 226° (*A.* 344, 253 *C.* 1906 [1] 1164).
- $C_{15}H_{16}ONJ$  1) Jodmethylat d. 1-Oxy-2-[2-Pyridyl]-2,3-Dihydroinden. Sm. 130° (*B.* 36, 1656 *C.* 1903 [2] 39). — \*IV, 238.
- $C_{15}H_{16}ON_2S$  1) Dimethyläther d. Phenylimido-2-Oxyphenylamidomerkapto-methan. Sm. 80° (*B.* 21, 1870). — II, 712.
- 2)  $\alpha$ -Phenyl- $\beta$ -[ $\beta$ -Oxy- $\beta$ -Phenyläthyl]thioharnstoff. Sm. 131—132° (*B.* 37, 2483 *C.* 1904 [2] 420).
- 3) *s*-Isobutyryl-1-Naphtylthioharnstoff. Sm. 167,5—168,5° (*Soc.* 69, 865). — \*II, 335.
- 4) Äthyläther d. 3-Oxy-*s*-Diphenylthioharnstoff. Sm. 138,5° (*B.* 36, 4102 *C.* 1904 [1] 271).
- 5) Benzyläther d.  $\alpha$ -Oxy- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. 125° (*B.* 24, 382). — II, 533.
- 6) 4-Methylphenyläther d. 4-Merkapto-2-Methylphenylharnstoff. Sm. 175° (*J. pr.* [2] 68, 285 *C.* 1903 [2] 995).
- $C_{15}H_{16}ON_2S_2$  1) 2-Thiocarbonyl-4-Keto-3-Allyl-5-[4-Dimethylamidobenzyliden]-tetrahydrothiazol. Sm. 131° (*M.* 26, 1205 *C.* 1905 [2] 1675).
- $C_{15}H_{16}ON_3Cl$  1) 3-Dimethylamido-9-Amido-4-Methylphenoxazoniumchlorid +  $H_2O$  (*C.* 1902 [2] 458). — \*IV, 840.
- $C_{15}H_{16}ON_3J$  1) Äthyläther d. 4-[4-Oxyphenyl]amido-2-Methyldiazobenzoljodid (*A.* 287, 165).
- 2) Jodmethylat d. 6-Äthoxyl-1-Phenyl-1,2,3-Benzotriazol (*B.* 25, 1005). — IV, 1575.
- $C_{15}H_{16}ON_4S$  1)  $\alpha$ -Phenyl- $\beta$ -[5-Methylnitrosamido-2-Methylphenyl]thioharnstoff. Sm. 158° (*B.* 31, 2929). — \*IV, 401.
- 2)  $\alpha$ -Methylphenylamidiformyl- $\alpha$ -Phenylamidothioharnstoff. Sm. 120—121° (*Soc.* 75, 403). — \*IV, 444.
- $C_{15}H_{16}OCIP$  1) Chlorid d. Phenyl-2,4,5-Trimethylphenylphosphinsäure. Sd. 210 bis 215°<sub>10</sub> (*A.* 315, 73). — \*IV, 1182.
- $C_{15}H_{16}O_2NBr$  1) Phenylimid d. Brompyrocampensäure. Sm. 149—150° (*Soc.* 87, 1521 *C.* 1905 [2] 1673).
- $C_{15}H_{16}O_2NJ$  1) 5-Acetylamido-2-Methyldiphenyljodoniumhydroxyd. Salze, siehe (*B.* 41, 2816 *C.* 1908 [2] 1167).
- 2) 4-Acetylamido-3-Methyldiphenyljodoniumhydroxyd. Salze, siehe (*B.* 40, 4080 *C.* 1907 [2] 1835).
- 3) 4'-Acetylamido-4-Methyldiphenyljodoniumhydroxyd. Salze, siehe (*B.* 40, 4074 *C.* 1907 [2] 1834).
- $C_{15}H_{16}O_2NP$  1) Phenylamid d. Dimethylphenylphosphinoxyd-4-Carbonsäure. Sm. 235° (*A.* 293, 287). — IV, 1673.
- $C_{15}H_{16}O_2N_2S$  1) Dimethyläther d. 2,5-Dioxy-*s*-Diphenylthioharnstoff. Sm. 137° (*B.* 17, 2123). — II, 948.
- 2) Dimethyläther d. 2,6-Dioxy-*s*-Diphenylthioharnstoff. Sm. 150° (*B.* 40, 4008 *C.* 1907 [2] 1840).
- 3) Dimethyläther d. *s*-Di[2-Oxyphenyl]thioharnstoff. Sm. 135° (*A.* 207, 246). — II, 711.
- 4) Dimethyläther d. *s*-Di[4-Oxyphenyl]thioharnstoff. Sm. 185° (191°) (*B.* 7, 1012; *D.R.P.* 68706; *B.* 39, 4377 *C.* 1907 [1] 337). — II, 720; \*II, 406.
- 5)  $\beta$ -Phenylhydrazon- $\alpha$ -Phenylsulfonpropan. Sm. 129° (*J. pr.* [2] 36, 406). — IV, 768.
- $C_{15}H_{16}O_2N_2S_2$  1) Benzolsulfonat d. 2,4,5-Trimethylthiodiazobenzol. Sm. 73° u. Zers. (*J. pr.* [2] 62, 395). — \*IV, 1116.



- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>N<sub>3</sub>Cl** 1)  $\alpha$ -[5-Chlor-2-Nitrophenyl]- $\beta$ -[2,4,5-Trimethylphenyl]hydrazin. Sm. 154° u. Zers. (*J. pr.* [2] 71, 395 *C.* 1905 [2] 39).
- C<sub>15</sub>H<sub>16</sub>O<sub>2</sub>N<sub>3</sub>Br** 1) Azoverbindung (aus 4-Nitrodiazobenzol u. 5-Brom-2-Amido-4-Dimethylamido-1-Methylbenzol). Sm. 162° u. Zers. (*Soc.* 89, 1058 *C.* 1906 [2] 950).
- C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>S** 1)  $\alpha$ -Phenylsulfon- $\beta$ -Äthyl- $\beta$ -Phenylharnstoff. Sm. 123,2° (*B.* 37, 695 *C.* 1904 [1] 1074).  
 2) Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -Phenylsulfonäthan. Sm. 114° (*J. pr.* [2] 78, 7 *C.* 1908 [2] 506).  
 3) 1-[4-Äthylamidobenzyliden]amidobenzol-4-Sulfonsäure (*B.* 37, 858 *C.* 1904 [1] 1206).  
 4) 1-[4-Dimethylamidobenzyliden]amidobenzol-4-Sulfonsäure (*C. r.* 134, 551 *C.* 1902 [1] 874).  
 5)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylpropan- $\alpha$ -[oder  $\beta$ ]-Sulfonsäure. Phenylhydrazinsalz (*B.* 24, 1807). — IV, 755.  
 6) 2-Methylphenylamid d. 1-Acetylamidobenzol-4-Sulfonsäure. Sm. 236° (*J. pr.* [2] 77, 374 *C.* 1908 [1] 2150).  
 7) 3-Methylphenylamid d. 1-Acetylamidobenzol-4-Sulfonsäure. Sm. 205° (*J. pr.* [2] 77, 376 *C.* 1908 [1] 2150).  
 8) 4-Methylphenylamid d. 1-Acetylamidobenzol-4-Sulfonsäure. Sm. 209° (*J. pr.* [2] 77, 377 *C.* 1908 [1] 2151).
- C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>S<sub>2</sub>** 1) Äthyläther d. 4-Oxy-1-[4-Methylphenylthiosulfon]diazobenzol. Sm. 116° u. Zers. (*J. pr.* [2] 62, 423). — \*IV, 1122.
- C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>N<sub>3</sub>Br** 1) Äthylester d.  $\alpha$ -[3-Keto-5-Methyl-1-(4-Bromphenyl)-2,3-Dihydro-4-Pyrazolyl]imidopropionsäure. Sm. 199° (*A.* 358, 138 *C.* 1908 [1] 853).
- C<sub>15</sub>H<sub>16</sub>O<sub>3</sub>N<sub>6</sub>Cl<sub>2</sub>** 1) Verbindung + H<sub>2</sub>O (aus 4-Chlorphenylhydrazin u. Parabansäure). Sm. 213° u. Zers. (*Soc.* 59, 213). — IV, 701.
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>NBr** 1) Oxim d. Verbind. C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>Br. Zers. bei 140° (*C.* 1901 [1] 115). — \*III, 467.
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>N<sub>3</sub>S** 1)  $\alpha$ -Oximido-4-Dimethylamidodiphenylmethan-3-Sulfonsäure (*B.* 39, 3774 *C.* 1907 [1] 45).  
 2) 5-Oxy-1,2,4-Trimethyl- $\beta$ -Azobenzol- $\beta$ -Sulfonsäure. K + 2H<sub>2</sub>O (*B.* 17, 887). — IV, 1425.  
 3) Äthylester d. s-Diphenylharnstoff-4-Sulfonsäure. Sm. 155° (*B.* 28, 3233). — \*II, 322.  
 4) 5-Nitro-2,4-Dimethylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 192° (*Soc.* 91, 363 *C.* 1907 [1] 1403).  
 5) 4-Nitro-2,5-Dimethylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 185° (D.R.P. 157859 *C.* 1905 [1] 416).  
 6) 3-Nitro-2,4,6-Trimethylphenylamid d. Benzolsulfonsäure. Sm. 162 bis 163° (*Soc.* 89, 1299 *C.* 1906 [2] 1121).  
 7) Methyl-4-Nitro-2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 103–105° (*B.* 39, 2874 *C.* 1906 [2] 1340).  
 8) Methyl-5-Nitro-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 185–186° (*Soc.* 89, 1297 *C.* 1906 [2] 1121).  
 9) Äthyl-4-Nitrophenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 107° (D.R.P. 157859 *C.* 1905 [1] 416).
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>Cl<sub>2</sub>P** 1) Diäthylester d. 2-Trichlormethyl-1-Naphtylphosphorsäure. Sm. 63° (*B.* 21, 1189; *A.* 346, 363 *C.* 1906 [2] 336). — II, 1688.
- C<sub>15</sub>H<sub>16</sub>O<sub>5</sub>NBr** 1)  $\beta$ -[ $\beta$ -Brom-4,5-Dioxy-2, $\beta$ -Acetylmethylamidoäthylphenyl]akryl-4,5-Methylenäthersäure. Sm. 180–181° (*A.* 271, 389). — II, 1784.
- C<sub>15</sub>H<sub>16</sub>O<sub>5</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Dichloralantipyridin. Sm. 67–68° (*A. ch.* [6] 27, 337). — IV, 510.
- C<sub>15</sub>H<sub>16</sub>O<sub>5</sub>N<sub>2</sub>S** 1) d- $\alpha$ -[2-Naphtylsulfonamidoacetyl]amidopropionsäure + H<sub>2</sub>O. Sm. 154–155° (wasserfrei) (*B.* 36, 2594 *C.* 1903 [2] 618; *B.* 40, 3547 *C.* 1907 [2] 1636).  
 2) r- $\alpha$ -[2-Naphtylsulfonamidoacetyl]amidopropionsäure ( $\beta$ -Naphtylsulfoglycyllalanin). Sm. 172–173° (*B.* 36, 2106 *C.* 1903 [1] 1304).  
 3)  $\alpha$ -d-[2-Naphtylsulfonamidopropionyl]amidoessigsäure. Sm. 180,5 bis 181,5° (*B.* 36, 2595 *C.* 1903 [2] 618).  
 4) 2-Nitro-4-Äthoxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 94° (D.R.P. 164130 *C.* 1905 [2] 1477).
- C<sub>15</sub>H<sub>16</sub>NCl<sub>2</sub>P** 1) Äthylbenzylamidophenyldichlorphosphin. Fl. (*A.* 260, 36). — IV, 1647.

- C<sub>15</sub>H<sub>17</sub>ON<sub>2</sub>Cl** 1) Nitrosodicyklopentadienpyridiniumchlorid. Sm. 211° (*Soc.* 89, 1342 *C.* 1906 [2] 1403).  
2) Chlormethylat d. Methylharmin. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*B.* 30, 2483). — \*III, 659.
- C<sub>15</sub>H<sub>17</sub>ON<sub>2</sub>Br** 1) Nitrosodicyklopentadienpyridiniumbromid (*Soc.* 89, 1342 *C.* 1906 [2] 1403).
- C<sub>15</sub>H<sub>17</sub>ON<sub>2</sub>J** 1) Jodmethylat d. Methylharmin (*B.* 30, 2483). — \*III, 659.
- C<sub>16</sub>H<sub>17</sub>ON<sub>2</sub>S** 1) Äthylphenylbenzylamin-4-Sulfonsäure (C<sub>2</sub>H<sub>5</sub> · C<sub>6</sub>H<sub>5</sub> · C<sub>7</sub>H<sub>8</sub>[SO<sub>3</sub>H]N). Sm. 190°. K, Ba + 4H<sub>2</sub>O (*J. pr.* [2] 76, 492 *C.* 1908 [1] 861).
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>NS** 1) 4'-Dimethylamido-4-Methyldiphenylsulfon. Sm. 95° (*B.* 12, 1793). — II, 824.  
2) 4-Methylphenylamid d. 1,3-Dimethylbenzol-5-Sulfonsäure. Sm. 121—123° (*C.* 1901 [1] 385).  
3) 2,5-Dimethylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 119° (D.R.P. 157859 *C.* 1905 [1] 416).  
4) 2,4,5-Trimethylphenylamid d. Benzolsulfonsäure. Sm. 136—137° (*B.* 38, 910 *C.* 1905 [1] 1003).  
5) Äthylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 87—88° (*J. pr.* [2] 47, 371; D.R.P. 157859 *C.* 1905 [1] 416). — II, 425; \*II, 223.  
6) Propylphenylamid d. Benzolsulfonsäure. Sm. 54° (*B.* 42, 2224 *C.* 1909 [2] 539).  
7) α-Phenylpropylamid d. Benzolsulfonsäure. Sm. 81° (*J. pr.* [2] 77, 9 *C.* 1908 [1] 629).  
8) Phenylbenzylamid d. Äthansulfonsäure. Sm. 100° (*B.* 34, 3481).  
9) Piperidid d. Naphtalin-2-Sulfonsäure. Sm. 135—136° (*B.* 37, 3250 *C.* 1904 [2] 996).
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) Dimethylphenyl-4-Nitrobenzylammoniumchlorid. Sm. 118—120° (*B.* 32, 516; *A.* 307, 287). — \*II, 291.  
2) Chlormethylat d. 4-Phenylamido-2,6-Dimethylpyridin-3-Carbonsäure. 2 + PtCl<sub>4</sub> (*A.* 366, 356 *C.* 1909 [2] 285).
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Butyrylchlorantipyridin. Sm. 68—69° (u. 70—71°) (*C.* 1902 [2] 1387). — \*IV, 326.
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>J** 1) Jodmethylat d. 4-Phenylamido-2,6-Dimethylpyridin-3-Carbonsäure. Sm. 200° (*A.* 366, 355 *C.* 1909 [2] 285).
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>P** 1) Phenylmonamid d. 1,2,3,4-Tetrahydro-1-Chinolylphosphinsäure (*A.* 326, 198 *C.* 1903 [1] 821). — \*IV, 142.
- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>NCl<sub>2</sub>** 1) Diäthylätherd.3,4-Dichlor-5,5-Dioxy-2-Keto-1-[4-Methylphenyl]-2,5-Dihydropyrrol (Dichlormalein-p-Toluidiäthyläther). Sm. 88° (*A.* 295, 50). — \*II, 280.
- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>NS** 1) Benzaldehyd-β-Phenyläthylthionaminsäure. Sm. 114° (*B.* 26, 2167). — III, 7.  
2) 1-Äthylbenzylamidobenzol-3-Sulfonsäure. Na, Ba + 3H<sub>2</sub>O (*J. pr.* [2] 63, 421).  
3) 1-Äthylbenzylamidobenzol-2-Sulfonsäure. Na + 3H<sub>2</sub>O (*B.* 23, 558). — II, 582.  
4) 3-Oxy-2,4,6-Trimethylphenylamid d. Benzolsulfonsäure. Sm. 178 bis 179° (*Soc.* 89, 1299 *C.* 1906 [2] 1122).  
5) 4-Äthoxylphenylamid d. Phenylmethan-α-Sulfonsäure. Sm. 85° (*B.* 39, 3314 *C.* 1906 [2] 1602).  
6) 4-Äthoxylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 106 bis 107° (*B.* 34, 3002; D.R.P. 164130 *C.* 1905 [2] 1477).  
7) [4-Äthoxylphenyl]methylamid d. Benzolsulfonsäure. Sm. 79° (*A.* 265, 184). — II, 721.  
8) β-Phenoxyläthylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 104° (*C.* 1901 [1] 1074).
- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>N<sub>2</sub>J** 1) Methyl ester d. α-[α-Jodpropionyl]amido-1-β-[3-Indolyl]propionsäure. Sm. 145—146° (*B.* 41, 2858 *C.* 1908 [2] 1735).
- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>N<sub>2</sub>As** 1) 4-[4-Dimethylamidobenzyliden]amidophenylarsinsäure (D.R.P. 193542 *C.* 1908 [1] 999).
- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>N<sub>2</sub>S** 1) 4-Dimethylamido-2-Methylazobenzol-4'-Sulfonsäure. Zers. bei 225° (*B.* 33, 3480). — \*IV, 1023.  
2) 4'-Dimethylamido-4-Methylazobenzol-2-Sulfonsäure (*B.* 17, 1493; 20, 2996). — IV, 1384.

- $C_{15}H_{17}O_3N_3S$  3) 2-[ $\alpha$ -Sulfophenylhydrazonbutyl]pyridin. Sm. 251° (*B.* 24, 2538). — IV, 799.
- 4) 3-[ $\alpha$ -Phenylhydrazonbutyl]pyridin- $\beta$ -Sulfonsäure. Sm. 283° (*B.* 24, 2541). — IV, 800.
- $C_{15}H_{17}O_3N_5S_2$  1) Diäthyläther d. 4-[ $\beta$ -3-Nitrophenylthioureido]-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 161° (*Am.* 36, 148 *C.* 1906 [2] 1064).
- $C_{15}H_{17}O_3ClHg$  1) Verbindung (aus Santonin). Sm. 252° (*G.* 39 [2] 117 *C.* 1909 [2] 1341).
- $C_{15}H_{17}O_4NS$  1) Äthylester d.  $\alpha$ -[2-Naphtylsulfon]amidopropionsäure +  $xH_2O$ . Sm. 78° (90,5° wasserfrei) (*B.* 35, 3782 *C.* 1902 [2] 1469).
- $C_{15}H_{17}O_4NS_2$  1)  $\beta\beta$ -Di[Phenylsulfon]- $\alpha$ -Amidopropan. (2HCl,  $PtCl_4$  + 2H<sub>2</sub>O) (*B.* 32, 2769). — \*II, 470.
- 2) Diacetat d. 6-Diacetyl-amido-3,4-Dimerkapto-1-Methylbenzol. Sm. 112° (114,5°) (*B.* 40, 2491 *C.* 1907 [2] 706; *B.* 40, 4424 *C.* 1908 [1] 28).
- 3) Phenylamid d. 4-Äthylsulfon-1-Methylbenzol-3-Sulfonsäure. Sm. 114° (*Soc.* 73, 753). — \*II, 487.
- 4) Propylimid d. Benzolsulfonsäure. Sm. 65° (*C.* 1899 [2] 867).
- $C_{15}H_{17}O_5NS_2$  1) Malonsäurediäthylesterderivat d. Benzylamidodithioameisensäure. Sm. 119° (*Am.* 26, 351).
- $C_{15}H_{17}O_5NS_2$  1) Äthylphenylbenzylamin- $\beta$ -Disulfonsäure (*D. R. P.* 69777). — \*II, 326.
- $C_{15}H_{17}O_{14}N_7Br_2$  1) Verbindung (aus Mukobromphenylbenzylhydrazonsäure). Sm. 214° (*R. F. HALVORSEN*, Dissert., Freiburg (Schweiz) 1901).
- $C_{15}H_{18}ONP$  1) Methyl-4-Dimethylamidodiphenylphosphinoxid. Sm. 146° (*A.* 260, 32). — IV, 1660.
- $C_{15}H_{18}ON_3J$  1) Jodmethylat d. 4-Dimethylamido-4'-Oxyazobenzol (*Soc.* 95, 1296 *C.* 1909 [2] 978).
- $C_{15}H_{18}ON_4S_2$  1) Diäthyläther d. 4-[ $\beta$ -Phenylthioureido]-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 82–83° (*Am.* 36, 146 *C.* 1906 [2] 1064).
- $C_{15}H_{18}O_2NCl$  1) Chloräthylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. 146° u. Zers. 2 +  $PtCl_4$  (*A.* 282, 113). — IV, 353.
- $C_{15}H_{18}O_2NBr$  1) Bromäthylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. 217° (*A.* 282, 123). — IV, 353.
- $C_{15}H_{18}O_2NBr_3$  1) Acetat d. 1-[2,5,6-Tribrom-3-Oxy-4-Methylbenzyl]hexahydropyridin. Sm. 92–94° (*A.* 344, 188 *C.* 1906 [1] 1160).
- $C_{15}H_{18}O_2NJ$  1) Jodäthylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. 236° u. Zers. (*A.* 282, 113). — IV, 353.
- 2) Jodmethylat d. 2-Methylchinolin-3-Carbonsäurepropylester. Sm. 186° u. Zers. (*A.* 282, 124). — IV, 353.
- $C_{15}H_{18}O_2NP$  1) Monamid d.  $\beta\beta$ -Diphenylisopropylphosphinsäure. Sm. 244° (*B.* 34, 1295). — \*IV, 1184.
- $C_{15}H_{18}O_2N_2Cl_2$  1) Verbindung (aus d. Phenylamid d.  $\alpha$ -Oxypropionsäure). Sm. 79 bis 82° (*A.* 279, 74). — \*II, 204.
- $C_{15}H_{18}O_2N_2S$  1) Diäthyläther d. 2-Merkapto-5-Oxy-4-Keto-1-Benzyl-1,4-Dihydro-1,3-Diazin. Sm. 85–86° (*Am.* 40, 542 *C.* 1909 [1] 194).
- 2) Diäthyläther d. 2-Merkapto-5-Oxy-4-Keto-3-Benzyl-3,4-Dihydro-1,3-Diazin. Sm. 140–141° (*Am.* 40, 541 *C.* 1909 [1] 194).
- 3) Methyl-4-Amido-2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 118–119° (*B.* 39, 2874 *C.* 1906 [2] 1340).
- 4) Methyl-5-Amido-2,4-Dimethylphenylamid d. Benzolsulfonsäure. HCl (*Soc.* 89, 1298 *C.* 1906 [2] 1121).
- 5) 3-Amido-2,4,6-Trimethylphenylamid d. Benzolsulfonsäure. Sm. 156° (*Soc.* 89, 1299 *C.* 1906 [2] 1122).
- $C_{15}H_{18}O_2N_3J$  1) Jodmethylat d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 288° (*A.* 366, 362 *C.* 1909 [2] 286).
- $C_{15}H_{18}O_3N_2S$  1) 1-[4-Dimethylamidobenzyl]amidobenzol-4-Sulfonsäure (*D. R. P.* 116959 *C.* 1901 [1] 150). — \*IV, 410.
- 2) Benzaldehyd-o-Xylylenthionaminsäure (*B.* 28, 608). — IV, 641.
- 3) Benzaldehyd-m-Xylylenthionaminsäure (*B.* 28, 604). — IV, 643.
- 4) Benzaldehyd-p-Xylylenthionaminsäure (*B.* 28, 606). — IV, 644.
- 5) Benzylidenverbindung d. 4-Dimethylamidophenyl-1-Thionaminsäure. Sm. 150° (*B.* 31, 2180). — \*IV, 384.



- $C_{15}H_{18}O_3N_2S$  6) Amid d. r- $\alpha$ -[2-Naphtylsulfon]amidoisovaleriansäure. Sm. 256 bis 257° (B. 41, 4437 C. 1909 [1] 440).
- $C_{15}H_{18}O_3N_3As$  1) 4'-Dimethylamido-2-Methylazobenzol-4-Arsinsäure. Na + 5H<sub>2</sub>O, Na<sub>2</sub> + 4H<sub>2</sub>O (Soc. 93, 1899 C. 1909 [1] 163).
- $C_{15}H_{18}O_3N_4S$  1) 4-Amido-5-Dimethylamido-2-Methylazobenzol-4'-Sulfonsäure. Sm. 205–206°. Acetat (B. 31, 2522). — IV, 1384.  
2) 4-Amido-6-Dimethylamido-3-Methylazobenzol-4'-Sulfonsäure. Acetat (B. 31, 2514). — IV, 1384.
- $C_{15}H_{18}O_4N_2S$  1) Äthyläther d. 4,4'-Diamido-3'-Oxy-3-Methylbiphenyl-6-Sulfonsäure. Ba + 8H<sub>2</sub>O, HCl + 4H<sub>2</sub>O (B. 20, 3176). — II, 898.
- $C_{15}H_{18}O_4N_2S_2$  1)  $\alpha\gamma$ -Di[Phenylsulfonamido]propan. Sm. 96° (Soc. 87, 388 C. 1905 [1] 1587).  
2) Di[Phenylamid]d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 130°. Ag<sub>2</sub> (B. 34, 3479).  
3) Di[Methylphenylamid] d. Methandisulfonsäure. Sm. 141,5–142,5°. Na (B. 38, 3392 C. 1905 [2] 1525).  
4) Phenylamid-Äthylphenylamid d. Methandisulfonsäure. Sm. 165° (B. 38, 3393 C. 1905 [2] 1525).
- $C_{15}H_{18}O_4N_4S$  1) 2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyltetrahydroimidazol-1- $\alpha$ -Nitrosamidoisobuttersäure. Sm. 166° (C. 1904 [2] 1028).
- $C_{15}H_{18}O_6N_2S$  1) 2-Naphtylsulfonhydrazon d. l-Arabinose. Zers. bei 175° (C. 1904 [2] 1494).
- $C_{15}H_{18}O_6N_2S_2$  1) Di[4-Amido-3-Methylphenyl]methan- $\beta$ -Disulfonsäure. (NH<sub>4</sub>)<sub>2</sub>, K<sub>2</sub> (B. 27, 1813). — IV, 984.
- $C_{15}H_{19}ON_2J$  1) Jodmethylat d. 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 199,5 bis 200° (J. pr. [2] 69, 236 C. 1904 [1] 1269).  
2) Jodmethylat d. 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 218° (B. 35, 3086 C. 1902 [2] 1116; J. pr. [2] 69, 166 C. 1904 [1] 1268). — \*IV, 381.
- $C_{15}H_{19}ON_3S$  1) Diäthyläther d. 4-[2-Methylphenyl]amido-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 80°. HCl (Am. 36, 158 C. 1906 [2] 1066).  
2) Diäthyläther d. 4-[4-Methylphenyl]amido-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 72°. HCl (Am. 36, 157 C. 1906 [2] 1065).
- $C_{15}H_{19}O_2NS$  1) l-Naphtylamid d.  $\beta$ -Methylbutan- $\delta$ -Sulfonsäure. Sm. 90–91° (C. 1906 [1] 1530).
- $C_{15}H_{19}O_2NS_2$  1) Diäthyläther d.  $\alpha$ -[1,2-Phtalyl]amido- $\beta\beta$ -Dimerkaptopropan. Sm. 71–72° (B. 27, 1041; 32, 1243). — II, 1814.
- $C_{15}H_{19}O_2N_2Br$  1) 4-Bromphenylhydrazoncamphononsäure. Sm. 194° (Soc. 75, 1002). — \*I, 259.
- $C_{15}H_{19}O_2N_2P$  1) Phenylamid-4-Methylphenylamid d. Phosphorsäuremonoäthylester. Sm. 116–117° (C. 1901 [1] 687; Soc. 81, 1372 C. 1902 [2] 1198).
- $C_{15}H_{19}O_2N_3S$  1) 4'-Methyläther - 2,5 - Diäthyläther d. 4-[4-Oxyphenyl]amido-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 68–69°. HCl (Am. 36, 158 C. 1906 [2] 1066).
- $C_{15}H_{19}O_3NBr_2$  1) Äthylester d.  $\delta$ -[ $\beta$ -Dibrom-2-Acetylamidophenyl]valeriansäure. Sm. 139° (B. 20, 384). — II, 1393.
- $C_{15}H_{19}O_3NSi$  1) Methyläthylphenyläther d. Trioxysiliciumphenylamid. Fl. (Soc. 79, 458).
- $C_{15}H_{19}O_3N_2Cl_3$  1) Verbindung (C. 1903 [2] 19).
- $C_{15}H_{19}O_3N_2Br$  1) Isoamyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 65° (J. pr. [2] 45, 188). — IV, 266.
- $C_{15}H_{19}O_3N_3S$  1) 2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 153° (C. 1904 [2] 1028).
- $C_{15}H_{19}O_3N_8Br$  1) 2,5-Dimethyl-1,3,4-Triazolylamid d.  $\alpha$ -Brom- $\delta$ -[2,5-Dimethyl-1,3,4-Triazolyl]amido- $\alpha\gamma$ -Butadien- $\alpha\gamma$ -Dicarbonsäure- $\gamma$ -Methylester. Sm. 205° (B. 42, 1995 C. 1909 [2] 284).
- $C_{15}H_{19}O_6NS_2$  1)  $\alpha$ -[1,2-Phtalyl]amido- $\beta\beta$ -Di[Äthylsulfon]propan. Sm. 175–177° (B. 32, 1244). — \*II, 1057.
- $C_{15}H_{20}ON_2Br_2$  1) Dibromanagyrin. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr (C. 1899 [1] 1130). — \*III, 601.
- $C_{15}H_{20}ON_2S_2$  1) Verbindung (aus Taurin u. Benzoësäureanhydrid). Sm. 175° (C. 1903 [2] 986).

- $C_{15}H_{20}ON_3P$  1) Propylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 146° (A. 326, 173 C. 1903 [1] 819).
- $C_{15}H_{20}O_2NCl$  1) Benzoat d. Chlorpiperiliumhydrin. 2 +  $PtCl_4$  (M. 15, 126). — IV, 19.
- $C_{15}H_{20}O_2N_2S$  1) Lakton d.  $\delta$ -[ $\alpha$ -Methyl- $\beta$ -Phenylthioureido]- $\beta$ -Oxy- $\beta$ -Methylpentan- $\delta$ -Carbonsäure. Sm. 152—154° (M. 29, 514 C. 1908 [2] 1037).
- $C_{15}H_{20}O_2N_2S_2$  1) 4-Nitrobenzylester d. 3-Methylhexahydrophenylamidodithioameisensäure. Sm. 90—93° (B. 35, 3384 C. 1902 [2] 1363).
- $C_{15}H_{20}O_3NBr$  1)  $\alpha$ -[ $\alpha$ -Brom- $\beta$ -Phenylpropionyl]amidoisocaprinsäure. Sm. 148° (corr.) (A. 354, 8 C. 1907 [2] 458).
- 2) isom.  $\alpha$ -[ $\alpha$ -Brom- $\beta$ -Phenylpropionyl]amidoisocaprinsäure. Sm. 166,5° (A. 354, 9 C. 1907 [2] 458).
- 3)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 119—123° (B. 37, 3306 C. 1904 [2] 1305).
- $C_{15}H_{20}O_4NBr$  1) d- $\alpha$ -[ $\alpha$ -Bromisocapronyl]amido-1- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 137—138° (B. 41, 2846 C. 1908 [2] 1734).
- 2) l- $\alpha$ -[ $\alpha$ -Bromisocapronyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 139—140° (B. 37, 2497 C. 1904 [2] 425).
- $C_{15}H_{20}O_6N_4S_2$  1)  $\alpha$ -Di[Phenylhydrazido]propan- $\beta$ - $\beta$ -Disulfonsäure. Ba (Bl. [3] 27, 11). — IV, 480.
- $C_{15}H_{20}N_3SP$  1) Propylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 116° (A. 326, 204 C. 1903 [1] 821).
- $C_{15}H_{21}ONBr_2$  1) Methyläther d. 1-[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]hexahydropyridin. Sm. 49—51° (A. 334, 304 C. 1904 [2] 985).
- $C_{15}H_{21}ON_3S$  1) 4-[ $\beta$ -Phenylthioureido]-5-Keto-1,2,2,4-Tetramethyltetrahydropyrrol. Sm. 180—181° (M. 29, 503 C. 1908 [2] 1036).
- $C_{15}H_{21}O_2NBr_2$  1) Acetat d. Diäthyl-2,6-Dibrom-4-Oxy-3,5-Dimethylbenzylamin. Sm. 94° (A. 344, 250 C. 1908 [1] 1164).
- $C_{15}H_{21}O_2NS$  1) Nitril d.  $\gamma$ -[2,4,5-Trimethylphenyl]sulfonpentan- $\gamma$ -Carbonsäure. Fl. (J. pr. [2] 72, 333 C. 1905 [2] 1785).
- $C_{15}H_{21}O_2N_2Cl$  1) 2-Chlormethylat-1',5-Diäthyläther d. 5-Oxy-1-[4-Oxyphenyl]-3-Methylpyrazol. 2 +  $PtCl_4$  (B. 28, 636). — IV, 514.
- $C_{15}H_{21}O_4NS$  1) Äthylester d. 2-Phenylsulfonamidohexahydrobenzol-1-Carbonsäure. Sm. 93° (A. 295, 202). — II, 705.
- $C_{15}H_{21}O_4N_2J$  1) Jodmethylat d. Base  $C_{14}H_{15}O_4N_2$ . Sm. 195° (B. 35, 1748 C. 1902 [2] 68). — III, 680.
- $C_{15}H_{21}O_5NS$  1) Amylester d. 4-Methylphenylsulfonacetylamidoameisensäure. Sm. 83° (C. 1899 [2] 285). — II, 486.
- $C_{15}H_{21}O_6N_3S_3$  1) Äthylester d. Rhodanuressigsäure. Sm. 81° (A. 136, 227; B. 14, 733). — I, 1228.
- $C_{15}H_{21}O_6ClSi$  1) Tri[Acetylacetonyl]siliciumchlorid. HCl, (HCl,  $FeCl_3$ ), (2 HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ), +  $ZnCl_2$  (B. 36, 926 C. 1903 [1] 1025; A. 344, 314 C. 1908 [1] 1409).
- $C_{15}H_{21}O_6ClTi$  1) Tri[Acetylacetonyl]titanchlorid. +  $FeCl_3$ , +  $TiCl_4$ , 2 +  $PtCl_4$  (B. 37, 590; A. 344, 335 C. 1908 [1] 1410).
- $C_{15}H_{21}O_6JSi$  1) Tri[Acetylacetonyl]siliciumjodid. +  $J_2$  (A. 344, 314 C. 1908 [1] 1409).
- $C_{15}H_{21}N_2JS$  1) 2-Jodisobutylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Methyläther. Sm. 189—191° (A. 331, 227 C. 1904 [1] 1220).
- 2) 2-Jodmethylat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol-5-Isobutyläther. Sm. 117° (A. 331, 202 C. 1904 [1] 1218).
- $C_{15}H_{22}ONJ$  1) Jodmethylat d. Äthylnaphtalanmorpholin. Zers. bei 205° (A. 307, 187). — II, 501.
- 2) Jodbenzylat d. Tropin. Sm. 236° (Ar. 242, 574 C. 1905 [1] 184).
- $C_{15}H_{22}ON_2S$  1) 9-[ $\beta$ -Phenylthioureido]- $\beta$ -Ketooktan. Sm. 77° (B. 42, 4055 C. 1909 [2] 1925).
- 2) Conhydrinphenylthioharnstoff (C. 1900 [1] 1164).
- $C_{15}H_{22}ON_5P$  1) Propylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 151° (A. 326, 175 C. 1903 [1] 819). — IV, 424.
- $C_{15}H_{22}O_2NBr$  1) Brommethylat d. 6-Keto-2,4-Dimethyl-2-Äthyl-5-Phenyltetrahydro-1,4-Oxazin. Sm. 195° (Bl. [4] 3, 1143 C. 1909 [1] 192).
- 2) Brombenzylat d. 1-Piperidylessigsäuremethyl ester. Zers. 193 bis 194° (B. 35, 182 C. 1902 [1] 429). — IV, 16.
- 3) Benzoat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridinbrommethylat. Sm. 144—147° (Soc. 93, 1802 C. 1909 [1] 145).

- $C_{15}H_{22}O_2NBr$  4) Phenylbromacetat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Methylbutan (*Bl.* [4] 3, 1143 *C.* 1909 [1] 192).
- $C_{15}H_{22}O_2NJ$  1) Jodäthylat d. 1,2,3,4-Tetrahydro-1-Chinolylessigsäureäthylester. Zers. 128—130° (*B.* 35, 1077 *C.* 1902 [1] 938). — \*IV, 144.  
2) Jodäthylat d. 1,2,3,4-Tetrahydro-2-Isochinolylessigsäureäthylester. Zers. bei 109—110° (*B.* 34, 3989 *C.* 1902 [1] 210; *B.* 35, 1077 *C.* 1902 [1] 938). — \*IV, 145.
- $C_{15}H_{22}O_2N_2Cl_2$  1) Verbindung (d. Phenylamidobrenzweinsäuremethyylimid u. Methylchlorid). +  $PtCl_4$  (*B.* 18, 1045). — II, 440.
- $C_{15}H_{22}O_2N_2J_2$  1) Verbindung (d. Phenylamidobrenzweinsäuremethyylimid u. Methyljodid) (*B.* 18, 1045). — II, 440.
- $C_{15}H_{22}O_3NJ$  1) Jodmethylylat d. Äthylhydrocotarnin. Sm. 188—189° (*B.* 39, 2225 *C.* 1906 [2] 439).
- $C_{15}H_{22}O_4NCl$  1) Chlormethylylat d. 2,4,6-Trimethylpyridin-3,5-Dicarbonsäurediäthylester. 2 +  $PtCl_4$  (*B.* 17, 1021). — IV, 170.
- $C_{15}H_{22}O_4NJ$  1) Jodmethylylat d. Äthoxyhydrocotarnin +  $\frac{1}{2}H_2O$ . Sm. 168° (*A.* 254, 364). — III, 917.  
2) Jodmethylylat d. 2,4,6-Trimethylpyridin-3,5-Dicarbonsäurediäthylester. Sm. 140° (*A.* 215, 25; *B.* 17, 1020). — IV, 169.
- $C_{15}H_{22}O_6N_4S_2$  1) Helicinthioharnstoff (*B.* 18, 800; *G.* 12, 464). — III, 69.
- $C_{15}H_{23}OClHg$  1) Verbindung (aus Dicyklopentadien). Fl. (*B.* 39, 3190 *C.* 1906 [2] 1313).
- $C_{15}H_{23}NBrJ$  1) d-Methylallylisoamyl-4-Bromphenylammoniumjodid. Sm. 131 bis 131,5° (*Soc.* 93, 306 *C.* 1908 [1] 1619).  
2) r-Methylallylisoamyl-4-Bromphenylammoniumjodid. Sm. 127 bis 128° (*Soc.* 93, 304 *C.* 1908 [1] 1618).
- $C_{15}H_{24}ONCl$  1) l-Caryophyllennitrosylchlorid. Fest. Zers. bei 161—163° (Sm. 158—160°) (*A.* 271, 295; *C.* 1899 [1] 108; 1899 [2] 1119; *Ar.* 241, 38 *C.* 1903 [1] 712). — III, 537; \*III, 402.  
2) i- $\alpha$ -Caryophyllennitrosylchlorid. Sm. 177—179° u. Zers. (*A.* 356, 4 *C.* 1907 [2] 1792).  
3) Humulennitrosylchlorid. Sm. 164—165° (*Soc.* 67, 781; *B.* 32, 3184; *C.* 1899 [1] 108). — III, 538.  
4)  $\alpha$ -Santalennitrosylchlorid. Sm. 122° (*Bl.* [3] 23, 541). — \*III, 415.  
5)  $\beta$ -Santalennitrosylchlorid. Sm. 152° (*Bl.* [3] 23, 542). — \*III, 415.  
6) isom.  $\beta$ -Santalennitrosylchlorid. Sm. 106° (*Bl.* [3] 23, 542). — \*III, 415.  
7) Zingiberennitrosylchlorid. Sm. 97° u. Zers. (*C.* 1901 [2] 1007; 1902 [1] 41). — \*III, 404.  
8) Nitrosochlorid (aus Caryophyllen). Sm. 122° (*A.* 359, 253 *C.* 1908 [1] 1933).  
9) isom. Nitrosochlorid (aus Caryophyllen). Sm. 147—148° (*A.* 359, 254 *C.* 1908 [1] 1933).
- $C_{15}H_{24}ONBr$  1) d-Methylallylisoamyl-4-Bromphenylammoniumhydroxyd. Jodid, d-Bromcamphersulfonat (*Soc.* 93, 305 *C.* 1908 [1] 1618).  
2) r-Methylallylisoamyl-4-Bromphenylammoniumhydroxyd. Bromid, Jodid, d-Camphersulfonat, d-Bromcamphersulfonat (*Soc.* 93, 304 *C.* 1908 [1] 1618).  
3)  $\alpha$ -Caryophyllennitrosobromid. Sm. 144—145° u. Zers. (*A.* 359, 247 *C.* 1908 [1] 1933).
- $C_{15}H_{24}ONJ$  1) Jodmethylylat d. 3-Diäthylamido-2-Oxy-1,2,3,4-Tetrahydronaphthalin. Sm. 151,5° (*A.* 288, 122). — \*II, 501.  
2) Jodmethylylat d. 1-[ $\gamma$ -Oxypropyl]hexahydropyridin- $\gamma$ -Phenyläther. Sm. 159—160° (*B.* 42, 2041 *C.* 1909 [2] 450).  
3) Jodäthylat d. 8-Oxy-1-Äthyl-1,2,3,4-Tetrahydrochinolin-8-Äthyläther. Sm. 136—137° (*B.* 19, 1045). — IV, 200.
- $C_{15}H_{24}O_2NBr$  1) Benzoat d. Trimethyl- $\beta$ -Oxy- $\beta$ -Methylbutylammoniumbromid (D.R.P. 195813 *C.* 1908 [1] 1224).
- $C_{15}H_{24}O_2NJ$  1) Benzoat d. Trimethyl- $\beta$ -Oxy- $\beta$ -Methylbutylammoniumjodid. Sm. 169—170° (D.R.P. 195813 *C.* 1908 [1] 1225).
- $C_{15}H_{24}O_3N_2S$  1) Diäthyläther d.  $\alpha$ -[ $\beta$ -Dioxyäthyl]- $\beta$ -[2,4-Dimethylphenyl]thioharnstoff. Sm. 35°, Pikrat (*B.* 25, 2366). — II, 544.
- $C_{15}H_{24}O_3NCl$  1) Chlormethylylat d. Methylpelloitin. 2 +  $PtCl_4$  (*B.* 29, 219; *A. Pth.* 40, 393). — III, 778; \*III, 601.
- $C_{15}H_{24}O_3NJ$  1) Jodmethylylat d. Methylpelloitin. Sm. 225° (*B.* 29, 218). — III, 778.



- $C_{15}H_{24}O_7N_3Cl$  1) Diäthylester d. d-Chloracetylglutamyldi[Amidoessigsäure]. Sm. 146° (A. 365, 191 C. 1909 [1] 1806).  
 2) Diäthylester d. r-Chloracetylglutamyldi[Amidoessigsäure]. Sm. 146° (A. 365, 199 C. 1909 [1] 1807).
- $C_{15}H_{25}O_2NS$  1) Äthyl- $\alpha$ -Äthylisoamylamid d. Benzolsulfonsäure. Fl. (J. pr. [2] 63, 214). — \*II, 70.  
 2) Äthyl-[ $\gamma$ -Methyl- $\alpha$ -Äthylbutyl]amid d. Benzolsulfonsäure (C. 1900 [2] 945).
- $C_{15}H_{25}O_3NS$  1) Lakton d. Piperidylcampher- $\beta$ -Sulfonsäure. Sm. 140° (C. 1901 [2] 417; Soc. 81, 1449 C. 1902 [2] 1465; Soc. 89, 1051 C. 1906 [2] 785). — \*IV, 14.  
 2) Äthylamid d.  $\delta$ -Oxy- $\delta$ -Phenylheptan- $\delta^3$ -Sulfonsäure. Sm. 117—118° (B. 37, 3261 C. 1904 [2] 1031).  
 3) Piperidid d. Campher- $\beta$ -Sulfonsäure. Sm. 55° (56°) (C. 1901 [2] 417; Soc. 81, 1450 C. 1902 [2] 1465; Soc. 89, 1051 C. 1906 [2] 785). — \*IV, 14.
- $C_{15}H_{26}ONCl$  1) Chlormethylat d.  $\beta$ -Methylbenzylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. 2 +  $PtCl_4$ , +  $AuCl_3$  (M. 28, 520 C. 1907 [2] 1229).
- $C_{15}H_{26}ONJ$  1) Jodmethylat d.  $\delta$ -Oxy- $\epsilon$ -[4-Dimethylamidophenyl]- $\beta$ -Methylpentan. Sm. 141° (B. 40, 4365 C. 1908 [1] 34).
- $C_{15}H_{26}ON_2Cl_2$  1) Terpendichloridnitropiperidid. Sm. 147° (A. 270, 203). — III, 527.
- $C_{15}H_{26}O_3N_3Br$  1) Verbindung (aus polym.  $\gamma$ -Oximido- $\beta$ -Methyl- $\alpha$ -Buten). Sm. 102° (A. 262, 351). — I, 1032.
- $C_{15}H_{26}O_3SSi$  1) Äthylpropylbenzylsiliciumsulfonsäure. l-Menthylaminsalz, Chininsalz, Cinchoninsalz (Soc. 93, 205 C. 1908 [1] 1266).
- $C_{15}H_{27}O_3NBr_2$  1)  $\alpha$ -Bromisovalerat d.  $\alpha$ -[ $\alpha$ -Bromisovaleryl]amido- $\beta$ -Oxy- $\beta$ -Methylpropan. Sm. 74° (D. R. P. 189481 C. 1907 [2] 2004; D. R. P. 194051 C. 1908 [1] 1222).
- $C_{15}H_{27}O_3N_3Br_2$  1) Dibromid d. polym.  $\gamma$ -Oximido- $\beta$ -Methyl- $\alpha$ -Buten. Sm. 82° (A. 262, 351). — I, 1032.
- $C_{15}H_{28}O_4NCl$  1) Chlormethylat d. 4 [oder 5]-Dimethylamido-R-Pentamethylen-1-Carbonsäure-2-Methylcarbonsäurediäthylester. 2 +  $PtCl_4$ , +  $AuCl_3$  (M. 21, 898). — \*III, 636.  
 2) Chlormethylat d. i-Tropinsäuredipropylester. +  $AuCl_3$  (B. 28, 3291). — III, 794.
- $C_{15}H_{28}O_4NBr$  1) Äthylester d.  $\alpha$ -[ $\alpha$ -Bromcaproxyl]- $\beta$ -Dimethylamidoisobuttersäure. Fl. HCl (D. R. P. 202167 C. 1908 [2] 1220).  
 2) Äthylester d.  $\alpha$ -[ $\alpha$ -Bromisovaleroxyl]- $\beta$ -Diäthylamidoisobuttersäure. Fl. HCl (D. R. P. 202167 C. 1908 [2] 1220).
- $C_{15}H_{29}O_2ClS$  1) l-Menthylester d. d-l-Methyläthylthetinchlorid. 2 +  $PtCl_4$  (Soc. 87, 458 C. 1905 [1] 1217, 1587).
- $C_{15}H_{29}O_2BrS$  1) l-Menthylester d. d-l-Methyläthylthetinbromid. Sm. 80—82° (Soc. 87, 457 C. 1905 [1] 1217, 1587).
- $C_{15}H_{30}ON_3P$  1) l-Tripiperidinphosphinoxid. Sm. 75—76°. 2 +  $HgCl_2$  (B. 28, 1017; A. 326, 200 C. 1903 [1] 821). — IV, II; \*IV, 10.
- $C_{15}H_{30}O_2NJ$  1) Jodmethylat d. 5-Dimethylamido-1, 1, 3-Trimethylhexahydrobenzol-2-Carbonsäureäthylester (A. 366, 183 C. 1909 [2] 614).
- $C_{15}H_{30}O_{15}NS$  1) Secaleamidosulfonsäure (Ar. 244, 353 C. 1906 [2] 1573).
- $C_{15}H_{33}N_3SP$  1) l-Tripiperidylphosphinsulfid. Sm. 120° (B. 28, 2211; A. 326, 219 C. 1903 [1] 822). — IV, II; \*IV, 10.
- $C_{15}H_{32}O_2NCl$  1) Chlormethylat d.  $\xi$ -Dimethylamido- $\beta$ -Methylheptan- $\gamma$ -Methylcarbonsäureäthylester. 2 +  $PtCl_4$  (A. 323, 327 C. 1902 [2] 1111).
- $C_{15}H_{32}O_2NJ$  1) Jodmethylat d.  $\xi$ -Dimethylamido- $\beta$ -Methylheptan- $\gamma$ -Methylcarbonsäureäthylester (A. 323, 327 C. 1902 [2] 1111).  
 2) Jodmethylat d.  $\epsilon$ -Dimethylamido- $\beta$ - $\xi$ -Dimethylheptan- $\alpha$ -Carbonsäureäthylester. Sm. 117° (C. 1902 [1] 1295).
- $C_{15}H_{32}O_8N_2S_5$  1) s-Di[ $\beta$ -Diäthylsulfonpropyl]thioharnstoff. Sm. 159—161° (B. 32, 2753). — \*I, 742.
- $C_{15}H_{33}O_3SP$  1) Thiophosphorsäuretriisomylester. Fl. (Z. 1869, 413). — I, 342.
- $C_{15}H_{34}O_2NJ$  1) Diäthyläther d.  $\beta$ -Dioxyäthyltripropylammoniumjodid (B. 30, 1510).
- $C_{15}H_{34}O_3N_2Cl_2$  1) Verbindung (aus  $\alpha$ -Oxyvaleriansäure u. Trimethyl- $\beta$ -Oxyäthylammoniumhydroxyd).  $PtCl_4$  +  $2H_2O$  (B. 27 [2] 739). — \*I, 646.
- $C_{15}H_{36}N_3SP$  1) Tri[Amylamid] d. Thiophosphinsäure. Fl. (A. 326, 208 C. 1903 [1] 821).

**C<sub>15</sub>-Gruppe mit fünf Elementen.**

- C<sub>15</sub>H<sub>9</sub>O<sub>4</sub>N<sub>2</sub>BrS** 1) Nitril d.  $\alpha$ -[4-Bromphenyl]sulfon- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 210° (*J. pr.* [2] 78, 134 *C.* 1908 [2] 1171).
- C<sub>15</sub>H<sub>10</sub>O<sub>2</sub>NBrS** 1) Nitril d.  $\alpha$ -[4-Bromphenyl]sulfon- $\beta$ -Phenylakrylsäure. Sm. 119° (*J. pr.* [2] 78, 133 *C.* 1908 [2] 1171).
- C<sub>15</sub>H<sub>10</sub>O<sub>3</sub>NBrS** 1) Nitril d.  $\alpha$ -[4-Bromphenyl]sulfon- $\beta$ -[2-Oxyphenyl]akrylsäure. Sm. 143° (*J. pr.* [2] 78, 134 *C.* 1908 [2] 1171).
- C<sub>15</sub>H<sub>10</sub>O<sub>5</sub>NBrS** 1) 4-Brom-1-Methylamido-9,10-Anthrachinon-6-Sulfonsäure (D.R.P. 164791 *C.* 1905 [2] 1758).
- C<sub>15</sub>H<sub>11</sub>ON<sub>4</sub>S<sub>3</sub>P** 1) Verbindung (aus Phosphoryltrithiocarbimid u. Diphenylamin). Sm. 140–141° (*Soc.* 93, 2161 *C.* 1909 [1] 842).
- C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>NCl<sub>2</sub>Br<sub>2</sub>** 1) N-Acetyl- $\beta$ -Dichlorphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 141,5–143,5° (*A.* 332, 188 *C.* 1904 [2] 210).
- 2) 2,6-Dichlor-3,5-Dibromphenylester d. Methylphenylamidoameisensäure. Sm. 162° (*B.* 39, 4151 *C.* 1907 [1] 240).
- C<sub>15</sub>H<sub>12</sub>ONBrS<sub>2</sub>** 1) Benzylester d. 3-Brombenzoylamidodithioameisensäure. Sm. 113° (*C.* 1906 [2] 1836).
- 2) 4-Brombenzylester d. Benzoylamidodithioameisensäure. Sm. 126° (*Am.* 26, 197).
- C<sub>15</sub>H<sub>12</sub>ON<sub>3</sub>ClS** 1) 3-Merkapto-5-Keto-4-[4-Chlorphenyl]-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 275° (*B.* 32, 1084; 34, 325). — \*IV, 535.
- 2) 2-Keto-5-[4-Chlorphenyl]amido-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiadiazol. Sm. 229–230° (*B.* 32, 1084). — \*IV, 535.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>NClBr<sub>2</sub>** 1) N-Acetyl-2-Chlorphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 129–130° (*A.* 332, 188 *C.* 1904 [2] 210).
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>NClS<sub>3</sub>** 1) Chlorid (aus Trithiodibutolakton). Sm. 210° (*B.* 34, 3404). — \*III, 594.
- C<sub>15</sub>H<sub>12</sub>O<sub>2</sub>NJS<sub>3</sub>** 1) Jodid (aus Trithiodibutolakton). Sm. 242° u. Zers. (*B.* 34, 3404). — \*III, 594.
- C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>ClBr** 1) Bromgallocyaninhydrochlorid (*Bl.* [3] 15, 404). — III, 677.
- C<sub>15</sub>H<sub>13</sub>ON<sub>2</sub>ClS** 1) 4-[4-Chlorphenyl]imido-5-Phenyl-5,6-Dihydro-1,3,5-Oxthiazin $\beta$  Sm. 78° (*C.* 1905 [2] 1422).
- C<sub>15</sub>H<sub>13</sub>ON<sub>2</sub>BrS** 1) 4-[4-Bromphenyl]imido-5-Phenyl-5,6-Dihydro-1,3,5-Oxthiazin $\beta$  Sm. 80° (*C.* 1905 [2] 1422).
- 2) 6-Äthyläther d. 2-Merkapto-6-Oxy-1-[3-Bromphenyl]benzimidazol. Sm. 201° (*B.* 36, 3869 *C.* 1904 [1] 92).
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>BrS** 1) Verbindung (aus d. Verb. C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>Br<sub>3</sub>S). Sm. 165° (*B.* 34, 3142; 36, 3128).
- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>ClJ** 1) Jodmethylat d. 5[oder 6]-Chlor- $\beta$ -Nitro-1-Methyl-2-Phenylbenzimidazol. Sm. 265–266° (*J. pr.* [2] 74, 69 *C.* 1906 [2] 1503).
- C<sub>15</sub>H<sub>14</sub>ONClS** 1) Phenylamid d. 3-Chlor-4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 195,5° (*J. pr.* [2] 59, 584). — \*II, 915.
- 2) 4-Chlorphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 194–195° (*J. pr.* [2] 59, 589). — \*II, 914.
- C<sub>15</sub>H<sub>14</sub>ONBrS** 1) 3-Bromphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 139° (*J. pr.* [2] 59, 590). — \*II, 914.
- C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>S<sub>3</sub>P** 1) Verbindung (aus Phosphoryltrithiocarbimid u. Anilin). Sm. 114,5 bis 115,5° (*Soc.* 93, 2161 *C.* 1909 [1] 842).
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>S** 1) Dimethyläther d. s-Di[5-Chlor-2-Oxyphenyl]thioharnstoff. Sm. 152,5° (*B.* 15, 1687). — II, 726; \*II, 416.
- C<sub>15</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>J<sub>2</sub>S** 1) Dimethyläther d. s-Di[3-Jod-4-Oxyphenyl]thioharnstoff. Sm. 194 bis 195° (*B.* 29, 999). — \*II, 419.
- C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>NClS** 1) Methyl-4-[4-Methylphenylsulfon]chloramidophenylketon. Sm. 93° (*Soc.* 85, 391 *C.* 1904 [1] 1404).
- 2) Äthyl-4-Phenylsulfonchloramidophenylketon. Sm. 81° (*Soc.* 85, 394 *C.* 1904 [1] 1404).
- C<sub>15</sub>H<sub>15</sub>ONClJ** 1) 5-Acetylamido-2-Methyldiphenyljodoniumchlorid. 2 + PtCl<sub>4</sub> (*B.* 41, 2816 *C.* 1908 [2] 1168).
- 2) 4-Acetylamido-3-Methyldiphenyljodoniumchlorid. Sm. 179°. 2 + PtCl<sub>4</sub> (*B.* 40, 4080 *C.* 1907 [2] 1835).
- 3) 4'-Acetylamido-4-Methyldiphenyljodoniumchlorid. Sm. 204,5°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*B.* 40, 4074 *C.* 1907 [2] 1834).

- C<sub>15</sub>H<sub>15</sub>ONBrJ** 1) 5-Acetylamido-2-Methyldiphenyljodoniumbromid. Sm. 159,5 bis 160° (*B.* 41, 2816 *C.* 1908 [2] 1168).  
 2) 4-Acetylamido-3-Methyldiphenyljodoniumbromid. Sm. 173,5° (*B.* 40, 4081 *C.* 1907 [2] 1835).  
 3) 4'-Acetylamido-4-Methyldiphenyljodoniumbromid. Sm. 185° (*B.* 40, 4074 *C.* 1907 [2] 1834).
- C<sub>15</sub>H<sub>15</sub>ON<sub>2</sub>Br<sub>3</sub>S** 1) Verbindung (aus Acetyl-s-Diphenylthioharnstoff). Sm. 167° u. Zers. (*B.* 34, 3138; *B.* 35, 3128 *C.* 1903 [2] 1070).
- C<sub>15</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>ClS** 1) Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[4-Chlorphenyl]sulfonäthan. Sm. 114° (*J. pr.* [2] 78, 8 *C.* 1908 [2] 506).
- C<sub>15</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>BrS** 1) Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[4-Bromphenyl]sulfonäthan. Sm. 132—133° (*J. pr.* [2] 78, 9 *C.* 1908 [2] 506).
- C<sub>15</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>JS** 1) Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[4-Jodphenyl]sulfonäthan. Sm. 165° (*J. pr.* [2] 78, 9 *C.* 1908 [2] 506).
- C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>NBr<sub>2</sub>S<sub>2</sub>** 1) Propylimid d. 4-Brombenzol-1-Sulfonsäure. Sm. 27° (*C.* 1899 [2] 867). — \*II, 74.
- C<sub>15</sub>H<sub>16</sub>ON<sub>2</sub>ClP** 1) Phenylmonamid d. 1,2,3,4-Tetrahydro-1-Chinolyphosphinsäuremonochlorid. Sm. 174—175° (*A.* 326, 198 *C.* 1903 [1] 821). — \*IV, 142.
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>Cl<sub>2</sub>S<sub>2</sub>** 1)  $\alpha\gamma$ -Di[Phenylsulfonchloramido]propan. Sm. 134° (*Soc.* 87, 388 *C.* 1905 [1] 1587).
- C<sub>15</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>ClS** 1) 3-Dimethylamido-4-Methylphenylamid d. 6-Chlor-3-Nitrobenzol-1-Sulfonsäure. Sm. 144° (*D. R. P.* 135016 *C.* 1902 [2] 1166). — \*IV, 401.
- C<sub>15</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>BrS** 1) 5-Brom-2-Phenylsulfonamido-4-Dimethylamido-1-Methylbenzol. Sm. 178—179° (*Soc.* 87, 949 *C.* 1905 [2] 468).
- C<sub>15</sub>H<sub>19</sub>ONBr<sub>2</sub>S<sub>2</sub>** 1) 1-[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]hexahydropyridin + Schwefelkohlenstoff. Sm. 180—181° (*A.* 356, 150 *C.* 1907 [2] 1699).
- C<sub>15</sub>H<sub>22</sub>O<sub>3</sub>NJS** 1) Jodmethylat d. Merkaptohydrocotarninäthyläther + H<sub>2</sub>O. Sm. 100° (wasserfrei) (*B.* 35, 1752 *C.* 1902 [2] 68). — \*III, 681.
- C<sub>15</sub>H<sub>23</sub>O<sub>3</sub>NBr<sub>2</sub>S** 1) Piperidid d.  $\alpha\alpha'$ -Dibromcamphersulfonsäure. Sm. 157—158° (*Soc.* 75, 570). — \*IV, 14.
- C<sub>15</sub>H<sub>24</sub>O<sub>3</sub>NBrS** 1) Piperidid d.  $\alpha$ -Bromcampher- $\beta$ -Sulfonsäure. Sm. 75° (*Soc.* 89, 1051 *C.* 1906 [2] 785).  
 2) Piperidid d. Bromcamphersulfonsäure. Sm. 152° (*Soc.* 75, 572). — \*IV, 14.  
 3) Lakton d. Piperidyl- $\alpha$ -Bromcampher- $\beta$ -Sulfonsäure. Sm. 123° (*C.* 1901 [2] 418; *Soc.* 81, 1452 *C.* 1902 [2] 1465; *Soc.* 89, 1051 *C.* 1906 [2] 785). — \*IV, 14.

### C<sub>16</sub>-Gruppe mit einem Element.

- C<sub>16</sub>H<sub>10</sub>** C 95,0 — H 5,0 — M. G. 202.  
 1)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadiin (Diphenyldiacetylen). Sm. 88° (96°). Pikrat (*A.* 154, 159; *B.* 15, 57; 20, 3081; *G.* 22 [2] 91; *C.* 1906 [1] 1407; *A.* 342, 223 *C.* 1905 [2] 1789). — II, 283; \*II, 125.  
 2) Pyren (Phenylennaphtalin). Sm. 148—149°; Sd. oberhalb 360°. Pikrat (*A.* 158, 285; 240, 153, 161; *B.* 10, 2143; 12, 1978; 30, 1357, 1383; *M.* 2, 7; 4, 315; *A.* 351, 218 *C.* 1907 [1] 1421). — II, 284; \*II, 125.
- C<sub>16</sub>H<sub>12</sub>** C 94,1 — H 5,9 — M. G. 204.  
 1) cis- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butenin. Sd. 187,5—188° (*A.* 342, 249 *C.* 1905 [2] 1790).  
 2) trans- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butenin. Sm. 96,5—97° (*A.* 342, 225 *C.* 1905 [2] 1789).  
 3) Diphenylbutin? Sm. 101°; Sd. 345—346° (*B.* 11, 1403, 1995; 13, 631; 14, 1896; *A.* 216, 301).  
 4) 1-Benzylideninden. Sm. 88° (*B.* 33, 3398). — \*II, 124.  
 5) 1-Phenylnaphtalin. Sd. 324—325° (*B.* 26, 1198; *Am.* 20, 110; *Soc.* 63, 1185; 65, 871; *A.* 342, 236 *C.* 1905 [2] 1789). — II, 280; \*II, 124.  
 6) 2-Phenylnaphtalin. Sm. 102—102,5° (101,5°); Sd. 345—346° (*B.* 6, 66; 12, 1396, 2049; 26, 1198, 1748; *Soc.* 39, 546; 65, 872; *A.* 296, 28; *B.* 36, 3910 *C.* 1903 [2] 1439; *B.* 36, 4010 *C.* 1904 [1] 176). — II, 280; \*II, 124.



$C_{16}H_{12}$ 

- 7) isom.-*p*-Phenyl-naphtalin. Sm. 101—101,5°; Sd. 345—346° (i. D.) (B. 11, 1402; 13, 304; 23, 1078; A. 226, 24, 48; 296, 29). — II, 280; \*II, 124.
- 8) Pseudophenanthren. Sm. 115°. Pikrat (Sm. 147°) (A. 191, 295). — II, 280.
- 9) *m*-Dimethylanthracylen. Sm. 85°. Pikrat (Sm. 135°) (J. pr. [2] 41, 15). — II, 281.
- 10) *p*-Dimethylanthracylen. Sm. 63°. Pikrat (Sm. 129°) (J. pr. [2] 41, 28). — II, 281.
- 11) Kohlenwasserstoff (aus Carminsäure). Sm. 183—188° (A. 163, 112; B. 16, 2169; 23, 1905, 3200). — II, 280; \*II, 124.
- 12) Kohlenwasserstoff (aus d. 1,3-Di[Brommethyl]benzol). Sm. 191°; Sd. 260°<sub>12</sub> (R. 18, 462). — \*II, 124.
- 13) Kohlenwasserstoff (aus Naphtalin) (B. 23, 1905). — II, 280; \*II, 124.

 $C_{16}H_{14}$ 

- 1) Di[4-Methylphenyl]äthin (Dimethyltolan). Sm. 136° (B. 6, 1505; A. 279, 335; 306, 79; Soc. 91, 540 C. 1907 [2] 66). — II, 274; \*II, 123.
- 2) *cis-cis-αδ*-Diphenyl-*αγ*-Butadien. Sm. 70—70,5° (A. 342, 238 C. 1905 [2] 1789).
- 3) *cis-trans-αδ*-Diphenyl-*αγ*-Butadien. Fl. (A. 342, 240 C. 1905 [2] 1789).
- 4) *trans-trans-αδ*-Diphenyl-*αγ*-Butadien. Sm. 147—148° (149°); Sd. 250° (350°). 2 Pikrat (G. 15, 107; 20, 154; A. 306, 198; C. r. 135, 1347 C. 1903 [1] 328; A. 342, 239 C. 1905 [2] 1789; A. 347, 305 C. 1906 [2] 961). — II, 275; \*II, 123.
- 5) *α*-Phenyl-*β*-[2-Äthenylphenyl]äthen. Fl. Pikrat (B. 42, 1765 C. 1909 [2] 38).
- 6) 1-Benzylinden? Sd. 230—235°<sub>15</sub> (B. 33, 1504; A. 347, 264 C. 1906 [2] 957). — \*II, 124.
- 7) 3-Benzylinden. Sd. 183—185°<sub>18</sub> (A. 347, 260 C. 1906 [2] 956).
- 8) 1-Phenyl-1,4-Dihydronaphtalin. Sm. 50° (A. 306, 235). — \*II, 124.
- 9) Äthylanthracen. Sm. 60—61°. Pikrat (Sm. 120°) (B. 14, 803; A. 212, 109). — II, 274.
- 10) 1,6-Dimethylantracen. Sm. 240° (C. r. 139, 977 C. 1905 [1] 256; C. r. 140, 44 C. 1905 [1] 535; C. r. 143, 689 C. 1907 [1] 168; C. r. 146, 135 C. 1908 [1] 1184).
- 11) 1,8-Dimethylantracen. Sm. 86° (C. r. 139, 977 C. 1905 [1] 256; C. r. 140, 44 C. 1905 [1] 535; C. r. 143, 690 C. 1907 [1] 168).
- 12) 2,3-Dimethylantracen. Sm. 246° (J. pr. [2] 41, 5). — II, 273.
- 13) 2,4-Dimethylantracen. Sm. 71° (A. ch. [6] 6, 187). — II, 273.
- 14) 2,6-Dimethylantracen. Sm. 231—232° (215—216°) (A. ch. [6] 1, 482; [6] 11, 266; B. 18, 348; Soc. 85, 216 C. 1904 [1] 656, 939; C. r. 139, 977 C. 1905 [1] 256). — II, 273.
- 15) 2,7-Dimethylantracen. Sm. 243—244° (244,5°) (A. 235, 319; C. r. 139, 977 C. 1905 [1] 256; C. r. 140, 44 C. 1905 [1] 535; C. r. 141, 355 C. 1905 [2] 827; C. r. 143, 688 C. 1907 [1] 167; C. r. 146, 135 C. 1908 [1] 1184). — II, 274.
- 16) isom. Dimethylantracen (aus Xylol). Sm. 200° (A. 169, 207). — II, 274.
- 17) isom. Dimethylantracen. Sm. 202—203° (A. 234, 238). — II, 274.
- 18) isom. Dimethylantracen (aus Benzylmesitylen). Sm. 218—219° (A. ch. [6] 6, 187). — II, 273.
- 19) isom. Dimethylantracen (aus Steinkohlenteer). Sm. 224—225° (B. 10, 1481; 17, 2816; A. 235, 172; Bl. 41, 323). — II, 274.
- 20) isom. Dimethylantracen. Sm. 238° (B. 23, 3273). — II, 274.
- 21) 9-Äthylphenanthren. Sm. 61—63°; Sd. 198—200°<sub>11</sub>. Pikrat (B. 39, 3129 C. 1906 [2] 1333).
- 22) isom. *p*-Äthylphenanthren. Sm. 172—173° (B. 39, 3127 C. 1906 [2] 1333).
- 23) isom. *p*-Äthylphenanthren. Sm. 109—110° (B. 39, 3127 C. 1906 [2] 1333).
- 24) 9,10-Dimethylphenanthren. Sm. 139° (A. 362, 250 C. 1908 [2] 951).
- 25) Atronol. Sd. 325—326° (A. 206, 52). — II, 274; \*II, 123.
- 26) Diphenylsuccininden. Sm. 100° (A. 247, 156). — II, 275.

- C<sub>16</sub>H<sub>14</sub>** 27) Kohlenwasserstoff (aus Acetophenon). Sm. 49—49,5° (B. 13, 645). — II, 274.
- C<sub>16</sub>H<sub>16</sub>** 28) Kohlenwasserstoff (aus Acetophenon u. Malonsäurediäthylester). Sm. 131—132° (B. 34, 1959).  
C 92,3 — H 7,7 — M. G. 208.
- 1)  $\alpha\alpha$ -Diphenyl- $\alpha$ -Buten. Sd. 291—292° (C. r. 135, 534 C. 1902 [2] 1209; B. 37, 1451 C. 1904 [1] 1352).
- 2)  $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Sm. 57°; Sd. 296—297° (B. 37, 1453 C. 1904 [1] 1352).
- 3)  $\alpha\delta$ -Diphenyl- $\beta$ -Buten. Sm. 39° (45—45,5°) (B. 23, 2857; A. 342, 253 C. 1905 [2] 1790). — II, 251.
- 4)  $\alpha$ -Phenyl- $\beta$ -[ $\beta$ -Äthylphenyl]äthen. Sm. 89—90° (B. 15, 1681). — II, 252.
- 5)  $\alpha\alpha$ -Di[4-Methylphenyl]äthen. Sm. 61°; Sd. 304—305° (B. 7, 1413; B. 38, 840 C. 1905 [1] 875; B. 39, 2295 C. 1908 [2] 523; B. 40, 488 C. 1907 [1] 816; B. 41, 689 C. 1908 [1] 1394). — II, 251.
- 6)  $\alpha\beta$ -Di[2-Methylphenyl]äthen. Sm. 82,5—83°. Pikrat (B. 38, 504 C. 1905 [1] 729).
- 7)  $\alpha\beta$ -Di[3-Methylphenyl]äthen. Sm. 55—56°. Pikrat (R. 21, 456 C. 1903 [1] 503; B. 38, 505 C. 1905 [1] 729).
- 8)  $\alpha\beta$ -Di[4-Methylphenyl]äthen. Sm. 176—177° (179°) (B. 6, 1504; 18, 1948; Bl. [3] 17, 368; J. pr. [2] 39, 299; [2] 47, 46; A. 279, 337; R. 21, 453 C. 1903 [1] 503; B. 38, 506 C. 1905 [1] 729). — II, 251; \*II, 120.
- 9) Distyrol. Sm. 124° (119°) (A. 189, 340; B. 6, 256, 494; 22, 2255). — II, 165.
- 10) isom. Distyrol. Sd. 310—312° (320°) (A. 135, 122; 216, 187; B. 11, 1260; 25, 2658). — II, 165; \*II, 85.
- 11) 1,3-Diphenyl-R-Tetramethylen? Sd. 157—158° (B. 38, 1966 C. 1905 [2] 133).
- 12) 9-Äthyl-9,10-Dihydroanthracen. Sd. 320—323° u. Zers. (A. 212, 78; B. 13, 1600; 14, 457). — II, 252.
- 13) 9,9-Dimethyl-9,10-Dihydroanthracen. Sm. 56° (B. 21, 2508). — II, 252.
- 14) 9,10-Dimethyl-9,10-Dihydroanthracen. Sm. 181—181,5° (A. 235, 305, 332; J. 1884, 561; B. 26, 1707). — II, 252.
- 15)  $\beta$ -Dimethyl-9,10-Dihydroanthracen (C. r. 139, 977 C. 1905 [1] 256).
- 16) Hexahydropyren. Sm. 127° (A. 158, 296). — II, 284.
- 17) Kohlenwasserstoff (aus 1,3-Dimethylbenzol). Sd. 260—270° (M. 7, 526). — II, 252.
- 18) Kohlenwasserstoff (aus  $\beta$ -Bromäthylbenzol). Sd. 287—295° (B. 15, 1984). — II, 62.
- 19) Kohlenwasserstoff (aus 1,3-Di[Brommethyl]benzol). Sm. 131,5°; Sd. 290° (R. 18, 459). — \*II, 120.  
C 91,4 — H 8,6 — M. G. 210.
- C<sub>16</sub>H<sub>18</sub>** 1)  $\alpha\alpha$ -Diphenylbutan. Sm. 27°; Sd. 265—266°<sub>751</sub> (C. r. 135, 534 C. 1902 [2] 1209; B. 37, 1452 C. 1904 [1] 1352).
- 2)  $\alpha\beta$ -Diphenylbutan. Sd. 288—289° (B. 37, 1454 C. 1904 [1] 1353).
- 3)  $\alpha\delta$ -Diphenylbutan. Sm. 52°; Sd. 317° (B. 23, 2858; C. r. 135, 89 C. 1902 [2] 504). — II, 239.
- 4)  $\beta\beta$ -Diphenylbutan. Sm. 127,5—128,5° (B. 11, 1990). — II, 241.
- 5)  $\beta\gamma$ -Diphenylbutan. Sm. 123,5° (126°) (B. 7, 142, 1127; 32, 434; B. 35, 2639 C. 1902 [2] 585). — II, 240; \*II, 116.
- 6)  $\alpha\beta$ -Diphenyl- $\beta$ -Methylpropan. Sd. 284—287°<sub>750</sub> (Bl. [3] 25, 627).
- 7)  $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropan? Sd. 300° (B. 7, 1627). — \*II, 241.
- 8)  $\gamma$ -[ $\beta$ -Methylphenyl]- $\alpha$ -Phenylpropan. Sd. 293—294° (B. 23, 3169). — II, 239.
- 9)  $\alpha\alpha$ -Di[4-Methylphenyl]äthan. Sd. 295—298° (B. 7, 1193; 15, 1476; A. 235, 315; C. r. 141, 355 C. 1905 [2] 827). — II, 239.
- 10)  $\alpha$ -Phenyl- $\alpha$ -[2,5-Dimethylphenyl]äthan. Sd. 316—317° (B. 23, 3272). — II, 240.
- 11)  $\alpha$ -Phenyl- $\alpha$ -[m-Dimethylphenyl]äthan. Sd. 311—312° (B. 23, 3271). — II, 240; \*II, 115.

- C<sub>16</sub>H<sub>18</sub>**
- 12)  $\alpha$ -Phenyl- $\alpha$ -[ $\beta$ -Dimethylphenyl]äthan. *Sd.* 316—317° (*B.* 23, 3272). — *II*, 240; \**II*, 115.
  - 13)  $\alpha$ -Phenyl- $\alpha$ -[ $\beta$ -Dimethylphenyl]äthan. *Sd.* 270—310° (*B.* 24, 2788; 33, 2265).
  - 14)  $\alpha$ -Phenyl- $\beta$ -[4-Äthylphenyl]äthan. *Sd.* 293—295° (*B.* 15, 1681). — *II*, 240.
  - 15)  $\alpha\beta$ -Di[2-Methylphenyl]äthan. *Sm.* 66,5°; *Sd.* 177—178°<sub>20</sub> (*B.* 32, 2531; *C. r.* 148, 1110 *C.* 1909 [1] 1990). — \**II*, 116.
  - 16)  $\alpha\beta$ -Di[3-Methylphenyl]äthan. *Sd.* 296° (298°) (*Z.* 1866, 489; *B.* 32, 2532; *R.* 21, 457 *C.* 1903 [1] 503; *C. r.* 148, 1109 *C.* 1909 [1] 1989). — *II*, 240; \**II*, 116.
  - 17)  $\alpha\beta$ -Di[4-Methylphenyl]äthan. *Sm.* 82°; *Sd.* 178°<sub>13</sub> (*B.* 32, 2532; *R.* 21, 453 *C.* 1903 [1] 503; *C. r.* 148, 1110 *C.* 1909 [1] 1990). — \**II*, 116.
  - 18)  $\alpha\beta$ -Di[ $\beta$ -Methylphenyl]äthan. *Sd.* 297—300° (*Bl.* 35, 52). — *II*, 239.
  - 19) 4-Isopropyldiphenylmethan. *Sd.* 310° (*B.* 31, 1000). — \**II*, 116.
  - 20) 2,4,5-Trimethyldiphenylmethan. *Sd.* 308—312° (*B.* 31, 1001). — \**II*, 116.
  - 21) 2,4,6-Trimethyldiphenylmethan. *Sm.* 36—37°; *Sd.* 300—303° (*A. ch.* [6] 6, 177; *J. pr.* [2] 35, 486; *B.* 31, 1001). — *II*, 241; \**II*, 116.
  - 22) 4-Methyl-1-Isopropenyl-5-Phenyl-1,2-Dihydrobenzol. *Sd.* 152 bis 153°<sub>13</sub> (*B.* 39, 2314 *C.* 1906 [2] 517; *B.* 40, 2371 *C.* 1907 [2] 335).
  - 23) 2-Methyl-5-Isopropylbiphenyl (2-Phenyl-p Cymol). *Sd.* 268°<sub>752</sub> (*B.* 39, 2315 *C.* 1906 [2] 517; *B.* 40, 2371 *C.* 1907 [2] 335).
  - 24)  $\beta$ -Diäthylbiphenyl. *Sd.* 304—310° (*A. ch.* [6] 15, 252). — *II*, 240.
  - 25) 1,3,1',3'-Tetramethylbiphenyl. *Sd.* 293—297° (290—295°) (*A.* 147, 38; *G.* 12, 128). — *II*, 240.
  - 26) 1,4,1',4'-Tetramethylbiphenyl. *Sm.* 125° (*B.* 14, 2112). — *II*, 240.
  - 27) 2,4,2',4'-Tetramethylbiphenyl. *Sm.* 41°; *Sd.* 288°<sub>722</sub> (*A.* 332, 45 *C.* 1904 [2] 40).
  - 28) 2,5,2',5'-Tetramethylbiphenyl. *Sm.* 50°; *Sd.* 284°<sub>732</sub> (*A.* 332, 46 *C.* 1904 [2] 40).
  - 29) Kohlenwasserstoff (aus Äthylbenzol u. Quecksilberdiäthyl). *Sd.* 161 bis 163°<sub>19</sub> (*B.* 41, 2727 *C.* 1908 [2] 1356).
  - 30) Kohlenwasserstoff (aus Äthylbenzol u. Phenylbromäthan) (*B.* 6, 494; 7, 811). — *II*, 241.  
C 90,6 — H 9,4 — M. G. 212.
- C<sub>16</sub>H<sub>20</sub>**
- 1)  $\delta$ -Benzyliden- $\beta\zeta$ -Dimethyl- $\beta\epsilon$ -Heptadiën. *Sd.* 277—278°<sub>724</sub> (*B.* 39, 2065 *C.* 1906 [2] 228).
  - 2) Bisdimethylfulven. *Sm.* 83° (*A.* 348, 7 *C.* 1906 [2] 1050).
  - 3)  $\beta$ -Phenylcamphen. *Sd.* 138—141°<sub>10</sub> (*C. r.* 142, 681 *C.* 1906 [1] 1428).
  - 4) Kohlenwasserstoff (aus akt. Benzyliden-*m*-Methylecyklohexanon). *Sd.* 160—162°<sub>10</sub> (*C. r.* 144, 1221 *C.* 1907 [2] 406).
  - 5) Kohlenwasserstoff (aus Phenylfenchol). *Sd.* 157—158°<sub>13-14</sub> (*C. r.* 148, 1612 *C.* 1909 [2] 358).
  - 6) isom. Kohlenwasserstoff (aus Phenylfenchol). *Sm.* 17—18°; *Sd.* 139 bis 141°<sub>16</sub> (*C. r.* 148, 1613 *C.* 1909 [2] 358).  
C 89,7 — H 10,3 — M. G. 214.
- C<sub>16</sub>H<sub>22</sub>**
- 1) 1- $\beta$ -Phenyl- $\beta\zeta$ -Dimethyl- $\alpha\eta$ -Oktadiën. *Sd.* 152°<sub>9,5</sub> (*B.* 39, 1940 *C.* 1906 [2] 123).
  - 2) 1-Methyl-3-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol? *Sd.* 157 bis 158°<sub>14</sub> (*A.* 303, 272). — \**II*, 94.
  - 3) 1-Methyl-4-[ $\beta$ -Propenyl]-3-Phenylhexahydrobenzol. *Sd.* 139—140°<sub>10</sub> (*B.* 39, 1940 *C.* 1906 [2] 123).
  - 4) Phenylidihdropinen. *Sd.* 286—291°<sub>745</sub> (*C.* 1902 [1] 1296).  
C 88,9 — H 11,1 — M. G. 216.
- C<sub>16</sub>H<sub>24</sub>**
- 1) 1- $\beta$ -Phenyl- $\beta\zeta$ -Dimethyl- $\alpha$ -Okten. *Sd.* 145—146°<sub>9,5</sub> (*B.* 39, 1941 *C.* 1906 [2] 124).
  - 2)  $\alpha$ -[2,4,6-Trimethylphenyl]- $\alpha$ -Hepten. *Sd.* 270—272° (*B.* 37, 931 *C.* 1904 [1] 1209).
  - 3) bim. 1,3-Dimethyl- $\beta$ -Dihydrobenzol. *Sd.* 280—285° (*A.* 258, 328). — *II*, 19.
  - 4) Menthylbenzol. *Sd.* 283—288° (*J. r.* 27, 458). — \**II*, 89.
  - 5) bim. Cyklooktadiën. *Sm.* 114° (*B.* 38, 1980 *C.* 1905 [2] 125).



- C<sub>16</sub>H<sub>26</sub>** C 88,1 — H 11,9 — M. G. 218.  
 1) 1- $\theta$ -Phenyl- $\beta^5$ -Dimethyloktan. *Sd.* 275°<sub>760</sub> (*B.* 39, 1941 *C.* 1906 [2] 124).  
 2) 2-Heptyl-1,3,5-Trimethylbenzol. *Sd.* 271–272°<sub>750</sub> (*B.* 37, 1720 *C.* 1904 [1] 1489).  
 3)  $\beta$ -Diisoamylbenzol. *Sd.* 265° (*Bl.* 31, 12; *G.* 19, 496). — II, 39.  
 4) Pentaäthylbenzol. *Sd.* 277° (*B.* 21, 2814; *R.* 12, 175). — II, 39; \*II, 23.
- C<sub>16</sub>H<sub>28</sub>** C 87,3 — H 12,7 — M. G. 220.  
 1)  $\alpha$ -Dioktin (aus Tetrahydroxylol). *Sd.* 250–260° (*A. ch.* [6] 1, 236). — II, 17.  
 2)  $\beta$ -Dioktin (aus Tetrahydroxylol). *Sd.* 260° (*A. ch.* [6] 1, 236). — II, 17.  
 3) Dioktonaphtylen. *Sd.* 262–264° (*J. r.* 27, 304). — \*II, 9.  
 4) Kohlenwasserstoff (aus Teeröl). *Sd.* 280° (*A.* 139, 246).
- C<sub>16</sub>H<sub>30</sub>** C 86,5 — H 13,5 — M. G. 222.  
 1)  $\alpha$ -Hexadekin (Tetradekylacetylen). *Sm.* 15°; *Sd.* 155°<sub>15</sub>. Na, CuOH, HgCl, Hg<sub>2</sub>NO<sub>3</sub>, Ag + AgNO<sub>3</sub> (*B.* 25, 2246; 29, 2236; 33, 3586). — \*I, 30.  
 2)  $\beta$ -Hexadekin (s-Methyltridekylacetylen; Cetylen). *Sm.* 20°; *Sd.* 160°<sub>16</sub> (*A.* 143, 268; *B.* 17, 1373; 25, 2245). — I, 137; \*I, 30.  
 3) Kohlenwasserstoff (aus Petroleum). *Sd.* 160–165°<sub>25</sub> (*C.* 1900 [2] 761).  
 4) Kohlenwasserstoff (aus Petroleum). *Sd.* 175–180°<sub>80</sub> (*Am.* 33, 272 *C.* 1905 [1] 1350).
- C<sub>16</sub>H<sub>32</sub>** C 85,7 — H 14,3 — M. G. 224.  
 1)  $\alpha$ -Hexadeken (Ceten). *Sm.* 4°; *Sd.* 274° (*A.* 19, 292; 143, 267; *R.* 14, 188; *J.* 1860, 7, 406; *B.* 7, 125; 16, 3022; *C.* 1907 [2] 1207). — I, 124; \*I, 21.  
 2) Hexadeken (aus Azelainsäure). *Sm.* 41–42°; *Sd.* 283–285° (*A.* 136, 265). — I, 125.  
 3)  $\beta$  $\theta$ -Dimethyl- $\epsilon$ -Isoamyl- $\delta$ -Nonen. *Sd.* 114–115°<sub>10</sub> (*C. r.* 136, 816 *C.* 1903 [1] 1077).  
 4) Dicaprylen. *Sd.* 210–220°<sub>150</sub> (*J. r.* 26, 254). — \*I, 20.  
 5) Kohlenwasserstoff (aus Petroleum). *Sd.* 164–168°<sub>30</sub> (*Am.* 33, 257 *C.* 1905 [1] 1349).
- C<sub>16</sub>H<sub>34</sub>** C 85,0 — H 15,0 — M. G. 226.  
 1) norm. Hexadekan (Dioktyl; Cetan). *Sm.* 19–20° (18°); *Sd.* 287,5°<sub>760</sub> (270°) (*A.* 152, 16; 220, 181; *G.* 31 [1] 346; *B.* 12, 1882; 15, 1702; *Soc.* 47, 38; *C.* 1900 [2] 452; *Am.* 28, 174 *C.* 1902 [2] 1081). — I, 106.  
 2)  $\eta$  $\theta$ -Dimethyltetradekan (Diisooktyl). *Sd.* 267,5–269,5°<sub>760</sub> (*A.* 220, 187; *J. r.* 15, 175). — I, 106.  
 3) Hexadekan (aus Rosenöl). *Sm.* 36,5–36,8°; *Sd.* 350–380° (*J. pr.* [2] 48, 311). — \*I, 14.  
 4) Kohlenwasserstoff (aus Leinkraut). *Sm.* 57° (*Bl.* [3] 35, 1212 *C.* 1907 [1] 574).  
 5) Kohlenwasserstoff (aus Pinsangwachs). *Sd.* bei 280° (*R.* 20, 74).
- C<sub>16</sub>O<sub>6</sub>** 1) Verbindung (aus Kohlenoxyd) (*Bl.* 26, 102). — I, 545.

### C<sub>16</sub>-Gruppe mit zwei Elementen.

- C<sub>16</sub>H<sub>6</sub>O<sub>5</sub>** C 69,1 — H 2,1 — O 28,8 — M. G. 278.  
 1) Anhydrid d. 9,10-Anthrachinon-2,3-Dicarbonsäure. *Sm.* 290° (*J. pr.* [2] 41, 9). — II, 2036.
- C<sub>16</sub>H<sub>6</sub>O<sub>6</sub>** C 65,3 — H 2,0 — O 32,7 — M. G. 294.  
 1) Dianhydrid d. Biphenyl-2,3,5,6-Tetracarbonsäure (*Am.* 20, 106). — \*II, 1221.
- C<sub>16</sub>H<sub>6</sub>O<sub>8</sub>** C 58,9 — H 1,8 — O 39,3 — M. G. 326.  
 1) Dicarboxonat d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. *Sm.* 214 bis 215° (*Soc.* 93, 737 *C.* 1908 [1] 2035).
- C<sub>16</sub>H<sub>6</sub>Cl<sub>4</sub>** 1) Tetrachlorpyren. *Sm.* oberhalb 330° (*M.* 4, 241, 242). — II, 285.
- C<sub>16</sub>H<sub>7</sub>Cl<sub>3</sub>** 1) Trichlorpyren. *Sm.* 256–257° (*M.* 4, 241). — II, 285.
- C<sub>16</sub>H<sub>7</sub>Br<sub>3</sub>** 1) Tribrompyren (*A.* 158, 294). — II, 285.
- C<sub>16</sub>H<sub>8</sub>O<sub>2</sub>** C 82,7 — H 3,4 — O 13,8 — M. G. 232.  
 1) Pyrenchinon. *Sm.* 282° u. Zers. (*A.* 158, 294; 240, 166). — III, 461.

$C_{16}H_8O_3$ 

C 77,4 — H 3,2 — O 19,4 — M. G. 248.

- 1)  $\alpha$ -Phenylen- $\alpha$ -Naphtylenoxydchinon. Sm. 140° (A. 209, 143). — II, 1002.
- 2) isom. Phenylennaphtylenoxychinon (A. 202, 14). — IV, 453.
- 3) 1,9-Laktond. 1-Oxy-10-Keto-9,10-Dihydroanthracen-9-Carbonsäure (Anthracumarin). Sm. 260° (B. 20, 3141). — II, 1905.
- 4) Laktion d. 10-Oxyphenanthren-9-Ketocarbonsäure. Sm. 220—221° u. Zers. (B. 38, 441 C. 1905 [1] 744; B. 38, 1271 C. 1905 [1] 1397).
- 5) Anhydrid d. Phenanthren-1,10-Dicarbonsäure. Sm. 283—284° (B. 39, 3115 C. 1906 [2] 1329).
- 6) Anhydrid d. Anthracen-2,3-Dicarbonsäure (J. pr. [2] 41, 11). — II, 1905.

 $C_{16}H_8O_4$ 

C 72,7 — H 3,0 — O 24,3 — M. G. 264.

- 1) 3-Oxybrasanichinon (Dehydro- $\alpha$ -Naphtochinonresorcin). Sm. 320° (B. 32, 924; B. 41, 2374 C. 1908 [2] 714). — \*III, 327.
- 2) Biphtalyl. Sm. 334—335° (B. 8, 1054; 15, 1673; 17, 2179; 24, 2296; A. 164, 229; 228, 130; 233, 241; 242, 220; M. 12, 62; 16, 13; 31, 371). — II, 1816; \*II, 1058.
- 3) 1,9-Laktion d. 1,4-Dioxy-10-Keto-9,10-Dihydroanthracen-9-Methenylcarbonsäure (m-Oxyanthracumarin). Sm. 325° (B. 20, 3142). — II, 1980.

 $C_{16}H_8O_5$ 

C 68,6 — H 2,8 — O 28,6 — M. G. 280.

- 1) Oxybiphtalyl. Sm. noch nicht bei 374° (A. 233, 244). — II, 1816.
- 2) 1,9-Laktion d. 1,2,3-Trioxy-10-Keto-9,10-Dihydroanthracen-9-Methenylcarbonsäure (o-Dioxyanthracumarin; Styrogallol). Sm. noch nicht bei 350° (B. 20, 2588; Soc. 83, 139 C. 1903 [1] 89, 466). — II, 2028; \*II, 1185.
- 3) Anhydrid d. Diphtalylsäure. Sm. 164,5—165° (A. 242, 229). — II, 2029.

 $C_{18}H_8O_6$ 

C 64,8 — H 2,7 — O 32,4 — M. G. 296.

- 1) Dioxybiphtalyl. Sm. 250° (A. 164, 246). — II, 1817.
- 2) Oxystyrogallol (C. 1899 [2] 967). — \*II, 1207.
- 3) 9,10-Anthrachinon-1,3-Dicarbonsäure. Sm. noch nicht bei 330°.  $Na_2 + 9H_2O, K_2 + 2H_2O, Ca, Ba + H_2O, Cu + H_2O, Ag_2$  (J. pr. [2] 41, 21). — II, 2036.
- 4) 9,10-Anthrachinon-1,4-Dicarbonsäure. Sm. noch nicht bei 300°. Ca, Pb,  $Ag_2$  (J. pr. [2] 41, 29). — II, 2036.
- 5) 9,10-Anthrachinon-2,3-Dicarbonsäure. Sm. 340°. Ca, Pb,  $Ag_2$  (J. pr. [2] 41, 8). — II, 2036.
- 6) 9,10-Anthrachinon-?-Dicarbonsäure (B. 10, 1483). — II, 2036.
- 7) Acetylmetellagsäure. Sm. 269—271° (Soc. 87, 1426 C. 1905 [2] 324, 1589).
- 8) Physconsäure (A. 284, 187). — III, 642.
- 9) 3',4'-Anhydrid d. Diphenylketon-2,3',4'-Tricarbonsäure. Sm. 175°. Ba, Ag (A. 312, 106). — \*II, 1207.

 $C_{16}H_8O_7$ 

C 61,5 — H 2,6 — O 35,9 — M. G. 312.

- 1) 9-Ketofluoren-1,3,4-Tricarbonsäure (C. 1908 [2] 1360).

 $C_{16}H_8O_8$ 

C 58,6 — H 2,4 — O 39,0 — M. G. 328.

- 1)  $\alpha,2\beta,2'$ -Dilaktion d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthen-2,2'-Dicarbonsäure (Tetraoxydiphtalyl). Sm. noch nicht bei 300° (M. 12, 67). — II, 2099; \*II, 1230.
- 2) Verbindung (aus d. Wurzel von Ventilago madraspatana). Sm. 275 bis 280° u. Zers. (Soc. 65, 629). — III, 454.

 $C_{16}H_8Cl_2$ 

- 1)  $\alpha$ -Dichlorpyren. Sm. 154—156° (M. 4, 239). — II, 284.

 $C_{16}H_8Br_4$ 

- 1) Dibrompyrendibromid (A. 158, 294). — II, 285.

 $C_{16}H_8N_5$ 

C 70,8 — H 3,3 — N 25,8 — M. G. 271.

- 1) Azimidonaphtphenazin. Sm. noch nicht bei 250° (A. 295, 26). — IV, 1579.

 $C_{16}H_8Cl$ 

- 1) Chlorpyren. Sm. 118—119°. Pikrat (Sm. 177—178°) (M. 4, 238). — II, 284.

 $C_{16}H_8Br_3$ 

- 1) 2,3,4-Tribrom-1-Phenylnaphtalin. Sm. 151° (B. 20, 3082; A. 342, 233 C. 1905 [2] 1789).
- 2) Verbindung. Sm. 134° (B. 34, 1907 Anm.).

$C_{16}H_{10}O$ 

C 88,1 — H 4,6 — O 7,3 — M. G. 218.

- 1)  $\alpha$ -Phenylen- $\alpha$ -Naphthylenoxyd? Sm. 178°; subl. bei 280°; Sd. oberhalb 360°. Pikrat (A. 209, 141; M. 22, 573, 1002). — II, 1002; \*II, 608.
- 2)  $\beta$ -Phenylennaphtylenoxyd. Sm. 296° (300°) (A. 202, 15; 209, 145). — II, 1002.
- 3)  $\beta\beta$ -Phenylennaphtylenoxyd (Brasan). Sm. 202° (B. 36, 2199 C. 1903 [2] 381; B. 41, 2376 C. 1908 [2] 714).

 $C_{16}H_{10}O_2$ 

C 82,0 — H 4,3 — O 13,7 — M. G. 234.

- 1) Dioxypyren (M. 4, 320). — II, 1002.
- 2) 1,3-Diketo-2-Benzyliden-2,3-Dihydroinden. Sm. 150—151° (A. 252, 75). — III, 304.
- 3) 2-Phenyl-1,4-Naphtochinon. Sm. 109° (Soc. 65, 873). — III, 459.
- 4)  $\beta$ -Phenyl-1,4-Naphtochinon. Sm. 109—110°. + NaHSO<sub>3</sub> (A. 226, 28). — III, 459.
- 5) polym.  $\beta$ -Phenyl-1,4-Naphtochinon.  $\alpha$ -Modif. Sm. 225—229°;  $\beta$ -Modif. Sm. 207—207,5° (A. 226, 43). — III, 459.
- 6) Diphenysuccindon (Dibenzylidicarbonid). Sm. 202° (B. 14, 1806; A. 247, 153). — III, 303.
- 7) Isodiphenysuccindon =  $(C_{16}H_{10}O_2)_x$ . Sm. 280—290° (A. 247, 154). — III, 304.
- 8) 3-Oxybrasan. Sm. 255° (B. 41, 2375 C. 1908 [2] 714).
- 9) Idrylcarbonsäure. Sm. 165°. Ag (M. 1, 232). — II, 1480.

 $C_{16}H_{10}O_3$ 

C 76,8 — H 4,0 — O 19,2 — M. G. 250.

- 1) 1,3-Diketo-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Zers. 196° u. Zers. (B. 30, 2139). — \*III, 234.
  - 2) 1,3-Diketo-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 222° (B. 30, 2140). — \*III, 235.
  - 3) 1,3-Diketo-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 239° (B. 30, 2141). — \*III, 235.
  - 4) 1,3-Diketo-2-Benzoyl-2,3-Dihydroinden. Sm. 108° (B. 27, 107). — III, 318.
  - 5) 3-Oxy-2-Phenyl-1,4-Naphtochinon. Sm. 146—147°. Ag (A. 296, 18). — \*III, 326.
  - 6)  $\beta$ -Oxy- $\beta$ -Phenyl-1,4-Naphtochinon. Sm. 143,5—144,5°. Ca, Ba, Ag (A. 226, 32). — III, 460.
  - 7) 3-Benzoyl-1,2-Benzpyron. Sm. 130° (B. 37, 4497 C. 1905 [1] 250).
  - 8) Anhydrid d.  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (A. d. Diphenylmaleinsäure). Sm. 155° (156°); Sd. 236°<sub>15</sub> (B. 13, 743; 15, 1626; A. 259, 64; 279, 121; Soc. 71, 132, 142; B. 35, 1761 C. 1902 [2] 19; Soc. 83, 289 C. 1903 [1] 877; B. 36, 2652 C. 1903 [2] 725). — II, 1897; \*II, 1099.
  - 9) Acetat d. 3-Oxyphenanthren-4,5-Oxyd (A. d. Morphenol). Sm. 140° (B. 30, 2442; 31, 55). — \*III, 320.
  - 10) Verbindung (aus Diphenylmaleinsäureanhydrid). Sm. oberhalb 250° (A. 269, 92). — II, 1898.
  - 11) Verbindung (aus Oxyessigphenyläthersäure) (B. 33, 3179). — \*III, 528.
- $C_{16}H_{10}O_4$
- C 72,2 — H 3,8 — O 24,0 — M. G. 266.
- 1)  $\alpha\beta\gamma\delta$ -Tetraketo- $\alpha\delta$ -Diphenylbutan + H<sub>2</sub>O. Sm. 86—87° (B. 24, 3034). — III, 323.
  - 2) 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 257° u. Zers. (B. 30, 1185). — \*III, 235.
  - 3) Methylenäther d. 2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 192° (B. 30, 1083; 32, 316). — \*III, 531.
  - 4) Leukooxindigo (B. 42, 200 C. 1909 [1] 539).
  - 5) 10-Oxyphenanthren-9-Ketocarbonsäure. Ba (B. 38, 444 C. 1905 [1] 744).
  - 6) Methylanthrachinoncarbonsäure. Sm. 244—246° (B. 10, 1483). — II, 1905.
  - 7) Anthracen-1,3-Dicarbonsäure. Sm. noch nicht bei 330°. Ag<sub>2</sub> (J. pr. [2] 41, 25). — II, 1905.
  - 8) Anthracen-1,4-Dicarbonsäure. Sm. bei 320°. Pb, Ag (J. pr. [2] 41, 30). — II, 1905.
  - 9) Anthracen-2,3-Dicarbonsäure. Sm. 345°. Ca, Pb, Ag (J. pr. [2] 41, 11). — II, 1905.



- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>**
- 10) Laktonsäure (aus d. Verbindung C<sub>20</sub>H<sub>20</sub>O<sub>4</sub>S<sub>2</sub>). Sm. 228—229°. Ag (B. 31, 2652). — \*II, 1149.
  - 11) Hydrobiphtalyl. Sm. 250° (B. 17, 2180; A. 243, 269). — II, 1817.
  - 12) Anhydrid d.  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure (A. d. Desoxybenzoïn-o-Dicarbonsäure). Sm. 260° (B. 24, 2824; 31, 2652). — II, 1978; \*II, 1149.
  - 13) Methylester d. 9,10-Anthrachinon-1-Carbonsäure. Sm. 189° (B. 30, 1116). — \*II, 1103.
  - 14) Acetat d. 2-Oxy-1,4-Anthrachinon. Sm. 188° (A. 344, 92 C. 1906 [1] 1100).
  - 15) Acetat d. 1-Oxy-9,10-Anthrachinon. Sm. 176—179° (172°) (B. 15, 1804; B. 35, 2926 C. 1902 [2] 1050; B. 38, 2864 C. 1905 [2] 1094). — III, 418.
  - 16) Acetat d. 2-Oxy-9,10-Anthrachinon. Sm. 158—159° (A. 212, 52; B. 31, 2794). — III, 418; \*III, 300.
  - 17) Acetat d. 2-Oxy-9,10-Phenanthrenchinon. Sm. 222° (215—216°) (B. 18, 1944; B. 34, 4006 C. 1902 [1] 203; A. 322, 161 C. 1902 [2] 282). — III, 442; \*III, 317.
  - 18) Acetat d. 3-Oxy-9,10-Phenanthrenchinon. Sm. 199—201° (206°) (A. 322, 140; B. 34, 4007 C. 1902 [1] 203). — \*III, 317.
  - 19) Verbindung (aus Dehydrobrasilon- $\alpha$ -Trimethyläther). Sm. 350° (B. 35, 1675 C. 1902 [1] 1355). — \*III, 482.
  - 20) Verbindung (aus Phtalsäureanhydrid). Sm. 250° (B. 24, 2827). — II, 1978.
- C<sub>16</sub>H<sub>10</sub>O<sub>5</sub>**
- C 68,1 — H 3,5 — O 28,4 — M. G. 282.
- 1) 9,10-Anthrachinon-2-Oxyessigsäure. Sm. 234—235° (D. R. P. 158277 C. 1905 [1] 703).
  - 2) Säure (aus d. Wurzel von Morinda umbellata).  $\alpha$ -Modif. Sm. 198—199°;  $\beta$ -Modif. Sm. 208° (Soc. 65, 860, 865). — II, 1980.
  - 3) Dilakton d. Di[ $\alpha$ -Oxybenzyl]äther-2,2'-Dicarbonsäure (Diphtalidäther). Sm. 221° (221—223°) (A. 239, 90; B. 31, 371; M. 25, 499 C. 1904 [2] 325). — II, 1625; \*II, 949.
  - 4) Monomethylester d. 9-Ketofluoren-1,7-Dicarbonsäure. Sm. 260 bis 261° (M. 29, 767 C. 1908 [2] 1602).
  - 5) isom. Monomethylester d. 9-Ketofluoren-1,7-Dicarbonsäure. Sm. 275—277° (M. 29, 767 C. 1908 [2] 1602).
  - 6) 2-Acetat d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 198—201° (Soc. 30, 578; 75, 447). — III, 422; \*III, 302.
  - 7) 2-Aldehydobenzoesäure d. 1,2-Dioxymethylbenzol-2-Carbonsäure-1,2-Lakton. Sm. 202° (M. 25, 499 C. 1904 [2] 325).
  - 8) Verbindung + H<sub>2</sub>O (aus Dehydrobrasilon- $\alpha$ -Trimethyläther). Zers. bei 315° (B. 35, 1674 C. 1902 [1] 1355). — \*III, 482.
  - 9) Verbindung (aus Morinda citrifolia L.). Sm. 210° (Ar. 246, 159 C. 1908 [1] 1844).
- C<sub>16</sub>H<sub>10</sub>O<sub>6</sub>**
- C 64,4 — H 3,3 — O 32,2 — M. G. 298.
- 1) Dimethylenäther d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan (Piperil). Sm. 171,5° (A. 308, 11). — \*III, 224.
  - 2) 3,4-Methylenäther d. 5,6-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 221° (B. 29, 2435). — \*III, 533.
  - 3) Rufeoccein. Ca (A. 163, 105). — II, 2098.
  - 4)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure (Diphtalylsäure). Sm. 270—272° (271—273°). K<sub>2</sub>, Ca, Ba + 2H<sub>2</sub>O, Ag<sub>2</sub> (A. 164, 236; 228, 132; 239, 98; 242, 221; 311, 265; B. 17, 3021; 31, 2650; A. 340, 255 C. 1905 [2] 486). — II, 2028; \*II, 1185.
  - 5) 1-Oxy-9,10-Anthrachinon-2-Oxyessigsäure. Sm. 267—268° (D. R. P. 158277 C. 1905 [1] 703).
  - 6)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxydiphenylmethan- $\alpha$ ,2,2'-Tricarbonsäure. Sm. 170° u. Zers. (A. 242, 232). — II, 2055.
  - 7) Methylester d. 2,5-Dioxy-9,10-Anthrachinon-1-Carbonsäure (Rheinmethylester). Sm. 174° (Soc. 95, 1092 C. 1909 [2] 623).
  - 8) 1,3-Phenylenester d. Furan-2-Carbonsäure. Sm. 128—129° (B. 37, 2952 C. 1904 [2] 993).
  - 9) Verbindung (aus Homooxysalicylsäure). Sm. 360° (M. 26, 825 C. 1905 [2] 620).

- $C_{16}H_{10}O_7$  C 61,1 — H 3,2 — O 35,7 — M. G. 314.  
 1) Diphenylketon - 2,3',4' - Tricarbonsäure +  $H_2O$ . Sm. 189°.  $(NH_4)_3$ ,  $Ba_3 + 8H_2O$ ,  $Ag_3 + H_2O$  (A. 312, 104). — \*II, 1207.
- $C_{16}H_{10}O_8$  C 58,2 — H 3,0 — O 38,8 — M. G. 330.  
 1) Biphenyl - 2,3,5,6 - Tetracarbonsäure. Sm. 280°.  $Ca_2$ ,  $Ba_2 + 8H_2O$ ,  $Ag_4$  (Am. 20, 103; C. 1908 [2] 1358). — \*II, 1221.  
 2) Biphenyl - 3,4,3',4' - Tetracarbonsäure. Sm. noch nicht bei 250° (B. 26, 2486).  
 3) Biphenyl- $\beta$ -Tetracarbonsäure. Fl.  $Ag_4$  (Am. 20, 109).  
 4) Acetylanhydripropurgalloncarbonsäure. Sm. 236—238° (Soc. 93, 1192 C. 1908 [2] 790).  
 5) Ellagdimethyläthersäure (M. 26, 1145 C. 1905 [2] 1589).  
 6) 1,2-Peroxydphthalsäure. Sm. 156° u. Zers. (B. 34, 764). — \*II, 1049.
- $C_{16}H_{10}N_2$  C 83,5 — H 4,3 — N 12,2 — M. G. 230.  
 1) 2,3-Biphenylen - 1,4 - Diazin (Phenanthropiazin). Sm. 180,5°. (2HCl,  $PtCl_4$ ) (B. 19, 112; Soc. 55, 98). — IV, 1060.  
 2) Benzo- $p$ -Phenanthrolin. Sm. 160°. HCl, (2HCl,  $PtCl_4$ ),  $HNO_3$ ,  $H_2SO_4$ , Bichromat, Pikrat (A. 274, 365). — IV, 1060.  
 3)  $\alpha\beta$ -Naphthophenazin. Sm. 142,5°; Sd. oberhalb 360°. HCl, (2HCl,  $PtCl_4 + H_2O$ ) (A. 256, 239; 286, 78; 292, 262; B. 20, 573, 1169, 2474; 21, 1600; 26, 188, 622; 30, 2632; 31, 3078; 34, 2448; B. 42, 1382 C. 1909 [1] 1709). — IV, 1050; \*IV, 703.  
 4)  $\beta\beta$ -Naphthophenazin. Sm. 233° (A. 319, 261 C. 1902 [1] 359). — \*IV, 713.  
 5) 1,5 - Naphtodichinolin. Sm. 217—217,5° (J. pr. [2] 79, 448 C. 1909 [2] 133).  
 6) Nitril d.  $\beta$ -Phenyl- $\alpha$ -[2-Cyanphenyl]akrylsäure. Sm. 125,5° (B. 31, 1583). — \*II, 1099.  
 7) Nitril d.  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (N. d. Diphenylmaleinsäure). Sm. 158° (160°) (B. 13, 743; 14, 1798; 25, 288, 1680; B. 35, 1758 C. 1902 [2] 19; C. 1903 [2] 493; B. 36, 2652 C. 1903 [2] 725; B. 36, 2862 C. 1903 [2] 1129). — II, 1898.  
 8) Isonitril d.  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure. Sm. 242° u. Zers. (B. 14, 1800). — II, 1898.
- $C_{16}H_{10}N_6$  C 67,1 — H 3,5 — N 29,4 — M. G. 286.  
 1) Fluorobin. Sm. noch nicht bei 300° (B. 36, 4048 C. 1904 [1] 184; B. 36, 4051 C. 1904 [1] 185).
- $C_{16}H_{10}Br_2$  1)  $\alpha\delta$ -Dibrom- $\alpha\delta$ -Diphenyl- $\alpha\beta\gamma$ -Butatrien? Sm. 142° (A. 342, 231 C. 1905 [2] 1789).  
 2) 2,3 - Dibrom - 1 - Phenylnaphtalin. Sm. 111—111,5° (A. 342, 237 C. 1905 [2] 1789).
- $C_{16}H_{10}Br_4$  1)  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien. Sm. 172° (B. 20, 3082; A. 342, 229 C. 1905 [2] 1789).
- $C_{16}H_{10}J_4$  1)  $\alpha\beta\gamma\delta$ -Tetraiod- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien. Sm. 144° (G. 22 [2] 91). — II, 275.
- $C_{16}H_{10}S_8$  1) Verbindung (aus d. Nitril d. 1-Chlormethylbenzol-2-Carbonsäure) (B. 23, 2487; 31, 2648). — II, 1561; \*II, 927.
- $C_{16}H_{10}Hg$  1) Quecksilberphenylacetylen. Sm. 125° (A. 308, 298).  
 C 88,5 — H 5,1 — N 6,4 — M. G. 217.
- $C_{16}H_{11}N$  1) Amaron, siehe  $C_{28}H_{20}N_2$ . — III, 37.  
 2) Amidopyren. Sm. 116°. HCl,  $H_2SO_4$  (M. 2, 580). — II, 640.  
 3) Phenyl- $\alpha$ -Naphtylcarbazon. Sm. 225°. Pikrat (B. 23, 2465; C. 1901 [2] 428; Soc. 83, 273; A. 359, 79 C. 1908 [1] 1552; J. pr. [2] 79, 410 C. 1909 [2] 832). — IV, 452; \*IV, 271.  
 4) Phenyl- $\beta$ -Naphtylcarbazon. Sm. 330°; Sd. 440—450° (A. 202, 1; B. 12, 1978). — IV, 452.  
 5) isom. Phenyl- $\beta$ -Naphtylcarbazon. Sm. 134—135° (120°); Sd. 448°<sup>760</sup>. Pikrat (C. 1901 [2] 427; B. 29, 269; 31, 1697; Soc. 83, 271 C. 1903 [1] 883; A. 332, 101 C. 1904 [1] 1571; J. pr. [2] 77, 412 C. 1908 [1] 2177). — IV, 453; \*IV, 271.  
 6) Chinolylenphenylenmethan. Sm. 166—167° (B. 34, 2471). — \*IV, 271.  
 7) Fluorencinolin. Sm. 134,5°; Sd. 390—400° (B. 35, 3276 C. 1902 [2] 1260). — \*IV, 271.

$C_{16}H_{11}N$ 

- 8) Base (aus Morphin) (*B.* 34, 1163). — \*III, 668.  
 9) Nitril d.  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 156,5°. Ag (*J. pr.* [2] 42, 267). — II, 1896.

 $C_{16}H_{11}N_8$ 

- C 78,4 — H 4,5 — N 17,1 — M. G. 245.  
 1) 3-Diazo-2,5-Diphenylpyrrol. Sm. 122—123° u. Zers. HCl (*C.* 1905 [2] 900).  
 2) 2-[5 oder 7-Chinolyl]benzimidazol +  $H_2O$ . Sm. 135—136° (wasserfrei). 2HCl, 2HNO<sub>3</sub> (*B.* 34, 2972). — \*IV, 873.  
 3) 2-[6-Chinolyl]benzimidazol +  $H_2O$ . Sm. 218° (wasserfrei). 2HCl, 2HNO<sub>3</sub> (*B.* 34, 2973). — \*IV, 873.  
 4) 2-[8-Chinolyl]benzimidazol +  $H_2O$ . Sm. 124°. 2HCl,  $H_2SO_4$  (*B.* 32, 1490; 34, 2971). — \*IV, 873.  
 5) 2-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 232° (*B.* 33, 1542). — \*IV, 871.  
 6) 3-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 217° (*B.* 31, 2415). — \*IV, 870.  
 7) 5-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 294° (264°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 23, 845, 2453; 27, 3343; 29, 2952; *A.* 290, 295; *B.* 41, 3937 *C.* 1909 [1] 25). — IV, 1203; \*IV, 857.  
 8) 6-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 191° (198—199°). HCl (*B.* 23, 176; 31, 2411). — IV, 1204; \*IV, 864.  
 9) 9-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 267°. HCl (*B.* 21, 1599; 30, 2632, 2640; D.R.P. 157861 *C.* 1905 [1] 483; *B.* 38, 1812 *C.* 1905 [1] 1655). — IV, 1200; \*IV, 855.  
 10) 2-Amido- $\beta\beta$ -Naphtophenazin. Sm. 155° (*A.* 319, 263). — \*IV, 873.  
 11) 1-Phenyl- $\alpha$ -Naphtisotriazol. Sm. 77° (*B.* 42, 1381 *C.* 1909 [1] 1709).  
 12) 3-Phenyl- $\beta$ -Naphtisotriazol (Phenylazimidonaphtalin). Sm. 105—107° (107—108°); Sd. 260—265°<sub>20</sub> (*B.* 18, 3136; 27, 2376; 28, 2201). — IV, 1208.  
 13) 3-Phenyl- $\beta$ -Naphtisotriazol. Sm. 149—150° (*A.* 255, 343). — IV, 1171; \*IV, 827.

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- C 87,4 — H 5,4 — O 7,2 — M. G. 220.  
 1) 1-[4-Oxyphenyl]naphtalin. Sm. 57°; Sd. 345°. +  $CH_4O$  (*M.* 23, 825 *C.* 1902 [2] 1470).  
 2) 2-[4-Oxyphenyl]naphtalin. Sm. 166—167° (*M.* 23, 827 *C.* 1902 [2] 1470).  
 3) Phenyläther d. 1-Oxynaphtalin. Sm. 55° (50°); Sd. 340° (D.R.P. 58001; *M.* 23, 824 *C.* 1902 [2] 1470; *A.* 350, 90 *C.* 1907 [1] 159).  
 4) Phenyläther d. 2-Oxynaphtalin. Sm. 45°; Sd. 333,5°<sub>753</sub> (*M.* 23, 827 *C.* 1902 [2] 1470; *A.* 350, 92 *C.* 1907 [1] 159).  
 5) Anhydroäthylloxanthranol (*A.* 212, 65). — III, 243.  
 6) 1-Keto-2-[ $\beta$ -Methylphenyl]inden. Sm. 220° (*C.* 1896 [1] 167).  
 7) 1-Keto-2-Benzyliden-2,3-Dihydroinden. Sm. 109—110° (113—114°) (*Soc.* 65, 498; *J. pr.* [2] 62, 546). — III, 250; \*III, 188.  
 8) 2,4-Diphenylfuran. Sm. 109° (*B.* 26, 1447; 27 [2] 338). — III, 695.  
 9) 2,5-Diphenylfuran. Sm. 91°; Sd. 343—345° (*B.* 21, 1490, 3057; *Soc.* 57, 954). — III, 694.  
 10) Phenanthrendihydrofuran. Sm. 152° (*B.* 38, 445 *C.* 1905 [1] 744).  
 11) Verbindung (aus 2-[2-Oxynaphtoyl]benzol-1-Carbonsäure). Sm. 108° (*B.* 16, 306). — II, 1909.

 $C_{16}H_{12}O_2$ 

- 12) Verbindung (aus Isodypnopinakolin). Sm. 162—163° (*B.* 27 [2] 339). C 81,4 — H 5,1 — O 13,5 — M. G. 236.  
 1) 1,3-Dioxy-2-Phenylnaphtalin. Sm. 165—166° (*A.* 296, 16; *Soc.* 91, 1302 *C.* 1907 [2] 992). — \*II, 608.  
 2) 1,4-Dioxy-2-Phenylnaphtalin. Sm. 92—93° (*A.* 226, 31). — III, 460.  
 3) Methyläther d.  $\gamma$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropin. Sm. 100° (*B.* 25, 3538). — III, 250.  
 4) 1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Sm. 206° u. Zers. K (*B.* 34, 413; *Soc.* 91, 1087 *C.* 1907 [2] 602). — \*III, 188.  
 5) 1-Keto-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 198—199° (*B.* 34, 413). — \*III, 188.  
 6) 1-Keto-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 219—220° (*B.* 34, 413). — \*III, 188.  
 7) Äthyläther d. Morphenol. Sm. 59° (*B.* 15, 2182; 30, 2439). — III, 443.  
 8) cis- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\beta$ -Buten (cis-Dibenzoyläthylen). Sm. 134° (*B.* 33, 3800; *B.* 35, 168 *C.* 1902 [1] 421; *Soc.* 95, 219 *C.* 1909 [1] 1324). — \*III, 232.



- $C_{16}H_{12}O_2$
- 9) *trans- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\beta$ -Buten* (*trans-Dibenzoyläthylen*). Sm. 111° (*B.* 33, 3797; *B.* 35, 168 *C.* 1902 [1] 422; *Soc.* 95, 219 *C.* 1909 [1] 1324). — \*III, 232.
  - 10) *1,3-Diketo-2-Methyl-2-Phenyl-2,3-Dihydroinden*. Sm. 154—155° (*B.* 26, 2579). — III, 303.
  - 11) *1,3-Diketo-5-Methyl-2-Phenyl-2,3-Dihydroinden*. Sm. 131° (*B.* 29, 2377). — \*III, 232.
  - 12) *1,3-Diketo-2-[2-Methylphenyl]-2,3-Dihydroinden*. Sm. 179—180° (*B.* 33, 2820). — \*III, 233.
  - 13) *1,3-Diketo-2-[3-Methylphenyl]-2,3-Dihydroinden*. Sm. 134—135° (*B.* 28, 1388). — III, 303.
  - 14) *1-Keto-2-Benzoyl-2,3-Dihydroinden*. Sm. 98,5° (*A.* 347, 120 *C.* 1906 [2] 776).
  - 15) *1,3-Dimethyl-9,10-Anthrachinon*. Sm. 162° (*A.* 234, 240; *A. ch.* [6] 6, 193, 232; *J. pr.* [2] 41, 13). — III, 455.
  - 16) *1,4-Dimethyl-9,10-Anthrachinon*. Sm. 118° (*A.* 234, 238; *J. pr.* [2] 41, 27). — III, 456.
  - 17) *2,3-Dimethyl-9,10-Anthrachinon*. Sm. 183° (200°) (*J. pr.* [2] 41, 6; *A.* 312, 103). — III, 456; \*III, 326.
  - 18) *2,6-Dimethyl-9,10-Anthrachinon*. Sm. 162° (*B.* 18, 348; *Soc.* 85, 216 *C.* 1904 [1] 656, 939). — III, 456.
  - 19) *2,7-Dimethyl-9,10-Anthrachinon*. Sm. 236° (*A.* 235, 319; *C. r.* 141, 354 *C.* 1905 [2] 827). — III, 456.
  - 20) *isom. Dimethylanthrachinon*. Sm. 155° (*B.* 10, 1482). — III, 456.
  - 21) *isom. Dimethylanthrachinon*. Sm. 170° (*A. ch.* [6] 6, 190). — III, 456.
  - 22) *isom. Dimethylanthrachinon*. Sm. 153° (*A.* 169, 211).
  - 23) *2-Äthyl-9,10-Phenanthrenchinon*. Sm. 187—188° (*B.* 39, 3127 *C.* 1906 [2] 1333).
  - 24) *2-Keto-1-Benzyliden-4-Methyl-1,2-Dihydrobenzofuran*. Sm. 119° (*B.* 41, 4238 *C.* 1909 [1] 184).
  - 25) *1-[4-Methylbenzoyl]benzofuran* ( *$\alpha$ -Cumaryl-p-Tolyketon*). Sm. 96° (*B.* 29, 239). — III, 249.
  - 26) *4-Methylen-2-[4-Oxyphenyl]-1,4-Benzpyran* (*Phenacetin*) (*J. pr.* [2] 23, 546; [2] 26, 54; *B.* 36, 732 *C.* 1903 [1] 840). — II, 662.
  - 27) *7-Oxy-4-Methylen-2-Phenyl-1,4-Benzpyran*.  $HCl + H_2O$ , Pikrat (*B.* 34, 1786). — \*III, 546.
  - 28) *3-Methyl-4-Phenyl-1,2-Benzpyron*. Sm. 79° (*B.* 41, 343 *C.* 1908 [1] 836).
  - 29) *3-[2-Methylphenyl]-2,1-Benzpyron*. Sm. 102,5° (*B.* 32, 1109). — \*II, 1011.
  - 30) *3-[3-Methylphenyl]-2,1-Benzpyron* (*Isoxylalptalid*). Sm. 92—93° (*B.* 23, 3166). — II, 1714.
  - 31) *3-[4-Methylphenyl]-2,1-Benzpyron* (*Iso-p-Xylalptalid*). Sm. 116° (109—111°) (*B.* 24, 3974; 29, 2548). — II, 1715; \*II, 1008.
  - 32) *8-Methyl-3-Phenyl-2,1-Isobenzpyron*. Sm. 131° (*B.* 42, 429 *C.* 1909 [1] 845).
  - 33) *bim. Cumaron*. Sm. 99° (*C.* 1902 [1] 355).
  - 34) *1-Methylphenanthren-10-Carbonsäure*. Sm. 181—182° (*B.* 39, 3111 *C.* 1906 [2] 1328).
  - 35) *3-Methylphenanthren-10-Carbonsäure*. Sm. 238° (*B.* 39, 3112 *C.* 1906 [2] 1328).
  - 36) *Aldehyd d.  $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure*. Sm. 125° (*M.* 27, 970 *C.* 1907 [1] 341).
  - 37) *lab. Lakton d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenylpropen- $\gamma$ -Carbonsäure*. Sm. 99,5 bis 100,5° (*A.* 306, 196; *A.* 319, 164 *C.* 1902 [1] 103). — \*II, 1008.
  - 38) *Lakton d.  $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropen- $\gamma$ -Carbonsäure*. Sm. 109—110° (*A.* 284, 5). — II, 1713.
  - 39) *isom. Lakton d.  $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropen- $\gamma$ -Carbonsäure*. Sm. 284—286° (*Soc.* 85, 1362 *C.* 1904 [2] 1646).
  - 40) *stab. Lakton d.  $\gamma$ -Oxy- $\beta\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure*. Sm. 152° (150°) (*A.* 269, 134; 306, 196; *Soc.* 67, 137; *B.* 31, 2227, 2231; *A.* 319, 164 *C.* 1902 [1] 104; *Soc.* 83, 292 *C.* 1903 [1] 877; *B.* 37, 3126 *C.* 1904 [2] 1042). — II, 1714; \*II, 1007.

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- 41) Laktone d.  $\gamma$ -Oxy- $\gamma\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure. Sm. 130 bis 131° (A. 308, 112). — \*II, 1010.
- 42) Laktone d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthen- $\alpha^2$ -Carbonsäure (o-Xylylphtalid). Sm. 136,5° (B. 32, 1104; 33, 2818). — \*II, 1010.
- 43) Laktone d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[3-Methylphenyl]äthen- $\alpha^2$ -Carbonsäure (m-Xylylphtalid). Sm. 152–153° (B. 23, 3159). — II, 1714.
- 44) Laktone d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 151° (B. 24, 3965). — II, 1715.
- 45) Laktone d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[3-Methylphenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 151° (B. 42, 424 C. 1909 [1] 845).
- 46) Laktone d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 138° (B. 29, 2376). — \*II, 1011.
- 47) Methylester d. Anthracen-9-Carbonsäure. Sm. 111° (B. 20, 703). — II, 1477.
- 48) Acetat d. 9-Oxymethylenfluoren. Sm. 132–134° (B. 42, 789 C. 1909 [1] 1004).
- 49) Acetat d. 1-Oxyanthracen. Sm. 128–130° u. Zers. (B. 38, 2863 C. 1905 [2] 1094).
- 50) Acetat d. 2-Oxyanthracen. Sm. 198° (B. 12, 590; A. 212, 51). — II, 901.
- 51) Acetat d. 10-Oxyanthracen. Sm. 126–131° (B. 9, 1202; A. 212, 8). — II, 902.
- 52) Acetat d. 2-Oxyphenanthren. Sm. 141° (142–143°) (B. 34, 4005 C. 1902 [1] 202; A. 321, 308 C. 1902 [2] 59).
- 53) Acetat d. 3-Oxyphenanthren. Sm. 114–115° (115–116°) (B. 33, 1821; B. 34, 4006 C. 1902 [1] 203; A. 321, 291 C. 1902 [2] 58). — \*II, 542.
- 54) Acetat d. 4-Oxyphenanthren. Sm. 58–59° (B. 33, 1828). — \*II, 542.
- 55) Acetat d. 9-Oxyphenanthren. Sm. 77–78° (Soc. 71, 1122; A. 321, 301 C. 1902 [2] 59). — \*III, 320.
- 56) Acetat d. 9-Oxyphenanthren. Sm. 117–118° (B. 10, 1253). — II, 903.
- 57) Verbindung (aus Oxymethylphenylketonphenyläther). Sm. 120° (B. 35, 1680 C. 1902 [1] 1366). — \*III, 102.
- 58) Verbindung (aus  $\gamma$ -Oxy- $\beta\gamma$ -Diphenylpropen- $\gamma$ -Carbonsäure). Sm. 118 bis 120° (Soc. 71, 139). — \*II, 1011.

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- 1) 1,4,9-Trioxo-9-Phenyl-naphthalin. Sm. 72–73° (A. 226, 35). — III, 461.
- 2) 1-Keto-2-[2,4-Dioxybenzyliden]-2,3-Dihydroinden. HCl (Soc. 91, 1092 C. 1907 [2] 603).
- 3) 1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 255–256° (B. 34, 414). — \*III, 188.
- 4) 3,4-Methylenäther d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 122°. 2 Pikrat (B. 29, 1892; A. 341, 33 C. 1905 [2] 821). — \*III, 181.
- 5) 4-Oxy-1,3-Dimethyl-9,10-Anthrachinon. Sm. 173–175° (Soc. 91, 1637 C. 1907 [2] 2059).
- 6) Methyläther d. 2-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 184° (Soc. 91, 1631 C. 1907 [2] 2058).
- 7) Methyläther d. 4-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 170–171° (Soc. 91, 1633 C. 1907 [2] 2059).
- 8) Äthyläther d. 2-Oxy-9,10-Anthrachinon. Sm. 135° (B. 15, 1798; 21, 1168). — III, 418.
- 9) Äthyläther d. 2-Oxy-9,10-Phenanthrenchinon. Sm. 160–161° (A. 322, 164 C. 1902 [2] 283). — \*III, 317.
- 10) Äthyläther d. 3-Oxy-9,10-Phenanthrenchinon. Sm. 207–208° (204 bis 205°) (A. 322, 147 C. 1902 [2] 282; A. 322, 155 C. 1902 [2] 282). — \*III, 317.
- 11) 2-Keto-1-[2-Oxybenzyliden]-4-Methyl-1,2-Dihydrobenzofuran. Sm. 225–226° (B. 33, 3181; B. 41, 4238 C. 1909 [1] 184). — \*III, 534.
- 12) 2-Keto-1-[4-Oxybenzyliden]-4-Methyl-1,2-Dihydrobenzofuran. Sm. 254–255° (200°) (B. 33, 3181; B. 41, 4238 C. 1909 [1] 184). — \*III, 534.
- 13) 2-Keto-1-[2-Oxybenzyliden]-5-Methyl-1,2-Dihydrobenzofuran. Sm. 192° u. Zers. (B. 33, 3180). — \*III, 534.

- $C_{16}H_{12}O_8$  14) **2-Keto-1-[4-Oxybenzyliden]-5-Methyl-1,2-Dihydrobenzofuran**. Zers. bei 212° (*B.* 33, 3181). — \*III, 534.
- 15) **2-Keto-1-[2-Oxybenzyliden]-6-Methyl-1,2-Dihydrobenzofuran**. Sm. 196° (*B.* 33, 3180). — \*III, 534.
- 16) **2-Keto-1-[4-Oxybenzyliden]-6-Methyl-1,2-Dihydrobenzofuran**. Sm. 210—215° (*B.* 33, 3180). — \*III, 534.
- 17) **Methyläther d. 5-Oxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran**. Sm. 143,5° (*B.* 30, 301). — \*III, 531.
- 18) **Methyläther d. 1-Keto-2-[2-Oxybenzyliden]-1,2-Dihydrobenzofuran**. Sm. 126—127° (*B.* 42, 836 *C.* 1909 [1] 1165).
- 19) **Methyläther d. 1-Keto-2-[3-Oxybenzyliden]-1,2-Dihydrobenzofuran**. Sm. 118—119° (*B.* 42, 836 *C.* 1909 [1] 1165).
- 20) **Methyläther d. 1-Keto-2-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran**. Sm. 132° (*B.* 42, 836 *C.* 1909 [1] 1165).
- 21) **Methyläther d. 2-Keto-1-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran** (Anisalcumaranon). Sm. 133,5—134,5° (*B.* 32, 319). — \*III, 531.
- 22) **Methyläther d. 1-[4-Oxybenzoyl]benzofuran**. Sm. 103—104° (*B.* 41, 1338 *C.* 1908 [1] 1981).
- 23) **5,7-Dioxy-4-Methylen-2-Phenyl-1,4-Benzpyran**. Zers. bei 100°.  $HCl + H_2O$ , Pikrat (*B.* 34, 1796). — \*III, 550.
- 24) **7,8-Dioxy-4-Methylen-2-Phenyl-1,4-Benzpyran**.  $HCl$ , Pikrat (*B.* 34, 1800). — \*III, 550.
- 25) **7-Oxy-2-Benzyl-1,4-Benzpyron**. Sm. 183° (*B.* 35, 867 *C.* 1902 [1] 813). — \*III, 567.
- 26) **7-Oxy-5-Methyl-2-Phenyl-1,4-Benzpyron**. Sm. 297° (*B.* 41, 796 *C.* 1908 [1] 1555).
- 27) **3-Oxy-6-Methyl-2-Phenyl-1,4-Benzpyron**. Sm. 196—197° (*B.* 41, 4239 *C.* 1909 [1] 185).
- 28) **5-Oxy-7-Methyl-2-Phenyl-1,4-Benzpyron**. Sm. 143° (*B.* 39, 4041 *C.* 1907 [1] 267).
- 29) **Methyläther d. 7-Oxy-2-Phenyl-1,4-Benzpyron** (M. d. m-Oxyflavon). Sm. 110—111° (*B.* 32, 312). — \*III, 561.
- 30) **2-Methylphenyläther d. 3-Oxy-1,2-Benzpyron** (o-Kresoleumarin). Sm. 100—101° (*G.* 24 [1] 46). — II, 1778.
- 31) **3-Methylphenyläther d. 3-Oxy-1,2-Benzpyron**. Sm. 105—106° (*G.* 24 [1] 46). — II, 1778.
- 32) **4-Methylphenyläther d. 3-Oxy-1,2-Benzpyron**. Sm. 113—114° (*G.* 24 [1] 46). — II, 1778.
- 33) **4-Methylphenyläther d. Oxymethylenphtalyl**. Sm. 173—174° (*B.* 14, 924). — III, 274.
- 34) **4,7-Dioxy-2,3-Indeno-1,4-Benzpyran** (*Soc.* 93, 1102 *C.* 1908 [2] 608).
- 35) **Northebenol**. Sm. 202—203° (*B.* 30, 1382). — \*III, 677.
- 36)  **$\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen- $\beta$ -Carbonsäure** (Benzoylbenzaleessigsäure). Sm. 154—155° (*Soc.* 95, 116 *C.* 1909 [1] 1236).
- 37)  **$\gamma$ -Keto- $\beta\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure** (Desylenessigsäure). Sm.  $\alpha$ -Form 142°;  $\beta$ -Form 169° (167°). *Ag* (*Soc.* 67, 138; 71, 132, 155; *A.* 319, 169, 176, 178 *C.* 1902 [1] 104). — II, 1720; \*II, 1015.
- 38) **2-Oxyphenanthrenmethyläther-9-Carbonsäure**. Sm. 228° (*B.* 34, 4002 *C.* 1902 [1] 202).
- 39) **4-Oxyphenanthrenmethyläther-9-Carbonsäure**. Sm. 224° (*B.* 33, 1827). — \*II, 1015.
- 40) **1-Oxyphenanthrenmethyläther-10-Carbonsäure**. Sm. 215° (*B.* 33, 169). — \*II, 1015.
- 41) **3-Oxyphenanthrenmethyläther-10-Carbonsäure**. Sm. 239° (*B.* 33, 174). — \*II, 1015.
- 42) **3-Phenanthroxyleessigsäure**. Sm. 189—191° (*A.* 321, 290 *C.* 1902 [2] 58).
- 43) **Säure** (aus d. Lakton d.  $\beta$ -Oxy- $\alpha\beta$ -Diphenyläthan- $\alpha$ -Ketocarbonsäure). Sm. 125° (*B.* 35, 1942 *C.* 1902 [2] 120).
- 44) **Anhydrid d.  $\alpha\beta$ -Diphenyläthan- $\alpha\alpha$ -Dicarbonsäure**. Sm. 112° (*A.* 258, 90; 259, 73). — II, 1891.
- 45) **Anhydrid d.  $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure**. Sm. 111—112° (*B.* 14, 1803; *A.* 258, 90; 259, 73). — II, 1890.



- $C_{16}H_{12}O_3$
- 46) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropan- $\alpha^2$ -Carbonsäure (Phthalidmethylphenylketon). Sm. 141—142° (*M.* 19, 439; 20, 704). — \*II, 1097.
  - 47) Lakton d.  $\beta$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthan- $\alpha$ -Ketocarbonsäure. Sm. 206° (*B.* 27, 2224; 29, 2586; 31, 2222, 2224). — II, 1892; \*II, 1097.
  - 48) Methylester d. 3-Oxyphenanthren-2-Carbonsäure. Sm. 171° (*B.* 35, 4428 *C.* 1903 [1] 334).
  - 49) Methylester d. 2-Oxyphenanthren-3-Carbonsäure. Sm. 126° (*B.* 35, 4428 *C.* 1903 [1] 334).
  - 50) Äthylester d. 9-Ketofluoren-1-Carbonsäure. Sm. 84—86° (*M.* 23, 891 *C.* 1902 [2] 1472; *M.* 25, 1175 *C.* 1905 [1] 363).
  - 51) Äthylester d. 9-Ketofluoren-4-Carbonsäure. Sm. 103° (*A.* 247, 278). — II, 1719.
  - 52) Gem. Anhydrid d. Benzolcarbonsäure u.  $\beta$ -Phenylakrylsäure. Fl. (*A.* 87, 80). — II, 1407.
  - 53) Monacetat d. 9,10-Dioxyphenanthren. Sm. 168—170° u. Zers. (*A.* 249, 138; *Soc.* 63, 771). — II, 1000.
  - 54) Acetat d. 10-Oxy-9-Keto-9,10-Dihydroanthracen (*A.* 212, 67). — III, 243.
  - 55) Verbindung (aus 1,4-Benzochinon u. 1-Oxynaphtalin). Sm. 100° u. Zers. (*B.* 42, 1152 *C.* 1909 [1] 1557).
  - 56) Verbindung (aus 1,4-Benzochinon u. 2-Oxynaphtalin). Sm. 85° (*B.* 42, 1153 *C.* 1909 [1] 1557).
- $C_{16}H_{12}O_4$
- C 71,6 — H 4,5 — O 23,9 — *M. G.* 268.
  - 1) Dimethylenäther d.  $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthen. Sm. 206° (*A.* 345, 333 *C.* 1906 [1] 1696).
  - 2) 4-[3-Oxyphenyl]äther d. 1,2,4-Trioxynaphtalin. Sm. 236—240° (*B.* 30, 2566). — \*II, 625.
  - 3) Dimethylenäther d. 1,2,5,6[oder 2,3,6,7]-Tetraoxy-9,10-Dihydroanthracen. Sm. noch nicht bei 360° (*Soc.* 95, 1486 *C.* 1909 [2] 1428).
  - 4)  $\gamma$ -Oxy- $\alpha\beta\delta$ -Tri keto- $\alpha\delta$ -Diphenylbutan (Benzoylformoin; Phenylglyoxalbenzoin). Sm. 170° (*B.* 24, 1386, 3034; 25, 3470). — III, 316.
  - 5) 3,4-Methylenäther d.  $\gamma$ -Keto- $\gamma$ -[3,4-Dioxyphenyl]- $\alpha$ -[2-Oxyphenyl]-propen. Sm. 162—163° (*B.* 34, 1472). — \*III, 182.
  - 6) 3,4-Methylenäther d.  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 137—138° (*B.* 32, 315). — \*III, 182.
  - 7) Methylenäther d.  $\alpha\beta\gamma$ -Tri keto- $\alpha$ -Phenyl- $\gamma$ -[4-Oxyphenyl]propan. Sm. 65° (*B.* 37, 1535 *C.* 1904 [1] 1609).
  - 8) 4,6[oder 4,7]-Dioxy-1,3-Dimethyl-9,10-Anthrachinon. Sm. 270° (*Soc.* 91, 1640 *C.* 1907 [2] 2060).
  - 9) 3,5-Dioxy-1,7-Dimethyl-9,10-Anthrachinon. Sm. 300° (*A.* 240, 276). — III, 456.
  - 10) 1,5-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. Sm. 224—225° (*Soc.* 83, 1333 *C.* 1904 [1] 100).
  - 11) 1,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. Sm. noch nicht bei 300° (*Soc.* 83, 1331 *C.* 1904 [1] 100).
  - 12) 3,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. Sm. 232° (*Soc.* 83, 1333 *C.* 1904 [1] 100).
  - 13) Dimethylanthrachinonsäure. Sm. noch nicht bei 360° (*A.* 240, 277). — III, 457.
  - 14) Dimethylbenzodioxyanthrachinon. Sm. 213° (*A.* 240, 278). — III, 457.
  - 15) 4-Methylenäther d. 4,6[oder 4,7]-Dioxy-1-Methyl-9,10-Anthrachinon. Sm. 158° (*Soc.* 91, 1634 *C.* 1907 [2] 2059).
  - 16) Monomethylenäther d. 1,3-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 290° (*Soc.* 91, 1912 *C.* 1908 [1] 397).
  - 17) Monomethylenäther d. Chrysophansäure. Sm. 204° (*Ar.* 243, 438 *C.* 1905 [2] 897).
  - 18) Dimethylenäther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 215° (210°) (*B.* 38, 152 *C.* 1905 [1] 535; *D.R.P.* 158278 *C.* 1905 [1] 704; *A.* 349, 209 *C.* 1906 [2] 1337).
  - 19) Dimethylenäther d. 1,3-Dioxy-9,10-Anthrachinon. Sm. 153° (187°?) (*B.* 9, 1204; *M.* 26, 587 *C.* 1905 [2] 334; *A.* 349, 230 *C.* 1906 [2] 1339). — III, 425.
  - 20) Dimethylenäther d. 1,4-Dioxy-9,10-Anthrachinon. Sm. 143° (*B.* 28, 117). — III, 426.

- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>** 21) Dimethyläther d. 1,5-Dioxy-9,10-Anthrachinon. Sm. 230° (236°) (D.R.P. 77818; D.R.P. 167699 C. 1906 [1] 1070; D.R.P. 156762 C. 1905 [1] 313). — \*III, 305.
- 22) Dimethyläther d. 1,6-Dioxy-9,10-Anthrachinon. Sm. 185° (204 bis 205°) (D.R.P. 167699 C. 1906 [1] 1070; Soc. 95, 1096 C. 1909 [2] 624).
- 23) Dimethyläther d. 1,7-Dioxy-9,10-Anthrachinon. Sm. 191° (D.R.P. 167699 C. 1906 [1] 1070).
- 24) Dimethyläther d. 1,8-Dioxy-9,10-Anthrachinon. Sm. 215° (219°) (D.R.P. 77818; D.R.P. 167699 C. 1906 [1] 1070; D.R.P. 156762 C. 1905 [1] 313). — \*III, 307.
- 25) Dimethyläther d. 2,3-Dioxy-9,10-Anthrachinon (D. d. Hystazarin). Sm. 237° (B. 28, 118, 1533; A. 342, 99 C. 1905 [2] 1594; Soc. 91, 2070 C. 1908 [1] 646). — III, 429.
- 26) Dimethyläther d. 2,6-Dioxy-9,10-Anthrachinon. Sm. 247—248° (250°) (B. 9, 383; Ph. Ch. 18, 561; D.R.P. 167699 C. 1906 [1] 1070). — III, 430.
- 27) Dimethyläther d. 2,7-Dioxy-9,10-Anthrachinon. Sm. 215° (214°) (D.R.P. 143858 C. 1903 [2] 404; B. 39, 642 C. 1906 [1] 1025; D.R.P. 167699 C. 1906 [1] 1070).
- 28) Dimethyläther d. 2,3-Dioxy-9,10-Phenanthrenchinon. Sm. 304° (B. 33, 1832). — \*III, 318.
- 29) Dimethyläther d. 4,5-Dioxy-9,10-Phenanthrenchinon. Sm. 190 bis 191° (B. 36, 3751 C. 1904 [1] 38).
- 30) 2-Äthyläther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 188—189° (Soc. 65, 186; 75, 446; A. 349, 213 C. 1906 [2] 1337). — III, 422; \*III, 302.
- 31) Monoäthyläther d. 1,4-Dioxy-9,10-Anthrachinon. Sm. 150—151° (B. 21, 1168; Ph. Ch. 18, 561). — III, 426.
- 32) Monoäthyläther d. 1,5-Dioxy-9,10-Anthrachinon. Sm. 163—164° (B. 35, 2929 C. 1902 [2] 1050).
- 33) Monoäthyläther d. 2,3-Dioxy-9,10-Anthrachinon. Sm. 234—240° (B. 22, 684). — III, 429.
- 34) 2-Keto-5,6-Dioxy-1-[4-Methylbenzyliden]-1,2-Dihydrobenzofuran. Sm. 276° (B. 37, 825 C. 1904 [1] 1152).
- 35) Monomethyläther d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 158° (B. 29, 2432). — \*III, 532.
- 36) 7-Oxy-4-Methylen-2-[2,4-Dioxyphenyl]-1,4-Benzpyran + H<sub>2</sub>O (Resacetin). HCl +  $\frac{1}{2}$  H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub>, Pikrat (J. pr. [2] 23, 54, 541; B. 36, 733 C. 1903 [1] 839; B. 37, 363 C. 1904 [1] 671). — III, 136.
- 37) 7-Oxy-5-Methyl-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 260° (B. 41, 796 C. 1908 [1] 1555).
- 38) 5-Oxy-7-Methyl-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 300—301° (B. 41, 788 C. 1908 [1] 1553).
- 39) 5-Oxy-7-Methyl-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 227° (B. 41, 790 C. 1908 [1] 1553).
- 40) 5-Oxy-7-Methyl-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 295° (B. 41, 791 C. 1908 [1] 1553).
- 41) Monomethyläther d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyron. Sm. 207° (B. 27, 420; G. 27 [1] 576). — III, 248; \*II, 1144.
- 42) 6-Methyläther d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 204 bis 205° (B. 37, 775 C. 1904 [1] 1155).
- 43) 7-Methyläther d. 3,7-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 180° (B. 37, 1181 C. 1904 [1] 1275).
- 44) Monomethyläther d. 5,7-Dioxy-2-Phenyl-1,4-Benzpyron (M. d. Chrysin; Tectochrysin). Sm. 163—164° (B. 6, 891; 10, 176; 32, 2449). — III, 628; \*III, 463.
- 45) 2<sup>3</sup>-Methyläther d. 3-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 134° (B. 38, 934 C. 1905 [1] 1026).
- 46) 2<sup>4</sup>-Methyläther d. 3-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 225° (B. 38, 1509 C. 1905 [1] 1404).
- 47)  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure (Dibenzoylessigsäure). Sm. 109°. Ag (B. 16, 2133; Soc. 47, 246; 59, 100; A. 347, 78 C. 1906 [2] 509). — II, 1896.
- 48)  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan-2-Carbonsäure. Na<sub>2</sub>, Ba (B. 27, 106). — II, 1896.

- $C_{16}H_{12}O_4$
- 49)  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (Diphenylfumarsäure). Sm. 260° u. Zers. (Sm. oberhalb 276°) (B. 15, 1626; Soc. 71, 142, 152). — II, 1898; \*II, 1099.
  - 50)  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (Diphenylmaleinsäure; Stilbendicarbonsäure). Ca, Ba, Ag, Ag<sub>2</sub> (B. 13, 742; 15, 1625; Soc. 71, 132, 152). — II, 1897; \*II, 1099.
  - 51)  $\alpha\beta$ -Diphenyläthen-2,2'-Dicarbonsäure (Stilbendi-o-Carbonsäure). Sm. 263—264°. Ag<sub>2</sub> (A. 243, 258). — II, 1896.
  - 52) 3,4-Dioxyphenanthren-3-Methyläther-9-Carbonsäure. Sm. 264° (B. 35, 4414 C. 1903 [1] 344).
  - 53) 3,4-Dioxyphenanthren-4-Methyläther-9-Carbonsäure. Sm. 214 bis 216° (B. 33, 1822). — \*II, 1098.
  - 54) 2-Cinnamoyloxybenzol-1-Carbonsäure. Sm. 155°. Chininsalz (C. 1907 [1] 1118).
  - 55) 5-Oxy-2-Phenylbenzofuran-5-Methyläther-1-Carbonsäure. Sm. 198° (B. 42, 3149 C. 1909 [2] 1347).
  - 56) Säure (aus Anhydro-1-[ $\beta$ -Oxyäthenyl]benzol-2-Carbonsäure). Sm. 189°. Ag<sub>2</sub> (B. 27, 211). — II, 1898.
  - 57) Bianhydrid d.  $\alpha$ -Oxy- $\alpha$ -Phenyllessigsäure (Diphenylglykolid). Sm. 240° (B. 35, 3642 C. 1902 [2] 1455).
  - 58) Bianhydrid d. 2-Oxy-1-Methylbenzol-3-Carbonsäure (o-Dikresotid). Sm. 231—231,5° (224—225°) (B. 25, 3645; B. 35, 3645 C. 1902 [2] 1456). — II, 1545.
  - 59) Bianhydrid d. 4-Oxy-1-Methylbenzol-3-Carbonsäure (p-Dikresotid). Sm. 243° (B. 35, 3646 C. 1902 [2] 1456).
  - 60) Bianhydrid d. 3-Oxy-1-Methylbenzol-4-Carbonsäure (m-Dikresotid). Sm. 207—207,5° (B. 35, 3645 C. 1902 [2] 1456).
  - 61) Gem. Anhydrid d. Essigsäure u. Diphenylketon-2-Carbonsäure. Sm. 112° (B. 14, 1865; 33, 2027). — II, 1704; \*II, 999.
  - 62)  $\alpha,2'$ -Lakton d. 4-Acetoxyldiphenylmethan-2'-Carbonsäure. Sm. 125 bis 126,5° (B. 27, 2637). — II, 1881.
  - 63)  $\alpha,2$ -Lakton d.  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylmethan-2,2'-Dicarbonsäure-2'-Methylester (L. d. Benzhydroldicarbonsäuremonomethylester). Sm. 154 bis 155° (A. 242, 241). — II, 1973.
  - 64)  $\alpha,2$ -Lakton d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure (L. d. Hydroxydiphtalylsäure). Sm. 198,5°. Ag (B. 17, 2181; 24, 2825; 27, 2502; 31, 376; A. 243, 253). — II, 1974; \*II, 1145.
  - 65) Dialdehyd d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. Sm. 170—174° (B. 19, 1814). — III, 109.
  - 66) Methylester d. 3-Oxy-9-Ketofluoren-3-Methyläther-2-Carbonsäure. Sm. 169° (G. 35 [2] 545 C. 1906 [1] 850).
  - 67) Äthylester d. Naphtaronylessigsäure. Sm. 146—147° (Soc. 81, 425 C. 1902 [1] 758, 999; Soc. 83, 1130 C. 1903 [2] 1060). — \*III, 572.
  - 68) Äthylester d. 1,2- $\alpha$ -Naphtopyron-4-Carbonsäure. Sm. 145—146° (B. 36, 1968 C. 1903 [2] 377).
  - 69) Äthylester d. 3,4- $\beta$ -Naphtopyron-2-Carbonsäure (Ä. d.  $\beta$ -Naphtocumarin- $\alpha$ -Carbonsäure). Sm. 115° (B. 36, 1971 C. 1903 [2] 377; B. 37, 4486 C. 1905 [1] 248).
  - 70) Diphenylester d. Fumarsäure. Sm. 161—162° (B. 18, 1948; B. 35, 4086 C. 1903 [1] 75). — II, 666.
  - 71) Diphenylester d. Maleinsäure. Sm. 73°; Sd. 226°<sub>15</sub> (B. 35, 4086 C. 1903 [1] 75).
  - 72) Acetat d. 3-Oxy-1-Methylxanthon. Sm. 127° (B. 24, 3981). — III, 212.
  - 73) Acetat d. 1-Oxy-3-Methylxanthon. Sm. 151—152° (Am. 5, 95). — III, 212.
  - 74) Acetat d. Verb.  $C_{14}H_{10}O_3$  (aus Salicylaldehyd) (B. 17, 502). — III, 78.
  - 75) Chinhydron (aus 1,4-Dioxybenzol u. 1,4-Naphtochinon). Sm. 123° (M. 28, 301 C. 1907 [2] 541).
  - 76) Farbstoff (aus Digitalis lutea). Sm. 217—218° (Bl. [3] 23, 91). — \*III, 486.
  - 77) Verbindung (aus Rumex nepalensis). Sm. 136° (B. 29, 325).  
C 67,6 — H 4,2 — O 28,2 — M. G. 284.
- $C_{16}H_{12}O_3$
- 1) 2-[2,3-Dioxyphenyl]äther d. 1,2,4-Trioxynaphtalin. Sm. 240—246° u. Zers. (B. 30, 1464, 2565). — \*II, 625.



- $C_{16}H_{12}O_5$
- 2) 4-[2,3-Dioxyphenyl]äther d. 1,2,4-Trioxynaphtalin. Sm. 242—245° (B. 30, 2567). — II, 625.
  - 3) 6,7,8-Trioxo-1,3-Dimethyl-9,10-Anthrachinon (A. 240, 287). — III, 456.
  - 4) Monomethyläther d. p-Trioxo-p-Methyl-9,10-Anthrachinon. Sm. 171—173° (Soc. 65, 860). — III, 455.
  - 5) Monomethyläther d. Emodin. Sm. 200° (216°) (Soc. 65, 932; 67, 1088; Ar. 245, 288 C. 1907 [2] 824). — III, 454.
  - 6) isom. Monomethyläther d. Emodin. Sm. 200° (Soc. 83, 26 C. 1904 [1] 100).
  - 7) 1,2-Dimethyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 225 bis 227° (230—232°) (Soc. 63, 1168; Soc. 91, 2068 C. 1908 [1] 646). — II, 432.
  - 8) 1,3-Dimethyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 209°. K (Soc. 63, 1168; Soc. 91, 2067 C. 1908 [1] 646). — III, 423.
  - 9) 2,3-Dimethyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 160°. Na, Li (M. 22, 735; M. 23, 1014 C. 1903 [1] 290; Soc. 91, 2071 C. 1908 [1] 647). — \*III, 310.
  - 10) isom. Dimethyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 212 bis 213° (Soc. 67, 824). — III, 432.
  - 11) 2,6-Dimethyläther d. 1,2,6-Trioxo-9,10-Anthrachinon. Sm. 239° (A. 349, 213 C. 1906 [2] 1337).
  - 12) 2,7-Dimethyläther d. 1,2,7-Trioxo-9,10-Anthrachinon. Sm. 241° (A. 349, 226 C. 1906 [2] 1338).
  - 13) 2,8-Dimethyläther d. 1,2,8-Trioxo-9,10-Anthrachinon. Sm. 193° (A. 349, 221 C. 1906 [2] 1338).
  - 14) 1[oder 3]-Äthyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 245° (B. 21, 1169). — III, 432.
  - 15) 2-Äthyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 175° (B. 21, 1169; Soc. 75, 446). — III, 432; \*III, 310.
  - 16) Monäthyläther d. 1,2,6-Trioxo-9,10-Anthrachinon (B. 21, 1170). — III, 435.
  - 17) Monäthyläther d. 1,2,7-Trioxo-9,10-Anthrachinon. Sm. 265° (B. 21, 1170). — III, 436.
  - 18) 3,6-Dimethyläther d. 3,4,6-Trioxo-9,10-Phenanthrenchinon (Thebaolchinon). Sm. 233° (234—235°) (B. 28, 943; 30, 1391; B. 39, 18 C. 1906 [1] 684). — \*III, 318.
  - 19) Acacetin (Soc. 77, 430). — \*III, 477.
  - 20) Brasilin + H<sub>2</sub>O. HCl, H<sub>2</sub>SO<sub>4</sub>, FeO<sub>3</sub> (A. 178, 100; C. 1900 [1] 606; B. 9, 1886; 15, 2343; 18, 1142; 23, 1433; 25, 18; M. 19, 743; M. 23, 170 C. 1902 [1] 1106; B. 35, 1676 C. 1902 [1] 1355; B. 35, 2306 C. 1902 [2] 284; B. 36, 400 C. 1903 [1] 587; B. 36, 3951 C. 1904 [1] 170; M. 25, 885 C. 1904 [2] 1313; C. 1906 [2] 432). — III, 654; \*III, 479.
  - 21) Methylnataloeomod. Sm. 238° (C. r. 134, 1113 C. 1902 [2] 62; C. r. 140, 1464 C. 1905 [2] 137). — \*III, 326.
  - 22) Physcion (Physciasäure). Sm. 207° (209°). + KOH (A. 284, 179; 297, 289; B. 30, 365, 1984; J. pr. [2] 57, 436, 446; [2] 58, 534; [2] 65, 557; J. pr. [2] 76, 39 C. 1907 [2] 1083). — III, 641; \*III, 470.
  - 23) 1<sup>4</sup>-Methyläther d. 2-Keto-5,6-Dioxy-1-[4-Oxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 252° (B. 37, 825 C. 1904 [1] 1152).
  - 24) 7-Oxy-4-Methylen-2-[2,3,4-Trioxyphenyl]-1,4-Benzpyran. HCl (B. 39, 222 C. 1906 [1] 681).
  - 25) 7-Oxy-5-Methyl-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 258° (B. 41, 797 C. 1908 [1] 1555).
  - 26) 5-Oxy-7-Methyl-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 270° (B. 41, 792 C. 1908 [1] 1554).
  - 27) 2<sup>4</sup>-Methyläther d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (M. d. Apigenin). Sm. 256—257° (B. 33, 2908). — \*III, 564.
  - 28) 3-Methyläther d. 3,5,7-Trioxo-2-Phenyl-1,4-Benzpyron (M. d. Galangin). Sm. bei 300° (G. 30 [2] 336). — \*III, 464.
  - 29) αβ-Diphenyläthanoxyd-2,2'-Dicarbonsäure? Zers. bei 190° (A. 243, 267). — II, 2023.

- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>** 30)  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure (Desoxybenzoïn-o-Dicarbonsäure). Sm. 238–239° (210°). Ag<sub>2</sub> (B. 24, 2821; 31, 2653). — II, 1977; \*II, 1149.
- 31)  $\beta$ -Benzoyl-1-Methylbenzol-3,5-Dicarbonsäure (Benzoylavitinsäure; 2isom. Formen). Sm. 245°. Ag (J. pr. [2] 35, 489). — II, 1977.
- 32) Xanthylmalonsäure. Zers. bei 140°. Na<sub>2</sub>, K<sub>2</sub>, Ca, Ba, Ag<sub>2</sub> (Bl. [3] 35, 1006 C. 1907 [1] 116).
- 33) 4,7-Dioxy-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Pikrat (B. 36, 1947 C. 1903 [2] 296).
- 34) Säure (aus d. Verb. C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>). Sm. 196° (B. 24, 2827). — II, 1978.
- 35) Succinylfluoresceïn + 3 H<sub>2</sub>O (J. pr. [2] 23, 153). — II, 2049.
- 36) Äthylester d. 4-Oxy-1,2- $\alpha$ -Naphtopyron-3-Carbonsäure. Sm. 179°. K, Cu, Ag (A. 368, 43 C. 1909 [2] 1443).
- 37) Äthylester d. 4-Oxy-1,2- $\beta$ -Naphtopyron-3-Carbonsäure. Sm. 182°. NH<sub>4</sub>, Na, Cu, Ag (A. 367, 254 C. 1909 [2] 1239).
- 38) Diphenylester d. Äthanoxyd- $\alpha\beta$ -Dicarbonsäure. Sm. 133° (A. 348, 302 C. 1906 [2] 1181).
- 39) 1-Acetat d. 1,6-Dioxyxanthon-6-Methyläther. Sm. 150° (B. 27, 1992). — III, 206; \*III, 157.
- 40) Diacetat d. Anhydrobaptigenetin. Sm. 192–194° (C. 1897 [2] 709). — \*III, 433.
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>** C 64,0 — H 4,0 — O 32,0 — M. G. 300.
- 1)  $\alpha^{3,4}$ -Methylenäther d.  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 208° (C. 1906 [1] 1417).
- 2) 3,4,3',4'-Dimethylenäther d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[3,4-Dioxyphenyl]-äthan (Piperonyloïn). Sm. 120° (118°) (Soc. 59, 164; A. 289, 324). — III, 227.
- 3) 2,4,6,8-Tetraoxy-1,5-Dimethyl-9,10-Anthrachinon. Sm. noch nicht bei 360° (A. 240, 280). — III, 456.
- 4) isom.  $\beta$ -Tetraoxy-1,5-Dimethyl-9,10-Anthrachinon. Sm. 258° (Soc. 65, 858). — III, 456.
- 5) Dimethyläther d. 1,2,5,8-Tetraoxy-9,10-Anthrachinon. Sm. 225 bis 230° (A. 240, 299). — III, 438.
- 6) Dimethyläther d. 1,3,5,7-Tetraoxy-9,10-Anthrachinon. Sm. 280 bis 283° (D. R. P. 139424 C. 1903 [1] 678).
- 7) Methylluteolin. Sm. 307–309° (Soc. 77, 1318).
- 8) 7,8-Dioxy-2-[2,3,4-Trioxyphenyl]-4-Methylen-1,4-Benzpyran + H<sub>2</sub>O (Gallaceteïn). Sm. 210°. HCl + H<sub>2</sub>O (B. 39, 856 C. 1906 [1] 1171).
- 9) 5-Oxy-7-Keto-4-Methyl-2-[2,3,4-Trioxyphenyl]-1,7-Benzpyran. Sm. noch nicht bei 300°. HCl + H<sub>2</sub>O (B. 39, 2032 C. 1906 [2] 257).
- 10) 2'-Methyläther d. 5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 250° (B. 33, 2336, 2340). — \*III, 440.
- 11) 7-Methyläther d. 5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (7-M. d. Luteolin). Sm. 270° (B. 34, 1452). — \*III, 439.
- 12) 2'-Methyläther d. 3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron + H<sub>2</sub>O (Kämpferid). Sm. 221–222° (227–229°). + CH<sub>4</sub>O, + C<sub>2</sub>H<sub>5</sub>O, K + H<sub>2</sub>O, 2 + Ca(OH)<sub>2</sub>, + Ba(OH)<sub>2</sub>, Pb (B. 14, 2385; 32, 861; G. 30 [2] 331; Soc. 83, 136 C. 1903 [1] 89, 466; B. 37, 2096 C. 1904 [2] 121). — III, 631; \*III, 463.
- 13) Chrysoeriol. Sm. noch nicht bei 337° (C. 1907 [2] 917; Soc. 95, 85 C. 1909 [1] 1165).
- 14) Hämateïn. + 2NH<sub>3</sub>, Na, K (A. 44, 292; 109, 332; 178, 92; 216, 236; B. 4, 331; 14, 611; 15, 2237; 35, 1678; Soc. 75, 443; B. 35, 1676 C. 1902 [1] 1356; C. 1906 [1] 467). — III, 665; \*III, 491.
- 15)  $\beta$ -Hämateïn + 3H<sub>2</sub>O (B. 4, 331; A. 216, 239). — III, 666.
- 16) Isohämateïn (B. 15, 2342). — III, 666.
- 17) Nephromin. Sm. 196° u. Zers. (B. 30, 1989; J. pr. [2] 57, 444). — \*III, 469.
- 18) Ophioxilin. Sm. 71,8° (R. 8, 319). — III, 638.
- 19) Ruficarmin (A. 163, 117). — II, 2098.
- 20) Vincetoxin. Sm. 59° (Bl. 43, 620). — III, 615.
- 21)  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure (p-Benzöindicarbonsäure). Ag<sub>2</sub> (B. 19, 1816). — II, 2024.

- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>** 22) Diphenylmethan- $\alpha$ ??-Tricarbonsäure + H<sub>2</sub>O. Sm. 218—220° (A. 242, 235). — II, 2024.  
 23) 4-[4-Acetoxybenzoxyl]benzol-1-Carbonsäure. Sm. 216,5° (J. pr. [2] 28, 210). — II, 1528.  
 24) Maleinflurescein. Zers. oberhalb 240°. Pb (B. 17, 1598). — II, 2050.  
 25) Methylen-3,4-Dioxybenzylester d. 3,4-Dioxybenzol-3,4-Methylenäther-1-Carbonsäure (Piperonylpiperonylat). Sm. 97° (C. 1899 [2] 115). — \*II, 1028.  
 26) 1,8-Lakton d. 4-[oder 5]-Acetyl-1-Acetoxyloxymethylnaphtalin-8-Carbonsäure. Sm. 183° (A. 327, 90 C. 1903 [1] 1228).  
 27) 1,4-Phenyleneester d. Oxyessig-1,4-Phenyleneäthersäure. Sm. 235° u. Zers. (B. 40, 2798 C. 1907 [2] 534).  
 28) Verbindung (aus Homooxysalicylsäure). Subl.; Sm. oberhalb 300° (M. 2, 466). — II, 1755.
- C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>** C 60,7 — H 3,8 — O 35,4 — M. G. 316.  
 1) Dimethyläther d. ?-Pentaoxy-9,10-Anthrachinon. Sm. 230° (Soc. 83, 438 C. 1908 [1] 1697).  
 2) 7-Methyläther d. 3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Rhamnetin). Sm. oberhalb 300°. HK, H<sub>2</sub>SO<sub>4</sub> (Soc. 67, 651; 75, 438; A. 196, 313; B. 12, 1595; M. 9, 560; C. 1900 [2] 1243; Soc. 81, 469 C. 1902 [1] 1014; C. 1909 [1] 773). — III, 604; \*III, 447.  
 3) 2'-Methyläther d. 3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Isorhamnetin) (Soc. 69, 1568; 73, 269; Ar. 247, 211 C. 1909 [2] 549). — \*III, 447.  
 4) isom. Methyläther d. 3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Soc. 73, 379). — \*III, 447.  
 5) isom. Methyläther d. 3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 238° (Ar. 246, 249 C. 1908 [2] 252).  
 6) Cocacetin + 3H<sub>2</sub>O. Sm. 260—265° (wasserfrei) (J. pr. [2] 66, 408 C. 1903 [1] 527).  
 7) Sennarhamnetin. Sm. noch nicht bei 260° (C. 1900 [2] 872).  
 8) Methylcarbonat d. 4-[4-Oxybenzoxyl]benzol-1-Carbonsäure. Sm. 216—217° (B. 42, 216 C. 1909 [1] 650).  
 C 57,8 — H 3,6 — O 38,6 — M. G. 332.
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>** 1) 1,3,5,7-Tetraoxy-2,6-Di[Oxymethyl]-9,10-Anthrachinon (D. R. P. 184768 C. 1907 [2] 860).  
 2) Gossypetin. HJ, H<sub>2</sub>SO<sub>4</sub>, K (Soc. 75, 826). — \*III, 489.  
 3) Laccainsäure. Zers. bei 180°. K<sub>2</sub>, Ba (B. 20, 1288). — II, 2082.
- C<sub>16</sub>H<sub>12</sub>O<sub>9</sub>** C 55,2 — H 3,4 — O 41,4 — M. G. 348.  
 1) Norbrasilinsäure. Sm. 250° u. Zers. (Soc. 81, 1034 C. 1902 [2] 747). — \*III, 483.
- C<sub>16</sub>H<sub>12</sub>O<sub>14</sub>** C 44,8 — H 2,8 — O 42,4 — M. G. 428.  
 1) Monäthylester d. Mekonsäure + 1 Molec. Mekonsäure (A. 83, 368, 370). — II, 2042.
- C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>** C 82,8 — H 5,2 — N 12,0 — M. G. 232.  
 1)  $\alpha$ , $\delta$ -Di[2-Amidophenyl]butadiin (o-Diamidodiphenyldiacetylen). Sm. 128°. 2HCl (B. 15, 60). — IV, 1039.  
 2) Diamidopyren. 2HCl, H<sub>2</sub>SO<sub>4</sub> (M. 8, 449). — IV, 1039.  
 3) 4-Imido-1-Phenylimido-1,4-Dihydronaphtalin. Sm. 128—129° (A. 286, 186). — IV, 923.  
 4) 1-Phenylazonaphtalin. Sm. 70° (63,5°) (B. 26, 143; 31, 994). — IV, 1391.  
 5) 3,6-Diphenyl-1,2-Diazin. Sm. 221—222° (B. 33, 3789, 3799; B. 36, 496 C. 1903 [1] 653; B. 40, 4604 C. 1908 [1] 266). — \*IV, 697.  
 6) 2,3-Diphenyl-1,4-Diazin. Sm. 118—119°; Sd. bei 340° u. Zers. (2HCl, PtCl<sub>4</sub>) (Soc. 55, 99; 63, 1297). — IV, 1038.  
 7) 2,5-Diphenyl-1,4-Diazin. Sm. 194—195° (195—196°; 196—197°). (2HCl, PtCl<sub>4</sub>) (B. 9, 563; 10, 1832; 11, 1744; 13, 836; 21, 1278; 22, 3254; J. 1879, 475; Soc. 63, 1363; A. 291, 279; B. 35, 2294 C. 1902 [2] 362; A. 330, 231 C. 1904 [1] 944; Soc. 87, 704 C. 1905 [2] 236; B. 41, 1134 C. 1908 [1] 1892). — IV, 1038; \*IV, 697.  
 8) 2,6-Diphenyl-1,4-Diazin. Sm. 88—89°. (2HCl, PtCl<sub>4</sub>) (Soc. 63, 1368). — IV, 1038.  
 9) 2,3-Biphenylen-1,4-Dihydro-1,4-Diazin (1,4-Dihydrophenanthrapiazin). Sm. 97—99°. (2HCl, PtCl<sub>4</sub>) (Soc. 63, 1286). — IV, 1038.



- C<sub>16</sub>H<sub>12</sub>N<sub>2</sub>**
- 10) 8-Phenylimidomethylchinolin. Sm. 82° (B. 38, 1281 C. 1905 [1] 1410).
  - 11) 1-[β-Phenyläthenyl]-2,3-Benzdiazin. Sm. 115°. HCl (B. 30, 3036). — IV, 1039.
  - 12) 5,12-Dihydro-ββ-Naphtophenazin. Sm. oberhalb 300° (A. 319, 260 C. 1902 [1] 359). — \*IV, 697.
  - 13) Dihydronaphtophenazin. HCl (A. 292, 263). — IV, 1039.
  - 14) Dihydro-α-Naphtinolin. Sm. 201°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 27, 2257). — IV, 1039.
  - 15) 1-Methylphenanthrenimidazol (Epiosin; N-Methyldiphenylenimidazol). Sm. 195° (188°). HCl, HNO<sub>3</sub> (B. 12, 1643; Soc. 67, 45; C. 1902 [1] 1302; B. 35, 3044 C. 1902 [2] 1259). — III, 445; \*III, 321.
  - 16) Nitril d. β-Imido-β-Phenyl-αβ-Benzylidenpropionsäure. Sm. bei 260° (J. pr. [2] 52, 108). — III, 37.
  - 17) Nitril d. αβ-Diphenyläthan-αα-Dicarbonsäure. Sm. 97—98° (Am. 32, 129 C. 1904 [2] 954).
  - 18) Nitril d. αβ-Diphenyläthan-αβ-Dicarbonsäure. α-Modif. Sm. 160°; β-Modif. Sm. 239—240° (B. 25, 289, 293; Am. 22, 256; Soc. 83, 998 C. 1903 [2] 373, 666; B. 37, 4067 C. 1904 [2] 1651; C. 1908 [1] 1778). — II, 1891.
  - 19) Nitril d. αβ-Diphenyläthan-α-Carbonsäure-2-Carbonsäure. Sm. 109 bis 110° (B. 21, 2680). — II, 1889.
  - 20) Nitril d. αβ-Diphenyläthan-4,4'-Dicarbonsäure. Sm. 198° (B. 34, 2423).
  - 21) Nitril d. 3,3'-Dimethylbiphenyl-4,4'-Dicarbonsäure. Sm. 190° (B. 25, 1036). — II, 1892.
- C<sub>16</sub>H<sub>12</sub>N<sub>4</sub>**
- C 73,9 — H 4,6 — N 21,5 — M. G. 260.
- 1) bim. Crotonaldazin. Sm. 95—100° (M. 24, 440 C. 1903 [2] 617).
  - 2) 1,5-Diamido-αβ-Naphtophenazin (B. 34, 1233). — \*IV, 970.
  - 3) 4-Methylphenylpseudoazimidochinolin. Sm. 184°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Acetat (J. pr. [2] 60, 73). — \*IV, 949.
  - 4) Base (aus d. Verbind. C<sub>16</sub>H<sub>8</sub>O<sub>2</sub>N<sub>4</sub>). Sm. 193—194° (A. 255, 352). — IV, 1171.
  - 5) Nitril d. αβ-Di[2-Amidophenyl]äthen-αβ-Dicarbonsäure. Sm. 265° (A. 332, 284 C. 1904 [2] 702).
  - 6) Nitril d. αβ-Di[3-Amidophenyl]äthen-αβ-Dicarbonsäure. Sm. 187° (A. 358, 358 C. 1908 [1] 1171).
  - 7) Nitril d. αβ-Di[4-Amidophenyl]äthen-αβ-Dicarbonsäure. Sm. oberhalb 300° (A. 332, 280 C. 1904 [2] 701).
  - 8) Verbindung (aus 1-Phenylazonaphtalin-2-Diazochlorid). Sm. 204—205° (B. 20, 2899). — IV, 1542.
- C<sub>16</sub>H<sub>12</sub>N<sub>6</sub>**
- C 66,6 — H 4,2 — N 29,2 — M. G. 288.
- 1) 1,1'-Diphenyl-3,3'-Bi[1,2,4-Triazol]. Sm. 277—278° (B. 27, 187). — IV, 1330.
- C<sub>16</sub>H<sub>12</sub>Br<sub>2</sub>**
- C<sub>16</sub>H<sub>12</sub>Br<sub>4</sub>**
- 1) Dibromdimethylantracen. Sm. 154° (A. 169, 213). — II, 274.
  - 1) αβγδ-Tetrabrom-αδ-Diphenyl-α-Buten. Zers. bei 197° (A. 342, 243 C. 1905 [2] 1790).
  - 2) isom. αβγδ-Tribrom-αδ-Diphenyl-α-Buten. Zers. bei 157—158° (A. 342, 244 C. 1905 [2] 1790).
- C<sub>16</sub>H<sub>12</sub>J<sub>2</sub>**
- 1) Phenyl-1-Naphtyljodoniumjodid. Zers. bei 176° (B. 33, 701). — \*II, 98.
  - 2) Phenyl-2-Naphtyljodoniumjodid. Sm. 156—160° (B. 31, 921). — \*II, 99.
- C<sub>16</sub>H<sub>12</sub>S**
- 1) 2,4-Diphenylthiophen. Sm. 119—120° (124°) (B. 11, 930; 28, 893; 30, 117; A. 337, 185 C. 1905 [1] 234; B. 40, 2979 C. 1907 [2] 791; J. pr. [2] 80, 193 C. 1909 [2] 981). — III, 749.
  - 2) 2,5-Diphenylthiophen. Sm. 152° (150,5°) (B. 21, 3058; 28, 892; J. pr. [2] 80, 194 C. 1909 [2] 982). — III, 749.
  - 3) Phenyläther d. 1-Merkaptonaphtalin. Sm. 41,5°; Sd. 218°<sub>14</sub> (B. 23, 3046; 28, 2327; Bl. [3] 35, 167 C. 1906 [1] 1244). — II, 867; \*II, 509.
  - 4) Phenyläther d. 2-Merkaptonaphtalin. Sm. 51,5°; Sd. 224°<sub>14</sub> (B. 23, 3048; 28, 2327). — II, 887; \*II, 529.
- C<sub>16</sub>H<sub>13</sub>N**
- C 87,7 — H 5,9 — N 6,4 — M. G. 219.
- 1) 1-Phenylamidonaphtalin (Phenyl-1-Naphtylamin). Sm. 62° (60°); Sd. 335°<sub>258</sub>. HCl, Pikrat (Bl. 18, 68; B. 14, 2344; 16, 2077; A. 209, 152; C. r. 73, 627). — II, 599; \*II, 332.

$C_{16}H_{13}N$ 

- 2) 2-Phenylamidonaphtalin (Phenyl-2-Naphtylamin). Sm. 107,5—108°; Sd. 395—395,5°. HCl, Pikrat (*B.* 13, 1300, 1850; 14, 2344; 16, 2077; *A.* 202, 5; 209, 156; *J.* 1882, 369; *J. pr.* [2] 51, 327; *C.* 1904 [1] 1013). — II, 602; \*II, 333.
- 3) 2-[2-Amidophenyl]naphtalin. Sm. 95°. HCl (*A.* 311, 271). — \*II, 351.
- 4) 2,5-Diphenylpyrrol. Sm. 143,5° (*B.* 20, 1490, 3361; 21, 2837, 3061). — IV, 438.
- 5) 3-Methyl-2-Phenylchinolin. Sm. 52—53°; Sd. oberhalb 300°. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 19, 527). — IV, 435.
- 6) 4-Methyl-2-Phenylchinolin (Flavolin). Sm. 64—65°; Sd. 373—375°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), Chromat, Pikrat (*B.* 15, 1503; 16, 68; 18, 34; 19, 1037). — IV, 436.
- 7) 6-Methyl-2-Phenylchinolin. Sm. 68°. (2HCl, PtCl<sub>4</sub>) (*A.* 242, 298). — IV, 437.
- 8) 8-Methyl-2-Phenylchinolin. Sm. 49—50°. (2HCl, PtCl<sub>4</sub>) (*A.* 242, 299). — IV, 437.
- 9) 2-Methyl-4-Phenylchinolin. Sm. 98—99°; Sd. 200—203°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Sulfat, Pikrat (*B.* 18, 2406; 20, 1771; 28, 1039; *J. pr.* [2] 33, 420; *B.* 36, 2456 *C.* 1903 [2] 670). — IV, 434.
- 10) 2-[3-Methylphenyl]chinolin (Pseudofavolin). Sm. 77°. (2HCl, PtCl<sub>4</sub>) (*M.* 9, 108). — IV, 434.
- 11) ?-Benzylchinolin. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 28, 1321). — IV, 433.
- 12) ?-Benzylchinolin. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 13, 2046).
- 13) isom. Benzylchinolin. Sm. 62—64° (*B.* 33, 1719 Anm.).
- 14) isom. Benzylchinolin. Sm. 78—79° (*B.* 33, 1719 Anm.).
- 15) 3-[2-Methylphenyl]isochinolin. Sm. 78—79°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*B.* 32, 1113). — \*IV, 265.
- 16) 3-[3-Methylphenyl]isochinolin. Sm. 51—52° (*B.* 23, 3168). — IV, 437.
- 17) 3-[4-Methylphenyl]isochinolin. Sm. 78°. (2HCl, PtCl<sub>4</sub>) (*B.* 24, 3975). — IV, 437.
- 18) 1-Benzylisochinolin. Sm. 50—52° (56°); Sd. 211—213°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 33, 1720; *B.* 37, 3399 *C.* 1904 [2] 1317; *B.* 42, 1978 *C.* 1909 [2] 454). — \*IV, 261.
- 19) 3-Benzylisochinolin. Sm. 104°; Sd. 311°. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), 5(HCl, HgCl<sub>2</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (*B.* 33, 1719; *A.* 328, 326 *C.* 1903 [2] 1074). — \*IV, 264.
- 20) 4-Benzylisochinolin. Sm. 117,5—118°; Sd. 238°. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (2HCl, HgCl<sub>2</sub> + 1/2 H<sub>2</sub>O), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (*B.* 33, 1719; *A.* 326, 265 *C.* 1903 [1] 927). — \*IV, 260.
- 21) 8-Methyl-3-Phenylisochinolin. Sm. 51°. (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O) (*B.* 42, 430 *C.* 1909 [1] 846).
- 22) 3-Allyl-β-Naphtochinolin. Sm. 78° (*B.* 27, 2023).
- 23) Base (aus Morphin). Fl. (*B.* 34, 1163). — \*III, 668.
- 24) Nitrid d. α-Phenyl-β-[4-Methylphenyl]akrylsäure. Sm. 61° (*B.* 34, 3089). C 77,7 — H 5,3 — N 17,0 — M. G. 247.

 $C_{16}H_{13}N_3$ 

- 1) Di[2-Cyanbenzyl]amin. Sm. 125°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Pikrat (*B.* 23, 2488). — II, 1334.
- 2) Di[3-Cyanbenzyl]amin. Sm. 54°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Bichromat, Pikrat (*B.* 34, 3368).
- 3) Di[4-Cyanbenzyl]amin. Sm. 105—106° (*B.* 33, 2629; *C.* 1901 [2] 762). — \*II, 830.
- 4) 1-Phenylamidodiazonaphtalin. Sm. 84° (*B.* 40, 2400 *C.* 1907 [2] 318).
- 5) 2-Amido-1-Phenylazonaphtalin. Sm. 102—104° (*B.* 18, 798; 22, 1376; 25, 1372; 28, 2201). — IV, 1392; \*IV, 1027.
- 6) 4-Amido-1-Phenylazonaphtalin. Sm. 123°. HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 4H<sub>2</sub>O (*A.* 137, 60; *B.* 12, 228; 22, 1381, 2069; 28, 2197). — IV, 1392.
- 7) 2-[4-Amidophenyl]azonaphtalin. Sm. 148—150°. HCl, H<sub>2</sub>SO<sub>4</sub> (*B.* 18, 799; 20, 2897, 3013). — IV, 1394.
- 8) ?-Phenylazo-1-Phenylpyrrol. Sm. 117° (*B.* 19, 2256). — IV, 1483.
- 9) 5-Phenylazo-2-Phenylpyrrol. Sm. 112° (*B.* 42, 2510 *C.* 1909 [2] 712).
- 10) 5-[?-Benzylidenamidophenyl]pyrazol. Sm. 65° (*B.* 35, 40 *C.* 1902 [1] 425). — \*IV, 813.
- 11) 5-[β-Phenyläthenyl]-1-Phenyl-1,2,4-Triazol. Sm. 119—120°. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 30, 2437). — IV, 1166.

- C<sub>16</sub>H<sub>13</sub>N<sub>3</sub>** 12) **6-Amido-2,4-Diphenyl-1,3-Diazin.** Sm. 120—121°. (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 42, 14). — **IV**, 1191.
- 13) **2-Methyl-4,6-Diphenyl-1,3,5-Triazin.** Sm. 110°; Sd. 227°<sub>15</sub>. (2HCl, PtCl<sub>4</sub>), + Br<sub>3</sub> (*B.* 17, 2513; **22**, 803; PINNER, Imidoäther 161). — **IV**, 1191.
- 14) **Hydrazoindol.** Sm. 140° (*B.* 8, 725). — **IV**, 218.
- 15) **Propenyl-β-o-Amidophenylbenzimidazol.** Sm. 147°. 2HCl + ½ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 1(1½)H<sub>2</sub>O) (*B.* 32, 1477). — **\*IV**, 851.
- 16) **Äthenyl-β-o-Amido-p-Tolylbenzimidazol.** Sm. 187—189°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (*B.* 32, 1480). — **\*IV**, 851.
- 17) **Äthenyl-β-o-Amidophenyl-m[oder p]-Tolimidazol + 2H<sub>2</sub>O.** Sm. 160°. Acetat (*B.* 32, 1483). — **\*IV**, 852.
- 18) **Methenyl-β-o-Amido-p-Tolyl-m[oder p]-Tolimidazol.** Sm. 212° (*B.* 32, 1484). — **\*IV**, 852.
- 19) **2-Phenylazo-4-Methylchinolin.** Sm. 98° (*B.* 25, 2706). — **IV**, 1163.
- 20) **2-Phenylhydrazonmethylchinolin.** Sm. 195—198° (*B.* 18, 3405). — **IV**, 371.
- 21) **8-Phenylhydrazonmethylchinolin.** Sm. 176° (*B.* 38, 1282 *C.* 1905 [1] 1410).
- 22) **α-Benzyliden-β-[2-Chinolyl]hydrazin.** Sm. 151°. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*B.* 33, 1886). — **\*IV**, 812.
- 23) **α-Benzyliden-β-[5-Chinolyl]hydrazin.** Sm. 194° (*Soc.* 61, 788). — **IV**, 1160.
- 24) **α-Benzyliden-β-[6-Chinolyl]hydrazin.** Sm. 203° (*A.* 310, 83). — **\*IV**, 812.
- 25) **Nitril d. 2-Phenylhydrazon-2,3-Dihydroinden-1-Carbonsäure.** Sm. 187° u. Zers. K, Ag (*Soc.* 93, 179 *C.* 1908 [1] 1276).
- C<sub>16</sub>H<sub>13</sub>N<sub>5</sub>** C 69,8 — H 4,7 — N 25,4 — M. G. 275.
- 1) **β-Di[Phenylazo]pyrrol.** Sm. 131° (*B.* 19, 2258). — **IV**, 1483.
- 2) **Nitril d. 3,3'-Dimethyldiazoamidobenzol-6,6'-Dicarbonsäure.** Sm. 180—190° u. Zers. (*B.* 26, 50). — **IV**, 1578.
- C<sub>16</sub>H<sub>13</sub>Cl** 1) **Verbindung** (aus 9,10-Dioxy-9,10-Dimethyl-9,10-Dihydrophenanthren). Sm. 155° (*A.* 362, 251 *C.* 1908 [2] 952).
- C<sub>16</sub>H<sub>13</sub>Br** 1) **β-Brom-α-δ-Diphenyl-αγ-Butadiën.** Sm. 113,5—114° (*A.* 342, 246 *C.* 1905 [2] 1790).
- C<sub>16</sub>H<sub>13</sub>Br<sub>3</sub>** 1) **αγδ[oder βγδ]-Tribrom-α-δ-Diphenyl-α-Buten.** Sm. 145—147° u. Zers. (*A.* 342, 248 *C.* 1905 [2] 1790).
- C<sub>16</sub>H<sub>14</sub>O** C 86,5 — H 6,3 — O 7,2 — M. G. 222.
- 1) **γ-Oxy-αγ-Diphenyl-α-Butin.** Sm. 77°; Sd. 190—198°<sub>13</sub> (*A.* 308, 281; *C.* 1905 [2] 1021). — **\*II**, 663.
- 2) **9-[α-Oxyäthyl]phenanthren.** Sm. 137° (*B.* 39, 3128 *C.* 1906 [2] 1333).
- 3) **10-Oxy-1,3-Dimethylantracen.** Sm. 155° (*J. pr.* [2] 41, 21). — **II**, 903.
- 4) **9-Oxy-2,3-Dimethylantracen.** Sm. 149° (*A.* 312, 103). — **\*II**, 663.
- 5) **9-Oxy-9-Methyl-10-Methylen-9,10-Dihydroanthracen.** Sm. 223° (*Bl.* [3] 33, 1147 *C.* 1906 [1] 47).
- 6) **Äthyläther d. 1-Oxyanthracen.** Sm. 69° (*B.* 38, 2864 *C.* 1905 [2] 1094).
- 7) **Äthyläther d. 2-Oxyanthracen.** Sm. 145—146° (*B.* 12, 591; 15, 1427; *A.* 212, 51). — **II**, 901.
- 8) **Äthyläther d. 10-Oxyanthracen.** Fl. (*B.* 21, 1178). — **II**, 902.
- 9) **Äthyläther d. 2-Oxyphenanthren.** Sm. 112° (*Soc.* 89, 1528 *C.* 1906 [2] 1765).
- 10) **Äthyläther d. 3-Oxyphenanthren.** Sm. 46° (*A.* 321, 289 *C.* 1902 [2] 58).
- 11) **9,10-Dimethyl-9,10-Dihydrophenanthren-9,10-Oxyd.** Sm. 75° (*A.* 362, 249 *C.* 1908 [2] 951).
- 12) **γ-Keto-α-δ-Diphenyl-α-Buten.** Sm. 33°; Sd. 190°<sub>13</sub> (*B.* 32, 1435). — **\*III**, 185.
- 13) **γ-Keto-α-β-Diphenyl-α-Buten.** Sm. 53—54° (*M.* 18, 444; **19**, 411; **22**, 667). — **\*III**, 185.
- 14) **γ-Keto-α-δ-Diphenyl-α-Buten.** Sm. 71° (*M.* 18, 438; **19**, 413, 424; **22**, 668). — **\*III**, 185.
- 15) **δ-Keto-α-δ-Diphenyl-α-Buten.** Sm. 93° (*B.* 40, 4830 *C.* 1908 [1] 362).



- C<sub>16</sub>H<sub>14</sub>O**
- 16)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten (Dypnon). *Sd.* 225°<sub>22</sub> (270°; 340—345°) (*C.* 1899 [2] 96; 1900 [2] 256; 1903 [1] 521, 880; *M.* 25, 431 *C.* 1904 [2] 336; *Bl.* [3] 35, 356 *C.* 1906 [2] 318). — *III*, 249; \**III*, 184.
  - 17)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropen. *Sd.* 210—213°<sub>23</sub> (*Soc.* 79, 932). — \**III*, 185.
  - 18)  $\gamma$ -Keto- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropen. *Sd.* 190—192°<sub>23</sub> (*Am.* 31, 656 *C.* 1904 [2] 446).
  - 19)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[3-Methylphenyl]propen. *Sm.* 73° (*Bl.* [3] 33, 397 *C.* 1905 [1] 1317).
  - 20)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[4-Methylphenyl]propen (Benzolmethyl-*p*-Tolylketon). *Sm.* 77° (59—60°); *Sd.* 355° (*C.* 1897 [1] 407; *B.* 29, 2246; *B.* 35, 1070 *C.* 1902 [1] 929; *Bl.* [3] 33, 397 *C.* 1905 [1] 1317). — \**III*, 184.
  - 21)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Methylphenyl]propen. *Sm.* 96,5° (*B.* 32, 2283). — \**III*, 185.
  - 22) 2-Benzoyl-2,3-Dihydroinden. *Sm.* 107° (*Soc.* 65, 245). — *III*, 249.
  - 23) 10-Keto-9,9-Dimethyl-9,10-Dihydroanthracen. *Sm.* 93—94° (*B.* 21, 2508). — *III*, 249.
  - 24) 2,5-Diphenyl-2,5-Dihydrofuran. *Sm.* 88—89° (*A.* 306, 210). — \**III*, 501.
  - 25) 2-Methyl-1-Benzylbenzofuran? *Sm.* 29°; *Sd.* 195—200°<sub>15</sub> (*B.* 35, 3560 *C.* 1902 [2] 1312).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>**
- 26) 1,2-Hydrindochroman. *Sm.* 61° (*Soc.* 91, 1090 *C.* 1907 [2] 603). *C* 80,7 — *H* 5,9 — *O* 13,4 — *M. G.* 238.
    - 1) Dimethyläther d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthin. *Sm.* 142° (*A.* 279, 338). — *II*, 999.
    - 2) Dimethyläther d. 1,5-Dioxyanthracen. *Sm.* 224° (*B.* 42, 1416 *C.* 1909 [1] 1711).
    - 3) Dimethyläther d. 1,8-Dioxyanthracen. *Sm.* 198° (*B.* 42, 1417 *C.* 1909 [1] 1711).
    - 4) Dimethyläther d. 2,3-Dioxyanthracen. *Sm.* 203—204° (*B.* 28, 1533; *A.* 342, 104 *C.* 1905 [2] 1594). — \**II*, 608.
    - 5) Dimethyläther d. 9,10-Dioxyanthracen. *Sm.* 196° (*B.* 18, 3038). — *II*, 1000.
    - 6) Dimethyläther d. 2,3-Dioxyphenanthren. *Sm.* 131°. *Pikrat* (*B.* 33, 1831). — \**II*, 608.
    - 7) Dimethyläther d. 3,4-Dioxyphenanthren. *Sm.* 44°; *Sd.* 298—303°<sub>112</sub>. *Pikrat* (*B.* 33, 1819, 1824; *B.* 38, 3178 *C.* 1905 [2] 1444; *B.* 40, 3866 *C.* 1907 [2] 1633). — \**II*, 607.
    - 8)  $\gamma$ -Keto- $\delta$ -Phenyl- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten. *Sd.* 217—219°<sub>12</sub> (*B.* 37, 498 *C.* 1904 [1] 805).
    - 9)  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[2-Oxyphenyl]propen. *Sm.* 152° (*B.* 29, 239). — *III*, 249.
    - 10)  $\gamma$ -Keto- $\gamma$ -[4-Oxy-3-Methylphenyl]- $\alpha$ -Phenylpropen. *Sm.* 137° (*M.* 27, 1148 *C.* 1907 [1] 720).
    - 11)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[6-Oxy-3-Methylphenyl]propen. *Sm.* 146° u. *Zers.* (*B.* 31, 713 *Ann.*). — \**III*, 185.
    - 12) Di-o-Oxy-m-Methylhydrobenzoesäureanhydrid. *Sm.* 172° (u. 194°) (*B.* 41, 622 *C.* 1908 [1] 1268).
    - 13) Methyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen. *Sm.* — 11°; *Sd.* 220—222°<sub>16</sub> (*R.* 24, 370 *C.* 1905 [2] 1178).
    - 14) Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -Phenylpropen (*M. d. o*-Oxyphenylstyrylketon). *Sm.* 106—107° (*B.* 25, 3536). — *III*, 247.
    - 15) Methyläther d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\gamma$ -Phenylpropen. *Sm.* 77 bis 78°. *HCl*, 2*HCl*, *HBr*, 2 *Pikrat* (*C.* 1899 [2] 1118; 1900 [2] 1014; *B.* 37, 1652 *C.* 1904 [1] 1603; *A.* 341, 33, 35 *C.* 1905 [2] 821). — \**III*, 180.
    - 16) Phenyläther d.  $\beta$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Buten. *Sm.* 102° (*B.* 35, 3553 *C.* 1902 [2] 1311).
    - 17)  $\alpha\gamma$ -Diketo- $\alpha\delta$ -Diphenylbutan (Phenylacetylacetophenon). *Sm.* 54—56°. *Cu* (*B.* 34, 1483). — \**III*, 229.
    - 18)  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan (*s*-Dibenzoyläthan; Diphenacyl). *Sm.* 144—145° (134°) (*B.* 20, 1375, 3361; 21, 3056; 27, 1168; 28, 3033; 29, 1750, 2096; 32, 531; 33, 3798; *Bl.* 49, 346; *B.* 35, 174 *C.* 1902 [1] 422). — *III*, 280, 297; \**III*, 228.

- $C_{16}H_{14}O_2$  19)  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropan. Sm. 82,5—84° (Soc. 79, 931). — \*III, 230.
- 20)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3-Methylphenyl]äthan (m-Tolil). Sm. 103° (C. 1908 [2] 1689).
- 21)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 104—105° (B. 22, 381). — III, 299.
- 22) 2,2'-Diacetylbiphenyl. Sm. 84° (A. 363, 305 C. 1909 [1] 178).
- 23) 10-Oxy-9-Keto- $\beta$ -Äthyl-9,10-Dihydroanthracen. Sm. 107° (B. 13, 1597; 14, 458; 21, 2507; A. 212, 70). — III, 243.
- 24) 6-Benzoyl-3,4-Dihydrobenzpyran. Sd. 365°<sub>110</sub> (B. 40, 3668 Ann. C. 1907 [2] 1420).
- 25) 7-Oxy-4-Methyl-2-Phenyl-1,4-Benzpyran. Sm. 155—160° (B. 34, 1793). — \*III, 546.
- 26) 6-Methyl-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 106—107° (B. 41, 4240 C. 1909 [1] 185).
- 27) 3-[2-Methylphenyl]-3,4-Dihydro-2,1-Benzpyron. Sm. 117° (B. 32, 1111). — \*II, 998.
- 28) 4-Methyl-3-Äthyl-1,2- $\alpha$ -Naphtocumarin ( $\beta$ -Methyl- $\alpha$ -Äthyl- $\alpha$ -Naphtocumarin). Sm. 138° (B. 36, 1968 C. 1903 [2] 376).
- 29) 9-Acetonilyxanthen. Sm. 101—102° (Bl. [3] 35, 1013 C. 1907 [1] 117).
- 30)  $\alpha\beta$ -Diphenylpropen- $\gamma$ -Carbonsäure (Diphenylvinylessigsäure). Sm. 172—173°. Ca + 4H<sub>2</sub>O, Ba +  $\frac{1}{2}$ H<sub>2</sub>O (J. pr. [2] 74, 330 C. 1906 [2] 1823).
- 31) isom.  $\alpha\beta$ -Diphenylpropen- $\gamma$ -Carbonsäure (Allo-diphenylvinylessigsäure). Sm. 142°. Ca + 7H<sub>2</sub>O (J. pr. [2] 74, 331 C. 1906 [2] 1823).
- 32)  $\alpha\gamma$ -Diphenylpropen- $\beta$ -Carbonsäure ( $\alpha$ -Benzyl- $\beta$ -Phenylakrylsäure). Sm. 157° (158—159°). Na (Am. 7, 69; J. pr. [2] 62, 545). — II, 1475; \*II, 874.
- 33)  $\beta\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure + H<sub>2</sub>O. Sm. 130—131° (J. pr. [2] 74, 331 C. 1906 [2] 1823).
- 34) 2-Methyl- $\alpha\beta$ -Diphenyläthen-2'-Carbonsäure. Sm. 169°. Cu (B. 32, 1108). — \*II, 875.
- 35) 3-Methyl- $\alpha\beta$ -Diphenyläthen-2'-Carbonsäure. Sm. 158°. Ag (B. 38, 3854 C. 1906 [1] 39).
- 36) Lakton d.  $\gamma$ -Oxy- $\alpha\gamma$ -Diphenylbuttersäure. Sm. 103—103,5° (A. 284, 4). — II, 1700.
- 37) Lakton d.  $\gamma$ -Oxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 112—113° (Soc. 71, 155). — \*II, 998.
- 38) Lakton d.  $\gamma$ -Oxy- $\gamma\gamma$ -Diphenylbuttersäure. Sm. 90° (A. ch. [6] 22, 313). — II, 1701.
- 39) Lakton d.  $\beta$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure? Sm. 169° (B. 14, 1689; A. 219, 48). — II, 1701.
- 40) Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure. Sm. 87° (B. 32, 1107). — \*II, 998.
- 41) Lakton d.  $\alpha$ -Oxy- $\beta$ -Phenyläthan- $\alpha$ -[3-Methylphenyl]- $\alpha^2$ -Carbonsäure. Sm. 87—92° (B. 42, 425 C. 1909 [1] 845).
- 42) Lakton d.  $\alpha$ -Oxy-3,4-Dimethyldiphenylmethan-2'-Carbonsäure (o-Xylolphtalid). Sm. 138° (A. 312, 101). — \*II, 998.
- 43) Lakton d.  $\alpha$ -Oxy- $\alpha'$ -Phenyl- $\alpha^2$ -[m-Dimethyldiphenyl]methan- $\alpha'$ -2-Carbonsäure. Sm. 83,5—84° (A. 234, 237). — II, 1701.
- 44) Lakton d.  $\alpha$ -Oxydi[ $\beta$ -Methylphenyl]essigsäure (Ditolylglykolid). Sm. 131—132° (B. 28 [2] 613).
- 45) Methylester d.  $\alpha\beta$ -Diphenylakrylsäure. Sm. 77—78° (G. 14, 115). — II, 1474.
- 46) Methylester d. Allo- $\alpha\beta$ -Diphenylakrylsäure. Fl. (G. 27 [2] 54).
- 47) Äthylester d. Fluoren-1-Carbonsäure. Sm. 53,5° (A. 200, 16). — II, 1473.
- 48) Äthylester d. Fluoren-9-Carbonsäure. Sm. 60° (43—45°; 165°?); Sd. 209—210°<sub>17</sub> (B. 10, 536; Bl. [3] 27, 881 C. 1902 [2] 991; B. 39, 3064 C. 1906 [2] 1501). — II, 1473.
- 49) Benzylester d.  $\beta$ -Phenylakrylsäure. Sm. 39°; Sd. 225—235° (Z. 1869, 156, 157; B. 2, 181; 27 [2] 312; D.R.P. 127649 C. 1902 [1] 445). — II, 1406.
- 50) 3-Methylphenylester d.  $\beta$ -Phenylakrylsäure. Sm. 65° (C. 1899 [1] 461). — \*II, 850.

- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>** 51) 4-Methylphenylester d.  $\beta$ -Phenylakrylsäure. Sm. 100–101°; Sd. 230°<sub>15</sub> (B. 18, 1945). — II, 1406.
- 52) Acetat d. 2-Oxy- $\alpha\alpha$ -Diphenyläthen. Sd. 172–173° (B. 36, 4003 C. 1904 [1] 174).
- 53) Acetat d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthen? Fl. (A. 155, 73). — II, 1082.
- 54) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]äthen. Sm. 54–55° (B. 42, 826 C. 1909 [1] 1162).
- 55) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthen. Sm. 152° (A. 349, 112 C. 1906 [2] 1257).
- 56) Acetat d. 1-Oxy-9,10-Dihydroanthracen. Sm. 82–85° (B. 35, 2926 C. 1902 [2] 1050).
- 57) Acetat d. 2-Oxy-9,10-Dihydroanthracen. Sm. 148° (B. 26, 3070). — II, 900.
- 58) Verbindung (aus Phenanthrenchinon). Sm. 80°. + C<sub>2</sub>H<sub>5</sub>O (Sm. 77°) (B. 12, 1307; 13, 761). — III, 443.
- C<sub>16</sub>H<sub>14</sub>O<sub>3</sub>** C 75,6 — H 5,5 — O 18,9 — M. G. 254.
- 1) 2-Methyläther-3,4-Methylenäther d.  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[3,4-Dioxyphenyl]äthen. Sm. 99–100° (B. 38, 942 C. 1905 [1] 1019).
- 2) 4-Methyläther-3,4-Methylenäther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[3,4-Dioxyphenyl]äthen. Sm. 153–154° (B. 38, 942 C. 1905 [1] 1019).
- 3) 1,5-Dimethyläther d. 1,5,6-Trioxypheanthren ( $\alpha$ -Pseudothebaol). Sm. 164–165° (B. 33, 181). — \*II, 627.
- 4) 5,6-Dimethyläther d. 1,5,6-Trioxypheanthren. Sm. 182–183° (B. 40, 2000 C. 1907 [2] 158).
- 5) 3,6-Dimethyläther d. 3,4,6-Trioxypheanthren (Thebaol). Sm. 94° (B. 28, 942; 30, 1389; 33, 178, 1815; B. 35, 4400 C. 1903 [1] 341; B. 37, 3499 C. 1904 [2] 1320). — \*II, 627.
- 6)  $\alpha\gamma$ -Dioxy- $\delta$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten ( $\beta$ -Oxydiphenacyl). Sm. 175 bis 178° (Am. 35, 141 C. 1906 [1] 1095).
- 7) 4-Methyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen (Anisoylbenzoylmethan). Sm. 131–132°. Cu (C. 1899 [2] 1118). — \*III, 226.
- 8)  $\gamma^4$ -Methyläther d.  $\gamma$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -[2-Oxyphenyl]propan. Sm. 148° u. Zers. (B. 41, 1337 C. 1908 [1] 1980).
- 9) 3-Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[3-Oxyphenyl]propen. Sm. 94–95° (B. 38, 933 C. 1905 [1] 1026).
- 10) 4-Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[4-Oxyphenyl]propen. Sm. 93–94° (B. 32, 318). — \*III, 181.
- 11) 4-Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropen (Benzalpaconol). Sm. 105° (B. 32, 311). — \*III, 181.
- 12) Phenyläther d.  $\delta$ -Oxy- $\alpha\gamma$ -Diketo- $\alpha$ -Phenylbutan (J. pr. [2] 65, 480 C. 1902 [2] 23).
- 13)  $\beta$ -Phenyläther d.  $\gamma$ -Keto- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten. Sm. 153° (B. 35, 3556 C. 1902 [2] 1311).
- 14)  $\gamma$ -Keto- $\beta$ -Acetyl- $\alpha$ -[2-Oxy-1-Naphtyl]- $\alpha$ -Buten ( $\beta$ -Oxy- $\alpha$ -Naphtylidenacetylaceton). Sm. 137° (B. 37, 4489 C. 1905 [1] 249).
- 15) Dimethyläther d. 3,4-Dioxy-9-Keto-9,10-Dihydroanthracen. Sm. 150° (B. 38, 153 C. 1905 [1] 535; B. 39, 207 C. 1906 [2] 1337).
- 16) Dimethyläther d. 9,9-Dioxy-10-Keto-9,10-Dihydroanthracen. Sm. 129° (A. 323, 231 C. 1902 [2] 802).
- 17) 2-Keto-1,3-Di[Furanylmethylen]hexahydrobenzol. Sm. 144° (B. 29, 1840).
- 18) Dimethyläther d. 3,5-Dioxy-2-Phenylbenzofuran. Sm. 83–84° (B. 42, 3150 C. 1909 [2] 1347).
- 19) Dimethyläther d. 5,6-Dioxy-2-Phenylbenzofuran. Sm. 83–84° (B. 42, 3152 C. 1909 [2] 1347).
- 20) 7-Methyläther d. 4,7-Dioxy-2-Phenyl-1,4-Benzpyron (B. 34, 3895 C. 1902 [1] 122). — \*III, 549.
- 21) Methyläther d. 6-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 141–142° (B. 37, 774 C. 1904 [1] 1155).
- 22) Methyläther d. 7-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 91° (B. 37, 1181 C. 1904 [1] 1275).
- 23) Methyläther d. 2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 77–78° (B. 38, 933 C. 1905 [1] 1026).



- $C_{16}H_{14}O_3$  24) **Methyläther d. 2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron.** Sm. 97° (B. 38, 1508 C. 1905 [1] 1404).
- 25) **8-Keto-5,7,7-Trimethyl-7,8-Dihydrofluoron.** Sm. 132—133° (M. 21, 68). — \*III, 571.
- 26)  **$\gamma$ -Oxy- $\alpha\beta$ -Diphenylpropen- $\gamma$ -Carbonsäure.** Sm. 125°. Ag (B. 31, 2228, 2235; B. 36, 917 C. 1903 [1] 1030; A. 333, 232 C. 1904 [2] 1389). — \*II, 1011.
- 27)  **$\gamma$ -Oxy- $\beta\gamma$ -Diphenylpropen- $\gamma$ -Carbonsäure (Isocinnamenylmandelsäure).** Sm. 161°. Ba + 2H<sub>2</sub>O, Ag (B. 18, 184; Soc. 47, 30; 71, 135). — \*II, 1011.
- 28)  **$\alpha\beta$ -Diphenyläthen- $\alpha^2$ -Oxyessigsäure.** Sm. 136° (B. 42, 827 C. 1909 [1] 1163).
- 29)  **$\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthan- $\alpha\beta$ -Oxyd- $\beta$ -Carbonsäure.** Sm. 134° (C. r. 148, 419 C. 1909 [1] 1094).
- 30)  **$\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]akryl-2-Methyläthersäure.** Sm. 186—187° (B. 38, 939 C. 1905 [1] 1019).
- 31)  **$\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akryl-3-Methyläthersäure.** Sm. 189° (B. 38, 940 Anm. C. 1905 [1] 1019).
- 32)  **$\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]akryl-4-Methyläthersäure.** Sm. 188—189° (J. 1879, 731). — II, 1707.
- 33)  **$\alpha$ -[2-Oxyphenyl]- $\beta$ -Phenylakryl-2-Methyläthersäure.** Sm. 145—146° (B. 42, 832 C. 1909 [1] 1164).
- 34) **lab.  $\beta$ -Phenyl- $\beta$ -[2-Oxyphenyl]akryl-2-Methyläthersäure.** Sm. 118° (B. 41, 333 C. 1908 [1] 835).
- 35) **stab.  $\beta$ -Phenyl- $\beta$ -[2-Oxyphenyl]akryl-2-Methyläthersäure.** Sm. 153° (B. 41, 333 C. 1908 [1] 835).
- 36)  **$\alpha$ -Oxy- $\beta$ -Phenylakryl-[2-Methylphenyl]äthersäure.** Sm. 167—168°. Ba + H<sub>2</sub>O, Ag (G. 20, 505). — II, 1637.
- 37)  **$\alpha$ -Oxy- $\beta$ -Phenylakryl-[3-Methylphenyläther]säure.** Sm. 155° (G. 20, 505). — II, 1637.
- 38)  **$\alpha$ -Oxy- $\beta$ -Phenylakryl-[4-Methylphenyläther]säure.** Sm. 159—160° (166°). Ag (G. 20, 505; B. 38, 1967 C. 1905 [2] 134). — II, 1637.
- 39)  **$\beta$ -Oxy- $\beta$ -Phenylakryl-2-Methylphenyläthersäure.** Sm. 133—134° u. Zers. Ag (Soc. 77, 988). — \*II, 962.
- 40)  **$\beta$ -Oxy- $\beta$ -Phenylakryl-3-Methylphenyläthersäure.** Sm. 126° u. Zers. Ag (Soc. 77, 1120). — \*II, 962.
- 41)  **$\beta$ -Oxy- $\beta$ -Phenylakryl-4-Methylphenyläthersäure.** Sm. 136—137° u. Zers. Ag (Soc. 77, 989). — \*II, 962.
- 42) **d- $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure.** Sm. 176—178° (Soc. 85, 1368 C. 1904 [2] 1646).
- 43) **l- $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure** (Soc. 85, 1368 C. 1904 [2] 1647).
- 44) **i- $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure.** Sm. 153° (160°). Ca + H<sub>2</sub>O, Ba + H<sub>2</sub>O, Ag (A. 284, 3; B. 28, 962; Soc. 85, 1360 C. 1904 [2] 1646; B. 38, 1204 C. 1905 [1] 1240). — II, 1713.
- 45)  **$\beta$ -Phenyl- $\beta$ -Benzoylpropionsäure (Desylessigsäure).** Sm. 162° (B. 21, 1350; 29, 2586; 31, 2228, 2231; Soc. 67, 137; 71, 135, 155; A. 319, 164 Anm.; Soc. 83, 292 C. 1903 [1] 877). — II, 1713; \*II, 1007.
- 46)  **$\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure.** Sm. 131°. Cu (B. 32, 1104). — \*II, 1010.
- 47)  **$\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -[3-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure (m-Methyldeoxybenzoïn-o-Carbonsäure).** Sm. 111—112°. Ag (B. 23, 3159). — II, 1714.
- 48)  **$\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthan- $\alpha^4$ -Carbonsäure (p-Methyldeoxybenzoïn-o-Carbonsäure).** Sm. 126° (B. 24, 3966). — II, 1715.
- 49)  **$\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[2-Methylphenyl]äthan- $\beta^2$ -Carbonsäure.** Sm. 139° (B. 32, 1110). — \*II, 1011.
- 50)  **$\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure + H<sub>2</sub>O.** Sm. 75—77° (B. 42, 425 C. 1909 [1] 845).
- 51)  **$\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthan- $\beta^2$ -Carbonsäure (p-Methyldeoxybenzoïn-o-Carbonsäure).** Sm. 147—148° (B. 29, 2547). — \*II, 1011.
- 52) **2,4-Dimethyldiphenylketon-6-Carbonsäure.** Sm. 185°. Mg, Ag (A. ch. [6] 6, 219). — II, 1716.
- 53) **2,4-Dimethyldiphenylketon-2'-Carbonsäure** (B. 15, 637). — II, 1716.
- 54) **2,5-Dimethyldiphenylketon-2'-Carbonsäure** (B. 15, 637). — II, 1716.

- $C_{16}H_{14}O_8$  55) 2,6-Dimethyldiphenylketon-4-Carbonsäure. Sm. 160°.  $Mg + 6H_2O$ ,  $Ba + 2H_2O$ , Ag (*A. ch.* [6] 6, 223). — II, 1716.
- 56) 3,4-Dimethyldiphenylketon-2'-Carbonsäure +  $H_2O$ . Sm. 161,5° (wasserfrei); (162°) (*B.* 15, 637; *A.* 312, 100). — II, 1716; \*II, 1009.
- 57)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 127° (*B.* 31, 2225). — \*II, 1092.
- 58) isom.  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 127° (*B.* 38, 3121 *C.* 1905 [2] 1428).
- 59) isom.  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 170° (*B.* 31, 2225). — \*II, 1092.
- 60) isom.  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 171° (*B.* 38, 3121 *C.* 1905 [2] 1428).
- 61) Lakton d.  $\alpha$ -Äthoxyl-2-Oxydiphenylelessigsäure. Sm. 85–86° (*B.* 30, 128). — \*II, 1090.
- 62) Anhydrid d. Phenylelessigsäure. Sm. 72,5° (*B.* 20, 1391; 34, 2075; *Am.* 31, 265 *C.* 1904 [1] 1078; *Soc.* 95, 1239 *C.* 1909 [2] 1047). — II, 1311.
- 63) Anhydrid d. 1-Methylbenzol-2-Carbonsäure. Sm. 36–38° (39°); *Sd.* oberhalb 325° (*A.* 239, 74; *B.* 32, 1561). — II, 1329; \*II, 823.
- 64) Anhydrid d. 1-Methylbenzol-3-Carbonsäure. Sm. 71°; *Sd.* 230°<sub>17</sub> (*Soc.* 95, 1240 *C.* 1909 [2] 1047).
- 65) Anhydrid d. 1-Methylbenzol-4-Carbonsäure. Sm. 95° (*Soc.* 75, 344; *R.* 20, 156). — \*II, 827.
- 66) Aldehyd d. 2-Benzoxyl-1,3-Dimethylbenzol-5-Carbonsäure. Sm. 105° (*A.* 311, 367). — \*III, 66.
- 67) p-Dimethyldisalicylaldehyd. Sm. 141° (*Am.* 14, 298). — III, 88.
- 68) Methylester d.  $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]akrylsäure. Sm. 168–169° (*A.* 349, 111 *C.* 1908 [2] 1256).
- 69) Methylester d.  $\alpha$ -Oxy- $\beta$ -Phenylakrylphenyläthersäure. Sm. 60–61° (*G.* 30 [2] 375). — \*II, 953.
- 70) Methylester d.  $\alpha$ -Benzoyl- $\alpha$ -Phenylelessigsäure. *Fl.* (*B.* 21, 1321). — II, 1707.
- 71) Methylester d.  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan- $\alpha$ ,2-Carbonsäure (*M.* d. o-Desoxybenzoincarbonsäure) (*B.* 26, 2578). — II, 1708.
- 72) Methylester d. 4-Methyldiphenylketon-2'-Carbonsäure. Sm. 53° (66°) (*Bl.* 35, 505; *A.* 299, 306; *M.* 25, 1187 *C.* 1905 [1] 364). — II, 1712; \*II, 1005.
- 73) isom. Methylester d. 4-Methyldiphenylketon-2'-Carbonsäure. Sm. 71–72° (*M.* 25, 1187 *C.* 1905 [1] 364).
- 74) Methylester d. 4-Methyldiphenylketon-4'-Carbonsäure. Sm. 126° (*A.* 312, 93). — \*II, 1006.
- 75) Äthylester d. Diphenylketon-2-Carbonsäure. Sm. 58° (*B.* 7, 987). — II, 1704.
- 76) Äthylester d. Diphenylketon-4-Carbonsäure. Sm. 52° (*B.* 7, 988). — II, 1705.
- 77) Äthylester d. Biphenyl-4-Ketocarbonsäure. Sm. 39°; *Sd.* 232°, (*Bl.* [3] 17, 809). — \*II, 1002.
- 78) Äthylester d. 9-Oxyfluoren-9-Carbonsäure. Sm. 92° (96°) (*B.* 10, 534; *J.* 1882, 366; *B.* 39, 3898 *C.* 1907 [1] 167). — II, 1706.
- 79) Äthylester d. 2-Methyl- $\alpha$ -Naphtofuran-1-Carbonsäure. Sm. 108° (*B.* 19, 1303). — III, 735.
- 80) 2-Methoxylphenylester d.  $\beta$ -Phenylakrylsäure (Styrakol). Sm. 130° (*D. R. P.* 62176). — \*II, 851.
- 81) Acetat d. 1,9-Dioxy-9,10-Dihydroanthracen. Sm. 136–138° (*A.* 212, 19; *B.* 10, 610; *B.* 35, 2925 *C.* 1902 [2] 1050). — II, 1112.
- 82) Acetat d. 1- $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (*Soc.* 95, 1585 *C.* 1909 [2] 2006).
- 83) Acetat d. i- $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (*A.* d. Benzoin). Sm. 83° (*A.* 104, 120; 155, 92; *B.* 21, 1336; *J. pr.* [2] 34, 10). — III, 223.
- 84) Acetat d.  $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 82° (*M.* 26, 989 *C.* 1905 [2] 1180).
- 85) Acetat d.  $\alpha$ -Keto- $\beta$ -[4-Oxyphenyl]- $\alpha$ -Phenyläthan. Sm. 87° (*B.* 21, 2450). — III, 227.

- C<sub>16</sub>H<sub>14</sub>O<sub>8</sub>** 86) Acetat d. 4-Oxymethyldiphenylketon. Sm. 36° (*Bl.* [3] 15, 947). — \*III, 162.
- 87) Acetat d. *p*-Benzoyl-2-Oxy-1-Methylbenzol. *Fl. (G.* 30 [2] 232). — \*III, 161.
- 88) Acetat d. *p*-Benzoyl-3-Oxy-1-Methylbenzol. *Fl. (G.* 30 [2] 227). — \*III, 165.
- 89) Acetat d. 2-[4-Oxyphenyl]-1,2-Dihydrobenzofuran. Sm. 102° (*B.* 39, 34 *C.* 1906 [1] 674).
- 90) Verbindung (aus Methylaurin) (*A.* 202, 208). — II, 1121.
- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>** C 71,1 — H 5,2 — O 23,7 — M. G. 270.
- 1) Dimethylenäther d.  $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 138° (*A.* 345, 326 *C.* 1906 [1] 1696).
- 2) 3-Methyläther d. Methyl-3-Oxy-4-Benzoxylphenylketon. Sm. 106° (*B.* 24, 2866). — III, 138.
- 3) Dimethyläther d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 127° (*Soc.* 91, 541 *C.* 1907 [2] 66).
- 4) Dimethyläther d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (D. d. *p*-Dioxybenzil; Anisil). Sm. 133° (*B.* 14, 327; 24, 177; *A.* 308, 8; *Soc.* 63, 1301; *Soc.* 91, 544 *C.* 1907 [2] 66). — III, 295; \*III, 224.
- 5) Chinhydron (aus 1,4-Benzochinon u. 2,3-Dioxynaphtalin) (*M.* 29, 1097 *C.* 1909 [1] 527).
- 6) Brasinol (*B.* 17, 194). — III, 655.
- 7) Pyschhydron. Sm. 180—182° (*A.* 284, 187; 286, 376). — III, 642.
- 8)  $\beta$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]propion-3,4-Methylenäthersäure. Sm. 155—156° (*C. r.* 143, 915 *C.* 1907 [1] 478).
- 9)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[2-Methoxyphenyl]akrylsäure. Sm. 152° (*B.* 42, 835 *C.* 1909 [1] 1164).
- 10)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[3-Methoxyphenyl]akrylsäure. Sm. 148° (*B.* 42, 836 *C.* 1909 [1] 1165).
- 11)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[4-Oxyphenyl]akrylsäure. Sm. 140° (*B.* 42, 836 *C.* 1909 [1] 1165).
- 12)  $\alpha$ -Phenyl- $\alpha$ -[4-Methoxyphenyl]äthan- $\alpha\beta$ -Oxyd- $\beta$ -Carbonsäure. Sm. 110° (*C. r.* 148, 419 *C.* 1909 [1] 1094).
- 13)  $\beta$ -Oxy- $\beta$ -Phenylakryl-2-Methoxyphenyläthersäure. Sm. 138° u. Zers. *Ag* (*Soc.* 77, 1181). — \*II, 962.
- 14)  $\beta$ -Oxy- $\beta$ -Phenylakryl-3-Methoxyphenyläthersäure. Sm. 110° (*Soc.* 83, 1134 *C.* 1903 [2] 1060).
- 15)  $\alpha$ -Oxy- $\beta$ -[4-Oxyphenyl]akryl- $\alpha$ -Phenyläther-4-Methyläthersäure. Sm. 200° (*G.* 14, 147; *B.* 35, 3556 *C.* 1902 [2] 1311). — II, 1778.
- 16)  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\beta$ -Diphenylpropan- $\gamma$ -Carbonsäure. Sm. 175° (*B.* 38, 3120 *C.* 1905 [2] 1427).
- 17)  $\beta$ -[4-Oxybenzoyl]propionphenyläthersäure. Sm. 117° (*B.* 38, 2491 *C.* 1905 [2] 619).
- 18) 2-Oxy-3,5-Dimethyldiphenylketon-2'-Carbonsäure. Sm. 165—166° (*Soc.* 91, 1637 *C.* 1907 [2] 2059).
- 19) 4-Oxy-3-Methyldiphenylketon-4-Methyläther-2'-Carbonsäure. Sm. 176° (*Soc.* 91, 1630 *C.* 1907 [2] 2058).
- 20) 6-Oxy-3-Methyldiphenylketon-6-Methyläther-2'-Carbonsäure. Sm. 122° (*Soc.* 91, 1633 *C.* 1907 [2] 2059).
- 21) 4'-Oxydiphenylketonäthyläther-2-Carbonsäure. Sm. 135—136°. *K*, *Ca*, *Ba* + 5H<sub>2</sub>O, *Ag* (*G.* 20, 124; *B.* 36, 2967 *C.* 1903 [2] 1007). — II, 1887.
- 22) 4-Oxydiphenylketonäthyläther-3-Carbonsäure. Sm. 109° (*A.* 290, 168). — \*II, 1094.
- 23)  $\alpha$ -Acetoxyl- $\alpha\alpha$ -Diphenylelessigsäure. Sm. 98° (*B.* 22, 1212). — II, 1696.
- 24) 4-Benzoxyl-1-Äthylbenzol-2-Carbonsäure. Sm. 177° (*A.* 319, 344 *C.* 1902 [1] 351).
- 25)  $\alpha\alpha$ -Diphenyläthan- $\beta\beta$ -Dicarbonsäure (Diphenylisobornsteinsäure). Sm. 173° u. Zers. (190—192° u. Zers.). *K*<sub>2</sub> + 2H<sub>2</sub>O, *Ag*<sub>2</sub> (*Soc.* 59, 731; *Am.* 34, 135 *C.* 1905 [2] 1022). — II, 1892.
- 26)  $\alpha\beta$ -Diphenyläthan- $\alpha\alpha$ -Dicarbonsäure (Phenylbenzylmalonsäure). Sm. 144° (*B.* 28, 816). — II, 1890.



- $C_{16}H_{14}O_4$  27)  $\alpha\beta$ -Diphenyläthan- $\alpha\alpha$ -Dicarbonsäure<sup>p</sup> Sm. 229° (252° u. Zers.). Ba + 7H<sub>2</sub>O, Ag<sub>2</sub> (B. 14, 1802; 15, 2347; 25, 296; 28, 2452; A. 247, 152; 258, 89; 259, 71; Ph. Ch. 4, 484; 8, 465; C. 1908 [1] 1778). — II, 1891; \*II, 1096.
- 28)  $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure + H<sub>2</sub>O (s-Diphenylbernsteinsäure). Sm. 183°. Ca, Ba + 2H<sub>2</sub>O, Zn + 1/2 H<sub>2</sub>O, Ag (B. 5, 1048; 14, 1802; 15, 2347; 23, 117; 28, 2450; A. 258, 88; 259, 70; Ph. Ch. 4, 484; 8, 465). — II, 1890.
- 29) isom. Diphenyläthandicarbonsäure. Sm. 275°. Ca (B. 15, 1481). — II, 1892.
- 30)  $\alpha\beta$ -Diphenyläthan- $\alpha,2$ -Dicarbonsäure (Benzylhomophthalsäure). Sm. 154°; Sd. oberhalb 300° (B. 21, 2682). — II, 1889.
- 31)  $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. Sm. 229° (231°). (NH<sub>4</sub>)<sub>2</sub>, K<sub>2</sub>, Ca, Ba, Zn + ZnO, Pb + PbO, Cu + CuO, Ag<sub>2</sub> (B. 8, 1055; 17, 2181; 24, 2821; A. 239, 66; 243, 254, 361; B. 37, 3218 C. 1904 [2] 1120). — II, 1889.
- 32)  $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. Sm. noch nicht bei 320°. (NH<sub>4</sub>)<sub>2</sub>, Ba, Ag<sub>2</sub> (B. 34, 2424; B. 37, 3215 C. 1904 [2] 1120).
- 33) 3,3'-Dimethylbiphenyl-4,4'-Dicarbonsäure. Sm. oberhalb 300° (B. 25, 1036). — II, 1892.
- 34) 3,4-Dimethylindiacen-2,5-Dicarbonsäure (B. 34, 2792).
- 35) Superoxyd d. 1-Methylbenzol-2-Carbonsäure. Sm. 60° (B. 29, 1727). — \*II, 623.
- 36) Superoxyd d. Phenylessigsäure. Sm. 41° (B. 29, 1727). — \*II, 813.
- 37)  $\delta\zeta$ -Lakton d.  $\delta$ -Oxy- $\alpha$ -Phenyl- $\epsilon$ -Methyl- $\alpha\gamma$ s-Heptatrien- $\gamma\zeta$ -Dicarbonsäure. Sm. 216° (A. 306, 244). — \*II, 1142.
- 38) Lakton d.  $\alpha,3,4$ -Trioxydiphenylmethan-3,4-Dimethyläther-2-Carbonsäure. Sm. 112° (B. 41, 983 C. 1908 [1] 1695).
- 39) Aldehyd d. 6,6'-Dioxybiphenyldimethyläther-3,3'-Dicarbonsäure. Sm. 130° (A. 357, 382 C. 1908 [1] 358).
- 40) Dialdehyd d. 4-Oxybenzoläthylenäther-1-Carbonsäure. Sm. 117 bis 118° (A. 357, 374 C. 1908 [1] 358).
- 41) Aldehyd d. 3,4-Dioxybenzol-3-Methyläther-4-Benzoylmethyläther-1-Carbonsäure (Acetophenonvanillin). Sm. 128° (B. 27, 2463). — II, 133.
- 42) Methylester d. 4'-Oxydiphenylketon-4'-Methyläther-2-Carbonsäure. Sm. 63° (M. 30, 487 C. 1909 [2] 1338).
- 43) Pseudomethylester d. 4'-Oxydiphenylketon-4'-Methyläther-2-Carbonsäure. Sm. 84° (M. 30, 489 C. 1909 [2] 1338).
- 44) Dimethylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 73,5° (74,5°) (A. 203, 98; 320, 140; A. 332, 70 C. 1904 [2] 42). — II, 1884.
- 45) Dimethylester d. Biphenyl-2,3'-Dicarbonsäure. Sm. 69,5° (A. 200, 10). — II, 1883.
- 46) Dimethylester d. Biphenyl-3,3'-Dicarbonsäure. Sm. 100—102° (104°) (B. 31, 2577; A. 332, 72 C. 1904 [2] 42). — \*II, 1093.
- 47) Dimethylester d. Biphenyl-3,4'-Dicarbonsäure. Sm. 98,5—99,5° (B. 32, 1063). — \*II, 1095.
- 48) Dimethylester d. Biphenyl-4,4'-Dicarbonsäure. Sm. 212—213° (214°; 224°) (B. 32, 1061 Anm.; A. 332, 73 C. 1904 [2] 43; B. 40, 1812 C. 1907 [2] 56). — \*II, 1093.
- 49) Äthylester d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 79—80° (J. pr. [2] 47, 243; A. 89, 362; 290, 169). — II, 1497; \*II, 890.
- 50) Äthylester d. 3-Benzoxylbenzol-1-Carbonsäure. Sm. 58° (A. 290, 170). — \*II, 902.
- 51) Äthylester d. 4-Benzoxylbenzol-1-Carbonsäure. Sm. 89° (94°); Sd. 358—360° (A. 303, 276; B. 41, 3364 C. 1908 [2] 1687). — \*II, 907.
- 52) Äthylester d. 4'-Oxydiphenylketon-2-Carbonsäure. Sm. 115° (Am. 42, 137 C. 1909 [2] 1873).
- 53) Äthylester d. 4-Oxydiphenylketon-3-Carbonsäure. Sm. 97°. K (A. 290, 166). — \*II, 1094.
- 54) Monäthylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 88° (A. 247, 267). — II, 1884.
- 55) Äthylester d.  $\alpha$ -Benzoyl- $\beta$ -Furanylakrylsäure (Ä. d. Furalbenzoylessigsäure). Sm. 68° (Soc. 59, 1011). — III, 714.

- $C_{16}H_{14}O_4$
- 56) Mono- $[\beta$ -Phenyläthyl]ester d. Benzol-1,2-Dicarbonsäure. Sm. 188 bis 189° (*B.* 33, 1723). — \*II, 1048.
  - 57) Diphenylester d. Bernsteinsäure. Sm. 120°; Sd. 330° (*B.* 2, 519; *J. pr.* [2] 26, 63; *G.* 30 [2] 358; *B.* 35, 4073 *C.* 1903 [1] 73). — II, 666; \*II, 364.
  - 58) Dibenzylester d. Oxalsäure. Sm. 80—81°; Sd. 235°<sub>14</sub> (*A.* 147, 341; *B.* 35, 3441 *C.* 1902 [2] 1303). — II, 1052.
  - 59) Di[2-Methylphenylester] d. Oxalsäure. Sm. 91° (*B.* 35, 3443 *C.* 1902 [2] 1303).
  - 60) Di[3-Methylphenylester] d. Oxalsäure. Sm. 106° (*B.* 35, 3443 *C.* 1902 [2] 1303).
  - 61) Di[4-Methylphenylester] d. Oxalsäure. Sm. 149° (*B.* 35, 3443 *C.* 1902 [2] 1303; D.R.P. 137584 *C.* 1903 [1] 111).
  - 62) 2-Acetat d. 1,2-Dioxydiphenylketon-1-Methyläther. Sm. 105—106° (*G.* 27 [1] 282). — \*III, 155.
  - 63) Diacetat d. 3,4-Dioxybiphenyl. Sm. 77—77,5° (*Am.* 29, 128 *C.* 1903 [1] 705).
  - 64) Diacetat d. 2,2'-Dioxybiphenyl. Sm. 95° (*B.* 34, 1667). — \*II, 601.
  - 65) Diacetat d. 3,3'-Dioxybiphenyl. Sm. 82,5° (*B.* 27, 2109; *B.* 39, 3343 *C.* 1906 [2] 1645). — II, 987.
  - 66) Diacetat d. 4,4'-Dioxybiphenyl. Sm. 159—160° (*A.* 207, 336). — II, 988.
  - 67) Diacetat d. isom. Dioxybiphenyl. Sm. 94° (*A.* 207, 358). — II, 990.
  - 68) Diacetat d. 7,8-Dioxyacenaphten. Sm. 130° (*Soc.* 55, 579). — II, 1100.
  - 69) 4-Benzoat d. Methyl-3,4-Dioxyphenylketon-3-Methyläther. Sm. 106° (*Soc.* 93, 1515 *C.* 1908 [2] 1173).
  - 70) Dibenzoat d.  $\alpha$ -Dioxyäthan. Sm. 72° (*A.* 354, 356 *C.* 1907 [2] 1058).
  - 71) Dibenzoat d.  $\alpha\beta$ -Dioxyäthan. Sm. 73—74°; Sd. oberhalb 360° (*J.* 1879, 486, 676; *B.* 23, 2498). — II, 1141.
  - 72) Benzoat-2-Methylbenzoat d. Dioxymethan. Sm. 51—52° (*C. r.* 134, 717 *C.* 1902 [1] 975).
  - 73) Benzoat-3-Methylbenzoat d. Dioxymethan. Sm. 36°; Sd. 227°<sub>12</sub> (*C. r.* 134, 717 *C.* 1902 [1] 975).
  - 74) Benzoat-4-Methylbenzoat d. Dioxymethan. Sm. 74—75° (*C. r.* 134, 717 *C.* 1902 [1] 975).
  - 75) Benzoat-Phenylacetat d. Dioxymethan. Sd. 230°<sub>12</sub> (*C. r.* 134, 717 *C.* 1902 [1] 975).
- $C_{16}H_{14}O_5$
- 76) Verbindung (aus d. Wurzel von Ventilago madraspatana).  $\alpha$ -Derivat. Zers. bei 260°;  $\beta$ -Derivat. Sm. 173° (*Soc.* 65, 935, 937). — III, 454. *C* 67,1 — *H* 4,9 — *O* 28,0 — *M. G.* 286.
  - 1) 3,4-Methylenäther-3',4'-Dimethyläther d. 3,4,3',4'-Tetraoxydiphenylketon. Sm. 141—142° (*Soc.* 89, 1662 *C.* 1907 [1] 407).
  - 2) Acetylloreoselin. Sm. 123° (118°) (*A.* 174, 81; *M.* 19, 276; *C.* 1899 [1] 432). — III, 620; \*III, 458.
  - 3) Brasilin +  $H_2O$ . *Pb* +  $H_2O$  (*J.* 1864, 545; *C.* 1900 [1] 133, 606, 1293; *A.* 178, 101; *B.* 4, 334; *B.* 6, 447; *B.* 9, 1883; *B.* 17, 195; *B.* 21, 3016; *B.* 27, 524; *B.* 32, 1024, 1045; *M.* 19, 738; *B.* 20, 461; *B.* 22, 207; *Soc.* 79, 1401 *C.* 1902 [1] 203; *Soc.* 81, 221 *C.* 1902 [1] 354, 816; *B.* 35, 2306 *C.* 1902 [2] 284; *B.* 35, 2608 *C.* 1902 [2] 595; *B.* 36, 840 *C.* 1903 [1] 973). — III, 652; \*III, 478.
  - 4) Sakuranetin +  $2H_2O$ . Sm. 70° (150° wasserfrei) (*Ar.* 246, 265 *C.* 1908 [2] 253).
  - 5) Dimethyläther d. Genistein. Sm. 137—139° (*Soc.* 75, 835; *B.* 77, 1310). — \*III, 489.
  - 6) isom. Dimethyläther d. Genistein. Sm. 200—202° (*Soc.* 75, 836; *B.* 77, 1310). — \*III, 489.
  - 7) Benzol-1-Methylcarbonsäure-2-Phenylxyessigsäure. Sm. 178° (*B.* 42, 831 *C.* 1909 [1] 1164).
  - 8) 2',4'-Dioxydiphenylketondimethyläther-2-Carbonsäure. Sm. 164° (*Soc.* 93, 510 *C.* 1908 [1] 1700).
  - 9) 4-Oxydiphenylketon-4-Methyläther-2-Oxyessigsäure. Sm. 114—115° (*B.* 42, 3148 *C.* 1909 [2] 1347).

- C<sub>18</sub>H<sub>14</sub>O<sub>5</sub>**
- 10) 3,4-Dioxybenzol-3-Methyläther-4-Benzoylmethyläther-1-Carbonsäure (Acetophenonvanillinsäure). Sm. 169° (B. 27, 2464). — II, 1744.
  - 11) α-Oxy-α-Phenyllessig-4-Aldehydo-2-Methoxyphenyläthersäure (Vanillinmandeläthersäure). Sm. 81—82° (D.R.P. 82924). — \*III, 76.
  - 12) 1-Oxymethylbenzol-4-Aldehydo-2-Methoxyphenyläther-4-Carbonsäure. Sm. 195° (D.R.P. 82924). — \*III, 76.
  - 13) Dibenzyläther-3,3'-Dicarbonsäure. Sm. 180° (B. 24, 2421). — II, 1561.
  - 14) Dibenzyläther-4,4'-Dicarbonsäure. Ag<sub>2</sub> (B. 23, 1061). — II, 1561.
  - 15) 2,4[oder 2,5']-Dioxy-3,5-Dimethyldiphenylketon-2'-Carbonsäure. Sm. 230° (Soc. 91, 1639 C. 1907 [2] 2060).
  - 16) 2',5'-Dioxydiphenylketondimethyläther-2-Carbonsäure. Sm. 162° (B. 28, 117). — II, 1972.
  - 17) 3',4'-Dioxydiphenylketondimethyläther-2-Carbonsäure. Sm. 233°. NH<sub>4</sub>, Ag (B. 28, 118; A. 342, 96 C. 1905 [2] 1594). — II, 1972.
  - 18) α-Oxy-αβ-Diphenyläthan-α,2-Dicarbonsäure (Oxybibenzyl-α,o-Dicarbonsäure). Sm. 130—133°. K<sub>2</sub> (B. 27, 2504). — II, 1973.
  - 19) α-Oxy-αβ-Diphenyläthan-2,2'-Dicarbonsäure (Hydroxydiphtalysäure). Sm. 170°. Ag<sub>2</sub> (B. 17, 2180; 24, 2825; 27, 2502; A. 243, 255). — II, 1974.
  - 20) 4'-Methoxydiphenylmethan-2,5-Dicarbonsäure. Sm. 265—266° (B. 36, 844 C. 1903 [1] 971).
  - 21) Säure (aus d. Verb. C<sub>20</sub>H<sub>22</sub>O<sub>5</sub>). Sm. 274°. Ag<sub>2</sub> (B. 42, 1410 C. 1909 [1] 1887).
  - 22) Anhydrid d. 4-Oxybenzolzomethyläther-1-Carbonsäure. Sm. 99° (A. 102, 284; C. 1895 [2] 442). — II, 1528.
  - 23) Anhydrid d. Oxyessigphenyläthersäure. Sm. 67—69° (C. 1901 [1] 1304).
  - 24) Lakton d. Di[4,6-Dioxy-2-Methylphenyl]essigsäure. Sm. 263° (Soc. 73, 400). — \*II, 1178.
  - 25) α,2'-Lakton d. α,4-Dioxy-3',4'-Dimethoxydiphenylmethan-2'-Carbonsäure (4-Oxyphenylmekonin). Sm. 160—170° (B. 27, 2639; 31, 2792). — II, 2020; \*II, 1178.
  - 26) Lakton d. Acetylyangonasäure. Sm. 131—132° (Ar. 246, 362 C. 1908 [2] 889).
  - 27) Aldehyd d. Di[4-Oxybenzyl]äther-3,3'-Dicarbonsäure. Fl. (B. 37, 192 C. 1904 [1] 660).
  - 28) Äthylester d. αγ-Diketo-α-[1-Oxy-2-Naphtyl]propan-γ-Carbonsäure (Ä. d. o-Oxynaphtoylbrenztraubensäure). Sm. 114—115° (B. 35, 860 C. 1902 [1] 812).
  - 29) Äthylester d. Indandionmethylenacetessigsäure. Sm. 117—118° (G. 35 [1] 2 C. 1905 [1] 1101).
  - 30) 1-Äthylester-3-Phenylester d. 4-Oxybenzol-1,3-Dicarbonsäure. Sm. 64—65° (J. pr. [2] 44, 13). — II, 1937.
  - 31) Diacetat d. 3,3'-Dioxydiphenyläther (B. 10, 1467). — II, 917.
  - 32) Diacetat d. Methyl-1,8-Dioxy-2-Naphtylketon. Sm. 168—169° (C. 1901 [2] 1287). — \*III, 142.  
C 63,6 — H 4,6 — O 31,8 — M. G. 302.
- C<sub>18</sub>H<sub>14</sub>O<sub>6</sub>**
- 1) 3,4,3',4'-Dimethylenäther d. αβ-Dioxy-αβ-Di[3,4-Dioxyphenyl]äthan (Hydropiperoin). Sm. 202° (200°) (A. 159, 131; Soc. 89, 1514 C. 1907 [1] 340). — III, 103.
  - 2) Isohydropiperoin. Sm. 135° (132°) (A. 159, 135; Soc. 89, 1515 C. 1907 [1] 340). — III, 104.
  - 3) 3,4-Methylenäther-β-Dimethyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon (Protocotoin). Sm. 141—142° (B. 24, 2982). — III, 208.
  - 4) Dehydrodivanillin. Sm. 304—305° (B. 18, 3493; 34, 1540; Am. 24, 175 C. 1904 [1] 587). — III, 110; \*III, 82.
  - 5) Coccinin, siehe C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>.
  - 6) Eriodiktyonon (Homoeriodiktyol). Sm. 214—215° (223°) (A. 351, 244 C. 1907 [1] 1209; Soc. 91, 891 C. 1907 [2] 247; M. 28, 1029 C. 1907 [2] 2065; C. 1908 [1] 1291).
  - 7) Hämatoxylin + 3H<sub>2</sub>O. Sm. 100—120° (A. ch. [2] 82, 53, 126; C. 1900 [1] 606, 1294; J. 1857, 490; 1877, 1156; M. 20, 461; 22, 207; A. 44, 292; 109, 332; 216, 232; B. 4, 329; 12, 1392; 17, 372; Soc. 79, 1396 C. 1902 [1] 203; Soc. 81, 235 C. 1902 [1] 354, 816). — III, 664; \*III, 489.



- C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>**
- 8) Hesperitin (oder C<sub>32</sub>H<sub>28</sub>O<sub>13</sub>). Sm. 226° u. Zers. (B. 9, 687; 14, 951; C. 1899 [1] 118; Soc. 85, 62 C. 1904 [1] 381, 729). — III, 594.
  - 9) Moradin (oder C<sub>21</sub>H<sub>18</sub>O<sub>8</sub>). Sm. 201—202° (G. 18, 409). — III, 637.
  - 10) 2-Oxybenzyläthyläther-1-Carbonsäure. Sm. 151—152° (J. pr. [2] 21, 128). — II, 1494.
  - 11) o-Dikresoldicarbonsäure. Sm. noch nicht bei 290° (B. 21, 1640). — II, 2023.
  - 12) αβ-Dioxy-αβ-Diphenyläthan-2,2'-Dicarbonsäure. K<sub>2</sub>, Ag<sub>2</sub> (A. 243, 266). — II, 2023.
  - 13) αβ-Dioxy-αβ-Diphenyläthan-4,4'-Dicarbonsäure (Hydrobenzoindicarbonsäure) (B. 19, 1817). — II, 2023.
  - 14) αγ-Lakton d. α-Oxy-αα-Di[2,5-Dioxyphenyl]propan-γ-Carbonsäure. Sm. 217° (B. 41, 2457 C. 1908 [2] 786).
  - 15) αγ-εη-Dilakton d. αβ[εη-Tetraoxy-δ-Phenyl-δ-Methyl-βε-Heptadien-αε-Dicarbonsäure (Phenyläthylidenbistetransäure). Sm. 169—171° (A. 315, 159). — \*II, 1218.
  - 16) Peroxyd d. 4-Oxybenzylmethyläther-1-Carbonsäure. Sm. 128° (B. 37, 3624 C. 1904 [2] 1500).
  - 17) Äthylenester d. 2-Oxybenzol-1-Carbonsäure. Sm. 83° (A. 123, 377). — II, 1492.
  - 18) Diphenylester d. αβ-Dioxyäthan-αβ-Dicarbonsäure. Sm. 101—102° (C. 1899 [1] 1175). — \*II, 367.
  - 19) Di[2-Methoxyphenylester] d. Oxalsäure. Sm. 127° (B. 35, 3449 C. 1902 [2] 1303).
  - 20) Triacetat d. 1,2,3-Trioxynaphtalin. Sm. 250—255° (A. 295, 19; 307, 19). — \*II, 626.
  - 21) Triacetat d. 1,2,4-Trioxynaphtalin. Sm. 135° (C. 1899 [1] 1094; A. 311, 345). — \*II, 626.
  - 22) Triacetat d. 1,3,6-Trioxynaphtalin. Sm. 112—113° (B. 38, 3952 C. 1906 [1] 241).
  - 23) Triacetat d. 1,6,7-Trioxynaphtalin. Sm. 144° (125—126°) (C. 1900 [2] 651; M. 23, 530 C. 1902 [2] 744). — \*II, 626.
  - 24) Triacetat d. isom. Trioxynaphtalin (T. d. β-Hydrojuglon). Sm. 129 bis 130° (B. 18, 2569). — II, 1027.
- C<sub>16</sub>H<sub>14</sub>O<sub>7</sub>**
- 1) Lecanorsäure + H<sub>2</sub>O (Diorsellinsäure). Sm. 166° (wasserfrei). Na + 4H<sub>2</sub>O, K + H<sub>2</sub>O, Ca + 4H<sub>2</sub>O, Ba + 5H<sub>2</sub>O, Pb + Pb(OH)<sub>2</sub>, Cu + 2H<sub>2</sub>O (A. 41, 159; 48, 7; 54, 261; 68, 59; 139, 24; 295, 278; 306, 304; 313, 332; 317, 122; J. pr. [2] 57, 264; [2] 58, 473, 499; [2] 62, 451; [2] 63, 540; Bl. [3] 31, 615 C. 1904 [2] 99; C. 1904 [2] 1504; J. pr. [2] 70, 496 C. 1905 [1] 260). — II, 1754; \*II, 1032.
  - 2) Gyrophorsäure. Sm. 200—202° (202—203° u. Zers.) (A. 70, 218; 300, 332, 356; 313, 322, 326; J. pr. [2] 58, 476; [2] 62, 463; [2] 63, 544; J. pr. [2] 68, 62 C. 1903 [2] 513). — II, 1754; \*II, 1032.
  - 3) Säure (aus 3,3'-Diazoamidoanissäure) (A. 117, 53). — IV, 1578.
- C<sub>16</sub>H<sub>14</sub>O<sub>8</sub>**
- 4) Äthylester d. Säure C<sub>14</sub>H<sub>10</sub>O<sub>7</sub>. Sm. 163—165° (B. 42, 1395 C. 1909 [1] 1885). C 57,5 — H 4,2 — O 38,3 — M. G. 334.
  - 1) Digallacyl. Zers. bei 270° (M. 20, 456). — \*III, 229.
  - 2) Acetylthujigenin (J. 1858, 516). — III, 614.
  - 3) Pyrogallolsuccinein. HCl (M. 20, 450). — \*II, 1224.
  - 4) αβ-Di[5,6-Dioxyphenyl]äthan-2,2'-Dicarbonsäure (Tetraoxydibenzyl-dicarbonsäure). Ba + H<sub>2</sub>O (M. 14, 139). — II, 2081.
  - 5) Parinsäure. Sm. 230° u. Zers. (J. pr. [2] 73, 173 C. 1906 [1] 1104).
  - 6) Verbindung (aus Dehydracetsäure). Sm. 214—215° u. Zers. (G. 34 [1] 346 C. 1904 [2] 195). C 54,8 — H 4,0 — O 41,1 — M. G. 350.
- C<sub>16</sub>H<sub>14</sub>O<sub>9</sub>**
- 1) βγ-Dioxy-α-[4-Oxy-2,5-Benzochinoyl]propan-γ-[2,5-Dioxyphenyl]-äther-β-Carbonsäure (Soc. 93, 1155 C. 1908 [2] 613).
  - 2) Ketongerbsäure. Mg (M. 10, 651). — II, 2091.
  - 3) Rufimorinsäure? + 2PbO, 2 + CuO (J. 1850, 530; 1851, 420; 1864, 556). — III, 208.
- C<sub>18</sub>H<sub>14</sub>O<sub>10</sub>**
- 1) Dimethylester d. Difuranoylweinsäure. Sm. 131° (Soc. 79, 520). — \*III, 503.

$C_{16}H_{14}O_{11}$ 

C 50,3 — H 3,6 — O 46,1 — M. G. 382.

 $C_{16}H_{14}N_2$ 

- 1) Verbindung (aus Gallussäure) (B. 5, 1097). — II, 1924.
- 1,3-Diamido-2-Phenylnaphtalin. Sm. 116°. HCl, 2HCl (Soc. 89, 1934 C. 1907 [1] 729; Soc. 91, 1287, 1304 C. 1907 [2] 990; Soc. 91, 589 C. 1907 [2] 69).
- 2) 2-Amido-1-[2-Amidophenyl]naphtalin. Sm. 154° (J. pr. [2] 77, 410 C. 1908 [1] 2177).
- 3) p-Amido-1-[p-Amidophenyl]naphtalin. Sm. 64°. 2HCl (B. 26, 144). — IV, 1033.
- 4) 1-[3-Amidophenyl]amidonaphtalin. Sm. 94,5—95°; Sd. 275—280°<sub>13</sub>. HCl, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 60, 545). — \*IV, 373.
- 5) 1-[4-Amidophenyl]amidonaphtalin. Sm. 80,5—81°; Sd. 275—280°<sub>12</sub>. HCl, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 60, 555). — \*IV, 383.
- 6) 2-[3-Amidophenyl]amidonaphtalin. Sm. 128°; Sd. 320°<sub>40</sub>. HCl, 2HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 26, 976). — IV, 573.
- 7) 2-[4-Amidophenyl]amidonaphtalin. Sm. 94°. HCl, 2HCl (J. pr. [2] 75, 276 C. 1907 [2] 408).
- 8) 2-Amido-1-Phenylamidonaphtalin<sup>p</sup> Sm. 161° (A. 255, 161). — IV, 917.
- 9) 4-Amido-1-Phenylamidonaphtalin. Sm. 148° (A. 243, 305; 286, 183). — IV, 922.
- 10) 1-Amido-2-Phenylamidonaphtalin. Sm. 138—140° (136—137°). HCl (B. 20, 1170, 1184; A. 255, 348). — IV, 917.
- 11) isom. p-1-Amido-2-Phenylamidonaphtalin. Sm. 170°. HCl, H<sub>2</sub>SO<sub>4</sub> (B. 42, 1380 C. 1909 [1] 1709).
- 12) Tetroldianil (J. pr. [2] 6, 151; B. 14, 933). — IV, 1032.
- 13) Bisanhydrophenacylamin. Sm. 178—179°. (2HCl, PtCl<sub>4</sub>), HJ (B. 41, 1138 C. 1908 [1] 1893).
- 14) s-Phenyl-1-Naphtylhydrazin. Sm. 125° (B. 26, 144). — IV, 1504.
- 15) 3,3'-Diäthénylazobenzol (Azostyrol). Sm. 38—39° (B. 26 [2] 677). — IV, 1389.
- 16) 3-Amido-2,5-Diphenylpyrrol. Sm. 187—188° (C. 1905 [2] 900).
- 17) 5-Methyl-1,3-Diphenylpyrazol. Sm. 47°; Sd. 365°<sub>731</sub> (B. 18, 933; 20, 1098). — IV, 936.
- 18) 3-Methyl-1,4-Diphenylpyrazol. Sm. 41,5—42,5°; Sd. 220—224°<sub>19</sub> (A. 352, 332 C. 1907 [1] 1336).
- 19) 3-Methyl-1,5-Diphenylpyrazol. Sm. 63°; Sd. 335°<sub>750</sub>. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (B. 18, 314, 2136; D.R.P. 33536). — IV, 936; \*IV, 617.
- 20) 4-Methyl-3,5-Diphenylpyrazol. Sm. 222—223° (Soc. 79, 931). — \*IV, 692.
- 21) 5-Phenyl-3-Benzylpyrazol. Sm. 90,5—91° (B. 34, 1485). — \*IV, 693.
- 22) 4[oder 5]-Benzyliden-1-Phenyl-4,5-Dihydropyrazol. 2 Modif. Sm. 235° (J. pr. [2] 50, 550). — IV, 937.
- 23) 1-Methyl-4,5-Diphenylimidazol. Sm. 147° (B. 35, 4139 C. 1903 [1] 295). — \*IV, 688.
- 24) 2-Methyl-4,5-Diphenylimidazol. Sm. 235°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (Soc. 49, 464). — IV, 1031.
- 25) 5-Methyl-2,4-Diphenylimidazol. Sm. 215°. HCl (B. 34, 640). — \*IV, 693.
- 26) 2-Phenyl-4-[4-Methylphenyl]imidazol. Sm. 183° (B. 34, 640). — \*IV, 693.
- 27) 4-Phenyl-2-[4-Methylphenyl]imidazol (B. 34, 640).
- 28) 3,6-Diphenyl-2-Dihydro-1,2-Diazin. Sm. 202° (B. 36, 496 C. 1903 [1] 653). — \*IV, 693.
- 29) 4,6-Dimethyl-2-[2-Naphtyl]-1,3-Diazin. Sm. 116—117° (B. 26, 2125). — IV, 1032.
- 30) 3,6-Diphenyl-1,2-Dihydro-1,4-Diazin. Sm. 162—163° (Soc. 87, 705 C. 1905 [2] 236).
- 31) 2,3-Diphenyl-1,4-Dihydro-1,4-Diazin. 3 + 2PtCl<sub>4</sub> + H<sub>2</sub>O (Soc. 63, 1293). — III, 284.
- 32) 5,6-Diphenyl-2,3-Dihydro-1,4-Diazin (Diphenyldihydropyrazin). Sm. 160—161° (B. 20, 268). — III, 283.
- 33) 3,6-Diphenyl-2,5-Dihydro-1,4-Diazin. Sm. 166—167° (B. 41, 1133 C. 1908 [1] 1892).

- C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>**
- 34) 5-Methyl-2-[ $\beta$ -Phenyläthenyl]benzimidazol +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 108 bis 110° (164—165° wasserfrei). HCl, (2HCl, PtCl<sub>4</sub> +  $4\frac{1}{2}$  H<sub>2</sub>O) (A. 273, 315; J. pr. [2] 74, 320 C. 1906 [2] 1822). — IV, 1031.
  - 35) 6-Amido-2-Phenylchinolin. Sm. 183° (D. R. P. 79385). — \*IV, 691.
  - 36) 4-Phenylamido-2-Methylchinolin. Sm. 150—151° (B. 20, 953). — IV, 931.
  - 37) 2-Phenylamido-4-Methylchinolin. Sm. 129—130°. (2HCl, PtCl<sub>4</sub>) (A. 236, 103). — IV, 1033.
  - 38) 3-Methyl-2-[3-Amidophenyl]chinolin. Sm. 115°. 2HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (B. 19, 533). — IV, 1029.
  - 39) 4-Methyl-2-[2-Amidophenyl]chinolin (Isoflavanilin). Sm. 83—84°. 2HCl (B. 26, 1353; 32, 3231). — IV, 1029; \*IV, 690.
  - 40) 4-Methyl-2-[4-Amidophenyl]chinolin (Flavanilin; p-Amidoflavinol). Sm. 97°. HCl +  $1\frac{1}{2}$  H<sub>2</sub>O, 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 15, 1500; 16, 68, 73; 19, 1038; C. 1903 [1] 976). — IV, 1029; \*IV, 691.
  - 41) 2-[3-Amido-4-Methylphenyl]chinolin (Pseudoflavanilin). Sm. 112°. HCl + 2H<sub>2</sub>O, 2HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (M. 9, 99). — IV, 1030.
  - 42) 4-[4-Amidobenzyl]isochinolin. Sm. 160—161° (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (A. 326, 277 C. 1903 [1] 928). — \*IV, 692.
  - 43) 5 oder 7-[2,6-Dimethyl-4-Pyridyl]chinolin (Lutidylchinolyl). Sm. 107 bis 109°. (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>) (G. 17, 474). — IV, 1032.
  - 44) 2-Äthyl-4-Phenyl-1,3-Benzdiazin. Sm. 83°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 25, 3086). — IV, 1030.
  - 45) 4-Methyl-2-Benzyl-1,3-Benzdiazin. Sm. 76° (B. 26, 1393). — IV, 1030.
  - 46) 2,6 oder 2,7-Dimethyl-3-Phenyl-1,4-Benzdiazin. Sm. 46—48°; Sd. 295°<sub>218</sub> (B. 22, 2130). — IV, 1031.
  - 47) 1-[ $\beta$ -Phenyläthyl]-2,3-Benzdiazin. Sm. 112,5—113,5°. HJ, HNO<sub>3</sub> (B. 30, 3037). — IV, 1031.
  - 48) Tetrahydro- $\alpha$ -Naphtinolin. Sm. 211—212°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub>. Pikrat (B. 27, 2252). — IV, 1032.
  - 49) Indolin (Diindol). Sm. 245°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Pikrat (J. 1877, 511; 1880, 586; J. r. 13, 559). — II, 1623.
  - 50) Base (aus Acetanilid). Sm. 156°. HCl (D. R. P. 137121 C. 1903 [1] 107).
  - 51) Base (aus 2-Amidodiphenylamin u. Biacetyl). Sm. 89—90° (B. 25, 1627). — IV, 564.
  - 52) Base (aus Benzoylacetone u. 1,2-Diamidobenzol). Sm. 87—88°. HCl + 3H<sub>2</sub>O (B. 40, 956 C. 1907 [1] 1133).
  - 53) Nitril d.  $\beta$ -Imido- $\alpha$ - $\gamma$ -Diphenylpropan- $\alpha$ -Carbonsäure. Sd. 274°<sub>20</sub> (J. pr. [2] 52, 114; [2] 55, 351 Anm.; Soc. 89, 1930 C. 1907 [1] 729). — \*II, 1009.
  - 54) Nitril d.  $\beta$ -Imido- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]propionsäure. Sd. 275°<sub>20</sub> (Soc. 91, 588 C. 1907 [2] 69).
  - 55) Nitril d.  $\gamma$ -Phenylamido- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 130 bis 131° (B. 17, 2115; 25, 2052). — II, 1425.
  - 56) Nitril d.  $\alpha$ -[4-Methylphenyl]amido- $\alpha$ -Phenylakrylsäure. Sm. 135° (B. 35, 2506 C. 1902 [2] 438).
  - 57) Nitril d.  $\beta$ -Benzylamido- $\beta$ -Phenylakrylsäure. Sm. 86° (C. r. 143, 555 C. 1906 [2] 1842).
  - 58) Verbindung (Base aus Acetanilid). HCl (A. 184, 96). — II, 362.
  - 59) Verbindung (Base aus Benzildioxim). Sm. 158—159°. (2HCl, PtCl<sub>4</sub>) (B. 21, 3515; 23, 3590). — III, 292.
- C<sub>16</sub>H<sub>14</sub>N<sub>4</sub>**
- 1)  $\alpha\beta$ -Di[Phenylcyanamido]äthan. Sm. 133° (B. 33, 1385). — \*II, 241.
  - 2) 4,4'-Di[Cyanmethylenamido]biphenyl. Sm. 241—242° (B. 39, 2806 C. 1906 [2] 1490).
  - 3) 4-Amido-1-[4-Amidophenyl]azonaphtalin. Sm. 159—160°. (2HCl, PtCl<sub>4</sub>) (Soc. 43, 432). — IV, 1396; \*IV, 1028.
  - 4) 2-[2,4-Diamidophenyl]azonaphtalin (B. 16, 2031). — IV, 1398.
  - 5) Anhydro- $\gamma\delta$ -Di[Phenylhydrazon]- $\beta$ -Ketobutan. Sm. 112° (B. 21, 1701). — IV, 763.
  - 6) 4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 126°. HCl (B. 36, 3598 C. 1903 [2] 1378; A. 338, 192 C. 1905 [1] 1156).
  - 7) 5-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 62° (B. 42, 2769 C. 1909 [2] 625).



- C<sub>16</sub>H<sub>14</sub>N<sub>4</sub>** 8) 4-Phenylazo-5-Methyl-1-Phenylpyrazol. Sm. 112°. HCl (*B.* 21, 1701; *A.* 350, 318 *C.* 1907 [1] 736).  
 9) 1,2-Di[2-Pyridylamido]benzol. Sm. 166—167°. (2HCl, PtCl<sub>4</sub>) (*B.* 35, 3676 *C.* 1902 [2] 1473). — \*IV, 552.  
 10) 1,3-Di[2-Pyridylamido]benzol. Sm. 160° (*B.* 35, 3676 *C.* 1902 [2] 1473). — \*IV, 552.  
 11) 1,4-Di[2-Pyridylamido]benzol. Sm. 200—201°. (2HCl, PtCl<sub>4</sub>) (*B.* 35, 3676 *C.* 1902 [2] 1473). — \*IV, 552.  
 12) 2,4-Di[Phenylamido]-1,3-Diazin. Sm. 136—137°. HCl (*Am.* 33, 459 *C.* 1905 [1] 1713).  
 13) 3,6-Dibenzyl-1,2,4,5-Tetrazin. Sm. 74° (76°) (*B.* 30, 1889; 31, 313; *A.* 298, 24). — IV, 1294.  
 14) 3,6-Di[4-Methylphenyl]-1,2,4,5-Tetrazin. Sm. 233° (*B.* 27, 3289; *A.* 298, 17). — IV, 1294.  
 15) Di[4-Methylphenyl]-2-Tetrazin. Sm. 185° (*Soc.* 55, 247). — IV, 1294.  
 16) αβ-Di[2-Benzimidazolyl]äthan. Sm. oberhalb 310°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2 Pikrat (*J. pr.* [2] 59, 257). — \*IV, 961.  
 17) 2,2'-Bi[5-Methylbenzimidazol](Anhydrooxalytoluylendiamin). Sm. 193°. 2HCl, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Acetat (*A.* 209, 373; *B.* 8, 474; 15, 2692). — IV, 615.  
 18) Nitril d. α-Phenylhydrazon-β-Phenylimidobuttersäure. Sm. 149° (*J. pr.* [2] 78, 500 *C.* 1908 [2] 591).  
 19) Nitril d. α-Methylphenylhydrazon-β-Phenylimidopropionsäure. Sm. 150—151° (*B.* 21, 3004). — IV, 757.  
 20) Verbindung (aus Maleindiphenylhydrazon). Sm. 174—175° (*C.* 1905 [1] 680).  
 21) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>13</sub>N<sub>3</sub>S). Sm. 178° (*J. pr.* [2] 79, 69 *C.* 1909 [1] 744).  
**C<sub>16</sub>H<sub>14</sub>N<sub>6</sub>** C 66,2 — H 4,8 — N 29,0 — M. G. 290.  
 1) Phenanthrenchinondiguanyl? 2HCl (*B.* 19, 762). — III, 445.  
**C<sub>16</sub>H<sub>14</sub>N<sub>8</sub>** 2) 3,5-Diimido-4-Benzylidenamido-1,2-Benzylidentetrahydro-1,2,4-Triazol. Sm. 196°. HCl (*G.* 37 [2] 324 *C.* 1908 [1] 48).  
**C<sub>16</sub>H<sub>14</sub>N<sub>8</sub>** C 60,4 — H 4,4 — N 35,2 — M. G. 318.  
**C<sub>16</sub>H<sub>14</sub>N<sub>10</sub>** 1) Pyrogallolsuccinein. Zers. bei 180°. HCl (*M.* 20, 454).  
 C 55,5 — H 4,0 — N 40,5 — M. G. 346.  
 1) Verbindung + H<sub>2</sub>O (aus 3,4-Diamido-1-Phenyl-1,2,5-Triazol). Sm. 128° (175° wasserfrei) (*A.* 295, 144). — IV, 1314.  
**C<sub>16</sub>H<sub>14</sub>Cl<sub>2</sub>** 1) ββ-Dichlor-αα-Di[2-Methylphenyl]äthan. Sm. 92° (*B.* 7, 1191; *J. pr.* [2] 47, 78; *A.* 271, 9). — II, 251.  
**C<sub>16</sub>H<sub>14</sub>Cl<sub>4</sub>** 1) ααββ-Tetrachlor-αβ-Di[4-Methylphenyl]äthan. Sm. 183° (*A.* 279, 335). — \*II, 116.  
**C<sub>16</sub>H<sub>14</sub>Br<sub>2</sub>** 1) γδ-Dibrom-αδ-Diphenyl-α-Buten. Sm. 147—148° u. Zers. (149°) (*G.* 15, 107; 20, 154; *A.* 306, 199; *A.* 342, 244 *C.* 1905 [2] 1790; *B.* 42, 2874 *C.* 1909 [2] 618). — II, 275; \*II, 123.  
 2) isom. γδ-Dibrom-αδ-Diphenyl-α-Buten. Fl. (*B.* 42, 2879 *C.* 1909 [2] 620).  
 3) 9,10-Dibrom-9,10-Dimethyl-9,10-Dihydroanthracen (*A.* 235, 309). — II, 252.  
 4) Dibromderivat d. Kohlenw. C<sub>16</sub>H<sub>16</sub>. Sm. 213—214° (*R.* 18, 462). — \*II, 120.  
**C<sub>16</sub>H<sub>14</sub>Br<sub>4</sub>** 1) αβγδ-Tetrabrom-αδ-Diphenylbutan. Sm. 230° u. Zers. (*G.* 15, 107; 20, 154). — II, 275.  
 2) isom. αβγδ-Tetrabrom-αδ-Diphenylbutan. Zers. bei 180° (*A.* 342, 240 *C.* 1905 [2] 1789).  
 3) isom. αβγδ-Tetrabrom-αδ-Diphenylbutan. Zers. bei 255° (*A.* 342, 240 *C.* 1905 [2] 1789).  
 4) αβ-Dibrom-α-Phenyl-β-[2,αβ-Dibromäthylphenyl]äthan. Sm. 165 bis 168° (*B.* 42, 1766 *C.* 1909 [2] 38).  
**C<sub>16</sub>H<sub>14</sub>S<sub>2</sub>** 1) Dithiänyl-3-Methylphenylmethan. Sd. 210—220°<sub>20</sub> (*B.* 30, 2038). — \*III, 591.  
 2) Disulfid (aus p-Xylylsulfhydrat u. p-Xylylenbromid) oder C<sub>48</sub>H<sub>42</sub>S<sub>6</sub>. Sm. 192—193° (*J. pr.* [2] 64, 529 *C.* 1902 [1] 260).  
**C<sub>16</sub>H<sub>14</sub>S<sub>4</sub>** 1) Disulfid d. Phenyldithioessigsäure. Sm. 78° (*B.* 39, 3229 *C.* 1906 [2] 1493).

**C<sub>16</sub>H<sub>15</sub>N**

C 86,9 — H 6,8 — N 6,3 — M. G. 221.

- 1) **5-Phenylimidomethyl-2,3-Dihydroinden.** Sm. 85° (A. 347, 386 C. 1906 [2] 606).
- 2) **1-Benzylidenamido-2,3-Dihydroinden.** Sm. 74–75° (Soc. 71, 251). — \*III, 23.
- 3) **10-Amido-9-Äthylanthracen** (A. 330, 174 C. 1904 [1] 891).
- 4) **2-Dimethylamidoanthracen** (Dimethylanthracylamin). Sm. 155°. (2HCl, PtCl<sub>4</sub>) (B. 16, 1637). — II, 639.
- 5) **2,5-Dimethyl-1-[1-Naphtyl]pyrrol.** Sm. 123°; Sd. 300–305°<sub>757</sub> (A. 236, 308). — IV, 72.
- 6) **2,5-Dimethyl-1-[2-Naphtyl]pyrrol.** Sm. 71°; Sd. 330°<sub>756</sub> (A. 236, 306). — IV, 72.
- 7) **α-Phenyl-δ-[6-Methyl-2-Pyridyl]-αγ-Butadien.** Sm. 103–104°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 42, 1451 C. 1909 [1] 1935).
- 8) **1-Äthyl-2-Phenylindol.** Sm. 86° (D.R.P. 128660 C. 1902 [1] 611). — IV, 251.
- 9) **2,3-Dimethyl-1-Phenylindol.** Sd. 335–340° u. ger. Zers. Pikrat (M. 21, 178; B. 36, 1273). — \*IV, 162.
- 10) **1,5-Dimethyl-2-Phenylindol.** Sm. 124° (D.R.P. 128660 C. 1902 [1] 611). — \*IV, 252.
- 11) **3,7-Dimethyl-2-Phenylindol.** Sm. 92–94° (Bl. [3] 17, 75). — IV, 420.
- 12) **1-Methyl-2-Phenyl-1,2-Dihydrochinolin.** Sm. 89–90° (B. 37, 4668 C. 1905 [1] 382).
- 13) **1-Benzyl-3,4-Dihydroisochinolin.** Sd. 196–197°<sub>12</sub> (B. 42, 1977 C. 1909 [2] 454).
- 14) **2-Methyl-1-Phenyl-1,2-Dihydroisochinolin.** Sm. 55–60°; Sd. 220°<sub>80</sub> (B. 42, 1760 C. 1909 [2] 37).
- 15) **Tetrahydrobenzo-α-Naphtindol.** Sm. 139–140° (A. 359, 64 C. 1908 [1] 1549).
- 16) **Tetrahydrobenzo-β-Naphtindol.** Sm. 152° (A. 358, 64 C. 1908 [1] 1549).
- 17) **Tetrahydrofluorechinolin.** Sm. 143° (B. 35, 3278 C. 1902 [2] 1261). — \*IV, 254.
- 18) **3-Isopropyl-β-Naphtochinolin.** Sm. 77°. (HCl, AuCl<sub>3</sub>) (B. 27, 2022). — IV, 420.
- 19) **Phenylnaphtylcarbazolin.** HCl, (2HCl, PtCl<sub>4</sub>), HJ (A. 202, 9). — IV, 420.
- 20) **5-Propylakridin.** Sm. 72–75°. H<sub>2</sub>SO<sub>4</sub> (G. 21 [2] 232). — IV, 420.
- 21) **Nitril d. αα-Diphenylbuttersäure.** Sd. 183°<sub>13</sub> (A. 275, 85). — II, 1469.
- 22) **Nitril d. αβ-Diphenylisobuttersäure.** Sd. 335–337° (A. 250, 137). — II, 1470.
- 23) **Nitril d. ββ'-Diphenylisobuttersäure.** Sm. 89–91° (B. 21, 1328; 25, 3028). — II, 1470.
- 24) **Nitril d. α-[2-Methylphenyl]-β-Phenylpropionsäure.** Sd. 340–350° u. ger. Zers. (B. 21, 1333). — II, 1470.
- 25) **Nitril d. α-[3-Methylphenyl]-β-Phenylpropionsäure.** Sm. 53°; Sd. 350–360° u. ger. Zers. (B. 21, 1332). — II, 1470.
- 26) **Nitril d. α-[4-Methylphenyl]-β-Phenylpropionsäure.** Sm. 79° (B. 21, 1334). — II, 1470.
- 27) **Verbindung (aus 1-Phenylpyrrol u. Benzaldehyd) = (C<sub>16</sub>H<sub>15</sub>N)<sub>x</sub>.** Sm. 231° (B. 35, 1654 C. 1902 [1] 1358). — \*IV, 68.

**C<sub>16</sub>H<sub>15</sub>N<sub>3</sub>**

C 77,1 — H 6,0 — N 16,9 — M. G. 249.

- 1) **2,4-Diamido-1-Phenylamidonaphtalin.** Sm. 190° (B. 41, 3937 C. 1909 [1] 25).
- 2) **5-Imido-2-Phenylimido-1-Phenyltetrahydropyrrol** (Diphenylsuccinimidin). HCl + ½ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 20, 1856). — II, 352.
- 3) **2-Naphtylazo-1-Äthylpyrrol.** Sm. 74° (B. 19, 2258). — IV, 1483.
- 4) **5-Phenylamido-3-Methyl-1-Phenylpyrazol.** Sm. 120° (124°) (C. 1900 [2] 654; B. 34, 724; B. 36, 3272 C. 1903 [2] 1188). — \*IV, 759.
- 5) **5-Imido-1-Phenyl-3-[4-Methylphenyl]-4,5-Dihydropyrazol.** Sm. 169° (J. pr. [2] 52, 111; [2] 58, 144). — IV, 697; \*IV, 815.
- 6) **5-[β-Phenyläthyl]-1-Phenyl-1,2,4-Triazol.** Sd. 340–350°<sub>45</sub>. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (B. 30, 2436). — IV, 1163.
- 7) **2,5-Di[4-Methylphenyl]-1,3,4-Triazol.** Sm. 248° (241°). Ag (B. 27, 3284, 3287; A. 298, 12). — IV, 1188.

- C<sub>16</sub>H<sub>15</sub>N<sub>3</sub>**
- 8) 2,5-Dibenzyl-1,3,4-Triazol. Sm. 147°. Ag (B. 30, 1887; A. 298, 21). — IV, 1188.
  - 9) 3-Benzylidenamido-5,7-Dimethylindazol. Sm. 183,5—184,5° (A. 305, 324). — \*IV, 801.
  - 10) 4-Phenylhydrazido-2-Methylchinolin. Sm. 134—135° (B. 26, 2227). — IV, 800.
  - 11) 2-Phenylhydrazido-4-Methylchinolin. Sm. 197° (B. 25, 2706). — IV, 1163.
  - 12) Nitril d.  $\alpha$ -[4-Äthylamidophenyl]imido- $\alpha$ -Phenylelessigsäure. Sm. 112° (B. 34, 119). — \*IV, 391.
  - 13) Nitril d.  $\alpha$ -Phenylimido- $\alpha$ -[4-Dimethylamidophenyl]essigsäure. Sm. 121° (B. 35, 3572 C. 1902 [2] 1384).
  - 14) Nitril d. 2-Methylphenylimido-2-Methylphenylamidoessigsäure. Sm. 107° (C. 1900 [2] 1251). — \*II, 259.
  - 15) Nitril d. 4-Methylphenylimido-4-Methylphenylamidoessigsäure. Sm. 124° (C. 1900 [2] 1251). — \*II, 285.
  - 16) Nitril d.  $\alpha$ -[4-Dimethylamidophenyl]imido- $\alpha$ -Phenylelessigsäure. Sm. 90° (B. 32, 2344; 34, 503). — \*IV, 391.
  - 17) Nitril d.  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. Sm. 100—104° (J. pr. [2] 55, 308). — \*IV, 456.
  - 18) Nitril d.  $\beta$ -Phenylhydrazon- $\beta$ -[4-Methylphenyl]propionsäure. Sm. 153° (J. pr. [2] 58, 144). — \*IV, 456.
  - 19) Nitril d. 4-[ $\alpha$ -Phenylhydrazonäthyl]phenylelessigsäure. Sm. 112 bis 114° (B. 39, 3146 C. 1906 [2] 1261).
- C<sub>16</sub>H<sub>15</sub>N<sub>5</sub>**
- C 69,3 — H 5,4 — N 25,3 — M. G. 277.
- 1) 4,5-Diamido-1-[4-Amidophenyl]azonaphtalin (D. R. P. 84657). — \*IV, 1029.
  - 2) 5-Amido-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 140°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 339, 145 C. 1905 [1] 1400; A. 354, 103 C. 1907 [2] 610; J. pr. [2] 79, 26 C. 1909 [1] 761).
  - 3) 6-Amido-2,4-Di[Phenylamido]-1,3-Diazin. Sm. 65—70°. H<sub>2</sub>SO<sub>4</sub> (Am. 34, 188 C. 1905 [2] 1355).
  - 4) Nitril d.  $\alpha\beta$ -Di[Phenylhydrazon]propan- $\alpha$ -Carbonsäure. Sm. 162 bis 170° (J. pr. [2] 52, 95).
  - 5) Nitril d.  $\beta$ -Phenylhydrazon- $\alpha$ -Methylphenylhydrazonpropionsäure. Sm. 181° (B. 21, 3004). — IV, 757.
- C<sub>16</sub>H<sub>15</sub>Cl**
- 1)  $\alpha$ -Chlor- $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Fl. (B. 25, 2237). — II, 252.
  - 2) isom.  $\alpha$ -Chlor- $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Sm. 60°; Sd. 328° (Soc. 71, 226). — \*II, 120.
  - 3)  $\beta$ -Chlor- $\alpha\alpha$ -Di[4-Methylphenyl]äthen. Sm. 67° (A. 279, 334). — \*II, 119.
- C<sub>16</sub>H<sub>15</sub>Cl<sub>3</sub>**
- 1)  $\beta$ -Trichlor- $\alpha\alpha$ -Diphenylbutan. Sm. 80° (B. 7, 1420). — II, 240.
  - 2)  $\alpha\alpha\beta$ -Trichlor- $\alpha\beta$ -Diphenylbutan. Sm. 90—91° (Soc. 71, 226). — \*II, 116.
  - 3)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Methylphenyl]äthan. Sm. 89° (B. 7, 1191; J. pr. [2] 47, 77). — II, 239.
- C<sub>16</sub>H<sub>16</sub>O**
- C 85,7 — H 7,1 — O 7,1 — M. G. 224.
- 1)  $\gamma$ -Oxy- $\gamma$ -Diphenyl- $\alpha$ -Buten. Fl. (Am. 31, 659 C. 1904 [2] 447).
  - 2)  $\delta$ -Oxy- $\delta\delta$ -Diphenyl- $\alpha$ -Buten. Sd. 182—183°<sub>32</sub> (C. 1908 [2] 1412; B. 42, 437 C. 1909 [1] 857).
  - 3) Äthyläther d.  $\beta$ -Oxy- $\alpha\alpha$ -Diphenyläthen. Sd. 178—182°<sub>18</sub> (A. 279, 327). — II, 1082.
  - 4) 2,4-Dimethylphenyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen. Sd. 178°<sub>15</sub> (Soc. 79, 1188).
  - 5)  $\beta$ -Oxyphenyl-1,2,3,4-Tetrahydronaphtalin. Sm. 129—130°; Sd. oberhalb 320° (B. 24, 179). — II, 900.
  - 6) Äthyläther d. 2-Oxy-9,10-Dihydroanthracen. Sm. 107° (B. 26, 3071). — II, 900.
  - 7)  $\gamma$ -Keto- $\alpha\alpha$ -Diphenylbutan. Sm. 47,5°; Sd. 315° (Soc. 71, 678; Am. 38, 530 C. 1908 [1] 227). — \*III, 174.
  - 8)  $\alpha$ -Keto- $\alpha\beta$ -Diphenylbutan (Äthyldeoxybenzoin). Sm. 58°; Sd. 323 bis 324° (B. 21, 1299; A. 250, 132; C. r. 143, 127 C. 1906 [2] 670). — III, 234.
  - 9)  $\gamma$ -Keto- $\alpha\beta$ -Diphenylbutan. Sd. 311—312° (M. 22, 661). — \*III, 174.



- $C_{16}H_{18}O$
- 10)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenylbutan. Sm. 70° (74°; 72°); Sd. 340—345° (200°<sub>18</sub>) (B. 7, 1626; 13, 642; A. 330, 232 C. 1904 [1] 944; Am. 31, 655 C. 1904 [2] 446). — III, 234.
  - 11)  $\beta$ -Keto- $\alpha\gamma$ -Diphenylbutan (Methyldibenzylketon). Sd. 320—326° (A. 284, 267; C. 1900 [2] 476). — III, 234; \*III, 172.
  - 12)  $\beta$ -Keto- $\alpha\delta$ -Diphenylbutan. Sd. 323—324° (A. 219, 34; M. 22, 665). — III, 234; \*III, 172.
  - 13)  $\gamma$ -Keto- $\beta\beta$ -Diphenylbutan. Sm. 41—41,5°; Sd. 310—311° (B. 11, 1989). — III, 235.
  - 14)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropan. Sd. 184—186°<sub>11</sub> (C. r. 149, 8 C. 1909 [2] 600).
  - 15)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Äthylphenyl]äthan. Sm. 64° (B. 15, 1680). — III, 234.
  - 16)  $\alpha$ -Keto- $\alpha\beta$ -Di[4-Methylphenyl]äthan (p-Desoxytoluoln). Sm. 102° (97 bis 98°) (B. 22, 383; A. 279, 335; Bl. [3] 17, 509). — III, 235; \*III, 173.
  - 17)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[2,4-Dimethylphenyl]äthan. Sd. 350° (B. 15, 1681; 24, 3541). — III, 235.
  - 18)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[2,5-Dimethylphenyl]äthan. Sd. 220—230°<sub>23</sub> (B. 24, 3541). — III, 235.
  - 19)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[2,6-Dimethylphenyl]äthan? Sm. 92—93,5° (B. 15, 1681). — III, 235.
  - 20)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dimethylphenyl]äthan. Sm. 95°; Sd. 210 bis 220°<sub>25</sub> (B. 24, 3540). — III, 235.
  - 21) 4-Propyldiphenylketon. Sd. 344—346°<sub>716</sub> (B. 24, 4032). — III, 235.
  - 22) 4-Isopropyldiphenylketon. Sd. 343°<sub>733</sub> (334—336°) (B. 24, 4035; 31, 1000). — III, 236; \*III, 173.
  - 23) 2,4,5-Trimethyldiphenylketon. Sd. 328—329° (B. 19, 2881; 31, 1001; J. pr. [2] 35, 491). — III, 236; \*III, 173.
  - 24) 2,4,6-Trimethyldiphenylketon. Sm. 35,5°; Sd. 318—320° (B. 16, 966; 19, 2879; 31, 1001; 32, 1565, 1908; J. pr. [2] 35, 486; A. ch. [6] 6, 202). — III, 237; \*III, 173.
  - 25) 2,2',4'-Trimethyldiphenylketon. Sd. 329—330°<sub>728</sub> (B. 24, 4050). — III, 237.
  - 26) Keton (aus d. Kohlenw.  $C_{16}H_{18}$ ). Sm. 120° (B. 6, 811). — III, 235.
  - 27) 2,5-Diphenyltetrahydrofuran. Sd. 320—322° (B. 21, 3057). — III, 694.
  - 28) Tetramethyldibenzofuran. Sm. 90—90,5° (B. 40, 1952 C. 1907 [2] 232).
  - 29) Aldehyd d.  $\alpha\alpha$ -Diphenylbuttersäure. Sd. 312—316° (C. r. 143, 1243 C. 1907 [1] 727; C. 1909 [1] 1336).
  - 30) Aldehyd d. Di[4-Methylphenyl]essigsäure. Sd. 213°<sub>23</sub> (B. 39, 2296 C. 1906 [2] 523).
- $C_{16}H_{16}O_2$
- C 80,0 — H 6,7 — O 13,3 — M. G. 240.
- 1) bim. 2-Oxyphenyläthen (B. 41, 370 B. 1908 [1] 1054).
  - 2) 1-Oxy-2-[2-Oxybenzyl]-2,3-Dihydroinden. Sm. 143° (Soc. 91, 1089 C. 1907 [2] 603).
  - 3) 9,10-Dioxy-9,10-Dimethyl-9,10-Dihydroanthracen. Sm. 181° (Bl. [3] 33, 1144 C. 1906 [1] 47).
  - 4) 9,10-Dioxy-9,10-Dimethyl-9,10-Dihydrophenanthren. Sm. 164° u. Zers. (A. 362, 248 C. 1908 [2] 951).
  - 5) Dimethyläther d. 2,5-Dioxy- $\alpha\alpha$ -Diphenyläthen. Sd. 206—207°<sub>21</sub> (A. 344, 59 C. 1906 [1] 1097; C. 1906 [2] 323).
  - 6) Dimethyläther d.  $\alpha\alpha$ -Di[p-Oxyphenyl]äthen. Sm. 140° (B. 22, 1132). — II, 998.
  - 7) Dimethyläther d.  $\alpha\beta$ -Di[2-Oxyphenyl]äthen. Sm. 136°; Sd. 195 bis 197°<sub>20</sub> (B. 25, 601; Soc. 91, 540 C. 1907 [2] 66). — II, 998.
  - 8) Dimethyläther d.  $\alpha\beta$ -Di[3-Oxyphenyl]äthen. Sm. 93—100° (A. 277, 358). — II, 998.
  - 9) Dimethyläther d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthen (Photoanethol). Sm. 211° (205—207°; 214—215°) (B. 25, 603; A. 279, 341; G. 21, 183; Am. 19, 861; J. pr. [2] 47, 68; Soc. 91, 542 C. 1907 [2] 66; B. 42, 1206 C. 1909 [1] 1708). — II, 998; \*II, 605.
  - 10) p-Oxy-2,4,5-Trimethyldiphenylketon. Sm. 187° (B. 17, 1806). — III, 237.
  - 11)  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[2-Methylphenyl]äthan (o-Toluoln). Sm. 79° (C. 1908 [2] 1689).

- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>** 12)  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 88—89° (B. 22, 380; C. 1900 [1] 713; A. 347, 364 C. 1906 [2] 604; C. 1908 [2] 1689). — III, 235; \*III, 173.
- 13) Methyläther d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[2-Oxyphenyl]propan. Sd. 223°<sub>22</sub> (B. 34, 410). — \*III, 167.
- 14) Methyläther d.  $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]propan. Sd. 330° (B. 21, 2451). — III, 230.
- 15) Methyläther d. 4-Oxy-3,5-Dimethyldiphenylketon. Sm. 144° (B. 41, 2339 C. 1908 [2] 784).
- 16) Methyläther d. Oxydimethyldiphenylketon C<sub>15</sub>H<sub>14</sub>O<sub>2</sub> (CH<sub>3</sub>:CH<sub>3</sub>:OH = 1:2:4). Sm. 82,5—83° (G. 32 [1] 502 C. 1902 [2] 581).
- 17) Methyläther d. Oxydimethyldiphenylketon C<sub>15</sub>H<sub>14</sub>O<sub>2</sub> (CH<sub>3</sub>:CH<sub>3</sub>:OH = 1:3:4). Sm. 52,5—53° (G. 33 [2] 63 C. 1903 [2] 996).
- 18) Methyläther d. Oxydimethyldiphenylketon C<sub>15</sub>H<sub>14</sub>O<sub>2</sub> (CH<sub>3</sub>:CH<sub>3</sub>:OH = 1:4:2). Sd. 194—195°<sub>10</sub> (G. 32 [1] 497 C. 1902 [2] 581).
- 19) Äthyläther d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (Ä. d. Benzoin). Sm. 95° (62°; 58—58,5°); Sd. 184—186°<sub>12</sub> (A. 155, 97; Soc. 77, 734; B. 26, 2415; Soc. 93, 1604 C. 1908 [2] 1512; Soc. 95, 1599 C. 1909 [2] 2007; B. 42, 3362 C. 1909 [2] 1430). — III, 222; \*III, 164.
- 20) Äthyläther d. 6-Oxy-3-Methyldiphenylketon. Sm. 68° (B. 36, 3892 C. 1904 [1] 93).
- 21) Phenyläther d.  $\beta$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sd. 180—183°<sub>14</sub> (B. 35, 3558 C. 1902 [2] 1311).
- 22) Phenyläther d. Oxymethyl-2,4-Dimethylphenylketon. Sm. 65°; Sd. 256—258°<sub>60</sub> (B. 35, 3564 C. 1902 [2] 1313).
- 23) Äthyläther d.  $\gamma$ -Keto- $\alpha$ -[2-Oxy-1-Naphtyl]- $\alpha$ -Buten. Sm. 112° (Bl. [3] 29, 881 C. 1903 [2] 885).
- 24) Äthyläther d. 2-Oxy-2-Phenyl-1,2-Dihydrobenzofuran. Sm. 88—89° (B. 36, 4004 C. 1904 [1] 174).
- 25) Dicyklopentadiënbenzochinon. Sm. 157—158° (A. 348, 47 C. 1906 [2] 770).
- 26) 3,5,3',5'-Tetramethyl-4,4'-Biphenochinon. Sm. 210° (B. 38, 232 C. 1905 [1] 613; B. 41, 2334 C. 1908 [2] 784).
- 27) Lapachonon. Sm. 61,5°. Pikrat (C. 1896 [1] 374). — \*III, 466.
- 28)  $\alpha\alpha$ -Diphenylbuttersäure. Sm. 173—174° (A. 275, 86; C. r. 143, 1243 C. 1907 [1] 727). — II, 1469.
- 29)  $\beta\gamma$ -Diphenylbuttersäure (Pyroamarsäure). Sm. 94° (96—97°). Ag (J. 1877, 813; Soc. 71, 156; C. 1908 [2] 1600). — II, 1471; \*II, 871.
- 30)  $\gamma\gamma$ -Diphenylbuttersäure. Sm. 106° (107°). Ag (Am. 19, 645; C. 1904 [1] 1416; 1907 [2] 2045). — \*II, 872.
- 31)  $\alpha\beta$ -Diphenylisobuttersäure (Benzylhydratropasäure). Sm. 126°. Na + 7H<sub>2</sub>O, Ca, Ba, Cu, Ag (A. 250, 137). — II, 1469.
- 32)  $\beta\beta$ -Diphenylisobuttersäure. Sm. 161° (C. 1908 [2] 1100).
- 33)  $\beta\beta'$ -Diphenylisobuttersäure (Dibenzylessigsäure). Sm. 85° (87°; 92°). Ca + H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Ag (B. 6, 1086; 10, 759; 34, 1998; J. pr. [2] 62, 550; Soc. 95, 163 C. 1909 [1] 1312). — II, 1470; \*II, 871.
- 34)  $\alpha$ -[2-Methylphenyl]- $\beta$ -Phenylpropionsäure. Sm. 95,5°. Ag (B. 21, 1333). — II, 1470.
- 35)  $\alpha$ -[3-Methylphenyl]- $\beta$ -Phenylpropionsäure. Sm. 79—80°. Ag (B. 21, 1332). — II, 1470.
- 36)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenylpropionsäure. Sm. 105°. Ag (B. 21, 1334). — II, 1470.
- 37)  $\beta$ -[4-Methylphenyl]- $\beta$ -Phenylpropionsäure. Sm. 145—146°. Ba, Ag (B. 26, 1579). — II, 1469.
- 38) Di[4-Methylphenyl]essigsäure. Sm. 144°. NH<sub>4</sub>, Ca + 2H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (A. 306, 81). — \*II, 872.
- 39)  $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure. Sm. 123° (B. 32, 1108). — \*II, 872.
- 40)  $\alpha$ -[3-Methylphenyl]- $\beta$ -Phenyläthan- $\alpha^2$ -Carbonsäure. Sm. 125—126° (B. 42, 426 C. 1909 [1] 845).
- 41) 3,4-Dimethyldiphenylmethan-2'-Carbonsäure. Sm. 134°. Ag (A. 312, 102). — \*II, 872.
- 42) 1-[2-Dimethylbenzyl]benzol-2-Carbonsäure. Sm. 157—158°. Ba + H<sub>2</sub>O (A. 234, 237). — II, 1469.

- C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>**
- 43) Methylester d.  $\alpha\alpha$ -Diphenylpropionsäure. Fl. (B. 11, 1994). — II, 1468.
  - 44) Methylester d.  $\alpha\beta$ -Diphenylpropionsäure. Sm. 34° (B. 21, 1313). — II, 1467.
  - 45) Methylester d.  $\beta\beta$ -Diphenylpropionsäure. Sm. 47° (Am. 33, 25 C. 1905 [1] 522).
  - 46) Methylester d. 4-Methyldiphenylessigsäure (B. 10, 997).
  - 47) Methylester d. 4-Methyldiphenylmethan-2'-Carbonsäure. Sm. 126° (A. 314, 239). — \*II, 871.
  - 48) Äthylester d. Diphenylessigsäure. Sm. 58—58,5°; Sd. 178°<sub>15</sub> (A. 171, 129; B. 38, 1737 C. 1905 [1] 1646; A. 356, 80 C. 1907 [2] 1701; B. 42, 3362 C. 1909 [2] 1430). — II, 1464.
  - 49) Phenylester d. 1-Isopropylbenzol-4-Carbonsäure. Sm. 57—58° (A. 92, 318; J. 1858, 406). — II, 1385.
  - 50) Benzylester d.  $\beta$ -Phenylpropionsäure. Sd. 290—300° (A. 193, 301; Am. 33, 94 C. 1905 [1] 611). — II, 1357.
  - 51) 4-Isopropylphenylester d. Benzolcarbonsäure. Sm. 70—71° (C. r. 141, 596 C. 1905 [2] 1536).
  - 52) 2,4-Dimethylbenzylester d. Benzolcarbonsäure. Sd. 332—333° (B. 22, 123). — II, 1147.
  - 53) 2,4,5-Trimethylphenylester d. Benzolcarbonsäure. Sm. 63° (J. pr. [2] 36, 8). — II, 1147.
  - 54) Acetat d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Fl. (A. 155, 65). — II, 1079.
  - 55) Acetat d.  $\beta$ -Oxy- $\beta$ -Methyldiphenylmethan. Sd. 245°<sub>34</sub> (J. 1878, 591). — II, 898.
  - 56) Acetat d.  $\beta$ -Oxy-1-[ $\beta$ -Methylbenzyl]benzol. Sd. 250° (J. 1879, 521). — II, 899.
  - 57) Acetat d. 3-Oxy- $\beta$ -Benzyl-1-Methylbenzol. Sm. 46,5° (G. 31 [1] 473).
  - 58) Phenylacetat d.  $\beta$ -Oxyäthylbenzol. Sm. 28°; Sd. 330° u. ger. Zers. (B. 33, 1722). — \*II, 813.
  - 59) Verbindung (aus  $\beta$ -Jod- $\alpha$ -Oxy- $\alpha$ -Phenyläthan). Sd. 195—197°<sub>18</sub> (C. r. 145, 812 C. 1908 [1] 42).
  - 60) Verbindung (aus  $\alpha\beta$ -Dioxyäthylbenzol). Sd. 260°<sub>50</sub> (A. 216, 298, 300; B. 11, 1402; C. r. 140, 1596 Ann. C. 1905 [2] 237). — II, 1097.
- C<sub>18</sub>H<sub>16</sub>O<sub>3</sub>**
- C 75,0 — H 6,2 — O 18,7 — M. G. 256.
  - 1) Monomethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropan. Sm. 74—75° (C. 1908 [2] 1024).
  - 2) Dimethyläther d.  $\alpha$ -Keto- $\alpha$ -[2,5-Dioxyphenyl]- $\beta$ -Phenyläthan. Sm. 49°; Sd. 226—227°<sub>16</sub> (A. 344, 65 C. 1906 [1] 1097).
  - 3) Dimethyläther d. 6,4'-Dioxy-3-Methyldiphenylketon. Sm. 69—70° (B. 40, 3517 C. 1907 [2] 1410).
  - 4) Dimethyläther d. 3,4-Dioxy- $\beta$ -Benzoyl-1-Methylbenzol. Fl. (G. 28 [2] 288). — \*III, 166.
  - 5) Dimethyläther d. 4-Oxyphenyl-4-Oxybenzylketon (Desoxyanisoin). Sm. 108—109° (95°; 109—111°) (A. 151, 40; 279, 339; Soc. 91, 542 C. 1907 [2] 66; B. 40, 1803 C. 1907 [1] 1748). — III, 227.
  - 6) 4-Äthyläther- $\alpha$ -Phenyläther d. Oxymethyl-4-Oxyphenylketon. Sm. 102°; Sd. 245—248°<sub>25</sub> (B. 35, 3565 C. 1902 [2] 1313).
  - 7) 2-Äthoxyphenyläther d. Oxymethylphenylketon. Sm. 81° (Bl. [4] 5, 505 C. 1909 [2] 21).
  - 8)  $\alpha$ -Oxy- $\alpha\beta$ -Diphenylbuttersäure. Sm. 134—136° (Soc. 71, 137). — \*II, 998.
  - 9)  $\gamma$ -Oxy- $\gamma\gamma$ -Diphenylbuttersäure. Sm. 145°. Ba (A. ch. [6] 22, 313). — II, 1701.
  - 10)  $\beta$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure (Dibenzyloxyessigsäure; Oxatolylsäure). Sm. 156—157°. Ba + 4H<sub>2</sub>O, Pb + 4H<sub>2</sub>O, Ag (A. 113, 69; 219, 45; 284, 285; B. 13, 2219; 14, 1687). — II, 1700.
  - 11)  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure. Sm. 137° (B. 32, 1111). — \*II, 998.
  - 12)  $\beta$ -Phenyl- $\alpha$ -[2-Methoxyphenyl]propionsäure. Sm. 93—94° (B. 42, 833 C. 1909 [1] 1164).
  - 13)  $\beta$ -Phenyl- $\beta$ -[2-Methoxyphenyl]propionsäure. Sm. 131° (B. 41, 335 C. 1908 [1] 835).
  - 14)  $\beta$ -Phenyl- $\beta$ -[4-Methoxyphenyl]propionsäure. Sm. 121,5—122,5°. Ag (C. r. 143, 914 C. 1907 [1] 478).



- $C_{16}H_{16}O_3$
- 15)  $\alpha$ -Oxydi[4-Methylphenyl]essigsäure. Sm. 131—132° (135°). Ba (C. r. 136, 1201 C. 1903 [2] 22; A. 347, 364 C. 1906 [2] 604; B. 39, 3589 C. 1907 [1] 36).
  - 16) 1-[ $\beta$ -Phenyläthyl]benzol-2-Oxyessigsäure (2-Dibenzylglykolsäure). Sm. 137° (B. 38, 944 C. 1905 [1] 1020).
  - 17)  $\alpha$ -Oxypropion-4-Benzylphenyläthersäure. Sm. 100—102°. Ba +  $H_2O$ , Pb +  $H_2O$  (B. 15, 1758; G. 12, 262). — II, 897.
  - 18) Oxyessig-[ $p$ -Methyl-4-Benzylphenyl]äthersäure. Sm. 109—111° (G. 11, 438). — II, 898.
  - 19)  $\alpha$ -Oxydiphenylessigäthyläthersäure (Äthylbenzilsäure) (A. 155, 100). — II, 1696.
  - 20) Säure (aus Reten). Sm. 139°. Na, Ba (A. 185, 109). — II, 1702.
  - 21)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\alpha\beta$ -Diphenylpropan- $\gamma$ -Carbonsäure. Sm. 127° (B. 35, 1942 C. 1902 [2] 120).
  - 22) Lakton d. isom.  $\alpha\gamma$ -Dioxy- $\alpha\beta$ -Diphenylpropan- $\gamma$ -Carbonsäure. Sm. 170° (B. 35, 1942 C. 1902 [2] 120).
  - 23) Aldehyd d. 3,4-Dioxybenzol-3-Äthyläther-4-Benzyläther-1-Carbonsäure. Sm. 57° (D. R. P. 85196). — \*III, 75.
  - 24) Äthylester d.  $\alpha$ -Oxydiphenylessigsäure. Sm. 34°; Sd. 201°<sub>21</sub> (A. 155, 82; B. 22, 1212, 1539; B. 37, 2766 C. 1904 [2] 708). — II, 1696.
  - 25) Äthylester d. 2-Oxydiphenylessigsäure. Sm. 104—106° (B. 31, 2813). — \*II, 995.
  - 26) Äthylester d.  $\alpha$ -Oxydiphenylmethan-4-Carbonsäure. Fl. (J. 1875, 599). — II, 1698.
  - 27) Äthylester d.  $\beta$ -[1-Naphtyl]propan- $\alpha\beta$ -Oxyd- $\alpha$ -Carbonsäure. Sd. 165 bis 170°<sub>4</sub> (C. r. 145, 1342 C. 1908 [1] 644).
  - 28) Äthylester d.  $\beta$ -[2-Naphtyl]propan- $\alpha\beta$ -Oxyd- $\alpha$ -Carbonsäure. Sd. 175—180°<sub>5</sub> (C. r. 145, 1343 C. 1908 [1] 644).
  - 29) Phenylester d.  $\alpha$ -Oxybutterphenyläthersäure. Sm. 48—49°; Sd. 202 bis 203°<sub>25</sub> (B. 39, 3833 C. 1907 [1] 92).
  - 30) Phenylester d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 24—26°; Sd. 194—195°<sub>16</sub> (B. 39, 3833 C. 1907 [1] 92).
  - 31) 2-Methylphenylester d. Oxyessig-2-Methylphenyläthersäure. Sm. 50—51° (D. R. P. 82105). — \*II, 423.
  - 32) Monacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 84° (A. 160, 190; 182, 274). — II, 1100.
  - 33) Monacetat d. Isohydrobenzoïn. Sm. 87—88° (A. 182, 282). — II, 1102.
  - 34) Monobenzoat d.  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropan +  $H_2O$  (B. 39, 2298 C. 1906 [2] 524).
- $C_{16}H_{16}O_4$
- 35) Benzoeat d. 1-Oxy-4-Keto-1,3,5-Trimethyl-1,4-Dihydrobenzol. Sm. 128,5° (B. 33, 3640). — \*III, 253.
  - 36) Verbindung (aus Anisaldehyd). Sm. 215° (Z. 1868, 644). — II, 1118. C 70,6 — H 5,9 — O 23,5 — M. G. 272.
  - 1) Methyläther d.  $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 54°; Sd. 312° (B. 36, 227 C. 1904 [1] 659).
  - 2) 4-Methyläther d.  $\beta\gamma$ -Dioxy- $\alpha$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropan. Sm. 90° (C. 1900 [2] 1015). — \*III, 168.
  - 3) 2,2'-Dimethyläther d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 101,5° (Soc. 79, 671). — \*III, 165.
  - 4) 4,4'-Dimethyläther d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (Anisoïn). Sm. 109—110° (A. 151, 33; B. 14, 327; 22, 377). — III, 227.
  - 5) Dimethyläther d.  $p$ -Dioxy- $p$ -Dimethylbiphenyldioxyd. Sm. 153° (B. 11, 1280; 31, 1335; A. 215, 162). — II, 955; \*II, 577.
  - 6) Dimethyläther d. 2',4',6'-Trioxy-4-Methyldiphenylketon. Sm. 138° (B. 27, 417). — III, 216.
  - 7) Trimethyläther d. 2,3,4-Trioxydiphenylketon. Sm. 55° (G. 27 [2] 22; M. 30, 536 C. 1909 [2] 1569). — \*III, 156.
  - 8) Trimethyläther d. 2,4,6-Trioxydiphenylketon (Methylhydrocotoïn). Sm. 115° (113°) (A. 199, 53; B. 24, 300; 25, 1120; 27, 419, 1497; C. 1896 [1] 312). — III, 203.
  - 9) Trimethyläther d. 3,4,3'-Trioxydiphenylketon. Sm. 98—99° (B. 39, 4026 C. 1907 [1] 263).
  - 10) 2,4-Dimethyläther- $\alpha$ -Phenyläther d. Oxymethyl-2,4-Dioxyphenylketon. Sm. 118,5°; Sd. 260—264°<sub>18</sub> (B. 35, 3565 C. 1902 [2] 1313).

- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>**
- 11) Dioxydimethyltetrahydro-9,10-Anthrachinon. Sm. 195—196° (*Ar.* 243, 454 *C.* 1905 [2] 1366).
  - 12) i-Benzoylhydrocoton. Sm. 115° (*A.* 276, 340). — III, 204.
  - 13) Peucedanin (Imperatorin). Sm. 81—82° (76°) (*J.* 1849, 475; 1854, 638; *A.* 5, 201; 174, 67; 176, 70; *M.* 19, 278). — III, 640.
  - 14)  $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Na, Ag (*B.* 31, 2227). — \*II, 1092.
  - 15) isom.  $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Na, Ag (*B.* 31, 2227). — \*II, 1092.
  - 16)  $\alpha\gamma$ -Dioxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure (Dioxydibenzylessigsäure). Sm. 188—190° (*Soc.* 59, 1001). — II, 1882.
  - 17)  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropion- $\alpha$ -[4-Methylphenyl]äthersäure. Sm. 122° (*B.* 38, 1967 *C.* 1905 [2] 133).
  - 18)  $\alpha$ -Äthoxyl-2-Oxydiphenylessigsäure. Sm. 131° u. Zers. (*B.* 30, 128). — \*II, 1090.
  - 19) Di[4-Methoxyphenyl]essigsäure. Sm. 110°. Ca + 2H<sub>2</sub>O, Ba + H<sub>2</sub>O (*A.* 306, 83). — \*II, 1089.
  - 20) Säure (aus Acetophenon). Sm. 99—101°. K, Ba + 3½H<sub>2</sub>O (*B.* 20, 389). — II, 1882.
  - 21) Äthylester d. Dioxyessigdiphenyläthersäure. Sd. 240°<sub>ss</sub> (*B.* 27, 2796). — \*II, 364.
  - 22) Äthylester d. 4-Oxynaphtalinäthyläther-1-Ketocarbonsäure. Sm. 83°; Sd. 240—245°<sub>10</sub> (*Bl.* [3] 17, 811). — \*II, 1088.
  - 23) Diäthylester d.  $\delta$ -Phenyl- $\alpha\gamma$ -Butenin- $\alpha$ -Dicarbonsäure. Fl. (*B.* 36, 3671 *C.* 1903 [2] 1313).
  - 24) Diäthylester d. Naphtalin-1,5-Dicarbonsäure. Sm. 123—124° (*G.* 26 [1] 97). — \*II, 1087.
  - 25) Diäthylester d. Naphtalin-1,8-Dicarbonsäure. Sm. 58—60° (*C.* 1906 [2] 669).
  - 26) 2-Methoxyphenylester d. Oxyessig-2-Methylphenyläthersäure. Sm. 81—82° (D.R.P. 85490). — \*II, 551.
  - 27) 2-Methoxyphenylester d. Oxyessig-4-Methylphenyläthersäure. Sm. 82—83° (D.R.P. 85490). — \*II, 551.
  - 28) 2-Methoxyphenylester d. 4-Oxybenzoläthyläther-1-Carbonsäure. Sm. 97° (D.R.P. 57941). — \*II, 906.
  - 29) 2-Methoxyl-4-Methylphenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 80—81° (D.R.P. 57941). — \*II, 919.
  - 30) 2-Methoxyl-4-Methylphenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 79—81° (D.R.P. 57941). — \*II, 920.
  - 31) 2-Methoxyl-4-Methylphenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 95° (D.R.P. 57941). — \*II, 922.
  - 32) Diacetat d. Podophylloresin. Sm. 198° (*Soc.* 73, 221). — \*III, 474.
  - 33) 4-Benzoat d. 3,4-Dioxy-1-[ $\alpha$ -Oxyäthyl]benzol-3-Methyläther. Sm. 128° (*Soc.* 93, 1521 *C.* 1908 [2] 1173).
  - 34) 5-Benzoat d. 3,4,5-Trioxy-1-Methylbenzol-3,4-Dimethyläther. Sm. 68° (*B.* 26, 2019). — II, 1152.
  - 35) Benzoat d. 2,4,6-Trioxy-1-Methylbenzol-2-Dimethyläther. Sm. 118° (*B.* 12, 1376). — II, 1152.
  - 36) 4-Methoxybenzoat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Sm. 91—92° (D.R.P. 57941). — \*II, 906.
  - 37) Verbindung (aus 1-Oxy-4-Keto-1,3-Dimethyl-1,4-Dihydrobenzol). Sm. 297—298° (*B.* 40, 1954 *C.* 1907 [2] 232).  
C 66,7 — H 5,5 — O 27,8 — M. G. 288.
- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>**
- 1) Methyläther d. Trioxymethyltetrahydro-9,10-Anthrachinon (Chrysopontin). Sm. 216° (*Ar.* 243, 451 *C.* 1905 [2] 1365; *Ar.* 245, 149 *C.* 1907 [1] 1803).
  - 2)  $\alpha$ -Oxydi[ $\beta$ -Methoxyphenyl]essigsäure (Anisilsäure). Sm. 164°. Ba (*B.* 14, 327). — II, 1970.
  - 3) Äthylester d. 3,5-Diketo-1-Phenylhexahydrobenzol-2-Ketocarbonsäure. Sm. 131° (*A.* 294, 290). — \*II, 1142.
  - 4) 2-Methoxyphenylester d. Oxyessig-2-Methoxyphenyläthersäure. Sm. 80° (D.R.P. 85490). — \*II, 552.
  - 5) Acetat d. Curcumin (*Am.* 6, 78). — III, 660.
  - 6) Acetat d. Rosocyanin (*Am.* 39, 710 *C.* 1908 [2] 513).

- C<sub>18</sub>H<sub>16</sub>O<sub>5</sub>**
- 7) Acetat d. Rubrocrocumin. Sm. 245° (*Am.* 39, 713 *C.* 1908 [2] 513).
  - 8) Diacetat d. 5,7-Dioxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran (*B.* 37, 1800 *C.* 1904 [1] 1612).
  - 9) Diacetat d. 7,8-Dioxy-4-Methylen-2,3-Dimethyl-1,4-Benzpyran. Sm. 148° (*B.* 37, 1799 *C.* 1904 [1] 1612).
- C<sub>18</sub>H<sub>16</sub>O<sub>6</sub>**
- 10) 5-Benzoat d. 1,2,3,5-Tetraoxybenzol-1,2,3-Trimethyläther. Sm. 117° (*C.* 1896 [2] 591). — \*II, 721.  
C 63,2 — H 5,2 — O 31,6 — M. G. 304.
  - 1) 2,4,6-Trimethyläther d. 2,4,6,3',4'-Pentaoxydiphenylketon (Coto-genin). Sm. 27° (*B.* 26, 783). — III, 208.
  - 2) isom. Trimethyläther d. 2,4,6,3',4'-Pentaoxydiphenylketon. Sm. 154—154,5° (*B.* 25, 1131). — III, 208.
  - 3) Tetramethyläther d. Tetraoxybiphenylchinon (Cörolignon, Cedriret) (*A.* 169, 221; *B.* 11, 335; 30, 238; 31, 615, 1334; *C.* 1906 [2] 247; *A.* 368, 276 *C.* 1909 [2] 1452). — II, 1042; \*II, 635.
  - 4) Anhydrokolatannin (*C.* 1898 [1] 579). — \*III, 497.
  - 5) Di[4,6-Dioxy-2-Methylphenyl]essigsäure (oder C<sub>23</sub>H<sub>24</sub>O<sub>8</sub>?). Sm. 252 bis 263° (*Soc.* 73, 399; *Am.* 9, 135). — II, 962; \*II, 1179.
  - 6) Acetyljangonasäure. Sm. 225° (*Ar.* 246, 361 *C.* 1908 [2] 889).
  - 7) Diacetoxynorcarencarbonsäure. Sm. 216° (*B.* 36, 3507 *C.* 1903 [2] 1274).
  - 8) Methylester d. Säure C<sub>15</sub>H<sub>14</sub>O<sub>8</sub> (aus β-Benzallävulinisäurem Natrium u. Natriummalonsäuremethylester). Sm. 172—173°. Na<sub>2</sub> (*A.* 341, 84 *C.* 1905 [2] 823).
  - 9) Äthylester d. 5-Keto-3-Acetyl-4,7-Dimethyl-5,8-Dihydro-1,2-Benzpyron-6-Carbonsäure? Sm. 168—169° (*Soc.* 91, 1802 *C.* 1908 [1] 245; *Soc.* 91, 1811 *C.* 1908 [1] 246).
  - 10) Diäthylester d. 1,4-Diketo-1,2,3,4-Tetrahydronaphtalin-2,3-Dicarbonsäure. Sm. 63° (*B.* 27, 113). — II, 2020.
  - 11) Acetat d. Purpurogallintrimethyläther. Sm. 140—143° (*Soc.* 83, 197 *C.* 1903 [1] 401, 639).
  - 12) Verbindung + ½ H<sub>2</sub>O (aus Acetaldehyd u. Pyrogallol) (*B.* 31, 145). — \*II, 613.  
C 60,0 — H 5,0 — O 35,0 — M. G. 320.
- C<sub>18</sub>H<sub>16</sub>O<sub>7</sub>**
- 1) Barbaloin + 1(3)H<sub>2</sub>O. Sm. 147° (*B.* 23 [2] 207; 33, 3213; *Bl.* [3] 17, 847; [3] 21, 670; [3] 23, 785, 793; *C.* 1898 [2] 118, 211, 582; *Soc.* 87, 878 *C.* 1905 [2] 487). — III, 618.
  - 2) Isobarbaloin + 3H<sub>2</sub>O (*C.* 1898 [2] 582; *Bl.* [3] 23, 787).
  - 3) Homovitexin. Sm. 245—246° (*Soc.* 73, 1028).
  - 4) Ugandaaloin (Capaloin). Sm. 138—139° (*C.* 1901 [2] 43).
  - 5) α-Naphtolglykuronsäure. Sm. 202—203° (*B.* 19, 1537). — II, 2049.
  - 6) β-Naphtolglykuronsäure + 2H<sub>2</sub>O. Sm. 150°. Ca + 4H<sub>2</sub>O (*B.* 19, 1536). — II, 2049.
  - 7) Purpurogallintetramethyläthersäure. Sm. 182—183° (*Soc.* 93, 1190 *C.* 1908 [2] 789).
  - 8) Purpurogallontetramethyläthersäure. Sm. 166—167° (*Soc.* 93, 1193 *C.* 1908 [2] 790).
  - 9) αγ-Lakton d. α-Oxy-α-[2,4-Dimethoxyphenyl]propen-γ-Carbonsäure-β-Ketocarbonsäureäthylester. Sm. 170° (*Soc.* 93, 507 *C.* 1908 [1] 1700).  
C 57,1 — H 4,8 — O 38,1 — M. G. 336.
- C<sub>18</sub>H<sub>16</sub>O<sub>8</sub>**
- 1) Aloinrot (*Ar.* 243, 407 *C.* 1905 [2] 1345).
  - 2) Methylxanthophansäure. Sm. 179° (*B.* 39, 2076 *C.* 1906 [2] 423).
  - 3) 1,1,6-Triacetat d. 4,5,6-Trioxy-2-Äthenyl-1-Dioxyethylbenzol-4,5-Methylenäther. Sm. 124° (*B.* 36, 1531 *C.* 1903 [2] 52).
  - 4) Verbindung (aus Methylxanthophansäure). Sm. 162° (*B.* 40, 3581 *C.* 1907 [2] 1745).  
C 52,2 — H 4,3 — O 43,5 — M. G. 368.
- C<sub>18</sub>H<sub>16</sub>O<sub>10</sub>**
- 1) Diäthylester d. 2,5-Diacetoxyl-1,4-Benzochinon-3,6-Dicarbonsäure. Sm. 174° u. Zers. (*B.* 22, 1287). — II, 2070.
  - 2) Pentaacetat d. Pentaoxybenzol. Sm. 165° u. Zers. (*B.* 37, 123 *C.* 1904 [1] 586).
- C<sub>18</sub>H<sub>16</sub>N<sub>2</sub>**
- 1) C 81,3 — H 6,8 — N 11,9 — M. G. 236.  
1) βγ-Di[Phenylimido]butan (Diacetyldianil). Sm. 139° (*B.* 21, 1415). — II, 447.



$C_{16}H_{16}N_2$ 

- 2)  $\alpha\beta$ -Di[Benzylidenamido]äthan. Sm. 53–54° (B. 20, 270). — III, 28.
- 3) 4,4'-Diamido-2,2'-Diäthylenbiphenyl. Sm. 124°. 2HCl (B. 26 [2] 677). — IV, 1018.
- 4) 4,4'-Diäthylidenamidobiphenyl (oder  $C_{16}H_{14}N_2$ ). (2HCl, PtCl<sub>4</sub>) (B. 11, 832; A. 258, 376). — IV, 967.
- 5)  $\beta$ -Benzyliden- $\alpha$ -Allyl- $\alpha$ -Phenylhydrazin. Sm. 52° (B. 22, 2237). — IV, 749.
- 6) Di[ $\alpha$ -Phenyläthyliden]hydrazin. Sm. 121° (127–128°); Sd. oberhalb 360° (J. pr. [2] 44, 167, 540; B. 34, 4301; A. 317, 193; B. 34, 4301 C. 1902 [1] 304; G. 31 [2] 560 C. 1902 [1] 481; J. pr. [2] 75, 432 C. 1907 [2] 252). — III, 130; \*III, 99.
- 7) Di[4-Methylbenzyliden]hydrazin. Sm. 154° (158°) (Bl. [3] 17, 368; B. 32, 1286; J. pr. [2] 62, 105; A. 347, 353 C. 1906 [2] 603). — \*III, 41.
- 8)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 156–157° (B. 17, 576; 20, 1099; M. 23, 916). — IV, 774; \*IV, 503.
- 9)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenyl- $\beta$ -Methylpropen. Sm. 137° (B. 19, 526). — IV, 755.
- 10)  $\beta$ -Diphenylmethylenhydrazonpropan (Diphenyldimethylazimethylen). Sm. 60,5° (J. pr. [2] 44, 205). — III, 187.
- 11)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Methylphenyl]propen. Sm. 145° (B. 36, 851 C. 1903 [1] 975). — \*IV, 489.
- 12) 1-Phenylhydrazon-1,2,3,4-Tetrahydronaphtalin. Sm. 84–85° u. Zers. (Soc. 75, 150). — \*IV, 503.
- 13) 2-Phenylhydrazon-1,2,3,4-Tetrahydronaphtalin. Sm. 107,5–108° (B. 27, 1548; A. 288, 115). — IV, 774.
- 14) 2-Isopropylidenhydrazidofluoren. Sm. 137–138° (B. 34, 1764). — \*IV, 667.
- 15) 1-Phenylhydrazon-2-Methyl-2,3-Dihydroinden. Sm. 116° (B. 23, 1889). — IV, 774.
- 16) 1-Phenylhydrazon-4-Methyl-2,3-Dihydroinden. Sm. 132° u. Zers. (B. 25, 2105). — IV, 774.
- 17) 1-Phenylhydrazon-6-Methyl-2,3-Dihydroinden. Sm. 133° u. Zers. (B. 25, 2105). — IV, 774.
- 18) 5-Methyl-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 109° (B. 18, 316). — IV, 886.
- 19) 3-Methyl-1,5-Diphenyl-4,5-Dihydropyrazol. Sm. 114°; Sd. bei 350° u. Zers. (B. 18, 934; 20, 1098; 26, 113 Anm.). — IV, 886.
- 20) 1-Phenyl-4-Benzylidentetrahydropyrazol. Sd. 280–290°<sub>10</sub> (A. 274, 326). — IV, 480.
- 21) 5-Methyl-1,2-Diphenyl-4,5-Dihydroimidazol. Sm. 65°; Sd. 192°<sub>12</sub>. (2HCl, PtCl<sub>4</sub>) (B. 28, 1667, 1669). — IV, 886.
- 22) 2-Methyl-4,5-Diphenyl-4,5-Dihydroimidazol. Sm. 162°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (B. 28, 3177). — IV, 978.
- 23) 3-Amido-1-Äthyl-2-Phenylindol. Pikrat (G. 36 [2] 60 C. 1906 [2] 1128).
- 24) 3-Äthylamido-2-Phenylindol. Pikrat (C. 1905 [2] 899).
- 25) 2,5-Dimethyl-1-Benzylbenzimidazol. Sm. 144°. (2HCl, PtCl<sub>4</sub>) (A. 273, 285). — IV, 883.
- 26) 2,5-Dimethyl-1-[4-Methylphenyl]benzimidazol. Sm. 94–95°. (2HCl, PtCl<sub>4</sub>) (B. 26, 187). — IV, 883.
- 27) ?-Dimethyl-2-[4-Methylphenyl]benzimidazol. Sm. 217°. HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (A. 205, 125; 210, 333). — IV, 1017.
- 28) 5-Methyl-1-Äthyl-2-Phenylbenzimidazol. (2HCl, PtCl<sub>4</sub>) (B. 26, 201). — IV, 1014.
- 29) 2-Methyl-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 104 bis 106° (J. pr. [2] 47, 361). — IV, 884.
- 30) 6-Methyl-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 158°. HCl + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Pikrat (J. pr. [2] 73, 209 C. 1906 [1] 1260).
- 31) Hexahydro- $\alpha$ -Naphtinolin +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 128° (wasserfrei) (B. 27, 2259). — IV, 1018.
- 32) Base (aus 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin). Sm. noch nicht bei 250° (Soc. 85, 532 C. 1904 [1] 1525).
- 33) Nitril d.  $\gamma$ -[1-Naphtyl]imidopentan- $\beta$ -Carbonsäure. Sm. 70°; Sd. 425–430° (Bl. [3] 1, 552). — II, 611.

- C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>** 34) Nitril d.  $\gamma$ -[2-Naphtyl]imidopentan- $\beta$ -Carbonsäure. Sm. 116°. — II, 624.
- 35) Nitril d.  $\alpha$ -Äthylphenylamido- $\alpha$ -Phenyllessigsäure. Fl. (B. 35, 3358 C. 1902 [2] 1196).
- 36) Verbindung (aus 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin) (C. 1904 [1] 677).
- C<sub>16</sub>H<sub>16</sub>N<sub>4</sub>** C 72,7 — H 6,1 — N 21,2 — M. G. 264.
- 1)  $\alpha\delta$ -Di[Phenylhydrazon]- $\beta$ -Buten. Sm. 236—237° u. Zers. (C. r. 134, 906 C. 1902 [1] 1272). — \*IV, 490.
- 2) 5-[4-Methylphenyl]amido-1-[4-Methylphenyl]-4,5-Dihydro-1,3,4-Triazol. Sm. 224° (B. 33, 1073). — \*IV, 897.
- 3) 5-Phenylhydrazon-2-Phenyl-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. 173—175° (B. 25, 1566). — IV, 767.
- 4) 5,6-Dimethyl-2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin. Sm. 169° u. Zers. (B. 21, 2755). — IV, 1307.
- 5) 3,6-Dibenzyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 158—160° (B. 30, 1888; 31, 312; A. 298, 22). — IV, 1290.
- 6) 3,6-Di[4-Methylphenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 235° u. Zers. (B. 27, 3285; A. 298, 14). — IV, 1290.
- 7) 1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 141°. HCl (Soc. 57, 52). — IV, 1234.
- 8) 1,4-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 185°. HCl (Soc. 55, 247; 57, 50). — IV, 1234.
- 9) 3,6-Dibenzyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 162°. HCl, HNO<sub>3</sub> (B. 30, 1888; A. 298, 22). — IV, 1290.
- 10) 3,6-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 295°. (2HCl, 2AuCl<sub>3</sub>) (B. 27, 3287; A. 298, 15). — IV, 1291.
- 11) 6-[4-Dimethylamidobenzyliden]amidoindazol. Sm. 198—199° (B. 37, 2581 C. 1904 [2] 659).
- 12) 3-[2,4-Dimethylphenyl]azo-5-Methylindazol. Sm. 228—229° (A. 305, 365). — \*IV, 1081.
- 13) Base (aus Formaldehyd u. 1,2-Diamidobenzol). Sm. 144°. 2HCl (B. 25, 2712). — IV, 563; \*IV, 367.
- C<sub>16</sub>H<sub>16</sub>N<sub>6</sub>** C 65,7 — H 5,5 — N 28,8 — M. G. 292.
- 1)  $\alpha\beta$ -Di[Imidoamidomethylimido]- $\alpha\beta$ -Diphenyläthan (Benzildiguanyl). (2HCl, PtCl<sub>4</sub>) (B. 19, 763). — III, 284.
- 2)  $\alpha\beta$ -Di[ $\alpha$ -Imidobenzylhydrazon]äthan (Glyoxalendibenzonylhydrazidin). Sm. bei 220° u. Zers. (B. 27, 995; A. 297, 247). — II, 1213; \*II, 761.
- 3) Benzalcarbohydrazimin (s-Dibenzylidendihydrazidodiimidoäthan). Sm. 218° (J. pr. [2] 50, 254). — IV, 1330.
- 4) 3,6-Di[4-Amidobenzyl]-1,2,4,5-Tetrazin. Sm. 166° (B. 35, 3939 C. 1903 [1] 39). — \*IV, 993.
- 5) 2,2'-Bi[5-Amido-7-Methylbenzimidazol]. Sm. oberhalb 300° (D.R.P. 74058). — \*IV, 994.
- C<sub>16</sub>H<sub>16</sub>Cl<sub>2</sub>** 1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Methylphenyl]äthan. Sm. 80° (A. 279, 334). — \*II, 115.
- C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>** 1)  $\beta\gamma$ -Dibrom- $\alpha\delta$ -Diphenylbutan. Sm. 83° (87—87,5°) (B. 23, 2858; A. 342, 254 C. 1905 [2] 1790). — II, 240.
- 2)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3-Methylphenyl]äthan. Sm. 167—168° (R. 21, 456 C. 1903 [1] 503).
- 3)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 207—209° (203°) (B. 6, 1505; 18, 1948). — II, 251.
- 4) Distyroidibromid. Sm. 238° (B. 22, 2256). — II, 241.
- 5) isom. Distyroidibromid. Sm. 102° (A. 216, 190). — II, 165.
- 6) isom. Distyroidibromid (A. 135, 122).
- C<sub>16</sub>H<sub>16</sub>S** 1) Äthyläther d.  $\alpha$ -Merkapto- $\alpha\beta$ -Diphenyläthen. Sd. 190—200°<sub>16</sub> (A. 329, 51 Anm. C. 1903 [2] 1448).
- 2) Distyrolsulfid. Sm. 150—151° (J. 1880, 404). — II, 1098.
- C<sub>16</sub>H<sub>16</sub>S<sub>2</sub>** 1) Cyklodi-o-Xylylendisulfid (Disulfid d. 1,2-Di[Merkaptomethyl]benzol). Sm. 234—236° (B. 36, 186 C. 1903 [1] 467).
- 2)  $\alpha$ -Phenyläthylendäther d. 1,2-Di[Merkaptomethyl]benzol. Sm. 126° (B. 35, 1395 C. 1902 [1] 1096). — \*III, 98.
- 3) Diphenylmethylenäther d.  $\alpha\gamma$ -Dimerkaptopropan (2,2-Diphenyl-R-Tetramethylen-1,3-Disulfid). Sm. 110° (B. 32, 1387). — \*III, 146.

$C_{16}H_{16}S_2$ 

- 4) Di[1,3-Dimethylphenylen]-4,5-Disulfid. Sm. 118° (B. 22, 910). — II, 968.

 $C_{16}H_{17}N$ 

C 86,1 — H 7,6 — N 6,3 — M. G. 223.

- 1)  $\alpha$ -Amido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (M. 25, 438 C. 1904 [2] 336).
  - 2) 4-Dimethylamido- $\alpha\alpha$ -Diphenyläthen. Sm. 56° (47°); Sd. 202°<sub>14</sub> (B. 40, 3902 C. 1907 [2] 1516; C. r. 149, 349 C. 1909 [2] 1450).
  - 3)  $\beta$ -[4-Dimethylamidophenyl]- $\alpha$ -Phenyläthen. Sm. 147—148° (B. 38, 515 C. 1905 [1] 736).
  - 4) Allylphenylimidomethyl-1-Isopropylbenzol (Cuminalanilin). Sd. 215—225°<sub>42</sub>. HCl (B. 32, 521). — \*II, 291.
  - 5) 4-[4-Äthylbenzyliden]amido-1-Methylbenzol. Sm. 49° (C. r. 136, 558 C. 1903 [1] 832).
  - 6) 4-Phenylimidomethyl-1-Isopropylbenzol (Cuminalanilin). Sd. 206 bis 207°<sub>15</sub> (B. 31, 2615 Anm.). — \*III, 43.
  - 7) 5-Phenylimidomethyl-1,2,4-Trimethylbenzol. Sm. 62°; Sd. 206°<sub>10</sub> (Bl. [3] 17, 370). — \*III, 44.
  - 8) 2-Phenylimidomethyl-1,3,5-Trimethylbenzol. Sm. 48—49° (56°); Sd. 202°<sub>10</sub> (Bl. [3] 17, 372; B. 34, 831). — \*III, 44.
  - 9) 1-Benzylamido-2,3-Dihydroinden. HCl,  $\alpha$ -Bromcamphersulfonat (2isom. Formen), Pikrat (Soc. 79, 434).
  - 10)  $\alpha$ -[4-Isopropylphenyl]- $\beta$ -[2-Pyridyl]äthen. Sm. 47°. (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Pikrat (B. 34, 1895). — \*IV, 240.
  - 11)  $\alpha$ -[4-Isopropylphenyl]- $\beta$ -[4-Pyridyl]äthen. Sm. 65—67° (HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (B. 39, 2835 C. 1906 [2] 1326).
  - 12)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Äthyl-2-Pyridyl]äthen. Sm. 94°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (B. 38, 3705 C. 1906 [1] 51).
  - 13) 2-[2-Methylbenzyl]-1,3-Dihydroisindol. Fl. HCl (B. 31, 1158). — \*IV, 140.
  - 14) 1-Benzyl-1,2,3,4-Tetrahydrochinolin. Sm. 36—37°; Sd. 218—222°<sub>33</sub> (B. 35, 185 C. 1902 [1] 429). — \*IV, 142.
  - 15) 1-Methyl-2-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 106—107° (B. 37, 4670 C. 1905 [1] 382).
  - 16) 1-Methyl-4-Phenyl-1,2,3,4-Tetrahydrochinolin. Fl. Pikrat (Sm. 222 bis 224°) (B. 28, 1043). — IV, 400.
  - 17) 1-Methyl-6-Phenyl-1,2,3,4-Tetrahydrochinolin. HCl, HJ, Pikrat (A. 230, 24). — IV, 400.
  - 18) 2-Methyl-4-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 66—67°. HCl (B. 28, 1044; D.R.P. 79385). — IV, 401; \*IV, 240.
  - 19) 2-Benzyl-1,2,3,4-Tetrahydroisochinolin. Sd. 194—197°<sub>18</sub>. (2HCl, PtCl<sub>4</sub>), Oxalat (B. 34, 3990 C. 1902 [1] 210; B. 36, 1162 C. 1903 [1] 1186). — \*IV, 144.
  - 20) 2-Methyl-1-Phenyl-1,2,3,4-Tetrahydroisochinolin + H<sub>2</sub>O. Sm. 120 bis 130° (B. 42, 1761 C. 1909 [2] 37).
  - 21) 4-Methyl-1-Isopropylcarbazol. Sm. 86°. Pikrat (A. 359, 78 C. 1908 [1] 1551).
  - 22) 1,3,4,7-Tetramethylcarbazol. Sm. 153°. Pikrat (A. 359, 78 C. 1908 [1] 1551).
  - 23) 1,3,6,8-Tetramethylcarbazol. Sm. 128—129°. Pikrat (B. 28, 2803). — IV, 401.
  - 24) 10-Methyl-5-Äthyl-5,10-Dihydroakridin. Sm. 70—73° (B. 42, 1755 C. 1909 [2] 36).
- C 76,5 — H 6,8 — N 16,7 — M. G. 251.
- 1) 2-[2-Amidobenzyliden]amido-1-Äthylimidomethylbenzol. Sm. 152 bis 153,5°. 2HCl (B. 37, 3656 C. 1904 [2] 1514).
  - 2) 4-Dimethylamidophenyl-2-Cyanbenzylamin. Sm. 135°. HCl + 3H<sub>2</sub>O (J. pr. [2] 80, 109 C. 1909 [2] 1328).
  - 3) 4-Dimethylamidophenyl-4-Cyanbenzylamin. Sm. 183° (J. pr. [2] 80, 111 C. 1909 [2] 1329).
  - 4)  $\gamma$ -Phenylhydrazon- $\alpha$ -[3-Amidophenyl]- $\beta$ -Methylpropen. Sm. 157° (B. 19, 1249). — IV, 755.
  - 5) 1-[1,2,3,4-Tetrahydro-1-Naphthyl]amidodiazobenzol. Pikrat (B. 22, 966). — IV, 1574.
  - 6) 1-[1,2,3,4-Tetrahydro-2-Naphtyl]amidodiazobenzol. Pikrat (B. 21, 1112). — IV, 1574.

 $C_{16}H_{17}N_3$



- C<sub>16</sub>H<sub>17</sub>N<sub>3</sub>** 7) *p*-Phenylazo-5-Amido-1,2,3,4-Tetrahydronaphtalin (*B.* 22, 626, 2069). — IV, 1389.  
 8) 3,5-Di[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol (*p*-Ditolenylimidin). Sm. 161°. HCl + H<sub>2</sub>O, (HCl, AuCl<sub>3</sub>) (*B.* 27, 3290; *A.* 298, 18). — IV, 1185.  
 9) 6-Methyl-1-[4-Dimethylamidophenyl]benzimidazol. Sm. 110—111° (*Soc.* 65, 883). — IV, 1184.  
 10) 8-Phenylazo-6-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 74,5° (*B.* 24, 2069). — IV, 1484.  
 11) 4,6-Dimethyl-2-[2,4-Dimethylphenyl]-2,1,3-Benzotriazol. Sm. 83—85° (*B.* 21, 544). — IV, 1151.  
 12) Nitril d.  $\gamma\gamma$ -Di[Phenylamido]buttersäure. Sm. 102—103° (*A. ch.* [6] 16, 159). — II, 444.  
 13) Nitril d.  $\alpha$ -[4-Dimethylamidophenyl]amido- $\alpha$ -Phenylessigsäure. Sm. 106° (*B.* 34, 502; *B.* 35, 3343 *C.* 1902 [2] 1194). — \*IV, 390.  
 14) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -[4-Dimethylamidophenyl]essigsäure. Sm. 114° (*B.* 35, 3572 *C.* 1902 [2] 1384).  
**C<sub>16</sub>H<sub>17</sub>N<sub>5</sub>** C 68,8 — H 6,1 — N 25,1 — M. G. 279.  
 1) 2,4,2',4'-Tetramethyl-5-Diazoazobenzolimid. Sm. 77° (*B.* 21, 542). — IV, 1533.  
**C<sub>16</sub>H<sub>17</sub>N<sub>7</sub>** C 62,5 — H 5,5 — N 31,9 — M. G. 307.  
 1) 3-Amido-4-[*p*-Dimethylamidophenyl]azo-1-Phenyl-1,2,5-Triazol. Sm. 243° u. Zers. (*A.* 295, 151). — IV, 1314.  
**C<sub>16</sub>H<sub>17</sub>Cl** 1)  $\alpha$ -Chlor- $\alpha\alpha$ -Diphenylbutan. Fl. (*B.* 37, 1451 *C.* 1904 [1] 1352).  
 2)  $\beta$ -Chlor- $\alpha\alpha$ -Di[4-Methylphenyl]äthan (*B.* 7, 1413). — II, 239.  
**C<sub>16</sub>H<sub>17</sub>J<sub>3</sub>** 1) *p*-Jod-2-Methylphenyl-4-Äthylphenyljodoniumjodid. Sm. 90° (*A.* 327, 296 *C.* 1903 [2] 352).  
 2) *p*-Joddi[2,4-Dimethylphenyl]jodoniumjodid (*B.* 33, 848). — \*II, 43.  
 3) *p*-Joddi[3,5-Dimethylphenyl]jodoniumjodid. Sm. 125° (*B.* 38, 1478 *C.* 1905 [1] 1379).  
**C<sub>16</sub>H<sub>18</sub>O** C 85,0 — H 7,9 — O 7,1 — M. G. 226.  
 1)  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylbutan. Sm. 65°; Sd. 185°<sub>15</sub> (*C. r.* 135, 534 *C.* 1902 [2] 1209; *B.* 37, 1451 *C.* 1904 [1] 1352).  
 2)  $\beta$ -Oxy- $\alpha\beta$ -Diphenylbutan. Sd. 179°<sub>14</sub> (*B.* 37, 1452 *C.* 1904 [1] 1352).  
 3)  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Äthylphenyl]äthan. Sd. oberhalb 350° (*B.* 15, 1681). — II, 1081.  
 4)  $\alpha$ -Oxy- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 148° (*A.* 279, 336). — II, 1081.  
 5) *p*-Oxy-4-Isopropyldiphenylmethan. Sd. 300°<sub>30</sub> (*J.* 1875, 438). — II, 899.  
 6)  $\alpha$ -Oxy-2,4,6-Trimethyldiphenylmethan. Sm. 34° (*A. ch.* [6] 6, 209). — II, 1081.  
 7) Äther d.  $\alpha$ -Oxyäthylbenzol. Sd. 335—340° (*G.* 37 [2] 360 *C.* 1908 [1] 32).  
 8) 3-Methyl-6-Isopropyldiphenyläther. Sd. 297°<sub>76</sub> (*A.* 350, 89 *C.* 1907 [1] 159).  
 9) Methyläther d.  $\alpha$ -Phenyl- $\alpha$ -[*p*-Oxy-*p*-Methylphenyl]äthan. Sm. 63° (*B.* 24, 3899). — II, 899.  
 10) Benzyläther d. 5-Oxy-1,2,4-Trimethylbenzol. Sm. 45° (*A.* 357, 93 *C.* 1907 [2] 1974).  
 11) 4-Keto-3-Benzyliden-1,1,5-Trimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 54—55° (*A.* 324, 105 *C.* 1902 [2] 1200).  
 12) Benzyliden- $\pi$ -Norcampher. Sd. 182—184°<sub>10</sub> (*B.* 41, 126 *C.* 1908 [1] 635).  
 13) Benzylidennopinon. Sm. 106—107° (*C.* 1899 [2] 1052; *A.* 313, 365). — \*III, 143.  
**C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>** C 79,3 — H 7,4 — O 13,2 — M. G. 242.  
 1)  $\alpha\alpha$ -Di[4-Oxyphenyl]butan. Sm. 136° (*C.* 1908 [2] 589).  
 2)  $\beta\beta$ -Di[4-Oxyphenyl]butan. Sm. 124—125° (*A.* 362, 205 *C.* 1908 [2] 942).  
 3)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylbutan. Sm. 115—116° (117°) (*Am.* 33, 193 *C.* 1905 [1] 880; *C. r.* 143, 127 *C.* 1906 [2] 670; *C.* 1909 [1] 1336).  
 4)  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenylbutan. Sm. 93—94° (*B.* 28, 3034). — \*II, 674.  
 5)  $\gamma\delta$ -Dioxy- $\alpha\delta$ -Diphenylbutan. Sm. 125° (*A.* 342, 254 *C.* 1905 [2] 1790).

$C_{16}H_{18}O_2$ 

- 6)  $\beta\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbutan (Acetophenonpinakon). Sm. 120° (122°) (B. 4, 147; 6, 1005; 10, 1714; 13, 643; 33, 2912; 34, 1538; C. 1902 [2] 1199). — II, 1103; \*II, 674.
- 7)  $\alpha\gamma$ -Dioxy- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropan. Sm. 98—99° (Soc. 79, 930).
- 8) 2,2'-Dioxy-3,5,3',5'-Tetramethylbiphenyl. Sm. 137,5—138° (B. 40, 1927 C. 1907 [2] 230; B. 40, 1952 C. 1907 [2] 232).
- 9) 4,4'-Dioxy-3,5,3',5'-Tetramethylbiphenyl. Sm. 220—221° (B. 38, 234 C. 1905 [1] 613).
- 10) Dimethyläther d.  $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 59,4°; Sd. 352 bis 354°<sub>767</sub> (C. 1904 [1] 1650).
- 11) Dimethyläther d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 125° (A. 345, 329 C. 1906 [1] 1696; B. 39, 2235 C. 1906 [2] 441).
- 12) Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 140—142° (Soc. 91, 1390 C. 1907 [2] 1244).
- 13) Dimethyläther d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 145,5° (Am. 31, 121 C. 1904 [1] 809).
- 14)  $\beta$ -Äthyläther d.  $\alpha\beta$ -Dioxy- $\alpha\alpha$ -Diphenyläthan. Sd. 209—210°<sub>29</sub> (C. r. 138, 91 C. 1904 [1] 505; Bl. [3] 31, 304 C. 1904 [1] 1133; C. 1907 [1] 872; B. 37, 2292 C. 1906 [2] 523).
- 15) Diäthyläther d. 2,2'-Dioxybiphenyl. Sm. 36—37° (A. 357, 383 C. 1908 [1] 359).
- 16) Diäthyläther d. 4,4'-Dioxybiphenyl. Sm. 174—176° (176°) (B. 22, 336; A. 332, 68 C. 1904 [2] 42). — II, 988.
- 17) Diphenyläther d.  $\alpha\delta$ -Dioxybutan. Sm. 98° (99°) (C. r. 138, 1048 C. 1904 [1] 1493; B. 39, 4361 C. 1907 [1] 328).
- 18) Di[2-Methylphenyläther] d.  $\alpha\alpha$ -Dioxyäthan. Sm. 12°; Sd. 180—185°<sub>27</sub> (Bl. [3] 23, 517). — \*II, 423.
- 19) Di[4-Methylphenyläther] d.  $\alpha\alpha$ -Dioxyäthan. Sm. 15—17°; Sd. 200 bis 204°<sub>27</sub> (Bl. [3] 23, 518). — \*II, 433.
- 20) Di[2-Methylphenyl]äther d.  $\alpha\beta$ -Dioxyäthan. Sm. 89° (A. 217, 42). — II, 737.
- 21) Di[3-Methylphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 91° (A. 357, 378 C. 1908 [1] 358).
- 22) Di[4-Methylphenyl]äther d.  $\alpha\beta$ -Dioxyäthan. Sm. 134,5°; Sd. 297° (B. 2, 625; 24, 196). — II, 748.
- 23) Phenyläther-2,4-Dimethylphenyläther d.  $\alpha\beta$ -Dioxyäthan. Sm. 76 bis 77° (B. 29, 2403). — \*II, 443.
- 24) l-Amylester d. Naphtalin-1-Carbonsäure. Sd. 222°<sub>25</sub> (Ph. Ch. 20, 581). — \*II, 864.
- 25) l-Amylester d. Naphtalin-2-Carbonsäure. Sd. 265°<sub>100</sub> (Ph. Ch. 20, 582). — \*II, 865.
- 26) Verbindung (aus Cuminol) (A. 137, 104). — III, 55.
- 27) Verbindung (aus Camphersäure u. Benzol). Fl. (B. 27 [2] 670).

 $C_{16}H_{18}O_3$ 

- C 74,4 — H 7,0 — O 18,6 — M. G. 258.
- 1) 2,5-Dimethyläther d.  $\alpha,2,5$ -Trioxy- $\alpha\alpha$ -Diphenyläthan. Sm. 65° (A. 344, 58 C. 1906 [1] 1097).
- 2) 4,4'-Dimethyläther d.  $\alpha,4,4'$ -Trioxy- $\alpha\beta$ -Diphenyläthan. Sm. 170° (A. 279, 340). — II, 1114.
- 3) Trimethyläther d. 2,4,6-Trioxydiphenylmethan. Sm. 91—93° (B. 40, 722 C. 1907 [1] 967).
- 4)  $\alpha$ -Phenyläther- $\gamma$ -(4-Methylphenyl)äther d.  $\alpha\beta\gamma$ -Trioxypropan (Glycerinphenyl-p-Tolyläther). Sm. 73,5—76° (Soc. 79, 1225).
- 5) Methylster d. Artemisinsäure. Fl. (C. 1903 [2] 1377).
- 6) Äthylester d.  $\alpha$ -Oxybutter-1-Naphtyläthersäure. Sd. 190—194°<sub>5</sub> (B. 33, 1388). — \*II, 504.
- 7) Äthylester d.  $\alpha$ -Oxybutter-2-Naphtyläthersäure. Sd. 200—203°<sub>12</sub> (B. 33, 1390). — \*II, 522.
- 8) Äthylester d.  $\alpha$ -Oxyisobutter-1-Naphtyläthersäure. Sd. 190—193°<sub>5</sub> (B. 33, 1388). — \*II, 504.
- 9) Äthylester d.  $\alpha$ -Oxyisobutter-2-Naphtyläthersäure. Sd. 195—200°<sub>5</sub> (B. 33, 1391). — \*II, 522.
- 10) Äthylester d.  $\epsilon$ -Keto- $\alpha$ -Phenyl- $\alpha\gamma$ -Heptadien- $\eta$ -Carbonsäure. Sm. 82° (B. 33, 1118 C. 1905 [1] 1241).

- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>**
- 11) Äthylester d. 4-Keto-6-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sm. 40—55° (A. 342, 352 C. 1905 [2] 1791).
  - 12) Äthylester d. isom. 4-Keto-6-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Fl. (A. 342, 354 C. 1905 [2] 1791).
  - 13) Äthylester d. 4-Keto-6-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 94° (B. 27, 2058; A. 342, 353 Anm. C. 1905 [2] 1791). — II, 1693.
  - 14) Acetat d. Verb. C<sub>14</sub>H<sub>16</sub>O<sub>2</sub> (aus Anethol). Sm. 40° (B. 13, 148). — II, 852.
  - 15) 3-Valerianat d. 2,3-Dioxynaphtalin-2-Methyläther. Sm. 76° (J. pr. [2] 65, 536 C. 1902 [2] 368).
  - 16) Verbindung (aus Anethol). Sm. 87° (B. 13, 147). — II, 852.
  - 17) Verbindung (aus Guajakonsäure). Sm. 133° (Ar. 244, 102 C. 1906 [1] 1891).
  - 18) Verbindung (aus 1,2-Di[Oxymethyl]benzol). Fl. (B. 19, 1540). — II, 1096.
- C<sub>16</sub>H<sub>18</sub>O<sub>4</sub>**
- C 70,1 — H 6,5 — O 33,4 — M. G. 274.
- 1) Phtalylpinakon ( $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[2-Oxymethylphenyl]äthan). Sm. 197° (B. 10, 1448). — II, 1557.
  - 2) Dimethyläther d. s-Di[2,5-Dioxy-1-Methyl]-p-Biphenyl. Sm. 173° (A. 215, 161; B. 11, 1281). — II, 955.
  - 3)  $\alpha\beta$ -Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 220° u. Zers. (A. 335, 173, 186 C. 1904 [2] 1129).
  - 4)  $\alpha\beta$ -Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (A. 335, 174 C. 1904 [2] 1129).
  - 5) 2,2'-Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 153—154° (Soc. 91, 539 C. 1907 [2] 66).
  - 6) 4,4'-Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (Hydranisoïn). Sm. 172° (174°; 168°) (A. 151, 38; B. 34, 1539; Z. 1867, 678; 1868, 643; Soc. 89, 1515 C. 1907 [1] 340; Soc. 91, 543 C. 1907 [2] 66). — II, 1118; \*II, 700.
  - 7) 4,4'-Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (Isohydranisoïn). Sm. 109° (110°; 125°) (A. 151, 42; Z. 1867, 679; 1868, 644; B. 37, 1677 C. 1904 [1] 1522; Soc. 89, 1515 C. 1907 [1] 340). — II, 1118.
  - 8) 3,3'-Dimethyläther d.  $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 158° (A. 345, 328 C. 1906 [1] 1696).
  - 9) 2,4,6-Trimethyläther d.  $\alpha,2,4,6$ -Tetraoxydiphenylmethan. Sm. 124 bis 126° (B. 39, 4017 C. 1907 [1] 261).
  - 10) Tetramethyläther d. 2,5,2',5'-Tetraoxybiphenyl. Sm. 104° (A. 332, 68 C. 1904 [2] 42).
  - 11) Di[2-Methoxyphenyl]äther d.  $\alpha\beta$ -Dioxyäthan. Sm. 138—139° (130°) (C. 1896 [1] 543; 1897 [2] 481; D.R.P. 83148; J. 1890, 1197; A. 357, 381 C. 1908 [1] 358). — \*II, 547.
  - 12) Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Keto-1,4-Dihydrophenyl]äthan. Sm. 82° (A. 335, 172 C. 1904 [2] 1129).
  - 13)  $\beta\eta$ -Diketo- $\delta\epsilon$ -Di[2-Furanyl]oktan. Sm. 123—124° (B. 32, 1321). — \*III, 522.
  - 14) 5-Isopropyl-2-Methyl-1,4-Benzochinonhydrochinonhemiacetal. Sm. 136—137° (138°) (Am. 18, 20; A. ch. [7] 21, 552). — III, 365; \*III, 271.
  - 15) Methyl ester d. 2,6-Diketo-1,3-Dimethyl-4-Phenylhexahydrobenzol-5-Carbonsäure. Sm. 185° (A. 294, 297). — \*II, 1086.
  - 16) Äthylester d.  $\gamma$ -Acetyl- $\delta$ -Keto- $\beta$ -Phenyl- $\alpha$ -Penten- $\alpha$ -Carbonsäure. Sd. 193—195°<sub>10</sub> (Soc. 75, 415). — \*II, 1085.
  - 17) Diäthylester d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta\delta$ -Dicarbonsäure. Sm. 36° (A. 306, 253). — \*II, 1083.
  - 18) Verbindung (aus Orcin). Sm. 135° (B. 27, 2894). C 66,2 — H 6,2 — O 27,6 — M. G. 290.
  - 1) Di[6-Oxy-3-Oxymethylbenzyl]äther. Zers. bei 150° (C. 1898 [2] 18).
  - 2) Äthylester d. 6-Oxy-4-Keto-2-[4-Methoxyphenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 160°. Na (A. 294, 294). — \*II, 1138.
  - 3) Äthylester d. 4-Oxy-7-Methyl-1,2-Benzpyron-4-Propyläther-3-Carbonsäure. Sm. 112° (A. 367, 226 C. 1909 [2] 1236).
- C<sub>16</sub>H<sub>18</sub>O<sub>5</sub>**



$C_{18}H_{18}O_6$ 

C 62,7 — H 5,9 — O 31,4 — M. G. 306.

- 1) 3,3'-Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 222—225° u. Zers. (B. 8, 1125). — II, 1124.
- 2) Tetramethyläther d.  $\alpha$ -Hexaoxybiphenyl (Hydrocoerulignon). Sm. 190°.  $Na_2$ ,  $K_2$  +  $4H_2O$  (A. 169, 226; B. 11, 1623; 31, 616 Anm.). — II, 1041; \*II, 634.
- 3)  $\alpha$ -Naphtolgalaktosid. Sm. 202—203° (Soc. 79, 705).
- 4)  $\beta\beta$ -Naphtolglykosid. Sm. 184—186° (186—187°) (Soc. 75, 1055; B. 34, 964). — \*II, 521.
- 5) Cedron? Sm. bei 305°.  $K_2$  +  $3H_2O$  (M. 20, 781). — \*II, 623.
- 6) Crocin +  $\frac{1}{2}H_2O$ . Pb (Z. 1867, 555). — III, 602.
- 7) Homohydroquercinsäure (A. 263, 122). — III, 681.
- 8)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\alpha$ -Benzoxyl- $\beta\beta$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure- $\alpha$ -Monomethylester. Sd. 200°<sub>20</sub> (B. 27, 2135; 28, 2162).
- 9) Diäthylester d.  $\alpha$ -Benzoxylpropen- $\beta\gamma$ -Dicarbonsäure. Sm. 57—58° (A. 363, 351 C. 1909 [1] 154).
- 10) Diäthylester d. 1,4-Phthalylidessigsäure. Sm. 70° (J. pr. [2] 74, 126 C. 1906 [2] 1122).
- 11) Diacetat d. Podophylloresin. Sm. 198° (Soc. 73, 221).

 $C_{18}H_{18}O_7$ 

C 59,6 — H 5,6 — O 34,8 — M. G. 322.

- 1) Aloin (Feroxaloin). Sm. 142° (Ar. 241, 341 C. 1903 [2] 725).
- 2) Barbaloin (B. 8, 1600; J. 1872, 481, 482; 1876, 873). — III, 618.
- 3) Nataloin (Methyläther d. Homonataloin). Sm. 202—204° (C. 1899 [2] 211; 1901 [1] 1318; Bl. [3] 23, 790; Ar. 241, 352 C. 1903 [2] 726).
- 4) Trimethylester d. Benzol-1-Carbonsäure-3-Ketocarbonsäure-4-[Isopropyl- $\alpha$ -Carbonsäure] (Tr. d. Iregenontricarbonsäure). Sm. 127—128° (B. 26, 2685). — II, 2048.

 $C_{18}H_{18}O_8$ 

C 56,8 — H 5,3 — O 37,9 — M. G. 338.

- 1) Acromelol. Sm. 134° (J. pr. [2] 76, 42 C. 1907 [2] 1083).
- 2)  $\beta\zeta$ -Diketo- $\delta$ -[3,4-Dioxyphenyl]heptan-3-Methyläther- $\gamma\epsilon$ -Dicarbonsäure (Vanillylidenbisacetessigsäure). Sm. 127—128° (B. 37, 4479 C. 1905 [1] 247).
- 3) Benzol-1,4-Di[Propyl- $\beta\beta$ -Dicarbonsäure]. Sm. 214—215° u. Zers. (B. 34, 2788).
- 4) Methylester d. 2,4,6-Triacetoxy-1,3-Dimethylbenzol-5-Carbonsäure. Sm. 124—126° (125—126°) (M. 22, 226; M. 23, 107 C. 1902 [1] 1100).
- 5) Diäthylester d. 1,2-Phthalyl oxyessigsäure. Fl. (A. 208, 273). — II, 1794.
- 6) Diäthylester d. 2,5-Diacetoxybenzol-1,4-Dicarbonsäure. Sm. 154° (156,5°; 183°) (A. 219, 81; Am. 12, 416; A. 349, 61 C. 1906 [2] 1260; B. 39, 3101 C. 1906 [2] 1411). — II, 2002.
- 7) Tetraacetat d. 1,2-Di[Dioxyethyl]benzol. Sm. 132—133° (126 bis 127°) (A. 311, 360; C. 1901 [2] 70). — \*III, 68.
- 8) Tetraacetat d. 1,3-Di[Dioxyethyl]benzol. Sm. 101° (A. 311, 359; C. 1901 [2] 70). — \*III, 68.
- 9) Tetraacetat d. 1,4-Di[Dioxyethyl]benzol. Sm. 164° (A. 311, 358; C. 1901 [2] 70). — \*III, 68.
- 10) Tetraacetat d. 2,4,5,6-Tetraoxy-1,3-Dimethylbenzol. Sm. 154° (M. 21, 12). — \*II, 630.
- 11) Tetraacetat d. 2,3,5,6-Tetraoxy-1,4-Dimethylbenzol. Sm. 242° (A. 361, 379 C. 1908 [2] 590).
- 12) Verbindung (aus d. Trimethyläther d. 5-Amido-1,2,3-Trioxybenzol). Sm. 243—244° (G. 27 [2] 355). — \*II, 613.

 $C_{18}H_{18}O_9$ 

C 54,2 — H 5,1 — O 40,7 — M. G. 354.

- 1) Hemichlorigensäure. Anilinsalz (C. 1908 [1] 869; A. 359, 232 C. 1908 [1] 868).

 $C_{18}H_{18}O_{10}$ 

C 51,9 — H 4,8 — O 43,2 — M. G. 370.

- 1) Fraxin (J. 1857, 525; 1859, 578; 1860, 556; 1863, 589). — III, 582.
- 2) Tetramethylester d. 3,6-Dioxybenzoldimethyläther-1,2,4,5-Tetra-carbonsäure. Sm. 135° (95°) (A. 258, 290; C. 1909 [2] 307). — II, 2095.

 $C_{18}H_{18}O_{11}$ 

C 49,7 — H 4,7 — O 45,6 — M. G. 386.

- 1) Tri[Äthylcarbonat] d. 3,4,5-Trioxybenzol-1-Carbonsäure. Sm. 96 bis 97° (B. 41, 2884 C. 1908 [2] 1429).

$C_{16}H_{18}N_2$ 

- C 80,6 — H 7,6 — N 11,8 — M. G. 238.
- 1)  $\alpha\delta$ -Diamido- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien. Sm. 149° u. Zers. 2 Pikrat (A. 360, 310 C. 1908 [2] 325).
  - 2) cis- $\alpha\gamma$ -Di[Phenylamido]- $\alpha$ -Buten. Sm. 85,5° (A. 318, 69; B. 27, 1299; 29, 2977). — \*II, 234.
  - 3) trans- $\alpha\gamma$ -Di[Phenylamido]- $\alpha$ -Buten. Sm. 126°; Sd. 300°. 2HCl (A. 318, 65, 79; B. 25, 2030, 2072; 27, 1300; 29, 2977). — II, 442; \*II, 234.
  - 4)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamidobutan. Sm. 105°. (2HCl, PtCl<sub>4</sub>) (C. 1900 [1] 1128). — \*II, 160.
  - 5)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamido- $\beta$ -Methylpropan. Sm. 90—91° (B. 33, 621). — \*II, 160.
  - 6)  $\alpha$ -Phenylimido- $\alpha$ -Äthylphenylamidoäthan (Äthylidiphenyläthanamidin). Fl. (J. 1865, 415). — II, 347; \*II, 160.
  - 7) 4-[4-Dimethylamidobenzyliden]amido-1-Methylbenzol. Sm. 120 bis 121° (B. 35, 3573 C. 1902 [2] 1384).
  - 8)  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[2-Methylphenyl]amidoäthan. Sm. 140,5° (136°). HCl, (2HCl, PtCl<sub>4</sub>) (B. 10, 1262; 16, 148; A. 214, 208). — II, 459.
  - 9)  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]amidoäthan. Sm. 143 bis 144° (140°) (B. 16, 148; A. 286, 355). — II, 488; \*II, 267.
  - 10)  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]amidoäthan. Sm. 121 bis 121,5°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 184, 364; 214, 203; J. 1865, 415; B. 9, 1214; 16, 148; 22, 3307; 33, 618; G. 24 [1] 449). — II, 488; \*II, 267.
  - 11) N-Methyl-4-Methylphenylimido-4-Methylphenylamidomethan. Sm. 68—69° (Soc. 85, 996 C. 1904 [2] 831).
  - 12) Amidin (aus Acetanilid u. 4-Amido-1,3-Dimethylbenzol). Sm. 153—154° (AUBERT, Dissert. Basel 1895). — \*II, 312.
  - 13) Dimethylendi-p-Toluidin. Sm. 119—125° (90°). 2HCl, (2HCl, AuCl<sub>3</sub>), 2HBr, H<sub>2</sub>SO<sub>4</sub> (A. 256, 296; C. 1898 [1] 987). — II, 510; \*II, 284.
  - 14) m-Dimethylenditoluidin (Anhydroformaldehyd-m-Toluidin). Sm. 148 bis 149° (B. 36, 42 C. 1903 [1] 504).
  - 15) isom. m-Dimethylenditoluidin. Sm. 183—184° (B. 36, 42 C. 1903 [1] 504).
  - 16) p-Dimethylenditoluidin. Sm. 119—125° (136°) (C. 1898 [1] 987; 1903 [2] 238).
  - 17) Di-o-Xylylendiimin. Sm. 79—80°; Sd. 130—135°<sub>12</sub>. HCl, 2HCl, HBr, 2Pikrat (B. 24, 2404). — IV, 996.
  - 18)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylbutan. HCl (Sm. 199—201°) (B. 35, 1074 C. 1902 [1] 930). — \*IV, 503.
  - 19)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylbutan. Sm. 59° (J. pr. [2] 78, 60 C. 1908 [2] 689).
  - 20)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3,4-Dimethylphenyl]äthan. Sm. 112° u. Zers. (Soc. 63, 80). — IV, 773.
  - 21) s-Di[2,3-Dimethylphenyl]hydrazin. Sm. 139—141° (B. 21, 3140). — IV, 1503.
  - 22) s-Di[2,4-Dimethylphenyl]hydrazin. Sm. 120—122° (B. 21, 3142). — IV, 1503.
  - 23) s-Di[2,5-Dimethylphenyl]hydrazin. Sm. 145° (B. 21, 3143). — IV, 1503.
  - 24) s-Di[3,4-Dimethylphenyl]hydrazin. Sm. 106—107° (B. 21, 3141). — IV, 1503.
  - 25) s-Di[3,5-Dimethylphenyl]hydrazin. Sm. 124—125° (B. 21, 3142). — IV, 1503.
  - 26)  $\alpha$ -Isobutyliden- $\beta\beta$ -Diphenylhydrazin. Sm. 30—30,5° (B. 39, 3584 C. 1907 [1] 18).
  - 27) 4-Isopropylbenzylidenphenylhydrazin. Sm. 127—129° (A. 248, 101; M. 23, 913). — IV, 754; \*IV, 489.
  - 28) 4-Methylbenzyliden-4-Äthylphenylhydrazin. Sm. 175° (J. pr. [2] 71, 412 C. 1905 [2] 41).
  - 29) 4-Methylbenzyliden-4-Methylbenzylhydrazin. Sm. 101°. Pikrat (J. pr. [2] 62, 103). — \*IV, 545.
  - 30) Phenyl-2,4,5-Trimethylbenzylidenhydrazin. Sm. 127° (A. 347, 376 C. 1906 [2] 605).

- C<sub>16</sub>H<sub>13</sub>N<sub>2</sub>**
- 31) Phenyl-2,4,6-Trimethylbenzylidenhydrazin (*B.* 24, 3544). — IV, 754.
  - 32) Benzyliden-2,4-Dimethylbenzylhydrazin. Sm. 92—93° (*J. pr.* [2] 62, 121). — \*IV, 546.
  - 33) Benzyliden-2,4,5-Trimethylphenylhydrazin. Zers. bei 100° (*Soc.* 57, 55). — IV, 814.
  - 34) 2,2'-Diäthylazobenzol. Sm. 46,5° (*B.* 17, 473). — IV, 1388.
  - 35) 4,4'-Diäthylazobenzol. Sm. 63°; Sd. oberhalb 340° (*B.* 17, 475). — IV, 1388.
  - 36) 2,4,5,4'-Tetramethylazobenzol. Sm. 58° (*B.* 31, 994). — IV, 1388.
  - 37) 2,3,2',3'-Tetramethylazobenzol. Sm. 110—111° (*B.* 21, 3139). — IV, 1386.
  - 38) 2,4,2',4'-Tetramethylazobenzol. Sm. 129° (125—126°) (*B.* 17, 476; 21, 3141; *A.* 320, 128; *B.* 40, 1913 *C.* 1907 [2] 229). — IV, 1386; \*IV, 1024.
  - 39) 2,4,3',5'-Tetramethylazobenzol. Sm. 46—47° (*B.* 21, 543). — IV 1387.
  - 40) 2,5,2',5'-Tetramethylazobenzol. Sm. 119° (*Z.* 1865, 312; *B.* 21, 3143; *J. r.* 14, 327; 19, 120). — IV, 1387.
  - 41) 3,4,3',4'-Tetramethylazobenzol. Sm. 140—141° (*B.* 21, 3140; *C.* 1898 [2] 776). — IV, 1386.
  - 42) 3,5,3',5'-Tetramethylazobenzol. Sm. 136—137° (*B.* 21, 3142). — IV, 1387.
  - 43) 1-Phenyl-2-Benzyltetrahydropyrazol. Sd. 225°<sub>40</sub> (*A.* 274, 330). — IV, 479.
  - 44) 1,3,5-Trimethyl-2-Phenyl-2,3-Dihydrobenzimidazol. Sm. 88° (*B.* 35, 1264 *C.* 1902 [1] 1062). — \*IV, 407.
  - 45) 1,3-Diphenylhexahydro-1,3-Diazin. Sm. 87° (*B.* 32, 2256). — \*IV, 297.
  - 46) 1,4-Diphenylhexahydro-1,4-Diazin (Diäthylendiphenyldiamin; Diphenylpiperazin). Sm. 163,5°; Sd. 300° u. Zers. 2HCl, (2HCl, PtCl<sub>4</sub>) (*J.* 1858, 353; 1859, 388; *B.* 22, 1778; 31, 3256; *Soc.* 95, 419 *C.* 1909 [1] 1648). — II, 344.
  - 47) 2,3-Diphenylhexahydro-1,4-Diazin. Sm. 122—123°. 2HCl, (2HCl, PtCl<sub>4</sub> + ½ H<sub>2</sub>O) (*Soc.* 55, 101). — IV, 996.
  - 48) 1-[3-Amidobenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 82° (*A.* 259, 52). — IV, 639.
  - 49) 3-Methyl-2-[3-Amidophenyl]-1,2,3,4-Tetrahydrochinolin (*B.* 19, 535). — IV, 996.
  - 50) 6-Methyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 138°. (2HCl, PtCl<sub>4</sub>), Pikrat (*J. pr.* [2] 73, 214 *C.* 1906 [1] 1261).
  - 51) Base (aus 1,4-Anhydro-4-Methylamido-1-Oxymethylbenzol). Sm. 205 bis 210° u. Zers. 2HCl (*M.* 23, 988 *C.* 1903 [1] 289).
  - 52) Verbindung (Base aus Benzonitril u. Zinkäthyl). HCl (*Soc.* 37, 563). — II, 1211.
- C<sub>16</sub>H<sub>13</sub>N<sub>4</sub>**
- C 72,2 — H 6,8 — N 21,0 — M. G. 266.
- 1) αβ-Diamido-αβ-Di[Benzylimido]äthan (Benzylamincyanid). Sm. 140°. 2HCl (*B.* 5, 693; 24, 806; *A.* 257, 206). — II, 531.
  - 2) αβ-Diamido-αβ-Di[2-Methylphenylimido]äthan (o-Toluidincyanid). Sm. 146°. 2HCl, 2HNO<sub>3</sub> (*Bl.* 41, 128; *B.* 40, 2659 *C.* 1907 [2] 224). — II, 474.
  - 3) αβ-Diamido-αβ-Di[3-Methylphenylimido]äthan (m-Toluidincyanid). Sm. 200°. 2HCl, 2HNO<sub>3</sub> (*Bl.* 41, 129). — II, 479.
  - 4) αβ-Diamido-αβ-Di[4-Methylphenylimido]äthan (p-Toluidincyanid; p-Ditolyldiamidodiimidoäthan). 2HCl, 2HNO<sub>3</sub>, 2H<sub>2</sub>SO<sub>4</sub> + 6H<sub>2</sub>O, Oxalat (*A.* 66, 144; 126, 165; *Bl.* 41, 126; *B.* 24, 805). — II, 512.
  - 5) αβ-Di[Phenylhydrazon]butan (Osazon d. Äthylketol). Sm. 116° (*A.* 288, 20; *B.* 37, 2476 *C.* 1904 [2] 418). — IV, 758.
  - 6) αδ-Di[Phenylhydrazon]butan. Sm. 124—125° (*B.* 23, 1784; 34, 1497). — IV, 758.
  - 7) βγ-Di[Phenylhydrazon]butan. Sm. 242° (239°) u. Zers. (*B.* 20, 3164; 21, 2754; 28, 2038; 31, 2124; 35, 3295; *J. pr.* [2] 49, 405; *A.* 247, 222; 249, 203). — IV, 780; \*IV, 503.
  - 8) β-Phenylhydrazon-α-Methylphenylhydrazonpropan. Sm. 151—152° (*Soc.* 53, 527; *A.* 247, 202). — IV, 758.



- C<sub>16</sub>H<sub>18</sub>N<sub>4</sub>** 9)  $\alpha$ -Phenylhydrazon- $\beta$ -Methylphenylhydrazonpropan. Sm. 119—120° (C. 1900 [1] 205). — \*IV, 490.
- 10)  $\alpha\beta$ -Di[**Methylphenylhydrazon**]äthan (Glyoxalmethylphenylosazon). Sm. 221—222° (217—218°) (B. 30, 2877; A. 253, 17). — IV, 755.
- 11) Di[ $\alpha$ -Amido- $\beta$ -Phenyläthyliden]hydrazin (Di[Phenylacet]hydrazidin). Sm. 153°. HCl, HNO<sub>3</sub> (B. 30, 1887; A. 298, 26). — IV, 1289.
- 12) Di[ $\alpha$ -Amido-4-Methylbenzyliden]hydrazin(p-Ditolenylhydrazidin). Sm. 196° u. Zers. 2HCl, (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>), 2HNO<sub>3</sub> (B. 27, 3280; A. 298, 10). — IV, 1289.
- 13) Di[ $\alpha$ -4-Amidophenyläthyliden]hydrazin. Sm. 166° (M. 30, 37 C. 1909 [1] 916).
- 14) 5,7-Dimethyl-2-[2,4-Dimethylphenyl]-2,3-Dihydro-1,2,3,4-Benzotetrazin. Sm. 136—137° (B. 21, 543). — IV, 1262.
- 15) 3,8-Di[Dimethylamido]diphenazon. Sm. 276°. HCl (B. 37, 31 C. 1904 [1] 524).
- 16) 3-Amido-7-Dimethylamido-1,2-Dimethyl-5,10-Naphtdiazin. Sm. 265° u. Zers. (B. 35, 648 C. 1902 [1] 751). — \*IV, 957.
- 17) 2-Amido-8-Dimethylamido-1,3-Dimethyl-5,10-Naphtdiazin. Sm. 241 bis 242° (B. 35, 648 C. 1902 [1] 751). — \*IV, 957.
- 18) 2-Amido-8-Dimethylamido-1,4-Dimethyl-5,10-Naphtdiazin. Sm. 215 bis 216° (B. 35, 648 C. 1902 [1] 751). — \*IV, 957.
- 19) Diäthylderivat d. Base C<sub>12</sub>H<sub>10</sub>N<sub>4</sub>. HCl, H<sub>2</sub>CO<sub>3</sub> (A. 290, 273). — IV, 1279.
- C<sub>16</sub>H<sub>18</sub>N<sub>6</sub>** C 65,3 — H 6,1 — N 28,6 — M. G. 294.
- 1) 3,6-Di[4-Amidobenzyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 212° (B. 35, 3939 C. 1903 [1] 39). — \*IV, 993.
- C<sub>16</sub>H<sub>18</sub>J<sub>2</sub>** 1) 4-tert. Butyldiphenyljodoniumjodid. Sm. 124° (B. 34, 3675).
- 2) 2-Methyl-4'-Propyldiphenyljodoniumjodid. Zers. bei 123° (A. 327, 314 C. 1903 [2] 354).
- 3) 4,4'-Diäthylidiphenyljodoniumjodid. Sm. 42° (A. 327, 291 C. 1903 [2] 352).
- 4) 2,4'-Dimethyl-2'-Äthylidiphenyljodoniumjodid. Sm. 168° (J. pr. [2] 69, 444 C. 1904 [2] 590).
- 5) Di[2,4-Dimethylphenyl]jodoniumjodid. Sm. 148° u. Zers. (B. 33, 846).
- 6) Di[3,5-Dimethylphenyl]jodoniumjodid. Zers. bei 164° (B. 38, 1477 C. 1905 [1] 1379).
- C<sub>16</sub>H<sub>18</sub>S** 1) Di[3-Methylbenzyl]sulfid. Fl. (Z. 1866, 489). — II, 1064.
- 2) 2,4,6,4'-Tetramethylidiphenylsulfid (4-Methylphenyläther d. 2-Merkapto-1,3,5-Trimethylbenzol). Sm. 89,6°; Sd. 190°<sub>11</sub> (B. 28, 2326). — \*II, 489.
- C<sub>16</sub>H<sub>18</sub>S<sub>2</sub>** 1) Dimethyläther d. 4,4'-Dimerkapto-3,3'-Dimethylbiphenyl. Sm. 118° (J. pr. [2] 41, 216). — II, 994.
- 2) Diäthyläther d. 4,4'-Dimerkapto-3,3'-Dimethylbiphenyl. Sm. 135° (J. pr. [2] 41, 214). — II, 989.
- 3) Di[ $\alpha$ -Phenyläthyl]disulfid. Sm. 57—58° (B. 28, 909). — \*II, 649.
- 4) Di[2,5-Dimethylphenyl]disulfid. Sm. 46—47° (C. 1908 [2] 1350).
- C<sub>16</sub>H<sub>18</sub>As<sub>2</sub>** 1) 2,4,2',4'-Tetramethylarsenobenzol. Sm. 194—196° (A. 320, 333 C. 1902 [1] 922). — \*IV, 1139.
- 2) 2,5,2',5'-Tetramethylarsenobenzol. Sm. 208° (A. 320, 337 C. 1902 [1] 923). — \*IV, 1201.
- C<sub>16</sub>H<sub>18</sub>Hg** 1) Quecksilberdi[2,4-Dimethylphenyl]. Sm. 169—170° (B. 20, 1719). — IV, 1711.
- 2) Quecksilberdi[2,5-Dimethylphenyl]. Sm. 123° (B. 14, 2112; A. 315, 23). — IV, 1711.
- 3) Quecksilberdi[3,4-Dimethylphenyl]. Sm. 150° (B. 17, 2374 Anm.). — IV, 1711.
- C<sub>16</sub>H<sub>18</sub>N** C 85,3 — H 8,4 — N 6,2 — M. G. 225.
- 1)  $\alpha$ -Amido- $\alpha\gamma$ -Diphenylbutan. HCl, (2HCl, PtCl<sub>4</sub>), Oxalat, Tartrat, Pikrat (A. 351, 177 C. 1907 [1] 1418).
- 2)  $\beta$ -Amidomethyl- $\alpha\gamma$ -Diphenylpropan ( $\beta\beta$ -Dibenzyläthylamin). Fl. HCl, (2HCl, PtCl<sub>4</sub>) (G. 26 [2] 226). — \*II, 350.
- 3)  $\alpha$ -Phenylamido- $\alpha$ -Phenylbutan. Sd. 200°<sub>20</sub>. HNO<sub>3</sub> (B. 38, 1765 C. 1905 [1] 1599).
- 4) 4-Diäthylamidobiphenyl. Sm. unter 100°. (2HCl, PtCl<sub>4</sub>), HBr, HJ (J. 1862, 345). — II, 633.

**C<sub>16</sub>H<sub>19</sub>N**

- 5) Isopropylphenylbenzylamin. *Sd.* 177—178°<sub>12</sub>. HCl, (2HCl, PtCl<sub>4</sub>), HBr, Pikrat (*B.* 35, 1282 *C.* 1902 [1] 1093).
- 6) Phenyl-4-Isopropylbenzylamin. *Sm.* 41,5°. HCl (*A.* 245, 290; *J. pr.* [2] 72, 216 *C.* 1905 [2] 1244). — II, 560.
- 7) Di[ $\alpha$ -Phenyläthyl]amin. *Sd.* 169—171°<sub>18</sub>. HCl (*J. pr.* [2] 77, 5 *C.* 1908 [1] 629).
- 8) Di[ $\beta$ -Phenyläthyl]amin. *Sd.* 335—337°<sub>603</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (*J.* 1879, 440; *B.* 12, 1308, 1700). — II, 539.
- 9) Äthyl-di[4-Methylphenyl]amin. *Sd.* 255—260°<sub>20</sub>. (*Bl.* 24, 120). — II, 486.
- 10) Äthylbenzyl-2-Methylphenylamin. *Sd.* 230°<sub>20-25</sub>. (*Bl.* [3] 5, 742). — II, 518.
- 11) Äthylbenzyl-4-Methylphenylamin. *Sd.* 200—210°<sub>10</sub>. Pikrat (*Bl.* [3] 6, 139; *B.* 37, 2726 *C.* 1904 [2] 592). — II, 518.
- 12) Äthyl-dibenzylamin. *Sd.* 306°. HCl, (2HCl, PtCl<sub>4</sub>) (*A.* 144, 315; *B.* 20, 1752; 23, 2782). — II, 520.
- 13) Di[2,4-Dimethylphenyl]amin. *Sd.* 305—310° (*B.* 20, 1042). — II, 543.
- 14) Di[3,4-Dimethylphenyl]amin. *Sd.* 340—345° u. Zers. (*B.* 20, 1041). — II, 541.
- 15) Di[ $\beta$ -Dimethylphenyl]amin. *Sd.* 305—315° (*Bl.* 18, 69). — II, 548.
- 16) Di[ $\beta$ -Dimethylphenyl]amin. *Sm.* 162°; *Sd.* 305—315° (*Bl.* 18, 69). — II, 548.
- 17) Di[3-Methylbenzyl]amin. *Fl.* HCl, HBr (*A.* 151, 131). — II, 545.
- 18) Di[4-Methylbenzyl]amin. *Sm.* 32,5°; *Sd.* 192—193°<sub>18</sub>. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), HNO<sub>2</sub>, HNO<sub>3</sub>, Pikrat (*J. pr.* [2] 62, 100; *C. r.* 140, 1037 *C.* 1905 [1] 1540). — \*II, 316.
- 19) Methylbenzyl-2,4-Dimethylphenylamin. *Sd.* 205—210° (*Bl.* [3] 7, 52). — II, 543.
- 20)  $\alpha$ -[4-Isopropylphenyl]- $\beta$ -[4-Pyridyl]äthan. *Sd.* 185—195°<sub>85</sub>. (*B.* 39, 2834 *C.* 1906 [2] 1326).
- 21)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Äthyl-2-Pyridyl]äthan. *Sd.* 198°<sub>18</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 38, 3706 *C.* 1906 [1] 52).
- 22) 2-Methyl-1-[2-Naphtyl]hexahydropyridin. *Sd.* 186—190°<sub>10</sub>. HCl, (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + 9H<sub>2</sub>O), Pikrat (*B.* 29, 1180). — IV, 27.
- 23) Base (aus Harnstoff u. Aceton). *Sm.* 119°; *Sd.* 320°. (2HCl, PtCl<sub>4</sub>) (*A.* 238, 24). — IV, 381.

**C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>**

- C* 75,9 — *H* 7,5 — *N* 16,6 — *M. G.* 253.
- 1) 4-Äthylamido-3-Methylbenzylidenphenylhydrazin. *Sm.* 95° (*B.* 37, 864 *C.* 1904 [1] 1207).
- 2) 4-Methyläthylamidobenzylidenphenylhydrazin. *Sm.* 114° (*B.* 37, 862 *C.* 1904 [1] 1206).
- 3) 1-Äthyl-4,4'-Dimethyldiazoamidobenzol. *Fl.* (*B.* 20, 3018). — IV, 1568.
- 4) 1-[4-Isopropylbenzyl]amidodiazobenzol. *Sm.* 50—51° (*B.* 22, 928). — IV, 1573.
- 5) 4-Methyl-1-[2,4,5-Trimethylphenyl]amidodiazobenzol. *Sm.* 106° (*B.* 25, 1360). — IV, 1573.
- 6) 4-Amido-2,3,2',3'-Tetramethylazobenzol. *Sm.* 110,5° (*B.* 18, 2684). — IV, 1386.
- 7) 4'-Amido-2,4,2',5'-Tetramethylazobenzol. *Sm.* 110—111° (115°). HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 13, 471; 18, 2686). — IV, 1387.
- 8) 2'-Amido-2,4,3',5'-Tetramethylazobenzol. *Sm.* 78°. HCl (*B.* 18, 2682; *D. R. P.* 22010). — IV, 1386; \*IV, 1024.
- 9) 4-Amido-2,5,2',5'-Tetramethylazobenzol. *Sm.* 150° (*B.* 18, 2685). — IV, 1387.
- 10) 4-Amido-2,6,3',5'-Tetramethylazobenzol. *Sm.* 95° (*B.* 18, 2684). — IV, 1387.
- 11) 4'-Amido-2,6,3',5'-Tetramethylazobenzol. *Sm.* 77,5° (*B.* 18, 2684). — IV, 1386.
- 12) 6-Amido-3,4,3',4'-Tetramethylazobenzol. *Sm.* 179° (*B.* 18, 2685). — IV, 1386.
- 13) 4-Dimethylamido-2,3'-Dimethylazobenzol. *Sm.* 73—74°. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 3482). — \*IV, 1019.

- C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>** 14) 4-Dimethylamido-2,4'-Dimethylazobenzol. Sm. 121°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 33, 3481). — \*IV, 1020.
- 15) 4-Diäthylamidoozobenzol. Sm. 97,8° (95°). HCl, 2HCl, 5HBr, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 72, 249 C. 1905 [2] 1449; B. 41, 1181 C. 1908 [1] 1884; B. 42, 391 C. 1909 [1] 844).
- 16) Base (aus Dimethylanilin u. 4-Nitroso-1-Dimethylanilin). Sm. 215° (B. 16, 2729; D.R.P. 25828). — IV, 839; \*IV, 565.
- 17) Base (aus salzs. Dimethylanilin u. 4-Amido-1-Dimethylamidobenzol). HCl, (2HCl, ZnCl<sub>2</sub>), (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (B. 10, 473; 13, 208; 16, 473, 865, 2855). — IV, 838.
- C<sub>16</sub>H<sub>19</sub>N<sub>5</sub>** C 68,3 — H 6,8 — N 24,9 — M. G. 281.
- 1) Di[2-Methylphenyl]biguanid. Sm. 178° (B. 34, 2600).
- 2) Di[4-Methylphenyl]biguanid. Sm. 140°. + C<sub>2</sub>H<sub>6</sub>O (B. 34, 2601).
- 3) α-Phenyl-2,4-Dimethylphenylbiguanid. Sm. 204° (B. 34, 2602).
- 4) Di[β-Phenylhydrazonäthyl]amin. Sm. 114°. HCl (A. 363, 207 C. 1909 [1] 143).
- 5) N-Di[4-Methylphenylazo]äthylamin. Sm. 121° u. Zers. (B. 21, 1025). IV, 1569.
- C<sub>16</sub>H<sub>19</sub>P** 1) Äthylidibenzylphosphin. Sd. 320—330° (Soc. 53, 725). — IV, 1664.
- C<sub>16</sub>H<sub>20</sub>O** C 84,2 — H 8,8 — O 7,0 — M. G. 228.
- 1) 4-Oxy-5-Methyl-2-Isopropenyl-4-Phenyl-1,2,3,4-Tetrahydrobenzol (2-Phenylcarveol). Sd. 159—160°<sub>12</sub> (B. 39, 2313 C. 1906 [2] 517).
- 2) 1-Keto-5-Methyl-3-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 27°; Sd. 210,5°<sub>17</sub> (A. 303, 243). — \*III, 140.
- 3) 5-Keto-2-Benzyliden-1,1,3-Trimethylhexahydrobenzol. Sd. 159 bis 160°<sub>5,5</sub> (A. 366, 188 Anm. C. 1909 [2] 616).
- 4) Benzylidenthujaketon. Sm. 170° (B. 30, 425). — \*III, 140.
- 5) Oktahydro-2,5-Diphenylfuran. Sd. 210—220°<sub>40</sub> (Soc. 57, 955). — III, 694.
- 6) Hydrocarpol. Sd. 220° (i. V.) (A. 170, 261, 264). — II, 1686.
- C<sub>16</sub>H<sub>20</sub>O<sub>3</sub>** C 73,8 — H 7,7 — O 18,5 — M. G. 260.
- 1) αα-Diäthyläther-β-[1-Naphtyläther] d. ααβ-Trioxyäthan (α-Naphtoxyl-acetal). Sd. 207—208°<sub>18</sub> (B. 30, 1703). — \*II, 520.
- 2) αα-Diäthyläther-β-[2-Naphtyläther] d. ααβ-Trioxyäthan (β-Naphtoxyl-acetal). Sd. 240°<sub>60</sub> (B. 30, 1439, 1701). — \*II, 520.
- 3) Methyläther d. Desmotroposantonin. Sm. 152—153° (G. 25 [1] 472). — II, 1790.
- 4) Methyläther d. Iso-Desmotroposantonin. Sm. 111—112° (G. 25 [1] 480). — II, 1791.
- 5) Rimusäure. Sm. 192—193°; Sd. 296—300°<sub>21</sub>. Ba + 14H<sub>2</sub>O (C. 1903 [2] 375; Soc. 85, 1242 C. 1904 [2] 1303).
- 6) Lakton d. α-Oxy-γ-Keto-α-[4-Methylphenyl]-ββδ-Trimethylpentan-δ-Carbonsäure. Sm. 138—139° (C. 1906 [2] 317; J. pr. [2] 78, 99 C. 1908 [2] 935).
- 7) Äthylester d. trans-ε-Keto-α-Phenyl-β-Hepten-η-Carbonsäure. Sd. 203°<sub>14</sub> (B. 38, 1121 C. 1905 [1] 1241).
- 8) Äthylester d. γ-Keto-α-[4-Isopropylphenyl]-α-Buten-β-Carbonsäure. Sd. 198°<sub>10</sub> (B. 31, 731, 2774). — \*II, 987.
- 9) Verbindung (aus Chloranethol). Sd. 268—270° (B. 13, 148). — II, 852.
- 10) Verbindung (aus Camphersäureanhydrid u. Benzol). Sm. 125—126° (B. [3] 4, 112). — II, 24.
- 11) Verbindung (aus Drachenblut). Sd. 236—240° (M. 1, 612). — III, 556.
- 12) Verbindung (aus Selleriöl). Sm. 66—67°; Sd. 209°<sub>13</sub> (B. 30, 495). — \*II, 627.
- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>** C 69,5 — H 7,2 — O 23,2 — M. G. 276.
- 1) Äthylester d. βζ-Diketo-δ-Phenylheptan-γ-Carbonsäure. Sm. 155 bis 157° u. Zers. (J. pr. [2] 49, 24). — II, 1871.
- 2) Äthylester d. ε-Keto-δ-Benzoylhexan-γ-Carbonsäure. Sd. 198°<sub>37</sub> (C. 1909 [2] 799).
- 3) Diäthylester d. δ-Phenyl-α-Buten-αγ-Dicarbonsäure (D. d. Benzylglutakonsäure). Sd. 203—204°<sub>10</sub> (Soc. 63, 259). — II, 1870.
- 4) Diäthylester d. δ-Phenyl-α-Buten-δδ-Dicarbonsäure (D. d. Phenylallylmalonsäure). Sd. 176—178°<sub>16</sub> (B. 29, 2600). — \*II, 1079.



- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>** 5) Diäthylester d.  $\beta$ -Phenyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure (D. d.  $\gamma$ -Methyl- $\gamma$ -Phenylisotakonsäure). Sd. 305—307° (A. 308, 136; B. 30, 95). — \*II, 1079.
- 6) Monophenylester d. Camphersäure. Sm. 100° (Soc. 75, 663; C. 1900 [2] 550). — \*II, 365.
- C<sub>16</sub>H<sub>20</sub>O<sub>5</sub>** C 65,8 — H 6,8 — O 27,4 — M. G. 292.
- 1)  $\eta$ -Keto- $\eta$ -Phenyl- $\beta$ -Methylheptan- $\varepsilon\varepsilon$ -Dicarbonsäure ( $\beta$ -Benzoyl- $\alpha$ -Isoamylisobornsteinsäure). Sm. 160°. NH<sub>4</sub> (B. 23, 1500). — II, 1968.
- 2) Anhydrid d.  $\alpha$ -Oxyisovalerian-1,2-Phenylenäthersäure. Sd. 230 bis 240°<sub>20</sub> (B. 33, 1676). — \*II, 554.
- 3) Dimethylester d.  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Butenäthyläther- $\delta\delta$ -Dicarbonsäure. Na (A. 336, 202 C. 1904 [2] 1731).
- 4) Äthylester d. Filixsäure. Sm. 142° (B. 21, 2964). — II, 1967.
- 5) Diäthylester d. Oxyfumar-2,4-Dimethylphenyläthersäure. Sd. 202 bis 203°<sub>17</sub> (Soc. 79, 1188).
- 6) Diäthylester d.  $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\alpha\beta$ -Dicarbonsäure (D. d. Phenylacetbernsteinsäure). Sm. 75—76° (B. 14, 430; 17, 71). — II, 1965.
- 7) Diäthylester d.  $\alpha$ -Keto- $\alpha$ -Phenylbutan- $\beta\delta$ -Dicarbonsäure. Sd. 200 bis 210°<sub>12</sub> (B. 31, 2001). — \*II, 1135.
- 8) Diäthylester d.  $\alpha$ -Keto- $\alpha$ -Phenylbutan- $\gamma\gamma$ -Dicarbonsäure (D. d. Benzoyldimethylmalonsäure). Fl. (B. 34, 4229 C. 1902 [1] 212).
- 9) Säure + H<sub>2</sub>O (aus Isopropylisoparakonsäureäthylester). Ca, Ba, Ag (A. 304, 295). — \*I, 368.
- C<sub>16</sub>H<sub>20</sub>O<sub>6</sub>** C 62,3 — H 6,5 — O 31,2 — M. G. 308.
- 1) Trimethylester d.  $\alpha$ -Phenylbutan- $\beta$ -Tricarbonsäure. Sm. 46°; Sd. 328—336°<sub>18</sub> (A. 306, 265). — \*II, 1173.
- 2) Trimethylester d. trans- $\beta$ -Phenylbutan- $\alpha\gamma\delta$ -Tricarbonsäure. Sm. 54—55° (A. 315, 236). — \*II, 1173.
- 3) Äthylester d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\gamma$ -[4,6-Diäthoxyphenyl]propen- $\gamma^s$ -Carbonsäure. Sm. 116—117° (B. 42, 1401 C. 1909 [1] 1886).
- 4) Äthylester d. 2,4-Diäthoxybenzoylbrenztraubensäure. Sm. 152° (B. 34, 2477).
- 5) Äthylester d. 2,5-Diäthoxybenzoylbrenztraubensäure. Sm. 90° (B. 34, 2477).
- 6) Diäthylester d.  $\alpha$ -[2-Methylbenzoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 215—225°<sub>12</sub> (Soc. 75, 341). — \*II, 822.
- 7) Diäthylester d.  $\alpha$ -[3-Methylbenzoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 212—220°<sub>13</sub> (Soc. 75, 342). — \*II, 825.
- 8) Diäthylester d.  $\alpha$ -[4-Methylbenzoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Fl. (Soc. 75, 343). — \*II, 826.
- 9) Diacetat d. 3,6-Dioxy-2,5-Diisopropyl-1,4-Benzochinon. Sm. 137,5° (B. 37, 2389 C. 1904 [2] 308).
- 10) Triacetat d.  $\alpha\gamma\delta$ -Trioxy- $\alpha$ -Phenylbutan. Sd. 221—222°<sub>30</sub> (Bl. [3] 13, 124). — \*II, 678.
- C<sub>16</sub>H<sub>20</sub>O<sub>7</sub>** C 59,2 — H 6,2 — O 34,6 — M. G. 324.
- 1) Methylglyko-o-Cumarketon + H<sub>2</sub>O. Sm. 192° (wasserfrei) (B. 18, 1964). — III, 161.
- 2) Thamnolinsäure. Sm. 163° (J. pr. [2] 62, 442; [2] 63, 536). — \*II, 1240.
- 3) Äthylester d.  $\alpha$ -[3,4,5-Trimethoxybenzoyl]acetylessigsäure. Sm. 85° (Soc. 89, 1655 C. 1907 [1] 407).
- 4) Diäthylester d. d-2-Methylbenzoylweinsäure. Sm. 32,5° (Soc. 73, 315). — \*II, 823.
- 5) Diäthylester d. d-3-Methylbenzoylweinsäure. Sm. 56° (Soc. 73, 318). — \*II, 825.
- 6) Diäthylester d. d-4-Methylbenzoylweinsäure. Sm. 94° (Soc. 73, 313). — \*II, 827.
- 7) Diäthylester d. d-Phenacetylweinsäure. Sd. 225—230°<sub>11</sub> (Soc. 77, 1103). — \*II, 813.
- 8) Triäthylester d. 5-Oxy-1-Methylbenzol-2,3,4-Tricarbonsäure. Fl. (B. 30, 1741). — \*II, 1196.
- 9) Triäthylester d. 3-Oxy-1-Methylbenzol-2,4,6-Tricarbonsäure. Sm. 47°. Na (B. 32, 2781; G. 31 [1] 145). — \*II, 1195.
- 10) Triäthylester d. 6-Oxybenzol-1,3-Dicarbonsäure-4-Methylcarbon-säure. Sm. 81° (B. 37, 2119 C. 1904 [2] 438).

- C<sub>18</sub>H<sub>20</sub>O<sub>8</sub>** C 56,4 — H 5,9 — O 37,6 — M. G. 340.  
 1) Kolatannin (*C.* 1897 [1] 933; 1898 [1] 578). — \*III, 497.  
 2) Glykoferulaaldehyd + 2H<sub>2</sub>O. Sm. 200—202° (wasserfrei) (*B.* 18, 3482). — III, 106.  
 3) Diäthylester d. Diacetylsuccinylbernsteinsäure? Sm. 168—169° (*A.* 219, 86; *Am.* 12, 416; *B.* 19, 428). — I, 824.  
 4) Triäthylester d. 2,6-Dioxybenzol-4-Methylcarbonsäure-1,3-Dicarbonsäure (Tr. d. Dioxyphenylessigdicarbonsäure). Sm. 98° (*B.* 19, 1448; 31, 2015; *Soc.* 75, 809). — II, 2070; \*II, 1215.
- C<sub>18</sub>H<sub>20</sub>O<sub>9</sub>** C 53,9 — H 5,6 — O 40,5 — M. G. 356.  
 1) Gentiopikrin +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 122° (191° wasserfrei) (*C. r.* 141, 207 *C.* 1905 [2] 771; *Bl.* [3] 33, 1059 *C.* 1905 [2] 1431).  
 2) Tri[Äthylcarbonat] d. 2,4,6-Trioxy-1-Methylbenzol. Sd. 245—248°<sub>17</sub> (*M.* 19, 229). — \*II, 620.
- C<sub>18</sub>H<sub>20</sub>O<sub>10</sub>** C 51,6 — H 5,4 — O 43,0 — M. G. 372.  
 1) Pentaacetylcellulose (*Soc.* 57, 2). — I, 1077.  
 2) Cuspidatsäure + H<sub>2</sub>O. Sm. 218° (*J. pr.* [2] 62, 440). — \*II, 1234.
- C<sub>18</sub>H<sub>20</sub>O<sub>12</sub>** C 47,5 — H 4,9 — O 47,5 — M. G. 404.  
 1) Hexamethylester d.  $\beta$ -Buten- $\alpha\alpha\beta\gamma\delta\delta$ -Hexacarbonsäure. Sm. 128 bis 130° (*M.* 9, 455). — I, 872.
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>** C 80,0 — H 8,3 — N 11,7 — M. G. 240.  
 1)  $\beta\gamma$ -Di[Phenylamido]butan. Sd. 225—228°<sub>41</sub>. 2HCl (*B.* 25, 3280). — II, 345.  
 2)  $\alpha\alpha$ -Di[Phenylamido]- $\beta$ -Methylpropan. Sd. 86—87°<sub>18</sub>. + SO<sub>2</sub> (*A.* 316, 133; *M.* 22, 464).  
 3)  $\alpha\beta$ -Di[Phenylamido]- $\beta$ -Methylpropan. Fl. 2HCl, 2HBr (*Bl.* 48, 800). — II, 345.  
 4)  $\alpha\beta$ -Di[Methylamido]- $\alpha\beta$ -Diphenyläthan. Sm. 135—136°. 2HCl (*J. pr.* [2] 73, 442 *C.* 1906 [2] 254).  
 5)  $\alpha\alpha$ -Di[4-Methylphenylamido]äthan. Sm. 61° (*B.* 33, 619). — \*II, 284.  
 6)  $\beta\beta$ -Di[Benzylamido]äthan. Sd. 175—182°. 2HCl (*C.* 1898 [2] 743; *B.* 32, 1829). — \*II, 294.  
 7)  $\alpha\beta$ -Di[Methylphenylamido]äthan. Sm. 47—48°; Sd. 245°<sub>45</sub>. Pikrat (*B.* 40, 763 *C.* 1907 [1] 1030; *Soc.* 95, 417 *C.* 1909 [1] 1648).  
 8)  $\alpha\beta$ -Di[2-Methylphenylamido]äthan. Sm. 75—76°. HCl, (2HCl, PtCl<sub>4</sub>), HBr, 2HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, + HgCl<sub>2</sub> (*Bl.* 48, 799; *Soc.* 77, 1023; *M.* 7, 231; *B.* 23, 1982, 2031). — II, 458; \*II, 249.  
 9)  $\alpha\beta$ -Di[3-Methylphenylamido]äthan. Sm. 58,5°. 2HCl, 2HNO<sub>3</sub>, + HgCl<sub>2</sub> (*Soc.* 71, 426; 77, 1023). — \*II, 260.  
 10)  $\alpha\beta$ -Di[4-Methylphenylamido]äthan. Sm. 97,5°. 2HNO<sub>3</sub>, + HgCl<sub>2</sub> (*J.* 1873, 698; *Soc.* 77, 1023). — II, 487; \*II, 266.  
 11) 4-Methylamido-4'-Dimethylamidodiphenylmethan. Sm. 86° (57°); Sd. 245—246° (*B.* 41, 2106 *C.* 1908 [2] 695; *B.* 41, 2155 *C.* 1908 [2] 704).  
 12) Methylamidodibenzylamidomethan (*B.* 28 [2] 852).  
 13) 4'-Amido-2-3'-Diäthylidiphenylamin? 2HCl, Pikrat (*J. pr.* [2] 66, 168 *C.* 1902 [2] 937). — \*IV, 659.  
 14) 4-Methylphenyl-4-Dimethylamidobenzylamin. Sm. 103° (105—106°). 2HCl (*C.* 1900 [1] 1112; *B.* 33, 2590). — \*IV, 410.  
 15) 2,4'-Diamido-3,5,3'-Trimethyldiphenylmethan. Fl. (*C.* 1900 [1] 1112).  
 16) 4-Amido-4'-Dimethylamido-3-Methyldiphenylmethan. Sm. 90° (92 bis 93°) (*C.* 1900 [1] 1111; *B.* 33, 2590). — \*IV, 651.  
 17) 6-Amido-4'-Dimethylamido-3-Methyldiphenylmethan. Fl. (*C.* 1900 [1] 1112).  
 18) 4,4'-Diamido-3,3'-Diäthylbiphenyl. 2HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat, Dipikrat (*B.* 17, 473; *J. pr.* [2] 66, 163 *C.* 1902 [2] 936). — IV, 985; \*IV, 658.  
 19) p-Diamido-p-Diäthylbiphenyl. H<sub>2</sub>SO<sub>4</sub> (*B.* 17, 475). — IV, 985.  
 20) 2,2'-Diamido-3,5,3,5'-Tetramethylbiphenyl. Sm. 180°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub> (*B.* 28, 2801). — IV, 985.  
 21) 4,4'-Di[Äthylamido]biphenyl. Sm. 115,5—116°. (2HCl, PtCl<sub>4</sub>) (*A.* 115, 366; *B.* 35, 4182, 4190 *C.* 1903 [1] 142; *C.* 1903 [1] 1128; 1903 [2] 1271; *B.* 41, 1997 *C.* 1908 [2] 600). — IV, 963; \*IV, 641.

- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>** 22) 2,4'-Di[Dimethylamido]biphenyl. Sm. 51—52°; Sd. 333—345°<sub>750</sub>. Pikrat (B. 22, 3016). — IV, 959.
- 23) 4,4'-Di[Dimethylamido]biphenyl. Sm. 195° (193,5°; 198°); Sd. oberhalb 360°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2HBr, (2HBr, Br<sub>4</sub>), 2HJ (B. 14, 2162; 17, 115; 32, 1404, 1898; 34, 23; Bl. [3] 1, 692; [3] 5, 59; [3] 13, 274; C. 1901 [1] 1319; B. 37, 29 C. 1904 [1] 523; B. 37, 2343 C. 1904 [2] 433; B. 37, 3765 C. 1904 [2] 1546; A. 346, 197 C. 1906 [1] 1880). — IV, 962; \*IV, 640.
- 24) s-Di[4-Methylbenzyl]hydrazin. Sm. 67°. HCl (J. pr. [2] 62, 105). — \*IV, 545.
- 25) Phenylhydrazidocarvol. Sm. 109—110° (106°) (B. 17, 1578; 27, 811). — II, 769.
- C<sub>18</sub>H<sub>20</sub>N<sub>4</sub>** 26) Phenylhydrazonanhydrid d. ζ9-Diketo-β-Methyl-β-Nonen. Sd. 182° (Bl. [3] 17, 749). — IV, 783; \*IV, 561.  
C 71,7 — H 7,4 — N 20,9 — M. G. 268.
- 1) 2,3-Di[Isopropylidenhydrazido]naphtalin. Sm. 145—146° (J. pr. [2] 76, 223 C. 1907 [2] 1338).
- 2) 2,4-Di[Dimethylamido]azobenzol (B. 10, 657).
- 3) 3,3'-Di[Dimethylamido]azobenzol. Sm. 118° (93°). + C<sub>6</sub>H<sub>6</sub>, 2HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), 2H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Bioxalat, Pikrat, Ferrocyanid (B. 30, 2936; C. 1901 [1] 105; Bl. [3] 7, 470; B. 35, 4228 Anm. C. 1903 [1] 207). — IV, 1361; \*IV, 1013.
- 4) 4,4'-Di[Dimethylamido]azobenzol. Sm. 265°. (2HCl, PtCl<sub>4</sub>), Pikrat + C<sub>6</sub>H<sub>6</sub>O (Bl. 48, 637; B. 13, 2136; 18, 1144; 21, 2612; 30, 2946; M. 4, 287). — IV, 1361; \*IV, 1013.
- 5) Diäthylidiphenyltetrazon. Sm. 108° u. Zers. (A. 199, 327). — IV, 1308.
- 6) 1,4-Di[4-Amidophenyl]hexahydro-1,4-Diazin (Diäthylendiphenyltetramin). Sm. 221°. 4HCl + 4H<sub>2</sub>O (B. 12, 1796; 22, 1388). — IV, 587.
- 7) 1,4 [oder 1,5]-Dimethyl-2,4 [oder 2,5]-Diphenylhexahydro-1,2,4,5-Tetrazin. Sm. 148° (B. 42, 3526 C. 1909 [2] 1460).
- C<sub>18</sub>H<sub>20</sub>Si** 1) Siliciumdiäthylidiphenyl. Sd. 305—320° (B. 40, 2277 C. 1907 [2] 322).
- C<sub>18</sub>H<sub>21</sub>N** C 84,6 — H 9,2 — N 6,2 — M. G. 227.
- 1) 9-Phenylimido-βζ-Dimethyl-βζ-Oktadien (Phenylimidocitral). Sd. bei 200°<sub>90</sub> (B. 26, 2716; 28, 2133). — III, 507.
- 2) 1-Dipropylamidonaphtalin. Sd. oberhalb 300°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HJ (M. 16, 804). — \*IV, 332.
- 3) 3-Isopropyl-2-Isobutylechinolin. Sd. 295—296°<sub>700</sub>. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (B. 17, 1718; 18, 3373; 24, 1726; B. 38, 3820 C. 1905 [2] 1726). — IV, 343.
- 4) 4-Methyl-1-Isopropyl-1,2,3,4-Tetrahydrocarbazol. Sm. 114,5°; Sd. 202—204°<sub>14</sub>. Pikrat (C. 1904 [2] 342; A. 359, 63 C. 1908 [1] 1549).
- 5) 4-Methyl-7-Isopropylcarbazolenin. Sd. 170—171°<sub>14</sub>. Pikrat (C. 1904 [2] 342).
- C<sub>18</sub>H<sub>21</sub>N<sub>3</sub>** 6) Validin. Fl. (Z. 1867, 429). — IV, 343.  
C 75,3 — H 8,2 — N 16,5 — M. G. 255.
- 1) 2,4,6'-Triamido-3,5,3'-Trimethyldiphenylmethan (C. 1900 [1] 1112).
- 2) 4,6-Diamido-4'-Dimethylamido-3-Methyldiphenylmethan. Sm. 113° (C. 1900 [1] 1112; B. 33, 2591). — \*IV, 825.
- 3) Äthylidi[2-Amidobenzyl]amin. Sm. 94° (B. 26, 2584). — IV, 628.
- 4) 4,4'-Di[Methylamido]-3,3'-Dimethyldiphenylamin. 2HJ (J. pr. [2] 73, 11 C. 1906 [1] 839).
- 5) 4,4'-Di[Äthylamido]diphenylamin. Sm. 95°. 2HCl (J. pr. [2] 73, 6 C. 1906 [1] 839).
- 6) 4,4'-Di[Dimethylamido]diphenylamin. Sm. 119°. (2HCl, ZnCl<sub>2</sub>) (B. 16, 474, 866). — IV, 1168.
- C<sub>18</sub>H<sub>21</sub>Cl** 1) α-[4-Chlorphenyl]-αβ-Triphenyläthan. Sm. 156° (B. 39, 1464 C. 1906 [1] 1743).
- C<sub>18</sub>H<sub>22</sub>O** C 83,5 — H 9,6 — O 6,9 — M. G. 230.
- 1) 9-Oxy-9-Phenyl-βζ-Dimethyl-βζ-Oktadien (α-Phenylgeraniol). Sd. 175 bis 176°<sub>12</sub> (D.R.P. 153120 C. 1904 [2] 624).
- 2) δ-Oxy-δ-Benzyl-βζ-Dimethyl-βε-Heptadien. Fl. (B. 39, 2065 C. 1906 [2] 228).



- C<sub>16</sub>H<sub>22</sub>O**
- 3) tert. Phenylborneol. Sm. 40—41°; Sd. 157—158°<sub>11</sub> (C. r. 142, 681 C. 1906 [1] 1428).
  - 4) d-Phenylfenchol. Sm. 47°; Sd. 166—167°<sub>13</sub> (C. r. 148, 1612 C. 1909 [2] 358).
  - 5) α-Camphylphenyläther. Sd. 178—180°<sub>20</sub> (C. 1898 [2] 888). — \*II, 356.
  - 6) γ-Keto-α-Phenyl-α-Dekin. Sm. 52° (Bl. [3] 33, 162 C. 1905 [1] 601).
  - 7) 5-Keto-1-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol. Sm. 67,5°; Sd. 187°<sub>11</sub> (A. 303, 273). — \*III, 134.
  - 8) 1-Benzoyl-1-Methyl-3-Isopropyl-R-Pentamethylen. Sd. 172°<sub>15</sub> (C. r. 148, 1400 C. 1909 [2] 126).
  - 9) Verbindung (aus akt. Benzyliden-m-Methylcyklohexanon). Sd. 160 bis 162°<sub>10</sub> (C. r. 144, 1221 C. 1907 [2] 406).
- C<sub>16</sub>H<sub>22</sub>O<sub>2</sub>**
- C 78,1 — H 8,9 — O 13,0 — M. G. 246.
  - 1) 2,4-Diacetyl-1,3,5-Triäthylbenzol. Sm. 77°; Sd. 188—190° (B. 32, 1125, 1564; J. pr. [2] 65, 396). — \*III, 212.
  - 2) 3,6-Dipropionyl-1,2,4,5-Tetramethylbenzol. Sm. 176°; Sd. 330 bis 335° (B. 28, 3214). — III, 274.
  - 3) 5,5'-Diketo-3,3,3',3'-Tetramethyl-2,3,4,5,2',3',4',5'-Oktahydrobiphenyl. Sm. 178° (Soc. 91, 70 C. 1907 [1] 1038).
  - 4) Phenolcampher. Fl. (Bl. [3] 4, 725). — III, 487.
  - 5) 1,1,2-Trimethyl-5-Benzyl-R-Pentamethylen-2-Carbonsäure (Phenylcamphylsäure). Sm. 132° (C. 1907 [1] 1617).
  - 6) Methylester d. 2-Phenyl-1,1,2-Trimethyl-R-Pentamethylen-3-Carbonsäure. Sm. 85—87° (93—94°) (Bl. [3] 13, 904; [3] 21, 838). — III, 167; \*II, 861.
  - 7) Methylester d. Hyposantonigen Säure (M. d. 5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure). Sm. 43° (G. 26 [2] 460). — \*II, 860.
  - 8) Phenylester d. Campholsäure. Sm. 22° (20°); Sd. 305° (Bl. [3] 11, 496; A. ch. [7] 4, 320). — II, 662; \*II, 361.
  - 9) Benzoeat d. β-Oxy-α[oder β]-Nonen. Sd. 210—211°<sub>50</sub> (Soc. 83, 151 C. 1903 [1] 72, 436).
- C<sub>16</sub>H<sub>22</sub>O<sub>3</sub>**
- C 73,3 — H 8,4 — O 18,3 — M. G. 262.
  - 1) Äther d. 6-Oxy-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 99,5° (Soc. 83, 119 C. 1903 [1] 230, 448).
  - 2) Resorcincampher. Sm. 29° (Bl. [3] 4, 726). — III, 487.
  - 3) 9-Benzoyloktan-α-Carbonsäure. Sm. 78—79° (A. ch. [6] 22, 364). — II, 1674.
  - 4) d-7-Methoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (d-Methyläthersantonige Säure). Sm. 116—117° (B. 28 [2] 393). — II, 1671; \*II, 977.
  - 5) i-7-Methoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (i-Methylätherisantonige Säure). Sm. 135—135,5° (B. 28 [2] 393). — II, 1671.
  - 6) isom. 7-Methoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (Methylätherdesmotroposantonige Säure). Sm. 97 bis 98° (G. 23 [2] 480; 25 [1] 532; B. 28 [2] 393). — II, 1672; \*II, 978.
  - 7) Gem. Anhydrid d. Pelargonsäure u. Benzolcarbonsäure. Fl. (A. 85, 231). — II, 1158.
  - 8) Methylester d. d-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (M. d. d-Santonigen Säure). Sm. 81—84° (86°) (G. 12, 395; 25 [1] 493; J. 1880, 895; B. 12, 1574; 16, 427). — II, 1670; \*II, 977.
  - 9) Methylester d. r-Santonigen Säure. Sm. 110,5—111° (G. 25 [1] 523). — \*II, 978.
  - 10) Methylester d. isom. 7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl-α-Carbonsäure (M. d. Desmotroposantonigen Säure). Sm. 95—96° (G. 23 [2] 477; 25 [1] 531). — II, 1671; \*II, 978.
  - 11) Benzylester d. Dihydroketocampholensäure. Sm. 46—47° (Bl. [3] 27, 411 C. 1902 [1] 1335).
  - 12) Acetat d. α-Oxyisopropyl-5-Isopropyl-2-Methylphenylketon. Sd. 157°<sub>15</sub> (C. 1899 [1] 959).
  - 13) Butyrat d. Oxymethyl-5-Isopropyl-2-Methylphenylketon. Sd. 195 bis 198°<sub>30</sub> (C. 1899 [1] 959). — \*III, 125.



C 69,1 — H 7,9 — O 23,0 — M. G. 278.

- 1) Diäthyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -[2,4-Dioxyphenyl]hexan. Sm. 60 bis 61° (B. 34, 1697). — \*III, 210.
- 2) Dipropyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 86° (C. 1905 [1] 815).
- 3) Propylisopropyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 78° (C. 1905 [1] 815).
- 4) Diisopropyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 126,5° (C. 1905 [1] 815).
- 5) Äthylbutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 104° (C. 1905 [1] 815).
- 6) Äthylisobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 72° (C. 1905 [1] 815).
- 7) Laktone d. Dihydroalantdicarbonsäure. Sm. 137°; Sd. 250°<sub>14</sub>. Na, Ca, Ba, Ag (A. 293, 360). — \*II, 1116.
- 8) Methylester d. Santonsäure. Sm. 86—86,5° (J. 1876, 618; B. 13, 2210; 32, 1412; G. 8, 332; B. 37, 260 C. 1904 [1] 643). — II, 1788; \*II, 1044.
- 9) Methylester d. Isosantonsäure. Sm. 69—70° (G. 25 [2] 473). — \*II, 1047.
- 10) Methylester d. Metasantonsäure. Sm. 101,5—102,5° (J. 1878, 825; G. 8, 336). — II, 1789.
- 11) Methylester d. Parasantonsäure. Sm. 183—184° (J. 1876, 826; B. 13, 2210; C. 1904 [1] 1446). — II, 1791.
- 12) Diäthylester d.  $\alpha$ -Phenylbutan- $\beta\beta$ -Dicarbonsäure. Sd. 184°<sub>18</sub> (J. pr. [2] 71, 330 C. 1905 [1] 1597).
- 13) Diäthylester d.  $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure- $\beta$ -Methylcarbon-säure. Sd. 184—189°<sub>21</sub> (A. 345, 240 C. 1906 [1] 1496).
- 14) Diäthylester d. Benzol-1,3-Di[Äthyl- $\beta$ -Carbonsäure]. Sd. 247—250°<sub>60</sub> (B. 21, 39). — II, 1858.
- 15) Dibutylester d. Benzol-1,4-Dicarbonsäure. Fl. (B. 10, 1743). — II, 1832.
- 16) Diisobutylester d. Benzol-1,4-Dicarbonsäure. Sm. 52,5° (B. 10, 1743). — II, 1832.
- 17) Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -Methylpentan. Sd. 169,5—170°<sub>14</sub> (M. 27, 1126 C. 1907 [1] 628).
- 18) Dipropionat d. 3,6-Dioxy-1,2,4,5-Tetramethylbenzol. Sm. 138,5 bis 139,5° (B. 29, 2175). — \*II, 586.
- 19) Verbindung (aus Dehydracetsäurechlorid). Zers. bei 202° (B. 25, 339). — II, 1757.



C 65,3 — H 7,5 — O 27,2 — M. G. 294.

- 1)  $\eta$ -Oxy- $\eta$ -Phenyl- $\beta$ -Methylheptan- $\epsilon\epsilon$ -Dicarbonsäure (B. 23, 1503). — II, 1959.
- 2)  $\eta$ -Oxy- $\beta$ -Methylheptanphenyläther- $\gamma\delta$ -Dicarbonsäure. Sm. 90—93° (Soc. 69, 1505). — \*II, 366.
- 3) Methylester d. Artemisinsäure. Sm. 180° (B. 34, 3718 C. 1902 [1] 45). — \*III, 456.
- 4) Methylester d. Oxyparasantonsäure. Sm. 138—139° (C. 1903 [2] 1377).
- 5) Dimethylester d. 6-Ketododekahydrobiphenylen-3,4'-Dicarbonsäure. Sd. 255°<sub>20</sub> (Soc. 85, 429 C. 1904 [1] 1439).
- 6) Äthylester d.  $\beta$ -Keto- $\alpha\gamma$ -Di[2-Keto-R-Pentamethylenyl]propan- $\alpha$ -Carbonsäure. Sd. 240—260°<sub>20</sub> (A. 350, 239 C. 1907 [1] 251).
- 7) Diäthylester d.  $\alpha$ -Oxyisovalerianphenyläthersäure-2-Carbonsäure. Sd. 185—190°<sub>4</sub> (B. 33, 1403). — \*II, 890.
- 8) Diäthylester d.  $\delta$ -Oxybutanphenyläther- $\alpha\alpha$ -Dicarbonsäure. Sm. 30° (32°); Sd. 271°<sub>140</sub> (B. 25, 417; 26, 2569; 28, 1199). — II, 667; \*II, 365.
- 9) Diäthylester d.  $\delta$ -Oxybutanphenyläther- $\beta\beta$ -Dicarbonsäure. Sd. 230°<sub>45</sub> (C. 1895 [1] 825; Soc. 69, 171). — \*II, 366.
- 10) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthanäthyläther- $\beta\beta$ -Dicarbonsäure (D. d. Oxybenzylmalonäthyläthersäure). Fl. Na (B. 26, 1877). — II, 1952.
- 11)  $\alpha\gamma$ -Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[2-Oxyphenyl]- $\beta\beta$ -Dimethylpropan-2-Methyläther. Sd. 187°<sub>18</sub> (M. 21, 1106). — \*II, 698.
- 12) Verbindung (aus Ketodimethyldicyklopentancarbonsäure). Sm. 205° (Soc. 79, 784).

$C_{16}H_{22}O_6$

C 61,9 — H 7,1 — O 31,0 — M. G. 310.

- 1)  $\alpha$ -Oxyisovalerian-1,3-Phenylenäthersäure. *Sd.* 230–240°<sub>85</sub> (*B.* 33, 1683). — \*II, 566.
- 2)  $\alpha$ -Oxyisovalerian-1,4-Phenylenäthersäure. *Sm.* 209° (*B.* 33, 1690). — \*II, 573.
- 3) Bilinsäure. *Sm.* 190°. K, Pb, Ag (*B.* 12, 1068). — II, 2008.
- 4) Diäthylester d.  $\alpha$ -Oxypropion-1,2-Phenylenäthersäure. *Sd.* 201° (*B.* 33, 1671). — \*II, 553.
- 5) Diäthylester d.  $\alpha$ -Oxypropion-1,3-Phenylenäthersäure. *Sm.* 72,5° (*B.* 33, 1678). — \*II, 566.
- 6) Diäthylester d. isom.  $\alpha$ -Oxypropion-1,3-Phenylenäthersäure. *Sd.* 207–208°<sub>22</sub> (*B.* 33, 1679).
- 7) Diäthylester d.  $\alpha$ -Oxypropion-1,4-Phenylenäthersäure. *Sm.* 91 bis 91,5° (*B.* 33, 1688). — \*II, 573.
- 8) Diäthylester d. isom.  $\alpha$ -Oxypropion-1,4-Phenylenäthersäure. *Sd.* 187–190° (*B.* 33, 1688). — \*II, 573.
- 9) Dipropylester d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (D. d. Hemipinsäure). *Sm.* 43–45° (*M.* 16, 121). — II, 1996.

$C_{16}H_{22}O_7$

- C 58,9 — H 6,7 — O 34,4 — M. G. 326.
- 1) Eugenolglykosid. *Sm.* 132° (*Am.* 6, 340). — II, 975.
- 2) Rhododendrin. *Sm.* 187–187,5° (*C.* 1901 [2] 594). — \*III, 449.
- 3)  $\alpha$ -Diterpysäure. *Sm.* 216° u. *Zers.* (*A.* 256, 123). — I, 848.
- 4) Anhydrid d. Trimethylparakonsäure. *Sm.* 154–155° (*Am.* 33, 364 *C.* 1905 [1] 1375).
- 5) Triäthylester d. 6-Oxy-1,4-Dihydrobenzol-1,3-Dicarbonsäure-4-Methylcarbonsäure. *Sm.* 82° (*B.* 37, 2118 *C.* 1904 [2] 437).
- 6) Triäthylester d.  $\alpha$ -[2-Furanyl]propan- $\beta\beta\gamma$ -Tricarbonsäure. *Sd.* 212 bis 213,5°<sub>25</sub> (*B.* 33, 490). — \*III, 517.
- 7) Triäthylester d. Glutakonylglutakonsäure. *Sm.* 77–78° (*C. r.* 136, 693 *C.* 1903 [1] 960).
- 8) Triäthylester d. Dimethylketobicyklopentantricarbonsäure. Na, K (*Soc.* 79, 768, 776; *C.* 1900 [2] 319).

$C_{16}H_{22}O_8$

- C 56,1 — H 6,4 — O 37,4 — M. G. 342.
- 1) Coniferin + 2H<sub>2</sub>O. *Sm.* 185° (*Z.* 1866, 339; *M.* 3, 402; *H.* 12, 368; *B.* 7, 609; 16, 44; 18, 1599; 25, 3221; *R.* 24, 466 *C.* 1905 [2] 1255). — III, 577.
- 2) Tripropionylshikiminsäure (*B.* 24, 1284). — I, 769.

$C_{16}H_{22}O_9$

- C 53,6 — H 6,1 — O 40,2 — M. G. 358.
- 1)  $\delta\delta\delta$ -Triacetat d.  $\beta$ -Anhydrid d.  $\beta\beta\delta\delta\delta$ -Penta[Oxymethyl]- $\gamma$ -Oxy-norm. Valeriansäure- $\alpha\gamma$ -Lakton. *Sm.* 161° (*A.* 276, 73). — \*I, 435.

$C_{16}H_{22}O_{10}$

- C 51,3 — H 5,9 — O 42,8 — M. G. 374.
- 1) Gentiamarin (oder  $C_{16}H_{20}O_{10}$ ) (*Bl.* [3] 33, 1071 *C.* 1905 [2] 1432).
- 2) Gentiopikrinsäure. K, Ba (*C. r.* 141, 209 *C.* 1905 [2] 771; *Bl.* [3] 33, 1064 *C.* 1905 [2] 1431).
- 3) Tetraäthylester d.  $\alpha\delta$ -Diketobutan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure (T. d. Dioxalbernsteinsäure). Fl. Na<sub>2</sub> (*A.* 285, 20). — \*I, 449.
- 4) Pentaacetat d. d-Quercit (*A. ch.* [5] 15, 44; *A.* 190, 284). — I, 416.
- 5) Pentaacetat d. l-Quercit. *Sm.* 124–125°. + C<sub>6</sub>H<sub>6</sub> (*Sm.* 87–97°) (*Soc.* 85, 626 *C.* 1904 [2] 329).

$C_{16}H_{22}O_{11}$

- C 49,2 — H 5,6 — O 45,1 — M. G. 390.
- 1) Pentaacetat d. d-Galaktose. *Sm.* 142° (*B.* 11, 1071; 22, 2207, 2209; *B.* 35, 838 Anm. *C.* 1902 [1] 758; *M.* 23, 484 *C.* 1902 [2] 513). — I, 1041.
- 2) Pentaacetat d. d-Glykose. *Sm.* 111–112° (113°) (*B.* 22, 1464; 25 [2] 911; 32, 2413; 34, 3207; *Bl.* [3] 13, 271; *Soc.* 75, 1055; *M.* 23, 4 *C.* 1902 [1] 803; *M.* 23, 484 *C.* 1902 [2] 512; *A.* 331, 373 *C.* 1904 [1] 1556). — I, 1048; \*I, 573.
- 3) isom. Pentaacetat d. d-Glykose. *Sm.* 134° (130°) (*B.* 25 [2] 911; 34, 963, 3207; *Bl.* [3] 13, 268; *C.* 1900 [2] 180; *M.* 22, 149, 1044; *A.* 331, 373 *C.* 1904 [1] 1556). — \*I, 573.
- 4) isom. Pentaacetat d. Glykose. *Sm.* 86° (*Bl.* [3] 13, 269). — \*I, 573.
- 5) Pentaacetat d. Lävulose (*B.* 23, 672). — I, 1054.

$C_{16}H_{22}O_{13}$

- C 45,5 — H 5,2 — O 49,3 — M. G. 422.
- 1) Hexamethylester d. Oxymethantri[Methyldicarbonsäure]. *Sm.* 136 bis 137° (*B.* 28, 2946). — \*I, 452.



$C_{16}H_{22}O_{15}$ 

C 42,3 — H 4,8 — O 52,9 — M. G. 454.

 $C_{18}H_{22}N_2$ 

- 1) Pektinsäure. Pb, Ag<sub>2</sub> (A. 67, 276), siehe auch C<sub>14</sub>H<sub>20</sub>O<sub>13</sub>. — I, 1105.  
C 79,3 — H 9,1 — N 11,6 — M. G. 242.

- 1) Bi-Dimethylanilin. Sm. 173° (172°). 4HCl, (2HCl, PtCl<sub>4</sub>) (B. 13, 2139; 34, 20). — II, 329.  
2) Diäthylparanilin (J. 1862, 344). — IV, 943.  
3) *o*-Phenylhydrazon- $\beta$ - $\zeta$ -Dimethyl- $\beta$ - $\zeta$ -Oktadien (Citralphenylhydrazon) (B. 26, 2716; 28, 2133; 31, 821).  
4) 1-Phenylhydrazon-3-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. bei 60° (A. 297, 147).  
5) 1-Phenylhydrazondekahydronaphtalin (C. r. 144, 982 C. 1907 [2] 153).  
6) Phenylhydrazon d. Campher. Sd. 230—235° u. ger. Zers. (210°<sub>17</sub>). Pikrat (G. 15, 247; 16, 132; M. 23, 914; B. 36, 868 C. 1903 [1] 972; C. 1906 [2] 1249). — IV, 795; \*IV, 526.  
7) polym. Phenylhydrazon d. Campher. Fest (Bl. [3] 1, 241). — IV, 796.  
8) Phenylhydrazon d. Keton C<sub>10</sub>H<sub>16</sub>O (aus Isolaunolsäure). Sd. 185 bis 190°<sub>13</sub> (C. 1897 [1] 814; Bl. [3] 19, 704). — \*IV, 501.  
9) Phenylhydrazon d. Keton C<sub>10</sub>H<sub>16</sub>O (aus Nitrosomenthen). Sm. 73,5 bis 74° (Am. 18, 775). — IV, 770.  
10) Phenylhydrazon d. Aldehyd C<sub>10</sub>H<sub>16</sub>O (aus Gingergrasöl). Sm. 63° (J. pr. [2] 71, 461 C. 1905 [2] 554).  
11) Phenylcamphenylamidin. Fl. (B. 18, 1633). — IV, 533.  
12) Nitril d.  $\beta$ -Benzylamido- $\alpha$ -Okten- $\alpha$ -Carbonsäure. Sm. 48° (C. r. 143, 555 C. 1906 [2] 1842).

 $C_{18}H_{22}N_4$ 

- 13) Verbindung +  $\frac{5}{3}$  H<sub>2</sub>O (aus Methyläthylketon u. Pyrrol). Sm. 142° (wasserfrei). 2 + AgNO<sub>3</sub> (B. 20, 2454). — IV, 943.  
C 71,1 — H 8,1 — N 20,7 — M. G. 270.  
1)  $\alpha\beta$ -Di[4-Amido-2-Methylphenylamido]äthan. 4HCl (Soc. 71, 425). — IV, 602; \*IV, 404.  
2)  $\alpha\beta$ -Di[4-Amido-3-Methylphenylamido]äthan. Sm. 143° (Soc. 71, 427). — IV, 612; \*IV, 404.  
3)  $\alpha\beta$ -Di[6-Amido-3-Methylphenylamido]äthan. Sm. 158—159° (B. 17, 780). — IV, 612.  
4) 4'-Dimethylamido-4,6,2'-Triamido-3-Methyldiphenylmethan. Sm. 177° (D.R.P. 133709 C. 1902 [2] 615). — \*IV, 948.  
5) 4-Methylamido-4'-Dimethylamido-2,2'-Diamidodiphenylmethan. Sm. 95° (D.R.P. 133709 C. 1902 [2] 615). — \*IV, 947.  
6) 4,4'-Diamido-2,2'-Di[Dimethylamido]biphenyl. Sm. 166°. 2HCl, 4HCl, (4HCl, PtCl<sub>4</sub>), 2HBr, 2HJ, H<sub>2</sub>SO<sub>4</sub> (B. 14, 2164; 17, 118; 30, 2940; Bl. [3] 7, 472). — IV, 1275.  
7) 2,4'-Diamido-3,3'-Di[Dimethylamido]biphenyl. Sm. bei 100°. 4HCl + 4H<sub>2</sub>O (B. 30, 2942). — IV, 1275.  
8) 2,2'-Diamido-4,4'-Di[Dimethylamido]biphenyl. Sm. 166° (B. 37, 33 C. 1904 [1] 524).

 $C_{16}H_{23}N$ 

- 9) s-Di[3-Dimethylamidophenyl]hydrazin. Sm. 99—100° (B. 30, 2939; C. 1901 [1] 105). — IV, 1499; \*IV, 1091.  
C 83,8 — H 10,0 — N 6,1 — M. G. 229.  
1) 6-Phenylamidomethyl-1,1,3-Trimethyl-1,2,3,4-Tetrahydrobenzol. Sd. 187°<sub>19</sub> (C. 1901 [1] 1026).  
2) Phenyl-1-Fenchylamin. Sm. 93—94°; Sd. 171—173°<sub>13</sub> (A. 263, 150; Soc. 73, 277). — IV, 58; \*IV, 62.  
3) 1,3,3-Triäthyl-2-Äthyliden-2,3-Dihydroindol. Sd. 187°<sub>40</sub>. Pikrat (C. 1905 [2] 677).  
4) 4-Methyl-1-Isopropylhexahydrocarbazol. Sm. 71° (A. 359, 73 C. 1908 [1] 1551).  
5) Methyldiisopropyldihydrochinolin. Sd. 298—300°. (2HCl, PtCl<sub>4</sub>) (B. 21, 3437). — IV, 234.  
6) Nitril d.  $\alpha$ -Phenylnonan- $\alpha$ -Carbonsäure. Sd. 328° (B. 22, 1237). — II, 1401.

 $C_{16}H_{24}O$ 

- C 82,8 — H 10,3 — O 6,9 — M. G. 232.  
1) 1-*o*-Oxy-*o*-Phenyl- $\beta$ - $\zeta$ -Dimethyl- $\alpha$ -Okten. Sd. 174°<sub>9,5</sub> (B. 39, 1939 C. 1906 [2] 123).  
2) 5-Oxy-1-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol. Sd. 185°<sub>14</sub> (A. 303, 268). — \*II, 653.

- C<sub>16</sub>H<sub>24</sub>O**
- 3) 4-Keto- $\beta\theta\mu$ -Trimethyl- $\beta\epsilon\eta\lambda$ -Tridekatetraën. Sd. 185°<sub>10</sub> (C. 1901 [1] 711).
  - 4) Methyl-4-Oktylphenylketon. Sd. bei 300° (B. 31, 938). — \*III, 127.
  - 5) Hexyl-2,4,6-Trimethylphenylketon. Sd. 172°<sub>15</sub> (B. 37, 930 C. 1904 [1] 1209).
  - 6) Propyl-6-Pseudobutyl-2,4-Dimethylphenylketon. Sm. 50°; Sd. 290 bis 295° (B. 31, 1349). — \*III, 127.
  - 7)  $\alpha$ -Propenyljonon. Sd. 155—165°<sub>15</sub> (D.R.P. 133758 C. 1902 [2] 613).
  - 8)  $\beta$ -Propenyljonon. Sd. 160—172°<sub>13</sub> (D.R.P. 133758 C. 1902 [2] 613).
  - 9) Verbindung (aus d. Pinakon C<sub>16</sub>H<sub>26</sub>O<sub>2</sub>). Sd. 220—225°<sub>15</sub> (Soc. 57, 248). — I, 272.
- C<sub>16</sub>H<sub>24</sub>O<sub>2</sub>**
- C 77,4 — H 9,7 — O 12,9 — M. G. 248.
- 1) 3-Methyl-4-Hexyläther d. 3,4-Dioxy-1-Allylbenzol. Sd. 296—300° (J. 1877, 581). — II, 974.
  - 2) 2,5-Diisocamyl-1,4-Benzochinon. Sm. 140° (B. 25, 2653). — III, 369.
  - 3) bim. Dimethylcyklohexenon. Sm. 113°; Sd. 258—262°<sub>758</sub> (B. 32, 422). — \*I, 524.
  - 4)  $\beta$ -Acetyljonon. Sd. 165—175°<sub>20</sub> (D.R.P. 133758 C. 1902 [2] 614).
  - 5)  $\alpha$ -Abietinolsäure. Sm. 95—96° (C. 1900 [2] 862). — \*II, 848.
  - 6)  $\beta$ -Abietinolsäure. Sm. 93—94° (C. 1900 [2] 862). — \*II, 848.
  - 7)  $\alpha$ -Beljiabietinolsäure. Sm. 96° (Ar. 240, 591 C. 1903 [1] 164).
  - 8)  $\beta$ -Beljiabietinolsäure. Sm. 96° (Ar. 240, 591 C. 1903 [1] 164).
  - 9)  $\alpha$ -Palabietinolsäure. Sm. 95° (Ar. 240, 581 C. 1903 [1] 163).
  - 10)  $\beta$ -Palabietinolsäure. Sm. 95° (Ar. 240, 581 C. 1903 [1] 163).
  - 11) Methyl ester d. d-Santalsäure. Sd. 160—164°<sub>10</sub> (B. 40, 1132 C. 1907 [1] 1327).
  - 12) Formiat d. Santalol. Sd. 175—178° (C. 1900 [2] 314). — \*III, 414.
  - 13) Verbindung (aus Cedron). Fest; Sd. 201—203°<sub>16</sub> (M. 20, 789). — \*II, 623.
- C<sub>16</sub>H<sub>24</sub>O<sub>3</sub>**
- C 72,7 — H 9,1 — O 18,2 — M. G. 264.
- 1) Aldehydsäure (aus Abietinsäure). Sm. 188° (Am. 33, 529 C. 1905 [2] 251; D.R.P. 183328 C. 1907 [1] 1607).
  - 2) Methyl ester d. Alantolsäure. Sm. 83° (A. 285, 361). — II, 1594.
  - 3) Äthylester d.  $\alpha$ -Oxybutter-5-Isopropyl-2-Methylphenyläthersäure. Sd. 283—286°<sub>751</sub> (B. 33, 1271). — \*II, 459.
  - 4) Äthylester d.  $\alpha$ -Oxybutter-6-Isopropyl-3-Methylphenyläthersäure. Sd. 273—278°<sub>778</sub> (B. 33, 1273). — \*II, 464.
  - 5) Äthylester d.  $\alpha$ -Oxyisobutter-5-Isopropyl-2-Methylphenyläthersäure. Sd. 264—272°<sub>751</sub> (B. 33, 1271). — \*II, 459.
  - 6) Äthylester d.  $\alpha$ -Oxyisobutter-6-Isopropyl-3-Methylphenyläthersäure. Sd. 258—263°<sub>760</sub> (B. 33, 1273). — \*II, 464.
  - 7) Äthylester d.  $\alpha$ -Citrylidenacetessigsäure. Sd. 185°<sub>12</sub> (C. 1898 [2] 695; SEHLER, Dissertation, Heidelberg 1897). — \*I, 268.
  - 8) Äthylester d.  $\beta$ -Citrylidenacetessigsäure. Sm. 68° (SEHLER, Dissertation, Heidelberg 1897).
  - 9) Äthylester d. aliphatischen Citrylidenacetessigsäure. Fl. (C. 1901 [2] 902).
  - 10) Äthylester d.  $\beta$ -Jononcarbonsäure. Sm. 49°; Sd. 160°<sub>11</sub> (C. 1901 [2] 1103).
  - 11) Äthylester d. Allylcamphocarbonsäure. Sd. 163—164°<sub>12,5</sub> (B. 35, 3631 C. 1902 [2] 1468).
  - 12) Acetat d. Alkohol C<sub>14</sub>H<sub>22</sub>O<sub>2</sub>. Sd. 243° (Ar. 245, 452 C. 1907 [2] 1913).
- C<sub>16</sub>H<sub>24</sub>O<sub>4</sub>**
- C 68,6 — H 8,6 — O 22,8 — M. G. 280.
- 1) Säure + H<sub>2</sub>O (aus Abietinsäure). Sm. 80° (111—113° wasserfrei). Ba + 3H<sub>2</sub>O (Am. 33, 527 C. 1905 [2] 251; D.R.P. 183328 C. 1907 [1] 1607).
  - 2) Säure (aus Mesityloxyd u. Natriummalonsäurediäthylester). Sm. 148 bis 148,5°. Ag<sub>2</sub> (C. 1899 [1] 251).
  - 3) Methyl ester d. Santolsäure. Sm. 111—114° (B. 37, 260 C. 1904 [1] 643).
  - 4) Äthylester d.  $\beta$ -[5-Keto-4-Methylhexahydrophenyl]propen-3-Acetessigsäure (Ä. d. Dihydrocarvonylacetessigsäure). Fl. (B. 37, 1668 C. 1904 [1] 1606).
  - 5) Äthylester d. Camphoformylpropionsäure. Sd. 205—215°<sub>20</sub> (C. 1907 [1] 1496).

- C<sub>16</sub>H<sub>24</sub>O<sub>4</sub>**
- 6) Acetat d. 2,4-Diketo-6-Oxy-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Sm. 60–62° (M. 9, 888). — II, 1025.
  - 7) Diacetat d. Äscigenin (J. 1862, 492, 493). — III, 613.
  - 8) Verbindung (aus Pyrogallol u. Cineol) (B. 35, 1210 C. 1902 [1] 998). — \*III, 340.
- C<sub>16</sub>H<sub>24</sub>O<sub>5</sub>**
- 1) Dihydroalantdicarbonsäure. Na<sub>2</sub>, Ca, Ba, Pb (A. 293, 362). — \*II, 1116.
  - 2) Dimethylester d.  $\beta$ -Camphopropioncarbonsäure. Sd. 200–204°<sub>10</sub> (C. r. 141, 15 C. 1905 [2] 485).
  - 3) Diisoamylester d. Furan-2,5-Dicarbonsäure. Sm. 37,5°; Sd. 207 bis 211°<sub>13</sub> (B. 34, 3456). — \*III, 513.
  - 4) Verbindung (aus Camphocarbonsäureäthylester). Sd. 179,5–181,5°<sub>20</sub> (B. 24, 3392). — I, 628.
- C<sub>16</sub>H<sub>24</sub>O<sub>6</sub>**
- 1) Carvakrolglykosid +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 135° (wasserfrei) (Soc. 75, 1057; 79, 706). — \*II, 459.
  - 2) Thymolglykosid + H<sub>2</sub>O. Sm. 100° (Bl. [3] 13, 5).
  - 3) Hirtasäure. Sm. 136–137°. K (J. pr. [2] 73, 130 C. 1906 [1] 1101).
  - 4) Äthylester d. Pentinsäure. Fl. (A. 219, 114). — I, 620.
  - 5) Diäthylester d. 2,5-Diketo-1-Methyl-4-Propylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Methylpropylsuccinylbernsteinsäure). Sd. 195 bis 200°<sub>15</sub> (B. 26, 233). — \*I, 423.
  - 6) Diäthylester d. 2,5-Diketo-1-Methyl-4-Isopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Methylisopropylsuccinylbernsteinsäure). Sd. 195–200°<sub>15</sub> (B. 26, 233). — \*I, 423.
  - 7) Diäthylester d. cis-2,5-Diketo-1,4-Diäthylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diäthylsuccinylbernsteinsäure). Sd. 215°<sub>15</sub> (B. 26, 232). — \*I, 423.
  - 8) Diäthylester d. trans-2,5-Diketo-1,4-Diäthylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diäthylsuccinylbernsteinsäure). Sm. 65–66°; Sd. 215°<sub>15</sub> (B. 26, 232). — \*I, 423.
  - 9) Diäthylester d. 5-Keto-2-Acetyl-1,3-Dimethylhexahydrobenzol-2,4-Dicarbonsäure. Sd. 258–260°<sub>28</sub> (Soc. 95, 115 C. 1909 [1] 1236).
- C<sub>16</sub>H<sub>24</sub>O<sub>7</sub>**
- 1) 1-Isopropylbenzol-4-Carbonsäurealdehydglykose (Cuminolglykose) (A. 244, 22). — III, 55.
  - 2) Pseudocholoidansäure (oder C<sub>25</sub>H<sub>30</sub>O<sub>10</sub>). Pb<sub>3</sub>, Ag<sub>2</sub> (Bl. 38, 135). — I, 727.
  - 3) Triäthylester d. 3-Keto-1-Methyl-2-Äthyl-R-Tetramethylen-1,2,4-Tricarbonsäure. Sd. 208–209°<sub>16</sub> (B. 33, 3751).
- C<sub>16</sub>H<sub>24</sub>O<sub>8</sub>**
- 1)  $\alpha$ -d-Camphoglykuronsäure + H<sub>2</sub>O. Sm. 128–130° (wasserfrei). Ba, Ag + xH<sub>2</sub>O (H. 3, 423). — I, 866.
  - 2)  $\beta$ -d-Camphoglykuronsäure. Sm. 100°. Ag + 3H<sub>2</sub>O (H. 3, 431). — I, 866.
  - 3) l-Camphoglykuronsäure. Sm. 120–130°. Strychninsalz (C. 1907 [1] 552).
  - 4) Camphenglykolmonoglykuronsäure. K +  $1\frac{1}{2}$ (2)H<sub>2</sub>O (H. 37, 200 C. 1903 [1] 594).
  - 5) Oxaphorglykuronsäure + H<sub>2</sub>O. Sm. 138°. Ag + 2H<sub>2</sub>O (C. 1907 [1] 552).
  - 6) Diäthylester d. polym. Äthen- $\alpha\alpha$ -Dicarbonsäure (Tetraäthylester d. Dimethylenmalonsäure). Sm. 155–156° (146–150°) (B. 22, 3295; A. 273, 48; Soc. 73, 340; C. 1898 [2] 1169). — I, 706.
  - 7) Tetraäthylester d.  $\alpha$ -Buten- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure (T. d. Methylidicarboxylglutakonsäure). Sd. 210°<sub>18</sub> (Soc. 63, 878; A. 222, 259). — \*I, 446.
  - 8) Tetraäthylester d.  $\alpha$ -Buten- $\alpha\beta\gamma\gamma$ -Tetracarbonsäure. Sd. 202–204°<sub>18</sub> (Soc. 81, 1213 C. 1902 [2] 888).
  - 9) Tetraäthylester d.  $\alpha$ -Buten- $\alpha\gamma\gamma\delta$ -Tetracarbonsäure. Sd. 216–218°<sub>12</sub> (J. pr. [2] 66, 106 C. 1902 [2] 732).
  - 10) Tetraäthylester d. R-Tetramethylen-1,1,3,3-Tetracarbonsäure. Sd. 220–250° u. Zers. (A. 256, 199). — I, 865.
  - 11)  $\alpha\gamma\gamma$ -Triäthyl- $\alpha$ -Propylester d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Fl. (B. 22, 1422). — I, 864.
- C<sub>16</sub>H<sub>24</sub>O<sub>10</sub>**
- 1)  $\beta\gamma\delta$ -Trimethylester- $\alpha\alpha$ -Diäthylester d. Butan- $\alpha\alpha\beta\gamma\delta$ -Pentacarbonsäure. Sm. 57–58° (B. 36, 3294 C. 1903 [2] 1167).



- C<sub>16</sub>H<sub>24</sub>O<sub>10</sub>** 2) Tetracetat d.  $\beta$ -Äthylgalaktosid. Sm. 88° (B. 35, 3155 C. 1902 [2] 1177).
- 3) Tetracetat d.  $\beta$ -Äthyl-d-Glykosid. Sm. 105—106° (106—107°) (C. 1900 [2] 180; B. 34, 971).
- 4) Tetracetat d. i-Inositdimethyläther. Sm. 193° (195°); Sd. 335—340° u. Zers. (A. ch. [6] 12, 567; R. 27, 258 C. 1908 [2] 1938). — I, 1052.
- C<sub>16</sub>H<sub>24</sub>O<sub>11</sub>** 5) Verbindung (aus d. Weinsäurediäthylester). Fl. (R. 12, 57).  
C 49,0 — H 6,1 — O 44,9 — M. G. 392.
- 1) Dulcitolpentacetat. Sm. 163° (A. ch. [4] 27, 156). — I, 418.
- 2) Pentamethylester d.  $\gamma$ -Oxypentanmethylläther- $\beta\beta\gamma\delta\delta$ -Pentacarbon-säure. Sm. 100° (A. 306, 37). — \*I, 452.  
C 78,7 — H 9,8 — N 11,5 — M. G. 244.
- C<sub>16</sub>H<sub>24</sub>N<sub>2</sub>** 1) Verbindung (aus Benzol u. Ammoniak) (B. 41, 2687 C. 1908 [2] 1256).
- C<sub>16</sub>H<sub>24</sub>Cl<sub>2</sub>** 1)  $\alpha\beta$ [oder  $\beta\delta$ ]-Dichlor- $\beta$ -Phenyl- $\beta\zeta$ -Dimethyloktan. Fl. (B. 39, 1940 C. 1906 [2] 123).
- C<sub>16</sub>H<sub>24</sub>Br<sub>2</sub>** 1)  $\alpha\beta$ -Dibrom- $\alpha$ -[2,4,6-Trimethylphenyl]heptan. Fl. (B. 37, 931 C. 1904 [1] 1209).
- C<sub>16</sub>H<sub>26</sub>N** C 83,1 — H 10,8 — N 6,1 — M. G. 231.
- 1) 6-Phenylamidomethyl-1,1,3-Trimethylhexahydrobenzol. Sd. 190°<sub>16</sub> (C. 1901 [2] 152).
- 2)  $\alpha$ -[4-Isopropylphenyl]- $\beta$ -[1-Hexahydropyridyl]äthan. Sd. 300—305°. HCl, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O), HBr (B. 34, 1895). — \*IV, 152.
- 3)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Äthyl-2-Hexahydropyridyl]äthan. Sd. 202 bis 203°<sub>14</sub> (B. 38, 3705 C. 1906 [1] 52).
- 4) 1-Camphyl-2,5-Dimethylpyrrol. Fl. (B. 38, 192 C. 1905 [1] 528).
- 5) N-Methylhemisparteilen. Sd. 160—161°<sub>16</sub> (C. r. 145, 816 C. 1908 [1] 139; Bl. [4] 3, 679 C. 1908 [2] 177).  
C 74,1 — H 9,6 — N 16,2 — M. G. 259.
- C<sub>16</sub>H<sub>25</sub>N<sub>3</sub>** 1) Base (aus Campherosazon). Fl. 2HCl (G. 17, 160). — IV, 796.
- C<sub>16</sub>H<sub>25</sub>Cl** 1) 6-Chlor-1,2,3,4,5-Pentaäthylbenzol. Sd. 290—295° (A. ch. [6] 6, 428). — II, 56.
- C<sub>16</sub>H<sub>25</sub>Br** 1) 6-Brom-1,2,3,4,5-Pentaäthylbenzol. Sm. 47,5°; Sd. bei 315° (B. 21, 2815). — II, 72.
- C<sub>16</sub>H<sub>26</sub>O** C 82,1 — H 11,1 — O 6,8 — M. G. 234.
- 1)  $\alpha$ -Oxy- $\delta$ -Butyl- $\beta\zeta$ -Dodekadiin. Sd. 178°<sub>16</sub> (Bl. [3] 27, 363 C. 1902 [1] 1319).
- 2)  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trimethylphenyl]heptan. Sd. 194°<sub>21</sub> (B. 37, 931 C. 1904 [1] 1209).
- 3) Diamylpropiolalkohol. Sd. 178°<sub>16</sub> (C. 1901 [2] 25).
- 4) Methylläther d. Santalol (Thryseol). Sd. 149—156°<sub>16</sub> (C. 1908 [2] 2030).
- 5) Dimethylheptenon. Sd. 172—174°<sub>16</sub> (Bl. [3] 21, 88). — \*I, 529.
- 6)  $\alpha$ -Alban (aus Ficus Vogelii). Sm. 201—205° (B. 40, 1000 C. 1907 [1] 1207).
- 7)  $\beta$ -Alban (aus Ficus Vogelii). Sm. 154° (B. 40, 1000 C. 1907 [1] 1207).
- 8) Azulen. Sd. bei 300° (C. 1899 [2] 623). — \*III, 407.
- 9) Verbindung (aus Cadinen u. Formaldehyd). Sd. 180°<sub>15</sub> (C. r. 138, 1229 C. 1904 [2] 106).
- 10) Verbindung (aus Caryophyllen u. Formaldehyd). Sd. 177—178°<sub>15</sub> (C. r. 138, 1228 C. 1904 [2] 106).
- 11) Verbindung (aus Cloven u. Formaldehyd). Sd. 170°<sub>12</sub> (C. r. 138, 1229 C. 1904 [2] 106).
- C<sub>16</sub>H<sub>26</sub>O<sub>2</sub>** C 76,8 — H 10,4 — O 12,8 — M. G. 250.
- 1)  $\alpha\delta$ -Dioxy- $\alpha\alpha\delta\delta$ -Tetraallylbutan. Sd. 200—213°<sub>10</sub> (B. 41, 4094 C. 1909 [1] 269).
- 2) 1,2-Dioxy- $\beta$ -Diisoamylbenzol. Sm. 60° (B. 25, 2654). — II, 971.
- 3) 1,3-Dioxy- $\beta$ -Diisoamylbenzol. Sm. 89° (B. 25, 2653). — II, 972.
- 4) 1,4-Dioxy- $\beta$ -Diisoamylbenzol. Sm. 185° (B. 25, 2650). — II, 972.
- 5) 1,3-Dioxy- $\beta$ -tert. Diamylbenzol. Sm. 67° (B. 32, 2426). — \*II, 587.
- 6) 1,1'-Dioxy-3,3,3',3'-Tetramethyl-1,2,3,4,1',2',3',4'-Oktohydrobiphenyl. Sm. 148° (Soc. 91, 76 C. 1907 [1] 1039).
- 7) Dibutyläther d. 4,6-Dioxy-1,3-Dimethylbenzol. Sm. 42° (B. 40, 1947 C. 1907 [2] 232).
- 8) Diisoamyläther d. 1,3-Dioxybenzol. Sm. 47° (G. 19, 496). — II, 917.

- $C_{16}H_{26}O_2$  9) Diisoamyläther d. 1,4-Dioxybenzol. Sm.  $65^\circ$  (B. 25, 2652). — II, 940.
- 10) Benzoresinol. Sm.  $274^\circ$ . K (B. 26 [2] 679). — III, 554.
- 11) Honduresinol. Sm.  $286^\circ$  (Ar. 243, 227 C. 1905 [2] 136).
- 12) Storesinol. Sm.  $156-161^\circ$  (C. 1901 [2] 856, 857). — \*III, 425.
- 13) Styresinol. Sm.  $161-162^\circ$  (C. 1901 [2] 857; Ar. 243, 229 C. 1905 [2] 136). — \*III, 426.
- 14) 5,5'-Diketo-1,3,1',3'-Tetramethyldodekahydrobiphenyl. Sm.  $175^\circ$  (B. 32, 1322). — \*I, 541.
- 15) Halepopinitsäure. Sm.  $78-80^\circ$  (Ar. 245, 162 C. 1907 [2] 147).
- 16) l-Menthylester d.  $\alpha\gamma$ -Pentadien- $\alpha$ -Carbonsäure. Sd.  $173^\circ_{14}$  (A. 327, 178 C. 1903 [1] 1396).
- 17) Formiat d. Caryophyllenhydrat. Sd.  $165-167^\circ_{20}$  (C. 1900 [2] 314). — \*III, 386.
- $C_{16}H_{26}O_3$  18) Verbindung (Pinakon). Sd.  $259-260^\circ_{25}$  (Soc. 57, 248). — I, 272.  
C 72,2 — H 9,8 — O 18,0 — M. G. 266.
- 1) 1,2,3-Trioxo-P-Diisoamylbenzol. Sm.  $90^\circ$  (B. 25, 2656). — II, 1026.
- 2)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2,4,5-Trimethylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxypropan. Sd.  $159-160^\circ_{16}$  (A. 312, 306). — \*II, 449.
- 3)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[5-Methyl-2-Isopropylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. Sd.  $280-281^\circ$  (A. 312, 306). — \*II, 463.
- 4)  $\alpha\alpha$ -Diäthyläther- $\beta$ -[2-Methyl-5-Isopropylphenyl]äther d.  $\alpha\alpha\beta$ -Trioxyäthan. Fl. (A. 312, 307).
- 5) 2,4,6-Triketo-1,1,3,3,5-Pentaäthylhexahydrobenzol (M. 9, 893). — II, 1026.
- 6) 2,4-Diketo-6-Oxy-1,1,3,3,5-Pentaäthyl-1,2,3,4-Tetrahydrobenzol. Sm.  $91-94^\circ$  (M. 9, 221; 13, 247). — II, 1026.
- 7) Äthyläther d. 2,4-Diketo-6-Oxy-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Fl. (M. 9, 887). — II, 1025.
- 8) Digitaliretin. Sm.  $60^\circ$  (J. 1858, 529). — III, 580.
- 9) Methylester d. Cedrenketosäure. Sd.  $160-165^\circ_8$  (B. 40, 3524 C. 1907 [2] 1694).
- 10) Äthylester d. 5-Oxy-3-Methyl-1-Hexyl-1,2-Dihydrobenzol-6-Carbonsäure. Sd.  $186-188^\circ_{17}$  (A. 288, 342; 297, 144 Anm.). — \*I, 268.
- 11) Äthylester d.  $\epsilon$ -Acetyl- $\beta\beta$ -Dimethyl- $\beta\eta$ -Nonadien- $\epsilon$ -Carbonsäure. Sd.  $280-290^\circ$  (C. 1905 [1] 145).
- 12) Äthylester d. 1-Keto-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sd.  $186-188^\circ_{17}$  (A. 288, 342). — \*I, 268.
- 13) Isoamylester d. Camphocarbonsäure. Sd.  $175-175,5^\circ_{11}$  (B. 35, 3511 C. 1902 [2] 1320; B. 36, 1310 C. 1903 [1] 1225; B. 37, 2515 C. 1904 [2] 332; B. 37, 3947 C. 1904 [2] 1569).
- 14) Verbindung (aus Brasilin) (B. 17, 194). — III, 655.
- $C_{16}H_{26}O_4$  15) Verbindung (aus Storesinol). Sm.  $280^\circ$  (C. 1901 [2] 857). — \*III, 425.  
C 68,1 — H 9,2 — O 22,7 — M. G. 282.
- 1)  $\alpha\beta$ -Dihexahydrophenyläthan-4,4'-Dicarbonsäure (p-Dihexahydrodibenzylidicarbonsäure). Sm.  $140-147^\circ$  (A. 310, 204). — \*II, 927.
- 2) Gurjoresinolsäure. Sm.  $254-255^\circ$ . Na (Ar. 241, 396 C. 1903 [2] 724).
- 3) Hederasäure. Sm.  $223^\circ$  (J. 1878, 960; B. 22 [2] 61). — I, 733.
- 4) Dimethylester d. Cedrendicarbonsäure. Sd.  $165-173^\circ_{11}$  (B. 40, 3525 C. 1907 [2] 1694).
- 5) Di[Hexahydrophenylester] d. Bernsteinsäure. Fl. (Bl. [3] 33, 274 C. 1905 [1] 1014).
- 6) Diacetat d. Glykol  $C_{12}H_{22}O_2$ . Sd.  $166-170^\circ_{13}$  (M. 24, 159 C. 1903 [1] 957).  
C 64,4 — H 8,7 — O 26,8 — M. G. 298.
- $C_{16}H_{26}O_5$  1) Oxyleinölsäure. Pb (J. 1865, 324).
- 2) Diäthylester d. 2-Keto-1-Methyl-3-Isopropylhexahydrobenzol-1,3-Dicarbonsäure. Sd.  $165^\circ_{10}$  (A. 350, 215 C. 1907 [1] 249).
- 3) Diacetat d. cis-Di[2-Oxyhexahydrophenyl]äther. Sd.  $332-333^\circ$  (C. 1905 [2] 1339).
- 4) Dipropionat d. Pinolglykol. Sm.  $106^\circ$  (A. 268, 223). — III, 509.
- $C_{16}H_{26}O_6$  5) Verbindung (aus d. Aldehyd  $C_8H_{14}O_3$ ) (Soc. 91, 1834 C. 1908 [1] 223).  
C 61,1 — H 8,3 — O 30,6 — M. G. 314.
- 1) Dulcamaretin (J. 1875, 828). — III, 582.

- C<sub>16</sub>H<sub>26</sub>O<sub>6</sub>**
- 2) Diäthylester d.  $\beta\zeta$ -Diketo- $\delta$ -Isopropylheptan- $\gamma\epsilon$ -Dicarbonsäure (D. d. Isobutylidendiacetessigsäure). Sm. 117° (A. 288, 323). — \*I, 421.
  - 3) Triäthylester d.  $\alpha$ -Hepten- $\delta\delta\epsilon$ -Tricarbonsäure. Sd. 285—290° (B. 25, 488; 29, 977). — I, 821.
  - 4) Triäthylester d.  $\epsilon$ -Methyl- $\alpha$ -Hexen- $\delta\delta\epsilon$ -Tricarbonsäure. Sd. 295 bis 300° (B. 29, 977). — \*I, 419.
  - 5) Di[ $\beta$ -Ketopropylester] d.  $\beta$ -Methylheptan- $\gamma\zeta$ -Dicarbonsäure. Sd. 230°<sub>12</sub> (C. r. 146, 139 C. 1908 [1] 1169).
  - 6) Triacetat d. 1,2-Dioxy-4-[ $\alpha$ -Oxyisopropyl]-1-Methylhexahydrobenzol. Sd. 193—195°<sub>20</sub> (C. 1897 [2] 417). — \*III, 712.  
C 58,2 — H 7,9 — O 33,9 — M. G. 330.
- C<sub>16</sub>H<sub>26</sub>O<sub>7</sub>**
- 1) d-Borneolglykuronsäure. Sm. 174—175°. Na, Zn + 2H<sub>2</sub>O (H. 34, 391 C. 1902 [1] 255, 674; C. 1907 [1] 552). — \*III, 338.
  - 2) l-Borneolglykuronsäure. Na (C. 1907 [1] 552).
  - 3) Triäthylester d.  $\beta$ -Keto- $\gamma$ -Äthylpentan- $\gamma\delta\epsilon$ -Tricarbonsäure. Sd. 194—196° (Soc. 73, 728).
  - 4) Triäthylester d.  $\gamma$ -Acetylpentan- $\alpha\gamma\epsilon$ -Tricarbonsäure. Sd. 217°<sub>15</sub> (Soc. 91, 1740 C. 1907 [2] 1975).
  - 5) Monomenthylester d. Citronensäure (C. 1903 [1] 162; B. 37, 1380 C. 1904 [1] 1441).  
C 55,5 — H 7,5 — O 37,0 — M. G. 346.
- C<sub>16</sub>H<sub>26</sub>O<sub>8</sub>**
- 1) Thujonhydratglykuronsäure. K (C. 1901 [1] 53; H. 33, 594; H. 36, 453 C. 1902 [2] 1426). — \*III, 385.
  - 2) Dimethylester d. d-Divalerylweinsäure. Sd. 208—210°<sub>11</sub> (Bl. [3] 11, 312). — \*I, 398.
  - 3) Dimethylester d. d-Diisovalerylweinsäure. Fl. (Bl. [3] 11, 369). — \*I, 398.
  - 4) Diäthylester d. d-Dibutylweinsäure. Sd. 212—215°<sub>24</sub> (B. 25 [2] 859; Bl. [3] 11, 311). — \*I, 398.
  - 5) Diäthylester d. d-Diisobutylweinsäure. Fl. (Bl. [3] 11, 368). — \*I, 398.
  - 6) Tetraäthylester d. Butan- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Sd. 200°<sub>150</sub> (B. 17, 2785). — I, 860.
  - 7) Tetraäthylester d. Butan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Sd. 275—280°<sub>225</sub>. Na<sub>2</sub> (Soc. 51, 19; 65, 578; 67, 109; B. 26, 2243). — I, 860; \*I, 440.
  - 8) Tetraäthylester d. Butan- $\alpha\beta\beta\delta$ -Tetracarbonsäure. Sd. 200—205°<sub>15</sub> (J. pr. [2] 66, 108 C. 1902 [2] 732; Soc. 89, 1643 C. 1907 [1] 343).
  - 9) Tetraäthylester d. Butan- $\alpha\beta\gamma\gamma$ -Tetracarbonsäure. Sd. 201°<sub>12</sub> (Soc. 73, 1009; B. 24, 2890; 33, 3761). — \*I, 441.
  - 10) Tetraäthylester d. Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sd. bei 300° (B. 27, 1124). — \*I, 441.
  - 11) Tetraäthylester d. Butan- $\beta\beta\gamma\gamma$ -Tetracarbonsäure. Sd. 310—315° (A. 234, 63, 70; Am. 16, 578). — I, 860.
  - 12) Tetraäthylester d. Butan- $\rho$ -Tetracarbonsäure. Sd. 211—212,5°<sub>17</sub> (J. pr. [2] 45, 59). — I, 860.
  - 13) Tetraäthylester d. Butan- $\rho$ -Tetracarbonsäure. Sd. oberhalb 300° (201°<sub>17</sub>) (J. pr. [2] 45, 57). — I, 860.
  - 14) Tetraäthylester d.  $\beta$ -Methylpropan- $\alpha\alpha\beta\gamma$ -Tetracarbonsäure. Sd. 200—201°<sub>12</sub> (Soc. 73, 1010; B. 33, 3759). — \*I, 441.
  - 15) Tetraäthylester d.  $\beta$ -Methylpropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sd. 209—212°<sub>20</sub> (208—209°<sub>17</sub>) (A. 218, 158; B. 31, 2587; J. pr. [2] 68, 157 C. 1903 [2] 759). — I, 860; \*I, 440.
  - 16) norm. Dipropylester d. d-Dipropionylweinsäure. Sd. 222—225°<sub>45</sub> (B. 25 [2] 859; 26 [2] 923; Bl. [3] 9, 683; [3] 11, 311). — \*I, 398.
  - 17) norm. Dibutylester d. d-Diacetylweinsäure. Sd. 218°<sub>23</sub> (B. 25 [2] 859; Bl. [3] 11, 310). — \*I, 397.
  - 18) Diisobutylester d. d-Diacetylweinsäure. Sd. 322—324° (B. 14, 2790; 25 [2] 859; J. 1882, 857; Bl. [3] 11, 367). — I, 797; \*I, 397.
  - 19) Triäthylpropylester d. Propan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sd. 195 bis 202°<sub>15</sub> (B. 22, 1423). — I, 859.
  - 20) Verbindung (aus Sabinen). Pb (H. 36, 457 C. 1902 [2] 1426).  
C 53,0 — H 7,2 — O 39,8 — M. G. 362.
- C<sub>16</sub>H<sub>26</sub>O<sub>9</sub>**
- 1) Säure (aus Santalol). K<sub>2</sub> (H. 36, 448 C. 1902 [2] 1426).
  - 2) Tetraacetat d.  $\alpha\beta\delta\zeta\eta$ -Pentaoxy- $\delta$ -Methylheptan. Fl. (J. pr. [2] 62, 299).



- $C_{18}H_{26}O_{10}$  C 50,8 — H 6,9 — O 42,3 — M. G. 378.  
 1) Tetraäthylester d.  $\beta\gamma$ -Dioxybutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Fl. (A. 246, 3). — I, 870.
- $C_{18}H_{26}O_{11}$  C 48,7 — H 6,6 — O 44,7 — M. G. 394.  
 1) Verbindung (aus Weinsäurediäthylester). Cu (R. 12, 52).  
 C 78,0 — H 10,6 — N 11,4 — M. G. 246.
- $C_{18}H_{28}N_2$  1)  $\alpha$ -[6-Methyl-3-Pyridyl]- $\alpha$ -[2-Propylhexahydro-1-Pyridyl]äthan (Collidinconiin). (2HCl, PtCl<sub>4</sub>) (B. 28, 2276). — IV, 864.  
 2) Tetrahydroadicollidin. Sd. 255–260°. (2HCl, PtCl<sub>4</sub>), HJ (A. 215, 46). — IV, 75.  
 3) Coniceidin. Sm. 55–56°; Sd. oberhalb 300° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>) (B. 18, 126). — IV, 37.  
 4) Base (aus Coniin-o-Xylylenammoniumbromid). Sd. 215–218°<sub>25</sub> (C. 1899 [1] 1246). — \*IV, 578.
- $C_{18}H_{28}N_8$  C 63,6 — H 8,6 — N 27,8 — M. G. 302.  
 1) Verbindung (aus maleinsäurem 5-Methylpyrazolin). Sm. 140–141°. Pikrat (J. pr. [2] 58, 330). — \*IV, 306.
- $C_{18}H_{26}S_8$  1) Triäthyläther d.  $\beta\gamma\gamma$ -Trimerkapto- $\alpha$ -Phenylbutan (B. 34, 1401). — \*III, 119.
- $C_{18}H_{27}N$  C 82,4 — H 11,6 — N 6,0 — M. G. 233.  
 1) Diisoamylamidobenzol. Sd. 275–280° (264–265°). (2HCl, PtCl<sub>4</sub>) (A. 74, 155; Ph. Ch. 16, 218; A. 343, 69 C. 1906 [1] 357). — II, 336; \*II, 155.  
 2) Paradiciniin. Sd. 210° (A. 166, 100). — IV, 54.  
 C 81,4 — H 11,8 — O 6,8 — M. G. 236.
- $C_{18}H_{28}O$  1) 1,1,5-Trimethyl-6-[ $\gamma$ -Oxy- $\gamma$ -Äthylamenyl]-1,2,3,4-Tetrahydrobenzol. Sd. 162°<sub>16</sub> (D. R. P. 160834 C. 1905 [2] 179).  
 2) Methyläther d. Guajol. Sd. 141–143° (B. 41, 4361 C. 1909 [1] 291).  
 3) Verbindung (aus Asclepias cyriaca L.). Sm. 104–105° (J. pr. [2] 68, 407 C. 1904 [1] 105).  
 C 76,2 — H 11,1 — O 12,7 — M. G. 252.
- $C_{18}H_{28}O_2$  1) Dibutyroin. Sd. 155–157°<sub>12</sub> (Bl. [3] 35, 641 C. 1906 [2] 1114).  
 2) Hydnocarpsäure. Sm. 60° (Soc. 87, 888 C. 1905 [2] 338; Soc. 91, 576 C. 1907 [2] 72).  
 3) Palmitolsäure. Sm. 42° (47°); Sd. 240°<sub>15</sub>. Ba, Ag (A. 143, 27; B. 25, 485; 27, 3400). — I, 534; \*I, 216.  
 4) Santanolformaldehyd. Fl. (D. R. P. 148944 C. 1904 [1] 846).  
 5) Amylester d.  $\beta\zeta$ -Dimethyl- $\beta\zeta$ -Oktadien- $\eta$ -Carbonsäure. Sd. 275 bis 277° (C. r. 146, 1154 C. 1908 [2] 248).  
 6) l-Menthylester d.  $\alpha$ -Penten- $\alpha$ -Carbonsäure. Sd. 163–164°<sub>14</sub> (A. 327, 174 C. 1903 [1] 1396).  
 7) l-Menthylester d.  $\alpha$ -Penten- $\varepsilon$ -Carbonsäure. Sd. 155–155,5°<sub>14</sub> (A. 327, 176 C. 1903 [1] 1396).  
 8) l-Menthylester d.  $\beta$ -Penten- $\alpha$ -Carbonsäure. Sd. 149–150°<sub>14</sub> (A. 327, 175 C. 1903 [1] 1396).  
 9) l-Menthylester d.  $\beta$ -Penten- $\varepsilon$ -Carbonsäure. Sd. 156–157°<sub>14</sub> (A. 327, 176 C. 1903 [1] 1396).  
 10) l-Menthylester d. R-Pentamethylencarbonsäure. Sd. 160,5–161°<sub>14</sub> (A. 327, 183 C. 1903 [1] 1396).  
 11) Acetat d. 4-[ $\beta$ -Oxy- $\beta$ -Äthylbutyl]-1,1,5-Trimethyl-2,3-Dihydro-R-Penten. Fl. (Bl. [3] 31, 464 C. 1904 [1] 1516).  
 12) Acetat d. d-Isobutylcamphol. Sd. 135°<sub>30</sub> (C. r. 142, 1310 C. 1906 [2] 238).  
 13) Caprylat d. l-Borneol. Sd. 175°<sub>15</sub> (B. 31, 1775).  
 14) Verbindung (aus 4-Acetyl-5-Methyl-2,3-Dihydro-R-Penten). Sd. 250 bis 255°<sub>50</sub> (Soc. 57, 245). — I, 1012.  
 C 71,6 — H 10,4 — O 17,9 — M. G. 268.
- $C_{18}H_{28}O_3$  1) Anhydrid d.  $\delta\varepsilon$ -Dipropylloktan- $\delta\varepsilon$ -Dicarbonsäure. Sm. 37,5° (Soc. 89, 933 C. 1906 [2] 501).  
 2) Anhydrid d. Thapsiasäure. Sm. 71° (G. 13, 516). — I, 689.  
 3) Äthylester d.  $\alpha$ -Oxy- $\alpha\alpha$ -Diallyl- $\beta$ -Äthylpentan- $\gamma$ -Carbonsäure. Sd. 161–162°<sub>14</sub> (B. 41, 4098 C. 1909 [1] 269).  
 4) l-Menthylester d. Äthylacetessigsäure, Sd. 159–161°<sub>10</sub> (Soc. 89, 380 C. 1906 [1] 1614).

- C<sub>16</sub>H<sub>28</sub>O<sub>4</sub>** C 67,6 — H 9,8 — O 22,5 — M. G. 284.  
 1) Palmitoxylsäure. Sm. 67°. Ag (A. 143, 35). — I, 695.  
 2) Diäthylester d. βε-Dimethyl-γ-Hexen-γδ-Dimethylcarbonsäure. Sd. 156°<sub>10</sub> (Bl. [3] 19, 199). — \*I, 347.  
 3) Dibutyryl d. δε-Dioxy-δ-Okten (Dibutyryl). Sd. 245—260° (A. 118, 35; B. 19, 1846; 24, 1272; 31, 1217; G. 25 [2] 57, 131). — I, 424; \*I, 152.
- C<sub>16</sub>H<sub>28</sub>O<sub>5</sub>** C 64,0 — H 9,3 — O 26,7 — M. G. 300.  
 1) Diäthylester d. β-Keto-γ-Isobutylhexan-γδ-Dicarbonsäure. Sd. 280 bis 285° (B. 29, 981). — \*I, 384.  
 2) Diäthylester d. β-Keto-γ-Isoamylpentan-γδ-Dicarbonsäure. Sd. 295 bis 300° (B. 29, 981). — \*I, 384.
- C<sub>16</sub>H<sub>28</sub>O<sub>6</sub>** C 60,8 — H 8,8 — O 30,4 — M. G. 316.  
 1) Tetraldan (Isodialdan). Sm. 113—114° (J. 1880, 524; Bl. 42, 163; R. 19, 174). — I, 964.  
 2) d-Borneol-d-Glykosid + H<sub>2</sub>O. Sm. 134—136° (B. 42, 1472 C. 1909 [1] 1985).  
 3) l-Naphtolglykosid + H<sub>2</sub>O. Sm. 147° (Bl. [3] 13, 5).  
 4) Tridekan-αγν-Tricarbonsäure. Sm. 60° (Soc. 91, 578 C. 1907 [2] 73).  
 5) Linoxynsäure (C. 1907 [2] 1030).  
 6) Diäthylester d. l-Capryl-läpfelsäure. Sd. 201°<sub>18</sub> (Ph. Ch. 36, 142).  
 7) Triäthylester d. Heptan-αδδ-Tricarbonsäure. Sd. 200—205°<sub>30</sub> (Soc. 79, 131).  
 8) Triäthylester d. Heptan-αεε-Tricarbonsäure. Sd. 189—191°<sub>20</sub> (Soc. 79, 132).  
 9) Triäthylester d. Heptan-γδδ-Tricarbonsäure. Sd. 285—290° (B. 29, 976). — \*I, 412.  
 10) Triäthylester d. β-Methylhexan-αεζ-Tricarbonsäure. Sd. 215—218° (i. V.) (A. 350, 245 C. 1907 [1] 252).  
 11) Triäthylester d. β-Methylhexan-βγγ-Tricarbonsäure. Sd. 300—301° (B. 23, 1937). — I, 815.  
 12) Triäthylester d. β-Methylhexan-βεε-Tricarbonsäure. Sd. 168°<sub>14</sub> (C. r. 145, 682 C. 1907 [2] 2050).  
 13) Triäthylester d. β-Methylhexan-γγδ-Tricarbonsäure. Sd. 280—285° (B. 29, 976). — \*I, 412.  
 14) Triäthylester d. β-Methylhexan-γδδ-Tricarbonsäure. Sd. 285—290° (B. 29, 976; A. 361, 399 C. 1908 [2] 591). — \*I, 412.  
 15) Triäthylester d. β-Methylhexan-γζζ-Tricarbonsäure. Sd. 185°<sub>8</sub> (Bl. [3] 33, 907 C. 1905 [2] 756).  
 16) Triäthylester d. β-Methylhexan-δδε-Tricarbonsäure. Sd. 290—295° (B. 29, 976). — \*I, 412.  
 17) Triäthylester d. ββ-Dimethylpentan-αεε-Tricarbonsäure. Sd. 180°<sub>7</sub> (C. r. 142, 998 C. 1906 [1] 1819).  
 18) Triäthylester d. βδ-Dimethylpentan-βγγ-Tricarbonsäure. Sd. 290 bis 295° (B. 29, 976). — \*I, 412.  
 19) Triäthylester d. γγ-Dimethylpentan-αδδ-Tricarbonsäure. Sd. 170 bis 180°<sub>13-15</sub> (B. 33, 54; C. 1901 [2] 535).  
 20) Triacetat d. Trioxydekan (aus Roseol). Sd. 215—220°<sub>40</sub> (J. pr. [2] 48, 304). — \*I, 100.
- C<sub>16</sub>H<sub>28</sub>O<sub>7</sub>** C 57,8 — H 8,4 — O 33,7 — M. G. 332.  
 1) Paridin + 2H<sub>2</sub>O (J. 1858, 527; 1860, 543). — III, 599.  
 2) Triacetat-α-Glykoheptit. Sd. 200—201°<sub>34</sub> (B. 28, 2534). — \*I, 497.  
 3) l-Mentholglykuronsäure + 1½ H<sub>2</sub>O. Sm. 87—88°. Cd + 3H<sub>2</sub>O (H. 34, 389 C. 1902 [1] 674). — \*III, 335.  
 4) Diisobutylester d. d-Butyrylweinsäure (Bl. [3] 13, 207). — \*I, 398.
- C<sub>16</sub>H<sub>28</sub>N<sub>2</sub>** C 77,4 — H 11,3 — N 11,3 — M. G. 248.  
 1) 1,4-Di[Isocamylamido]benzol. Sm. 49° (B. 22, 2173). — IV, 583.  
 2) 1,2-Di[Isobutylamidomethyl]benzol. Sd. 188—190°<sub>20</sub> (B. 31, 1705). — \*IV, 412.  
 3) 1,2-Di[Diäthylamidomethyl]benzol. Sd. 170—175°<sub>20</sub> (B. 31, 427). — \*IV, 411.  
 4) 2,5-Dimethyl-3,6-Diamyl-1,4-Diazin. Fl. (2HCl, PtCl<sub>4</sub>) (B. 30, 1517). — IV, 832.

- C<sub>16</sub>H<sub>28</sub>N<sub>2</sub>** 5)  $\alpha$ -Methylspartein. Sm. 30–31°; Sd. 178–179°<sub>11</sub>. 2HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), 2HJ, 2 Pikrat (C. r. 141, 261 C. 1905 [2] 772; Bl. [3] 33, 1266 C. 1906 [1] 246; C. r. 145, 929 C. 1908 [1] 264; C. r. 146, 80 C. 1908 [1] 1068; Bl. [4] 3, 683 C. 1908 [2] 177; Bl. [4] 3, 687 C. 1908 [2] 177; C. r. 147, 127 C. 1908 [2] 801; C. r. 147, 1319 C. 1909 [1] 447; Bl. [4] 5, 31 C. 1909 [1] 766).
- 6)  $\beta$ -Methylspartein. Sd. 181–183°<sub>16</sub>. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), HJ + 2H<sub>2</sub>O, 2HJ, 2 Pikrat (C. r. 141, 261 C. 1905 [2] 772; Bl. [3] 33, 1266 C. 1906 [1] 246; C. r. 145, 930 C. 1908 [1] 264; C. r. 146, 80 C. 1908 [1] 1068; Bl. [4] 3, 685 C. 1908 [2] 177; Bl. [4] 3, 691 C. 1908 [2] 177; Bl. [4] 5, 31 C. 1909 [1] 766).
- C<sub>16</sub>H<sub>26</sub>Si** 1) Äthylpropylisobutylbenzylsilicium. Sd. 282–283° (Soc. 95, 73 C. 1909 [1] 1157).
- C<sub>16</sub>H<sub>26</sub>N<sub>3</sub>** C 73,0 — H 11,0 — N 16,0 — M. G. 263.
- C<sub>16</sub>H<sub>30</sub>O** 1) Nitril d. Imidocaprylsäure. HCl (A. 177, 134). — I, 1205.
- C 80,7 — H 12,6 — O 6,7 — M. G. 238.
- 1)  $\beta$ -Oxy- $\alpha\gamma$ -Di[Hexahydrophenyl]- $\beta$ -Methylpropan. Sd. 202–205°<sub>45</sub> (Bl. [3] 35, 551 C. 1906 [2] 782).
- 2) Muskön. Sd. 327–330°<sub>752</sub> (J. pr. [2] 73, 490 C. 1906 [2] 126).
- C 75,6 — H 8,3 — O 8,3 — M. G. 254.
- C<sub>16</sub>H<sub>30</sub>O<sub>2</sub>** 1) 1,1'-Dioxy-3,3,3',3'-Tetramethyldodekahydrobiphenyl. Sm. 212° (Soc. 91, 77 C. 1907 [1] 1039).
- 2) 5,5'-Dioxy-3,3,3',3'-Tetramethyldodekahydrobiphenyl. Sm. 183° (Soc. 91, 71 C. 1907 [1] 1038).
- 3)  $\alpha$ -Pentadeken- $\alpha$ -Carbonsäure. Sm. 49°. Na, Ca + 3H<sub>2</sub>O, Ba (C. 1905 [1] 805).
- 4)  $\zeta$ -Pentadeken- $\alpha$ -Carbonsäure. Sd. 236°<sub>15</sub> (B. 27, 3398). — \*I, 205.
- 5) Pentadekencarbonsäure? Sm. 36° (C. 1901 [1] 612).
- 6) Gaidinsäure. Sm. 39°. Na, Cu (A. 99, 307; 143, 38). — I, 524.
- 7) Hypogäsäure (Physetölsäure). Sm. 33°. Ba, Cu (A. 94, 230; 143, 22; 244, 253; J. 1860, 324; J. pr. [2] 57, 26). — I, 524.
- 8) Lycopodiumölsäure. Fl. (B. 22 [2] 341, 835). — I, 525.
- 9) Physetölsäure. Sm. 30°. Ba, Pb (A. 91, 182; C. 1898 [2] 273). — I, 525; \*I, 206.
- 10) Säure (aus Dorschleberöl). Sm. — 1° (B. 39, 3573 C. 1907 [1] 54).
- 11) Methylester d. Säure C<sub>16</sub>H<sub>28</sub>O<sub>2</sub> (aus Petroleum). Sm. 280–290° (B. 20, 598). — I, 524.
- 12) Acetat d.  $\zeta$ -Oxymethyl- $\zeta$ -Trideken. Sd. 285–290° (280–285°) (B. 15, 2809; 16, 211, 1029). — I, 255.
- 13) Valerianat d.  $\beta$ -Oxy- $\alpha$ -[oder  $\beta$ ]-Undeken. Sd. 185–190°<sub>50</sub> (Soc. 83, 154 C. 1903 [1] 72, 436).
- 14) Capronat d. d-Citronellol. Sd. 168–170°<sub>33</sub> (Bl. [3] 19, 638). — \*III, 332.
- 15) Capronat d. l-Menthol. Sd. 153°<sub>15</sub> (B. 31, 364; Soc. 95, 1571 C. 1909 [2] 1986). — \*III, 333.
- C<sub>16</sub>H<sub>30</sub>O<sub>3</sub>** C 71,1 — H 11,1 — O 17,8 — M. G. 270.
- 1) Dikonylenalkohol (A. 130, 300). — I, 270.
- 2)  $\eta$ -Ketopentadekan- $\alpha$ -Carbonsäure (Ketopalmitinsäure). Sm. 74° (B. 27, 3400). — \*I, 251.
- 3) Oxyhypogäsäure. Sm. 34° (A. 143, 36). — I, 612.
- 4) Scammonölsäure (C. 1904 [2] 1226).
- 5) Säure (aus Lycopodiumsporen) (B. 22 [2] 341). — I, 612.
- 6) Anhydrid d. Caprylsäure. Sm. — 1°; Sd. 280–290° (A. 85, 229; B. 33, 3576; 34, 183). — I, 464.
- 7) Äthylester d.  $\eta$ -Methyldodekan- $\beta\gamma$ -Oxyd- $\beta$ -Carbonsäure. Sd. 174 bis 175°<sub>15</sub> (C. r. 141, 767 C. 1906 [1] 22).
- 8) Äthylester d.  $\eta$ -Ketotridekan- $\zeta$ -Carbonsäure (Ä. d. Önanthylönanth-säure). Sd. 290–292° (Bl. [3] 2, 339). — I, 612.
- 9) Äthylester d.  $\delta$ -Keto- $\zeta$ -Methyldodekan- $\epsilon$ -Carbonsäure. Sd. 166°<sub>16</sub> (C. r. 135, 110 C. 1902 [2] 512).
- 10) Amylester d.  $\zeta$ -Oxy- $\beta\zeta$ -Dimethyl- $\beta$ -Okten- $\eta$ -Carbonsäure. Sd. 175 bis 185°<sub>14</sub> (C. r. 146, 1154 C. 1908 [2] 248).
- 11) Verbindung (aus Isobutyraldehyd). Sd. 190–200° (Soc. 43, 95; M. 19, 374). — I, 947.



- C<sub>16</sub>H<sub>30</sub>O<sub>4</sub>** C 67,1 — H 10,5 — O 22,4 — M. G. 286.
- 1)  $\delta\epsilon$ -Dipropyloktan- $\delta\epsilon$ -Dicarbonsäure. Sm. 137° (Soc. 89, 935 C. 1906 [2] 501).
  - 2) Thapsiasäure. Sm. 123—124°. K<sub>2</sub>, Ba, Ag<sub>2</sub> (G. 13, 514). — I, 689.
  - 3) Jalapinolsäure, siehe C<sub>16</sub>H<sub>32</sub>O<sub>3</sub>. — III, 595.
  - 4) Dimethylester d. Dodekan- $\alpha\mu$ -Dicarbonsäure. Sd. 205—215°<sub>15</sub> (Soc. 91, 568 C. 1907 [2] 72).
  - 5) Äthylester d.  $\alpha$ -Acetoxylundekan- $\alpha$ -Carbonsäure. Sd. 172—173°<sub>13</sub> (Bl. [3] 29, 1127 C. 1904 [1] 261).
  - 6) Diäthylester d. Dekan- $\alpha\kappa$ -Dicarbonsäure. Fl. (C. 1899 [2] 1016).
  - 7) Diäthylester d.  $\beta\eta$ -Dimethyloktan- $\delta\delta$ -Dicarbonsäure. Sd. 148—153°<sub>16</sub> (A. 318, 155).
  - 8) Diäthylester d.  $\gamma\delta$ -Diäthylhexan- $\gamma\delta$ -Dicarbonsäure. Sd. 168—172°<sub>25</sub> (Soc. 87, 962 C. 1905 [2] 670).
  - 9) Diäthylester d.  $\beta\beta\epsilon\epsilon$ -Tetramethylhexan- $\alpha\zeta$ -Dicarbonsäure. Sd. 292 bis 293°<sub>755</sub> (Soc. 89, 600 C. 1906 [2] 18).
  - 10) l-Diamylester d. fum. Butan- $\beta\gamma$ -Dicarbonsäure. Sd. 185°<sub>30</sub> (Ph. Ch. 20, 384). — \*I, 294.
  - 11) l-Diamylester d. mal. Butan- $\beta\gamma$ -Dicarbonsäure. Sd. 168—169°<sub>15</sub> (Ph. Ch. 20, 384). — \*I, 294.
- C<sub>16</sub>H<sub>30</sub>O<sub>5</sub>** C 60,4 — H 9,4 — O 30,2 — M. G. 318.
- 1) Diisocamylidenäther d. Sorbit. Sm. 70° (A. ch. [6] 22, 423). — I, 953.
  - 2) Menthol-d-Glykosid + H<sub>2</sub>O. Sm. 77—79° (B. 42, 1470 C. 1909 [1] 1985).
- C<sub>16</sub>H<sub>30</sub>O<sub>7</sub>** C 57,5 — H 9,0 — O 33,5 — M. G. 334.
- 1) Cardensäure. Sm. 126°. Ag (C. 1896 [1] 112). — \*III, 462.
- C<sub>16</sub>H<sub>30</sub>O<sub>8</sub>** C 54,8 — H 8,6 — O 36,6 — M. G. 350.
- 1) Sebacin? (A. ch. [3] 41, 293). — I, 687.
- C<sub>16</sub>H<sub>30</sub>Br<sub>2</sub>** 1) Cetylenbromid (A. 143, 268). — I, 125.
- C<sub>16</sub>H<sub>30</sub>Br<sub>4</sub>** 1)  $\alpha\alpha\beta\beta$ -Tetrabromhexadekan. Fl. (B. 33, 3586).
- C<sub>16</sub>H<sub>31</sub>N** C 81,0 — H 13,1 — N 5,9 — M. G. 237.
- 1)  $\alpha$ -Amido- $\alpha$ -Hexadekin. Sm. 41—42°; Sd. 195°<sub>15</sub>. (2HCl, PtCl<sub>4</sub>) (B. 33, 3587).
  - 2) Nitril d. Palmitinsäure. Sm. 31°; Sd. 251,5°<sub>100</sub> (108°). 2 + HBr (B. 15, 1730; 22, 812; 24, 989; 26, 2847; 29, 1324). — I, 1468; \*I, 808.
- C<sub>16</sub>H<sub>31</sub>N<sub>3</sub>** C 72,5 — H 11,7 — N 15,8 — M. G. 265.
- 1)  $\alpha$ -Isoamylecyanamido- $\epsilon$ -[l-Piperidyl]pentan. Sd. 213—215°<sub>12</sub> (B. 40, 3929 C. 1907 [2] 1525).
  - 2) Tri[l-Hexahydropyridyl]methan + H<sub>2</sub>O. Sd. 98°<sub>15</sub> (B. 20, 3247). — IV, 11.
  - 3) Tetrapropylsuccinimidin. (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub> (B. 23, 2931). — I, 1165.
- C<sub>16</sub>H<sub>31</sub>Br** 1) Bromceten (A. 143, 268). — I, 124.
- 2)  $\beta$ -[oder  $\gamma$ ]-Brom- $\beta$ -Hexadeken. Sd. 198—200°<sub>18</sub> (B. 25, 2245). — \*I, 53.
- C<sub>16</sub>H<sub>32</sub>O** C 80,3 — H 13,3 — O 6,7 — M. G. 240.
- 1) Isopropyläther d. 5-Oxy-3-Hexyl-1-Methylhexahydrobenzol. Sd. 138—139°<sub>10</sub> (A. 289, 152).
  - 2)  $\beta$ -Ketohehexadekan (Methyltetradekylketon). Sm. 43—43,5°; Sd. 230 bis 231°<sub>100</sub> (B. 15, 1707). — I, 1005.
  - 3) Hexadekanoxyd (Cetenoxyd). Sm. unter 30°; Sd. unter 300° (A. 126, 203). — I, 310.
  - 4) Aldehyd d. Palmitinsäure. Sm. 58,5° (46—47°); Sd. 192—193°<sub>22</sub> (B. 13, 1416; A. 131, 287; Soc. 87, 1892 C. 1906 [1] 652). — I, 957.
  - 5) Verbindung (aus Schweißkohle). Sm. 77—78,5° (Ar. 244, 206 C. 1906 [2] 180).
- C<sub>16</sub>H<sub>32</sub>O<sub>2</sub>** C 75,0 — H 12,5 — O 12,5 — M. G. 256.
- 1) Bistetramethyltetramethylenoxyd. Sd. 260—262° (M. 17, 100). — \*I, 115.
  - 2) Pentadekan- $\alpha$ -Carbonsäure (Palmitinsäure). Sm. 62° (62,6°); Sd. 339 bis 356° (138—139°). Salze meist bekannt. Lit. bedeutend. — I, 442; \*I, 159.
  - 3) Pentadekan-9-Carbonsäure (norm. Diheptylessigsäure). Sm. 26—27°; Sd. 240—250°<sub>80—90</sub>. Ba, Cu (A. 200, 116). — I, 444.

- C<sub>16</sub>H<sub>32</sub>O<sub>2</sub>**
- 4)  $\gamma$ -Methyltetradekan- $\zeta$ -Carbonsäure. Sm. 65–66°. Ag (*J. pr.* [2] 57, 455). — \*I, 159.
  - 5) Gallipharsäure. Sm. 54°. Ag (*Ar.* 242, 282 C. 1904 [1] 1654).
  - 6) Säure (aus Sphingosin). Ba (*J. pr.* [2] 60, 501).
  - 7) Methylester d. Tetradekan- $\alpha$ -Carbonsäure. Sm. 18,5° (*Soc.* 87, 1899 C. 1906 [1] 652).
  - 8) Methylester d. Tetradekan- $\rho$ -Carbonsäure. Sm. 66–68° (*B.* 20, 965). — I, 442.
  - 9) Methylester d. Laktarsäure. Sm. 38° (*Bl.* [3] 2, 157). — I, 442.
  - 10) Äthylester d. Myristinsäure. Sm. 10,5–11,5°; Sd. 295° (*A.* 37, 157; *B.* 18, 2016, 2623; 19, 1434; *B.* 36, 4340 C. 1904 [1] 433). — I, 441.
  - 11)  $\beta$ -Methylbutylester d. Undekylsäure. Sd. 293–296°<sub>729</sub> (*Bl.* [3] 15, 284). — \*I, 158.
  - 12) Diisobutylhydrateter d. Isooktylessigsäure. Sd. 278–281° (*Soc.* 35, 128). — I, 438.
  - 13) Oktylester d. norm. Caprylsäure. Sd. 297–299° (305,9°) (*A.* 152, 6; 233, 289). — I, 437.
  - 14) norm. Tetradekylester d. Essigsäure. Sm. 12–13°; Sd. 175,5 bis 176,5°<sub>15</sub> (*B.* 16, 1720). — I, 411.
  - 15) Tetradekylester d. Essigsäure (aus Amylheptylälthylalkohol). Sd. 275 bis 280° (*B.* 15, 2811; 16, 1032; *Soc.* 48, 77). — I, 411.
  - 16) Verbindung (aus  $\alpha\gamma$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan). Sd. 260–262° (*M.* 3, 624; 4, 671; 17, 100). — I, 1003.
- C<sub>16</sub>H<sub>32</sub>O<sub>3</sub>**
- 1)  $\alpha$ -Oxypentadekan- $\alpha$ -Carbonsäure ( $\alpha$ -Oxypalmitinsäure). Sm. 82–83°. Ba, Pb, Cu (*B.* 24, 939; *Soc.* 87, 1895 C. 1906 [1] 652; C. 1905 [1] 805). — I, 579.
  - 2)  $\delta$ -Oxy- $\gamma$ -Methyltetradekan- $\zeta$ -Carbonsäure (Jalapinsäure). Sm. 64 bis 64,5° (67–68°). NH<sub>4</sub>, KH, Na, Ba, Cu, Pb, Ag (*A.* 95, 149; 110, 306; *J.* 1884, 1447; *J. pr.* [2] 57, 448, 457). — III, 595; \*I, 233.
  - 3) Juniperinsäure. Sm. 95° (*C. r.* 147, 1313 C. 1909 [1] 450; C. 1909 [2] 718).
  - 4) Lanopalminsäure. Sm. 87–88° (*B.* 29, 2891). — \*I, 234.
  - 5) Tampikolsäure. Na (*Z.* 1870, 667, 668). — III, 613.
  - 6) Säure (aus  $\alpha$ -Turpethin) (*C.* 1907 [1] 978).
  - 7) Methylester d.  $\delta$ -Oxy- $\gamma$ -Methyltridekan- $\nu$ -Carbonsäure. Sm. 33,5°; Sd. 206–208°<sub>15</sub> (*R.* 13, 206). — \*I, 233.
- C<sub>16</sub>H<sub>32</sub>O<sub>4</sub>**
- 1) Dioxypalmitinsäure. Sm. 115°. Ba (*A.* 143, 37). — I, 635.
  - 2) isom. Dioxypalmitinsäure. Sm. 57° (*M.* 8, 497). — I, 635.
  - 3) isom. Dioxypalmitinsäure. Sm. 125° (*B.* 39, 3573 C. 1907 [1] 54).
  - 4) Turpetholsäure. Sm. 87° (70,5–71°). Na, Ba, Ag (*A.* 139, 53; C. 1895 [2] 790). — III, 614.
  - 5) Methylester d. Ipurolmethyläthersäure. Sm. 64–65° (*C.* 1908 [2] 887).
- C<sub>16</sub>H<sub>32</sub>O<sub>5</sub>**
- 1) Trioxypalmitinsäure (aus Schellack) (*C.* 1908 [1] 1861).
- C<sub>16</sub>H<sub>32</sub>N<sub>2</sub>**
- 1) C 76,2 — H 12,7 — N 11,1 — M. G. 252.
  - 1) Di[ $\alpha$ -Methylheptyliden]hydrazin (Bismethylhexylazimethylen). Sd. 286 bis 290° (*J. pr.* [2] 44, 166). — I, 1028.
  - 2) 5-Methyl-3,5-Dihexyl-4,5-Dihydropyrazol. Fl. (*J. pr.* [2] 58, 324). — \*IV, 310.
  - 3) 4,6,6,4',6',6'-Hexamethyl-3,3'-Bipiperidin. Sd. 266–267°<sub>745</sub>. (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>) (*C.* 1908 [2] 1444).
- C<sub>16</sub>H<sub>32</sub>Cl<sub>2</sub>**
- 1) Dichlorhexadekan. Sd. 205–210°<sub>16</sub> (*Am.* 28, 175 C. 1902 [2] 1081).
- C<sub>16</sub>H<sub>32</sub>Br<sub>2</sub>**
- 1) Dibromhexadekan (Cetenbromid). Sm. 13,5°; Sd. 225–227°<sub>15</sub> (*B.* 17, 1373; 23, 2353; 25, 2245). — I, 180; \*I, 49.
  - 2) isom. Dibromhexadekan (*A.* 136, 265; 143, 268). — I, 124.
- C<sub>16</sub>H<sub>32</sub>S**
- 1) Hexadekylthiophan. Sd. 283–285°<sub>750</sub> u. Zers. (*Am.* 35, 413 C. 1906 [2] 77).
- C<sub>16</sub>H<sub>32</sub>S<sub>4</sub>**
- 1) cyklisches Duplo-1,3-Dithio-2,2-Dimethylhexamethylen. Sm. 117 bis 118° (*B.* 41, 4254 C. 1909 [1] 275).
- C<sub>16</sub>H<sub>32</sub>N**
- 1) 1-3-Dipropylamido-4-Isopropyl-1-Methylhexahydrobenzol (1-Dipropylmenthylamin) (*C.* 1902 [2] 1238). — \*IV, 36.

- C<sub>16</sub>H<sub>33</sub>Cl** 1) **Chlorhexadekan** (Cetylchlorid). *Sd.* 289° (113°) (*J.* **1860**, 406; *B.* **29**, 1325). — *I*, 157; \**I*, 38.
- C<sub>16</sub>H<sub>33</sub>Br** 1) **Bromhexadekan** (Cetyl bromid). *Sm.* 15° (*A.* **83**, 15). — *I*, 180.
- C<sub>16</sub>H<sub>33</sub>J** 1) **Jodhexadekan** (Cetyljodid). *Sm.* 22°; *Sd.* 211°<sub>15</sub> (128°) (*A.* **83**, 9; *B.* **19**, 2219; **29**, 1325; *R.* **12**, 181; **14**, 188). — *I*, 196; \**I*, 55.
- C<sub>16</sub>H<sub>34</sub>O** 1) **α-Oxyhexadekan** (Cetylalkohol). *Sm.* 50°; *Sd.* 344° (119°). *Na* (*A.* **83**, 7; **206**, 352; *H.* **3**, 225; **21**, 287; **23**, 38; *Ph. Ch.* **29**, 252; *B.* **3**, 616; **16**, 1721; **29**, 1325; *J. pr.* [2] **43**, 152; *G.* **14**, 522; *J.* **1852**, 504; **1862**, 413; *R.* **12**, 168; *M.* **25**, 346 *C.* **1904** [1] 1399). — *I*, 240; \**I*, 77.
- 2) **Dicaprylalkohol**. *Sd.* 173°<sub>17</sub> (*C.* **1901** [1] 928).
- 3) **isom. Dicaprylalkohol**. *Sd.* 230—235° (*B.* **34**, 3248).
- 4) **norm. Oktyläther d. α-Oxyoktan** (norm. Oktyläther). *Sd.* 280—282° (291,7°) (*A.* **185**, 56; **243**, 10; *G.* **31** [1] 337). — *I*, 300.
- C<sub>16</sub>H<sub>34</sub>O<sub>2</sub>** 1) **9α-Dioxyhexadekan**. *Sd.* 200°<sub>12</sub> (*C. r.* **136**, 1677 *C.* **1903** [2] 419).
- 2) **Dioxyhexadekan** (Cetenglykol). *Sm.* 75—76° (72—73°); *Sd.* 220—221°<sub>15</sub> (*A.* **143**, 270; *B.* **23**, 2354). — *I*, 267.
- 3) **ζη-Dioxy-βζηλ-Tetramethyl dodekan** (Methylisohexylpinakon). *Sd.* 293 bis 295°<sub>765</sub> (*C.* **1909** [1] 831).
- C<sub>16</sub>H<sub>34</sub>O<sub>3</sub>** 1) **Triisooamyläther d. Trioxymethan** (Tr. d. Orthoameisensäure). *Sd.* 265 bis 267° (*A.* **92**, 348; *B.* **14**, 118). — *I*, 312.
- C<sub>16</sub>H<sub>34</sub>N<sub>2</sub>** 1) **α-Imido-α-Amido hexadekan** (Palmitinamidin). *Sm.* 85°; *Sd.* 194°<sub>13</sub>. *HCl*, (2*HCl*, *PtCl<sub>4</sub>*) (*B.* **26**, 2843, 2844). — \**I*, 635.
- 2) **β-sec. Oktylhydrazonoktan**. *Fl.* (*J. pr.* [2] **64**, 118).
- C<sub>16</sub>H<sub>34</sub>S** 1) **Merkaptohexadekan** (Cetylmerkaptan). *Sm.* 50,5° (*A.* **83**, 18). — *I*, 350.
- 2) **Dioktylsulfid**. *Sd.* 310° u. *Zers.* (*A.* **185**, 59). — *I*, 363.
- C<sub>16</sub>H<sub>34</sub>S<sub>4</sub>** 1) **Tetraäthyläther d. γγζζ-Tetramerkapto-β-Methylheptan** (*B.* **33**, 2992).
- C<sub>16</sub>H<sub>34</sub>Hg** 1) **Quecksilberdioktyl** (*B.* **12**, 1880). — *I*, 1526.
- C<sub>16</sub>H<sub>35</sub>N** 1) **α-Amido hexadekan** (Cetylamin). *Sm.* 45—46°; *Sd.* 330°. *HCl*, (2*HCl*, *PtCl<sub>4</sub>*), *HJ* (*B.* **22**, 812; **29**, 1331). — *I*, 1138.
- 2) **α-Oktylamidooktan** (norm. Dioktylamin). *Sm.* 36,5°; *Sd.* 297—298°. *HCl*, (2*HCl*, *PtCl<sub>4</sub>*) (*A.* **166**, 87; *B.* **17**, 630). — *I*, 1137.
- 3) **sec. Dioktylamin**. *Sd.* 260—270° (281,5°<sub>785</sub>). *HCl*, (2*HCl*, *PtCl<sub>4</sub>*), (*HCl*, *AuCl<sub>3</sub>*) (*B.* **17**, 636; *C.* **1900** [1] 653; *A. ch.* [6] **13**, 511). — *I*, 1138.

### C<sub>16</sub>-Gruppe mit drei Elementen.

- C<sub>16</sub>H<sub>3</sub>O<sub>5</sub>Br<sub>9</sub>** 1) **Nonobrombrasilein**. + *C<sub>3</sub>H<sub>4</sub>O<sub>2</sub>* (*B.* **22**, 1557). — *III*, 655.
- C<sub>16</sub>H<sub>4</sub>O<sub>4</sub>Cl<sub>4</sub>** 1) **Tetrachlorbiphtalyl** (*A.* **233**, 245). — *II*, 1816.
- C<sub>16</sub>H<sub>4</sub>O<sub>5</sub>Br<sub>8</sub>** 1) **Oktobrombrasilein**. + 2 *C<sub>3</sub>H<sub>4</sub>O<sub>2</sub>* (*B.* **22**, 1550). — *III*, 655.
- C<sub>16</sub>H<sub>5</sub>O<sub>2</sub>Br<sub>8</sub>** 1) **Tribrompyrenchinon** (*M.* **4**, 317). — *III*, 462.
- C<sub>16</sub>H<sub>6</sub>O<sub>2</sub>N<sub>2</sub>** 1) **Verbindung** (aus Pyridin u. Chloranil) (*Bl.* [3] **19**, 1008).
- C<sub>16</sub>H<sub>6</sub>O<sub>2</sub>Br<sub>2</sub>** 1) **Dibrompyrenchinon**. *Sm.* noch nicht bei 310° (*B.* **29**, 462). — *III*, 462.
- C<sub>16</sub>H<sub>6</sub>O<sub>4</sub>Cl<sub>8</sub>** 1) **Diacetat d. Oktochlor-?-Dioxybiphenyl**. *Sm.* 193—194° (*B.* **16**, 885). — *II*, 990.
- C<sub>16</sub>H<sub>6</sub>O<sub>4</sub>S<sub>8</sub>** 1) **Verbindung** (aus Schwefelkohlenstoff). *Ag<sub>5</sub>* (*C.* **1906** [1] 340; *Soc.* **89**, 144 *C.* **1906** [1] 1004).
- C<sub>16</sub>H<sub>6</sub>O<sub>6</sub>Cl<sub>4</sub>** 1) **αβ-Diketo-α-Phenyl-β-[3,4,5,6-Tetrachlorphenyl]äthan-2,2'-Dicarbonsäure**. *Sm.* 290° (*A.* **340**, 263 *C.* **1905** [2] 486).
- 2) **Dicarbonat d. ?-Tetrachlor-αβ-Di[3,4-Dioxyphenyl]äthan**. *Sm.* 310 bis 311° (*Soc.* **93**, 740 *C.* **1908** [1] 2036).
- C<sub>16</sub>H<sub>6</sub>O<sub>6</sub>Cl<sub>6</sub>** 1) **Diacetat d. Verbindung C<sub>12</sub>H<sub>2</sub>O<sub>4</sub>Cl<sub>6</sub>**. *Sm.* 282° (*Am.* **38**, 153 *C.* **1907** [2] 1162).
- 2) **Verbindung** (aus Chloranil) (*B.* **38**, 1727 *C.* **1905** [1] 1646).
- C<sub>16</sub>H<sub>6</sub>O<sub>7</sub>Cl<sub>2</sub>** 1) **Dicarbonat d. ββ-Dichlor-α-Keto-αβ-Di[3,4-Dioxyphenyl]äthan**. *Sm.* 191—192° (*Soc.* **93**, 736 *C.* **1908** [1] 2035).
- C<sub>16</sub>H<sub>6</sub>O<sub>8</sub>N<sub>4</sub>** 1) **Tetranitropyren**. *Sm.* oberhalb 300° (*A.* **158**, 293). — *II*, 285.



- $C_{16}H_7OBr_5$  1) *p*-Pentabrom-2,5-Diphenylfuran. Sm. 209—210° (A. 306, 212). — \*III, 501.
- $C_{16}H_7O_4Br$  1) Brombiphtalyl (A. 164, 247). — II, 1816.
- $C_{16}H_7O_5Br_5$  1) Pentabrommethylnataloemodin. Sm. 293—295° (C. r. 140, 1465 C. 1905 [2] 137).
- $C_{16}H_7O_6N$  C 62,1 — H 2,3 — O 31,1 — N 4,5 — M. G. 309.
- 1) Nitrobiphtalyl. Sm. 270° (A. 233, 243). — II, 1816.
- $C_{16}H_5OCl_2$  1) Dichlor- $\alpha$ -Phenylen- $\alpha$ -Naphtylenoxyd. Sm. 245° (A. 209, 144). — II, 1002.
- $C_{16}H_5OBr_2$  1) Dibrom- $\alpha$ -Phenylen- $\alpha$ -Naphtylenoxyd. Sm. 284° (A. 209, 144). — II, 1002.
- $C_{16}H_5OBr_4$  1) 3,4-Dibrom-2,5-Di[4-Bromphenyl]furan. Sm. 190—191° (Soc. 57, 954; A. 306, 211). — III, 695; \*III, 501.
- $C_{16}H_5O_2N_2$  C 73,8 — H 3,1 — O 12,3 — N 10,8 — M. G. 260.
- 1) 1,4-Naphtochinonphenazin (B. 23, 2797). — III, 375.
- 2) 5,6-Diketo-5,6-Dihydro- $\alpha\beta$ -Naphtophenazin. Sm. 265° u. Zers. (A. 286, 57, 79; 295, 22; B. 34, 1056; B. 36, 3624 C. 1903 [2] 1383; B. 39, 2239 C. 1906 [2] 441). — IV, 1058; \*IV, 712.
- $C_{16}H_5O_2N_4$  C 66,7 — H 2,8 — O 11,1 — N 19,4 — M. G. 288.
- 1) Verbindung (aus 1-Amido-2-Phenylamidonaphtalinhydrochlorid u.  $N_2O_3$ ). Sm. 207—208° (A. 255, 351). — IV, 1171.
- $C_{16}H_5O_2Cl_2$  1) Chlorid d. Anthracen-1,3-Dicarbonsäure (J. pr. [2] 41, 27). — II, 1905.
- $C_{16}H_5O_2S_2$  1) 2,2-Bisthionaphtenindigo (Thioindigo; Thionaphtenindigo; Thioindigo-rot). Sm. oberhalb 280° (C. 1906 [1] 1353; B. 39, 1063 C. 1906 [1] 1499; C. 1906 [2] 286; A. 351, 410 C. 1907 [1] 1586; D.R.P. 194237 C. 1908 [1] 1116; M. 29, 370 C. 1908 [2] 514).
- 2) 2,3-Bisthionaphtenindigo (Thioindirubin). Sm. 205—207° (M. 29, 373 C. 1908 [2] 515).
- 3) Dilakton d.  $\alpha\beta$ -Dimerkapto- $\alpha\beta$ -Diphenyläthen-2,2'-Dicarbonsäure (Dithiodiphtalyl). Sm. 332—333° (B. 31, 2649). — \*II, 1184.
- $C_{16}H_5O_3N_2$  C 69,6 — H 2,9 — O 17,4 — N 10,1 — M. G. 276.
- 1) Anhydrobispyrindandion (B. 35, 1413 C. 1902 [1] 1165). — \*IV, 693.
- $C_{16}H_5O_3Br_2$  1) Anhydrid d.  $\alpha\beta$ -Di[4-Bromphenyl]äthen- $\alpha\beta$ -Dicarbonsäure (Bis-p-Bromphenylmaleinsäureanhydrid). Sm. 208—210° (B. 41, 4127 C. 1909 [1] 167).
- $C_{16}H_5O_3S_2$  1) Verbindung (aus Thioindigo). Sm. oberhalb 300° (D.R.P. 202707, 202708 C. 1908 [2] 1707).
- $C_{16}H_5O_4N_2$  C 65,8 — H 2,7 — O 21,9 — N 9,6 — M. G. 292.
- 1)  $\alpha\delta$ -Di[2-Nitrophenyl]- $\alpha\gamma$ -Butadien. Sm. 212° u. Zers. (B. 15, 51; D.R.P. 19266). — II, 283; \*II, 125.
- 2) Dinitrophen. Sm. oberhalb 240° (A. 158, 292; M. 2, 581). — II, 285.
- 3) 2-Nitroketonaphtophenoxazin. Sm. 246—247° (B. 30, 2132). — \*IV, 278.
- 4) 3-Nitroketonaphtophenoxazin. Sm. 253—254° (B. 30, 2134). — \*IV, 278.
- 5) *p*-Nitroketonaphtophenoxazin. Sm. 234—235° (B. 28, 354; 30, 2136). — IV, 460; \*IV, 277.
- 6) Anhydrid d. 2,2'-Azoxystilben- $\alpha\beta$ -Dicarbonsäure (A. 358, 361 C. 1908 [1] 1172).
- 7) Anhydrid d. 3,3'-Azoxystilben- $\alpha\beta$ -Dicarbonsäure (A. 358, 359 C. 1908 [1] 1172).
- 8) Nitril d. 3-[3-Nitrophenyl]-1,2-Isobenzpyron-4-Carbonsäure (3-m-Nitrophenyl-4-Cyanisocumarin). Sm. 210—211° (B. 29, 2543). — \*II, 1149.
- 9) Verbindung (aus Diphtalylsäure). Sm. 285—286° (A. 242, 230). — II, 2029.
- $C_{16}H_5O_4N_4$  C 60,0 — H 2,5 — O 20,0 — N 17,5 — M. G. 320.
- 1) Nitril d.  $\alpha\beta$ -Di[2-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Zers. oberhalb 210° (A. 332, 283 C. 1904 [2] 702).
- 2) Nitril d.  $\alpha\beta$ -Di[3-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 233° (A. 358, 358 C. 1908 [1] 1171).
- 3) Nitril d.  $\alpha\beta$ -Di[4-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 268 bis 269° (A. 332, 279 C. 1904 [2] 701).
- 4) Nitril d.  $\alpha\beta$ -Di[4-Nitrophenyl]äthen- $\alpha^2\beta^2$ -Dicarbonsäure. Sm. 258° u. Zers. (Soc. 91, 2083 C. 1908 [1] 643).

- $C_{16}H_8O_4Cl_2$  1) Biphtalylechlorid. Sm. 245° (A. 228, 133). — II, 1816.
- $C_{16}H_8O_4Br_2$  1) Biphtalylbromid. Sm. bei 225° (A. 228, 131). — II, 1816.
- 2) Acetat d. 1,3-Dibrom-2-Oxy-9,10-Anthrachinon. Sm. 189—190° (A. 202, 137). — III, 419.
- $C_{16}H_8O_5N_2$  C 62,3 — H 2,6 — O 26,0 — N 9,1 — M. G. 308.
- 1) Dinitro- $\alpha$ -Phenylen- $\alpha$ -Naphtylenoxyd. Sm. 235° (A. 209, 145). — II, 1002.
- $C_{16}H_8O_5Cl_2$  1) 3',4'-Dichlorid d. Diphenylketon-2,3',4'-Tricarbonsäure? Sm. 73° (A. 312, 106). — \*II, 1207.
- $C_{16}H_8O_5Br_4$  1) Tetrabromsuccinylfluorescein (Succinyleosin). K (J. pr. [2] 23, 155). — II, 2049.
- $C_{16}H_8O_6N_2$  C 59,3 — H 2,5 — O 29,6 — N 8,6 — M. G. 324.
- 1) Bianhydrid d. 4,4'-Diamidobiphenyl- $\beta$ -Tetracarbonsäure. Sm. oberhalb 300°.  $NH_4$ ,  $Na_2 + xH_2O$ ,  $K_2 + 5H_2O$ , Pb,  $Ag_2$ ,  $Ag_4$  (B. 16, 1759). — II, 2085.
- $C_{16}H_8O_6N_4$  C 54,5 — H 2,3 — O 27,3 — N 15,9 — M. G. 352.
- 1) 4-Dinitroindigo (M. 26, 1261 C. 1906 [1] 564).
- 2) isom. Dinitroindigo (B. 12, 1316). — II, 1620.
- 3) isom. Dinitroindigo (M. 23, 1006 C. 1903 [1] 292).
- 4) Dinitroindin (J. pr. [2] 25, 452). — II, 1616.
- $C_{16}H_8O_6Cl_2$  1)  $\alpha\beta$ -Diketo- $\alpha$ -Phenyl- $\beta$ -[3,6-Dichlorphenyl]äthan-2,2'-Dicarbonsäure. Sm. 216° (A. 340, 265 C. 1905 [2] 486).
- 2) Dicarbonat d.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 260° (Soc. 93, 739 C. 1908 [1] 2036).
- $C_{16}H_8O_6Br_4$  1) Dimethyläther d. 2,4,6,8-Tetrabrom-1,3,5,7-Tetraoxy-9,10-Anthrachinon (D.R.P. 155633 C. 1904 [2] 1487).
- $C_{16}H_8O_7N_2$  C 56,5 — H 2,3 — O 32,9 — N 8,2 — M. G. 340.
- 1) Anhydrid d.  $\alpha\beta$ -Di[3-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 249—249,5° (A. 358, 359 C. 1908 [1] 1172).
- 2) Anhydrid d.  $\alpha\beta$ -Di[4-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 197° (A. 332, 281 C. 1904 [2] 702).
- 3) Anhydrid d.  $\alpha\beta$ -Di[p-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Erweichet bei 73° (B. 14, 1801). — II, 1898.
- $C_{16}H_8O_8N_2$  C 53,9 — H 2,2 — O 35,9 — N 7,9 — M. G. 356.
- 1) Acetat d.  $\beta$ -Dinitro-3-Oxy-9,10-Phenanthrenchinon. Sm. 263—265° (A. 322, 158). — \*III, 318.
- $C_{16}H_8O_9N_2$  C 51,6 — H 2,1 — O 38,7 — N 7,5 — M. G. 372.
- 1) Anhydrid d. 3-Nitrobenzol-1-Carbonsäure-2-Carbonsäurealdehyd. Sm. 248—251° (M. 24, 822 C. 1904 [1] 372).
- 2) Anhydrid d. 4-Nitrobenzol-1-Carbonsäurealdehyd-2-Carbonsäure. Sm. 224—226° (M. 24, 817 C. 1904 [1] 372).
- $C_{16}H_8O_{10}N_4$  C 46,2 — H 1,9 — O 38,4 — N 13,5 — M. G. 416.
- 1)  $\beta$ -Trinitro-4-Acetoxyphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 176—177° (G. 16, 253). — II, 1809.
- $C_{16}H_8O_{13}N_4$  C 41,4 — H 1,7 — O 44,8 — N 12,1 — M. G. 464.
- 1) Monomethyläther d. Tetranitroemodin. Sm. 275° u. Zers. (Soc. 65, 935). — III, 454.
- $C_{16}H_8N_2Cl_2$  1) 5,6-Dichlor- $\alpha\beta$ -Naphtophenazin. Sm. 202° (A. 286, 56). — IV, 1051.
- 2) 6,11-Dichlor- $\beta\beta$ -Naphtophenazin. Sm. 265° (A. 334, 360 C. 1904 [2] 1055).
- $C_{16}H_8N_2Br_2$  1) Nitril d.  $\alpha\beta$ -Di[4-Bromphenyl]äthen- $\alpha\beta$ -Dicarbonsäure (Bis-p-Bromphenylmaleinsäurenitril). Sm. 214—215° (B. 41, 4126 C. 1909 [1] 167).
- $C_{16}H_9ON$  C 83,1 — H 3,9 — O 6,9 — N 6,1 — M. G. 231.
- 1) Ketochinolylenphenylenmethan. Sm. 175,5° (B. 34, 2470). — \*IV, 271.
- 2) Fluorenonchinolin. Sm. 191° (B. 35, 3281 C. 1902 [2] 1261). — \*IV, 272.
- $C_{16}H_9ON_2$  1) Verbindung (aus Nitroso- $\beta$ -Naphtochinonanilid)? =  $(C_{16}H_9ON_2)_x$ . Sm. 217° (B. 15, 286). — III, 393.
- $C_{16}H_9OBr_3$  1) 3-Brom-2,5-Di[4-Bromphenyl]furan. Sm. 134° (A. 306, 213). — \*III, 501.
- $C_{16}H_9O_2N$  C 77,7 — H 3,6 — O 12,9 — N 5,7 — M. G. 247.
- 1)  $\alpha$ -Phenyl- $\delta$ -[2-Nitrophenyl]- $\alpha\gamma$ -Butadiin. Sm. 154—155° (B. 15, 58). — II, 283.
- 2) Nitropyren. Sm. 141—142° (149,5—150,5°) (A. 158, 292; M. 2, 580; 10, 2143). — II, 285.

- C<sub>16</sub>H<sub>9</sub>O<sub>2</sub>N** 3) Phenochinoxanthon. Sm. 188°. HCl (B. 25, 1644). — IV, 375.  
 4) Naphtophenoxazon. Sm. 200—211° (B. 36, 1808 C. 1903 [2] 205).  
 5) Ketonaphtophenoxazin. Sm. 191—192° (B. 28, 354; 30, 2131). — IV, 460; \*IV, 277.  
 6) Phenyl-β-Naphtylcarbazonchinon. Sm. 307° (A. 202, 13). — IV, 453.  
 7) α,α<sup>2</sup>-Laktan d. β-Cyan-α-Oxy-αβ-Diphenyläthen-α<sup>2</sup>-Carbonsäure. Sm. 164—165,5° (B. 18, 1264; J. pr. [2] 55, 330). — II, 1977.  
 8) Nitril d. 3-Phenyl-2,1-Benzpyron-4-Carbonsäure (3,4-Phenyleyanisocumarin). Sm. 204—205° (205—206°) (B. 25, 3572; 27, 832 Anm.; J. pr. [2] 55, 330; B. 40, 1205 C. 1907 [1] 1257). — II, 1977; \*II, 1149.  
 9) Imid d. Phenanthren-1,10-Dicarbonsäure. Sm. 308—309° (B. 39, 3115 C. 1906 [2] 1329).  
 10) Verbindung (aus Desoxybenzoindicarbonimidosäure) (B. 24, 2823). — II, 1978.
- C<sub>16</sub>H<sub>9</sub>O<sub>2</sub>N<sub>8</sub>** C 69,8 — H 3,3 — O 11,6 — N 15,3 — M. G. 275.  
 1) 6-Nitro-αβ-Naphtophenazin. Sm. 221—222° (B. 23, 175). — IV, 1051.  
 2) Monooxim d. 5,6-Diketo-5,6-Dihydro-αβ-Naphtophenazin. Sm. 219° u. Zers. (A. 286, 80). — IV, 1058.
- C<sub>16</sub>H<sub>9</sub>O<sub>3</sub>N** C 73,0 — H 3,4 — O 18,2 — N 5,3 — M. G. 263.  
 1) 9-Oxyphenonaphtoxazon (B. 36, 1810 C. 1903 [2] 206; B. 38, 2575 C. 1905 [2] 637). — \*IV, 278.  
 2) Biphtalylimid. Sm. oberhalb 274° (A. 228, 137; 233, 246; B. 26, 540). — II, 1817.
- C<sub>16</sub>H<sub>9</sub>O<sub>3</sub>N<sub>3</sub>** C 66,0 — H 3,1 — O 16,5 — N 14,4 — M. G. 291.  
 1) Nitril d. 1-Keto-3-[3-Nitrophenyl]-1,2-Dihydroisochinolin-4-Carbonsäure (3-m-Nitrophenyl-4-Cyanisocarbostyryl). Sm. oberhalb 315° (B. 29, 2545). — IV, 432.
- C<sub>16</sub>H<sub>9</sub>O<sub>3</sub>Br** 1) Acetat d. Brommorphenol. Sm. 208° (B. 33, 358). — \*III, 321.  
**C<sub>16</sub>H<sub>9</sub>O<sub>4</sub>N** C 68,8 — H 3,2 — O 22,9 — N 5,0 — M. G. 279.  
 1) Nitril d. 4-Acetoxy-1,2-ββ-Naphtopyron-3-Carbonsäure. Sm. 229° (A. 367, 260 C. 1909 [2] 1240).
- C<sub>16</sub>H<sub>9</sub>O<sub>4</sub>N<sub>3</sub>** C 62,5 — H 2,9 — O 20,8 — N 13,7 — M. G. 307.  
 1) 10-Nitro-6-Amidophenonaphtoxazon. Sm. 288° (B. 33, 3070). — \*IV, 714.  
 2) 2-Nitro-4-Cyanbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 194° (B. 27, 2165). — II, 1813.
- C<sub>16</sub>H<sub>9</sub>O<sub>4</sub>N<sub>5</sub>** C 57,3 — H 2,7 — O 19,1 — N 20,9 — M. G. 335.  
 1) 1-[2,4,6-Dinitrosonitrophenyl]azonaphtalin. Sm. 210° (J. pr. [2] 43, 183; [2] 55, 392). — IV, 1392; \*IV, 1027.  
 2) 2-[2,4,6-Dinitrosonitrophenyl]azonaphtalin. Sm. 231° u. Zers. (J. pr. [2] 43, 183; [2] 55, 392). — IV, 1392; \*IV, 1027.
- C<sub>16</sub>H<sub>9</sub>O<sub>4</sub>Cl** 1) Acetat d. 1-Chlor-2-Oxy-9,10-Anthrachinon. Sm. 163,5° (B. 39, 114 C. 1906 [1] 676).
- C<sub>16</sub>H<sub>9</sub>O<sub>5</sub>N** C 65,1 — H 3,0 — O 27,1 — N 4,7 — M. G. 295.  
 1) Gallorubin. Sm. bei 300°. + C<sub>2</sub>H<sub>6</sub>O (B. 29, 1752; B. 37, 828 C. 1904 [1] 1152). — \*III, 529.  
 2) 9,10-Anthrachinon-1-Oxaminsäure. Sm. 226° (B. 39, 642 C. 1906 [1] 1025).
- C<sub>16</sub>H<sub>9</sub>O<sub>5</sub>N<sub>3</sub>** C 59,4 — H 2,8 — O 24,8 — N 13,0 — M. G. 323.  
 1) 3-[2-Nitrophenyl]azo-2-Oxy-1,4-Naphtochinon. Sm. 255—257° u. Zers. (B. 30, 2129). — IV, 1481.  
 2) 3-[4-Nitrophenyl]azo-2-Oxy-1,4-Naphtochinon. Zers. bei 260—261° (B. 30, 2129). — IV, 1481.
- C<sub>16</sub>H<sub>9</sub>O<sub>5</sub>N<sub>5</sub>** C 54,6 — H 2,6 — O 22,8 — N 19,9 — M. G. 351.  
 1) 1-[2,4,6-Nitrosodinitrophenyl]azonaphtalin. Sm. 232° (J. pr. [2] 43, 182; [2] 55, 394). — IV, 1392; \*IV, 1027.  
 2) 2-[2,4,6-Nitrosodinitrophenyl]azonaphtalin. Sm. 245° (J. pr. [2] 43, 182; [2] 55, 394). — IV, 1392; \*IV, 1027.
- C<sub>16</sub>H<sub>9</sub>O<sub>5</sub>Br<sub>8</sub>** 1) Tribrombrasilein + H<sub>2</sub>O (B. 23, 1429). — III, 655.  
**C<sub>16</sub>H<sub>9</sub>O<sub>6</sub>N** C 61,7 — H 2,9 — O 30,9 — N 4,5 — M. G. 311.  
 1) Acetat d. p-Nitro-3-Oxy-9,10-Phenanthrenchinon. Sm. 217° (A. 322, 157 C. 1902 [2] 282). — \*III, 318.  
 2) Acetat d. 5-Nitro-4-Oxy-9,10-Phenanthrenchinon. Sm. 220° u. Zers. (B. 38, 3736 C. 1906 [1] 40).



- C<sub>16</sub>H<sub>9</sub>O<sub>6</sub>N<sub>5</sub>** C 52,3 — H 2,4 — O 26,2 — N 19,1 — M. G. 367.  
 1) 1-[2,4,6-Trinitrophenyl]azonaphtalin. Sm. 226° u. Zers. (*J. pr.* [2] 43, 181). — IV, 1392.  
 2) 2-[2,4,6-Trinitrophenyl]azonaphtalin. Sm. 205° u. Zers. (*J. pr.* [2] 43, 182). — IV, 1392.
- C<sub>16</sub>H<sub>9</sub>O<sub>7</sub>Br<sub>3</sub>** 1) 7-Methyläther d. P-Tribrom-3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (M. d. Tribromquercetin) (*A.* 196, 321). — III, 605.
- C<sub>16</sub>H<sub>9</sub>O<sub>8</sub>N** C 56,0 — H 2,6 — O 37,3 — N 4,1 — M. G. 343.  
 1) 4-Nitro-1-Oxy-9,10-Anthrachinon-2-Oxyessigsäure (D. R. P. 158277 *C.* 1905 [1] 703).
- C<sub>16</sub>H<sub>9</sub>O<sub>8</sub>N<sub>6</sub>** C 48,1 — H 2,2 — O 32,1 — N 17,5 — M. G. 399.  
 1) P-Tetranitro-1-Phenylamidonaphtalin. Sm. 253° (*B.* 15, 2720). — II, 600.  
 2) P-Tetranitro-1-Phenylamidonaphtalin. Sm. 162,5° (*B.* 15, 2717). — II, 600.
- C<sub>16</sub>H<sub>9</sub>O<sub>8</sub>N<sub>7</sub>** C 45,0 — H 2,1 — O 30,0 — N 22,9 — M. G. 427.  
 1) P-Tetranitro-2-Methyl-4,6-Diphenyl-1,3,5-Triazin (PINNER, Imidoäther 162). — IV, 1191.
- C<sub>16</sub>H<sub>9</sub>O<sub>9</sub>N<sub>3</sub>** C 49,6 — H 2,3 — O 37,2 — N 10,9 — M. G. 387.  
 1) Methyläther d. P-Trinitro-2-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 212° u. Zers. (*Soc.* 91, 1633 *C.* 1907 [2] 2058).
- C<sub>16</sub>H<sub>9</sub>O<sub>6</sub>Cl** 1) Chloracetat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon (*B.* 10, 881). — III, 439.
- C<sub>16</sub>H<sub>9</sub>NBr<sub>4</sub>** 1) P-Tetranitro-2-Phenylamidonaphtalin. Sm. 202—203° (198°) (*A.* 209, 159; *B.* 20, 1170; 28, 337). — II, 602.
- C<sub>16</sub>H<sub>9</sub>N<sub>2</sub>Cl** 1) 9-Chlor- $\alpha\beta$ -Naphtophenazin. Sm. 191° (*B.* 31, 2479). — \*IV, 704.  
 2) Verbindung (aus 4,4'-Tetramethyldiamidobiphenyl) (*Bl.* [3] 5, 59). — IV, 962.
- C<sub>16</sub>H<sub>10</sub>ON<sub>2</sub>** C 78,0 — H 4,1 — O 6,5 — N 11,4 — M. G. 246.  
 1) 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Äthyl-1,4-Dihydrobenzol. Sm. 83—84° (*A. ch.* [7] 10, 60). — IV, 599.  
 2) Oximidochinolylenphenylenmethan. Sm. 261° u. Zers. (*B.* 34, 2470). — \*IV, 271.  
 3) Nitrosophenyl- $\beta$ -Naphtylcarbazol. Sm. 240° (*A.* 202, 8). — IV, 453.  
 4) isom. Nitrosophenyl- $\beta$ -Naphtylcarbazol. Sm. 132° (144—145°) u. Zers. (*B.* 29, 269; *C.* 1901 [2] 428). — IV, 453; \*IV, 271.  
 5) 2-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 285° (*B.* 41, 1836 *C.* 1908 [2] 179).  
 6) 5-Oxy- $\alpha\beta$ -Naphtophenazin ( $\alpha$ -Naphteurhodol) (*B.* 23, 846, 2453; 28, 349, 357; 34, 1056). — IV, 1054; \*IV, 708.  
 7) 6-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 197—198° (199°) (*B.* 26, 618; 31, 2412). — IV, 1054; \*IV, 708.  
 8) isom. 6-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. noch nicht bei 300° (*B.* 26, 619; 34, 1055). — IV, 1054.  
 9)  $\alpha\beta$ -Naphtophenazin-N-Oxyd. Sm. 182° (*B.* 34, 2448). — \*IV, 704.  
 10) 5,6-Dihydro- $\alpha\beta$ -Naphtophenazin-5,6-Oxyd. Sm. 186—187° (*B.* 26, 617). — IV, 1053.  
 11) 5-Imido-7,12-Naphtophenoxazin. Sm. 215°. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>CrO<sub>7</sub> (*B.* 40, 2080 *C.* 1907 [2] 151).  
 12) Nitril d.  $\beta$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[2-Cyanphenyl]äthen- $\alpha$ -Carbonsäure. Sm. 109—110°. K + 3H<sub>2</sub>O, Ag (*B.* 27, 832). — II, 1977.  
 13) Nitril d. 1-Keto-3-Phenyl-1,2-Dihydroisochinolin-4-Carbonsäure. Sm. 285° (*B.* 25, 3573; 27, 832 Anm.). — II, 1897.  
 14) Nitril d. 1-Keto-4-Phenyl-1,2-Dihydroisochinolin-3-Carbonsäure. Sm. 267°. Ag (*B.* 27 [2] 589).  
 15) Verbindung (aus 2-Oxynaphtalin u. 1,4-Benzochinondichlordiimin). HCl, HNO<sub>3</sub> (*B.* 21, 1745; *B.* 40, 2074 *C.* 1907 [2] 150). — III, 330.
- C<sub>16</sub>H<sub>10</sub>OBr<sub>2</sub>** 1) 2,5-Di[4-Bromphenyl]furan. Sm. 201° (*A.* 306, 214). — \*III, 501.
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>** C 73,3 — H 3,8 — O 12,2 — N 10,7 — M. G. 262.  
 1) 4-Phenylazo-1,2-Diketo-1,2-Dihydronaphtalin. Sm. 265° u. Zers. (*A.* 286, 85). — IV, 1480.  
 2) Bis-m-Indolon. Sm. noch nicht bei 330° (*B.* 26, 539). — II, 1625.  
 3) 5-Phthalylmethylbenzimidazol. Sm. 223—225° (*A.* 273, 320). — IV, 893.  
 4) 2,3-Difuranyl-1,4-Benzdiazin. Sm. 134° (*B.* 25, 2843). — IV, 1061.

- $C_{16}H_{10}O_2N_2$  5) **5,6-Dioxy- $\alpha\beta$ -Naphtophenazin** ( $\alpha\beta$ -Oxynaphteurhodol). Sm. 241° (270° u. Zers.) (A. 286, 77; B. 36, 3625 C. 1903 [2] 1383). — IV, 1057.
- 6) **9,10-Dioxy- $\alpha\beta$ -Naphtophenazin**. Sm. bei 300° (B. 24, 1339). — IV, 1057.
- 7) **5-Amidonaphtophenoxazon**. HCl (B. 36, 1812 C. 1903 [2] 207; B. 38, 2576 C. 1905 [2] 638). — \*IV, 278.
- 8) **6-Amidonaphtophenoxazon**. Sm. 211–212° (B. 30, 2136; 33, 3069). — IV, 1060; \*IV, 714.
- 9) **9-Amidonaphtophenoxazon**. Zers. bei 280° (B. 30, 2135). — IV, 1060.
- 10) **10-Amidonaphtophenoxazon**. Sm. 255–256° (B. 30, 2132). — IV, 1060.
- 11) **Indigotin** (Indigoblau) oder  $C_{82}H_{20}O_4N_4$ . Sm. 390–392° u. Druck; subl. 156–158°. Lit. bedeutend. — II, 1618; \*II, 945.
- 12) **Isoindigotin** (3,3'-Bisindolindigo). Sm. oberhalb 350° (C. r. 148, 718 C. 1909 [1] 1576; Bl. [4] 5, 1039 C. 1909 [2] 2173).
- 13) **Indin**. K (J. pr. [1] 25, 445; A. 72, 282; J. 1865, 584). — II, 1616.
- 14) **Indirubin** (Isatinindogen; Indigpurpurin) (B. 3, 515; 12, 459, 1220; 14, 1745; 17, 976; 28, 541, 2525; D. R. P. 17656; C. 1901 [1] 1169; J. 1858, 468; R. 19, 16; B. 35, 4339 C. 1903 [1] 294; Bl. [3] 29, 756 C. 1903 [2] 628; Soc. 91, 1722 C. 1907 [2] 2060; C. r. 148, 719 C. 1909 [1] 1576). — II, 1622; \*II, 947.
- 15) **Lakton d. 3-Oxy-6[oder 7]-Methyl-2-Phenyl-1,4-Benzdiazin-2<sup>3</sup>-Carbonsäure**. Sm. 225° (G. 35 [2] 577 C. 1906 [1] 931).
- 16) **Nitril d. 9,10-Dioxy-9,10-Dihydrophenanthren-9,10-Dicarbonsäure** (Phenanthrenchinondihydrocyanid) (Soc. 51, 32; Soc. 87, 686 C. 1905 [2] 244). — III, 443.
- 17) **isom. Nitril d. 9,10-Dioxy-9,10-Dihydrophenanthren-9,10-Dicarbonsäure**. Zers. oberhalb 160° (Soc. 87, 689 C. 1905 [2] 244).
- 18) **2-Cyanbenzylimid d. Benzol-1,2-Dicarbonsäure**. Sm. 181–182° (B. 20, 2231). — II, 1805.
- 19) **3-Cyanbenzylimid d. Benzol-1,2-Dicarbonsäure**. Sm. 147° (B. 24, 2418). — II, 1805.
- 20) **4-Cyanbenzylimid d. Benzol-1,2-Dicarbonsäure**. Sm. 183–184° (B. 23, 1058). — II, 1805.
- 21) **bim. Cyanid d. Benzolcarbonsäure** ( $(C_6H_5ON)_2$ ). Sm. 99–100° (95°); Sd. 220°<sub>15</sub> (J. pr. [2] 39, 260; B. 31, 1024; A. 287, 305; B. 41, 1896 C. 1908 [2] 160). — II, 1157; \*II, 725.
- 22) **Verbindung** (aus ?-Nitro-1,8-Naphtochinon). Sm. 128° u. Zers. (B. 21, 1462). — III, 398.
- 23) **Verbindung** (aus Amido- $\beta$ -Naphtochinonanilid). Sm. 275° (B. 15, 286). — III, 393.
- $C_{16}H_{10}O_2N_4$  C 66,2 — H 3,4 — O 11,0 — N 19,3 — M. G. 290.
- 1) **1-[2,4-Dinitrosophenyl]azonaphtalin**. Sm. 162° (J. pr. [2] 43, 188; [2] 55, 891). — IV, 1391; \*IV, 1027.
- 2) **2-[2,4-Dinitrosophenyl]azonaphtalin**. Sm. 178° (J. pr. [2] 43, 188; [2] 55, 891). — IV, 1391; \*IV, 1027.
- 3) **Azin d. Diphenyldinitrosacyl**. Sm. 207° (B. 42, 2799 C. 1909 [2] 826).
- 4) **5,5'-Diphenyl-3,3'-Bi[1,2,4-Oxdiazol]**. Sm. 246° (B. 22, 2948). — IV, 1210.
- 5) **3,3'-Diphenyl-5,5'-Bi[1,2,4-Oxdiazol]**. Sm. 142° (B. 22, 3138). — II, 1204.
- 6) **5,5'-Diphenyl-2,2'-Bi[1,3,4-Oxdiazol]**. Sm. 270° (J. pr. [2] 70, 421 C. 1905 [1] 84).
- 7) **?-Nitro-1-[1-Naphtyl]-1,2,3-Benztriazol**. Sm. 182° (B. 21, 2303). — IV, 1144.
- 8) **?-Nitro-1-[2-Naphtyl]-1,2,3-Benztriazol**. Sm. 203–204° (B. 21, 592). — IV, 1144.
- 9) **2-[3-Nitrophenyl]naphtriazol**. Sm. 223–224° (Soc. 59, 379). — IV, 1208.
- 10) **2-[4-Nitrophenyl]naphtriazol**. Sm. 236° (Soc. 59, 379). — IV, 1208.

- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>N<sub>4</sub>** 11) Di[2-Cyanphenylamid] d. Oxalsäure. Sm. 318° u. Zers. (*B.* 42, 3714 *C.* 1909 [2] 1806).
- 12) Di[3-Cyanphenylamid] d. Oxalsäure (*C.* 1904 [2] 102).
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) 2-Dichlor-1,3-Diketo-2-[2-Methylphenyl]-2,3-Dihydroinden. Sm. 125,5° (*B.* 33, 2822). — \*III, 233.
- 2) 5,8-Dichlor-1,2-Dimethyl-9,10-Anthrachinon. Sm. 269—270° (*Soc.* 95, 1314 *C.* 1909 [2] 986).
- 3) 5,8-Dichlor-1,3-Dimethyl-9,10-Anthrachinon. Sm. 208° (*Soc.* 95, 1317 *C.* 1909 [2] 987).
- 4) 5,8-Dichlor-1,4-Dimethyl-9,10-Anthrachinon. Sm. 244° (*Soc.* 95, 1318 *C.* 1909 [2] 987).
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>S** 1) Atronylsulfon. Sm. 193° (*A.* 206, 63). — II, 281.
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>S<sub>2</sub>** 1) Thioindigoweiß (D.R.P. 199551 *C.* 1908 [2] 275).
- C<sub>16</sub>H<sub>10</sub>O<sub>3</sub>N<sub>2</sub>** *C* 69,1 — H 3,6 — O 17,3 — N 10,0 — M. G. 278.
- 1) 2-Nitroso-4-Phenylimido-2-Oxy-1,4-Dihydronaphtalin. Sm. 245°. + C<sub>2</sub>H<sub>6</sub>O (*B.* 15, 286). — III, 393.
- 2) 3-Phenylazo-2-Oxy-1,4-Naphtochinon. Sm. 225—226° u. Zers. NH<sub>4</sub>, Ag (*B.* 30, 2127). — IV, 1480.
- 3) 3,4-Dibenzoyl-1,2,5-Oxdiazol. Sm. 118° (*B.* 26, 529; *G.* 23 [2] 23). — III, 323.
- 4) 1,2-Naphto-β-Ketopentamethylenazinmethylsäure. Zers. bei 190° (*Bl.* [3] 23, 442). — \*IV, 695.
- 5) Indenophenazinglykolsäure. Sm. 223—224° (*B.* 36, 3626 *C.* 1903 [2] 1383).
- 6) Anhydrid d. Dibenzylidenhydrazin-2,2'-Dicarbonsäure. Sm. 219 bis 220° (*B.* 30, 3024 Anm.). — \*II, 950.
- C<sub>16</sub>H<sub>10</sub>O<sub>3</sub>N<sub>4</sub>** *C* 62,7 — H 3,3 — O 15,7 — N 18,3 — M. G. 306.
- 1) 1-[2,4-Nitrosnitrophenyl]azonaphtalin. Sm. 201° (*J. pr.* [2] 43, 186; [2] 55, 392). — IV, 1392; \*IV, 1027.
- 2) 2-[2,4-Nitrosnitrophenyl]azonaphtalin. Sm. 205° (*J. pr.* [2] 43, 187; [2] 55, 392). — IV, 1392; \*IV, 1027.
- 3) Acetylnitroindophenazin (*B.* 29, 203). — IV, 1189.
- 4) Nitril d. 7-Nitro-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benz-diazin-3'-Carbonsäure. Sm. 234° (*C.* 1908 [2] 181).
- C<sub>16</sub>H<sub>10</sub>O<sub>3</sub>Cl<sub>4</sub>** 1) Äthylester d. 3,4,5,6-Tetrachlordiphenylketon-2-Carbonsäure. Sm. 90° (*A.* 238, 341; *B.* 33, 2027). — II, 1704; \*II, 1000.
- C<sub>16</sub>H<sub>10</sub>O<sub>3</sub>S** 1) 3,4-Methylenäther d. 2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzthiofuran. Sm. 207° (*M.* 30, 352 *C.* 1909 [2] 282).
- 2) Pyrensulfonsäure. K + H<sub>2</sub>O (*M.* 4, 250). — II, 285.
- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>N<sub>2</sub>** *C* 65,3 — H 3,4 — O 21,8 — N 9,5 — M. G. 294.
- 1) 2-[2-Nitrophenyl]amido-1,4-Naphtochinon (*B.* 23, 2797). — III, 375.
- 2) 2-[3-Nitrophenyl]amido-1,4-Naphtochinon. Sm. oberhalb 270° (*B.* 14, 1905). — III, 375.
- 3) 2-[4-Nitrophenyl]amido-1,4-Naphtochinon. Sm. noch nicht bei 270° (*B.* 14, 1904). — III, 375.
- 4) 3-Nitro-1,2-Naphtochinonphenylimid. Sm. 253° (246—248°) (*B.* 17, 908, 1133). — III, 392.
- 5) 2,3,5,6-Tetraketo-1,4-Diphenylhexahydro-1,4-Diazin (Diphenyltetraacipiperazin; Dioxanilid) (*J. pr.* [2] 41, 80; *B.* 23, 2028). — II, 412.
- 6) 4,5-Dibenzoyl-1,2,3,6-Dioxdiazin (Dibenzoylgyoximsuperoxyd). Sm. 87° (*B.* 20, 3360; 21, 2838; *A.* 269, 130; *G.* 23 [1] 421; *R.* 11, 259; *J. pr.* [2] 41, 492; *G.* 37 [2] 67 *C.* 1907 [2] 899; *B.* 42, 2798 *C.* 1909 [2] 826). — III, 298.
- 7) Bilifuscin (*A.* 132, 337; *J.* 1876, 935). — III, 663.
- 8) α-Cyan-α-Phenyl-β-[2-Nitrophenyl]äthen-α'-Carbonsäure. Sm. 194°. Na + 3H<sub>2</sub>O, Ba + 5H<sub>2</sub>O (*B.* 40, 1209 *C.* 1907 [1] 1258).
- 9) Anhydrid d. Diisatinsäure (*J. pr.* [2] 58, 107). — \*II, 948.
- 10) Dilakton d. 3,3'-Di[Oxymethyl]azobenzol-4,4'-Dicarbonsäure. Sm. 260—280° u. Zers. (*C.* 1901 [2] 1160). — \*IV, 1058.
- 11) Benzoat d. 4-Oximido-5-Keto-3-Phenyl-4,5-Dihydroisoxazol (*B.* 42, 1014 *C.* 1909 [1] 1398).
- 12) Nitril d. α-[4-Nitrophenyl]-β-[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 187° (*J. pr.* [2] 61, 191). — \*II, 1095.



- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>N<sub>2</sub>** 13) Imidamid d. Diphenylketon-2,3',4'-Tricarbonsäure. Sm. 240° (A. 312, 108). — \*II, 1207.
- 14) Verbindung (aus Trioxyposafraon) (B. 31, 2439).  
**C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>N<sub>4</sub>** C 59,6 — H 3,1 — O 19,9 — N 17,4 — M. G. 322.
- 1) 1-[2,4-Dinitrophenyl]azonaphtalin. Sm. 190° (J. pr. [2] 43, 186). — IV, 1392.
- 2) 2-[2,4-Dinitrophenyl]azonaphtalin. Sm. 178° (J. pr. [2] 43, 186). — IV, 1392.
- 3) 5,5'-Bi[2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Oxdiazol]. Sm. oberhalb 300° (B. 21, 1243). — IV, 701.
- 4) p-Dinitro-2,3-Diphenyl-1,4-Diazin (Soc. 55, 101). — IV, 1038.
- 5) Base (aus 1,4-Diketocopyrin). 2HCl (B. 35, 1366 C. 1902 [1] 1113). — \*IV, 601.
- 6) Verbindung (aus Dioxychinopyrin). 2HCl (B. 37, 2136 C. 1904 [2] 233). C 54,9 — H 2,8 — O 18,3 — N 24,0 — M. G. 350.
- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>N<sub>6</sub>** 1) pp'-Tetrazoindigo (M. 24, 14 C. 1903 [1] 776).
- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>Br<sub>2</sub>** 1) γ-Oxy-αβδ-Triketo-αδ-Di[4-Bromphenyl]butan (p-Brombenzoylformoin). Sm. 180° (B. 25, 3476). — III, 318.
- 2) Dimethyläther d. p-Dibrom-2,3-Dioxy-9,10-Phenanthrenchinon. Sm. 158° (B. 33, 1832). — \*III, 318.
- 3) Monomethyläther d. p-Dibrom-5,7-Dioxy-2-Phenyl-1,4-Benzpyron (Dibromtectoerysin) (B. 6, 892, 893). — III, 628.
- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>Br<sub>4</sub>** 1) Diacetat d. p-Tetrabrom-4,4'-Dioxybiphenyl. Sm. 245° (B. 13, 225). — II, 988.
- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>J<sub>2</sub>** 1) Diphenylester d. Dijodfumarsäure. Sm. 127° (B. 26, 847). — II, 666.
- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>J<sub>4</sub>** 1) Di[2,4-Dijodphenylester] d. Bernsteinsäure. Sm. 209° (C. r. 133, 161).
- C<sub>16</sub>H<sub>10</sub>O<sub>4</sub>S** 1) Dicumaronsulfon (B. 34, 1887).
- C<sub>16</sub>H<sub>10</sub>O<sub>5</sub>N<sub>2</sub>** C 61,9 — H 3,2 — O 25,8 — N 9,0 — M. G. 310.
- 1) 2,4-Dinitrophenyläther d. 2-Oxynaphtalin. Sm. 95° (B. 23, 3429). — II, 877.
- 2) 2-[4-Nitro-2-Oxyphenyl]amido-1,4-Naphtochinon. Zers. bei 270° (B. 30, 2135). — \*III, 276.
- 3) 2-[5-Nitro-2-Oxyphenyl]amido-1,4-Naphtochinon. Zers. bei 240°. Na (B. 30, 2133). — \*III, 276.
- 4) 2-[2-Nitro-4-Oxyphenyl]amido-1,4-Naphtochinon (B. 30, 2137). — \*III, 275.
- 5) 4-Nitro-1-Acetylamido-9,10-Anthrachinon. Sm. 256—258° (C. 1901 [2] 1219). — \*III, 298.
- 6) 3-Nitrobenzoylmethylimid d. Benzol-1,2-Dicarbonsäure. Sm. 204° (B. 22, 3249). — III, 128.
- C<sub>16</sub>H<sub>10</sub>O<sub>5</sub>N<sub>4</sub>** C 56,8 — H 3,0 — O 23,7 — N 16,5 — M. G. 338.
- 1) p-Dinitro-1-Oxy-2-Phenylazonaphtalin. Sm. 250—251° (Soc. 65, 840). — IV, 1429.
- 2) 5-Nitro-2-[4-Nitrophenyl]azo-1-Oxynaphtalin. Sm. 210° (B. 40, 3273 C. 1907 [2] 1074).
- 3) 5-Nitro-4-[4-Nitrophenyl]azo-1-Oxynaphtalin. Zers. bei 252—260° (B. 40, 3272 C. 1907 [2] 1074).
- C<sub>16</sub>H<sub>10</sub>O<sub>6</sub>Cl<sub>8</sub>** 1) Verbindung (aus 3,4,5,6-Tetrachlor-1,2-Benzochinon u. tert. Butylalkohol). Sm. 250° (Am. 38, 165 C. 1907 [2] 1163).
- C<sub>16</sub>H<sub>10</sub>O<sub>6</sub>Br<sub>2</sub>** 1) γγ-Dioxy-αβδ-Triketo-αδ-Di[4-Bromphenyl]butan. Sm. 135° u. Zers. (B. 25, 3476). — III, 323.
- C<sub>16</sub>H<sub>10</sub>O<sub>6</sub>Br<sub>4</sub>** 1) Tetrabrombrasilin (B. 18, 1141). — III, 654.
- 2) isom. Tetrabrombrasilin (B. 22, 1553). — III, 654.
- C<sub>16</sub>H<sub>10</sub>O<sub>6</sub>N<sub>2</sub>** C 58,9 — H 3,1 — O 29,4 — N 8,6 — M. G. 326.
- 1) p-Dinitro-1,3-Diketo-2-[2-Methylphenyl]-2,3-Dihydroinden. Sm. 159—160° (B. 33, 2822). — \*III, 233.
- 2) Azobenzol-3,3'-Diketocarbonsäure + 2H<sub>2</sub>O. Sm. 134,5—135° (151° wasserfrei). Ba, Ag<sub>2</sub> (B. 16, 1308). — IV, 1472.
- C<sub>16</sub>H<sub>10</sub>O<sub>6</sub>N<sub>4</sub>** C 54,2 — H 2,8 — O 27,1 — N 15,8 — M. G. 354.
- 1) 1-[2,4,6-Trinitrophenyl]amidonaphtalin. Sm. 197° (198—199°). K (Soc. 59, 716; B. 33, 106, 435; Soc. 89, 589, 594 C. 1906 [2] 31, 32). — II, 600; \*II, 332.
- 2) 2-[2,4,6-Trinitrophenyl]amidonaphtalin. Sm. 233—233,5° (231,5°). K (B. 33, 107; Soc. 89, 589, 594 C. 1906 [2] 31, 32). — \*II, 333.

- $C_{16}H_{10}O_6N_4$  3) 3,5-Dinitro-1,2-Dinitrosobenzol + Naphtalin. Sm. 172° (A. 307, 58). — \*II, 96.
- 4) 2-Oxy-1-[3,5-Dinitro-4-Oxyphenyl]azonaphtalin. Sm. 259° (Soc. 87, 1205 C. 1905 [2] 1247).
- $C_{16}H_{10}O_6N_6$  C 50,3 — H 2,6 — O 25,1 — N 22,0 — M. G. 382.
- 1) Phenanthrenchinondinitrodiurein. Zers. bei 300° (G. 27 [1] 234). — \*III, 321.
- $C_{16}H_{10}O_6N_8$  C 46,8 — H 2,4 — O 23,4 — N 27,3 — M. G. 410.
- 1)  $\alpha\beta$ -Di[6-Nitro-4-Keto-3,4-Dihydro-1,2,3-Benzotriazolyl-3]äthan (m-Nitroäthylenbenzazimid). Sm. bei 290° (J. pr. [2] 53, 218). — IV, 1555.
- $C_{16}H_{10}O_6Br_2$  1) 2<sup>4</sup>-Methyläther d. 2-Dibrom-3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Dibromkämpferid). Sm. 224–225° u. Zers. (B. 14, 2389). — III, 632.
- $C_{16}H_{10}O_6Br_6$  1) Anhydrohexabromkolatannin (C. 1898 [1] 579).
- $C_{16}H_{10}O_6S_2$  1) Pyrendisulfonsäure.  $K_2 + 2\frac{1}{2}H_2O$ ,  $Ca + 2H_2O$ ,  $Ba + 3\frac{1}{2}H_2O$  (M. 4, 244). — II, 285.
- $C_{16}H_{10}O_7N_2$  C 56,1 — H 2,9 — O 32,7 — N 8,2 — M. G. 342.
- 1) Äthyläther d. 1,3-Dinitro-2-Oxy-9,10-Anthrachinon. Sm. 158° (B. 15, 694). — III, 419.
- 2) Azoxybenzol-4,4'-Diketocarbonsäure. Sm. bei 190° (B. 22, 205). — IV, 1345.
- 3) 5,5'-Dialdehyd d. Azoxybenzol-2,5,2',5'-Tetracarbonsäure. Zers. bei 280° (B. 19, 1090). — IV, 1345.
- $C_{16}H_{10}O_7N_4$  C 51,9 — H 2,7 — O 30,3 — N 15,1 — M. G. 370.
- 1) 2-Oxy-1-[3,6-Dinitro-2,4-Dioxyphenyl]azonaphtalin. Zers. bei 240° (Soc. 95, 1385 C. 1909 [2] 1052).
- $C_{16}H_{10}O_7N_6$  C 48,2 — H 2,5 — O 28,1 — N 21,1 — M. G. 398.
- 1) 4-[4-Nitrophenyl]hydrazon-5-Keto-1-[4-Nitrophenyl]-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 238–240° u. Zers.  $Na + H_2O$ ,  $Ca$ ,  $Ba + 2H_2O$ ,  $Ag$  (A. 299, 104, 107, 110). — IV, 729.
- 2) Anhydrid d. Di[4-Nitrophenylhydrazon]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 278–280° u. Zers. (A. 299, 115). — IV, 729.
- $C_{16}H_{10}O_7Br_4$  1) Tetrabromlecanorsäure. Sm. 157° (A. 139, 28). — II, 1754.
- $C_{16}H_{10}O_8N_2$  C 53,6 — H 2,8 — O 35,7 — N 7,8 — M. G. 358.
- 1) Dimethylenäther d. 2-Dinitro-1,2,5,6[oder 2,3,6,7]-Tetraoxy-9,10-Dihydroanthracen. Sm. 217° (Soc. 95, 1487 C. 1909 [2] 1428).
- 2)  $\alpha\beta$ -Di[2-Nitrophenyl]äthen- $\alpha\beta$ -Dicarbonsäure. Sm. 237,5° u. Zers. (A. 332, 284 C. 1904 [2] 702).
- 3)  $\alpha\beta$ -Di[4-Nitrophenyl]äthen-2,2'-Dicarbonsäure. Sm. 288–291° u. Zers. (Am. 40, 1724 C. 1908 [2] 1927).
- 4) Azobenzol-2,3,2',3'-Tetracarbonsäure. Sm. 230°.  $Na_2 + 10H_2O$ ,  $K_2 + 6H_2O$ ,  $Mg + 18H_2O$ ,  $Ba$ ,  $Ag_2$  (B. 14, 1331). — IV, 1474.
- 5) Azobenzol-2,5,2',5'-Tetracarbonsäure (B. 19, 1093). — IV, 1475.
- 6) Azobenzol-3,4,3',4'-Tetracarbonsäure. Sm. noch nicht bei 360°.  $Ag_2$  (C. 1901 [2] 1160). — \*IV, 1062.
- $C_{16}H_{10}O_9N_2$  C 51,3 — H 2,7 — O 38,5 — N 7,5 — M. G. 374.
- 1) Dinitrophyscion. Sm. 96° (A. 284, 184). — III, 641.
- 2) Azoxybenzol-2,5,2',5'-Tetracarbonsäure. Zers. bei 250–280°.  $Ag_2$  (B. 19, 1091). — IV, 1345.
- $C_{16}H_{10}O_9N_6$  C 44,6 — H 2,3 — O 33,5 — N 19,5 — M. G. 430.
- 1) Verbindung (aus N-Diphenyl- $\alpha\beta$ -Diacipiperazin). Sm. 290° (B. 23, 2029). — II, 411.
- $C_{16}H_{10}O_{10}N_2$  C 49,2 — H 2,6 — O 41,0 — N 7,2 — M. G. 390.
- 1) Dimethyläther d. 2-Dinitro-1,3,5,7-Tetraoxy-9,10-Anthrachinon. Sm. oberhalb 300° (D.R.P. 155633 C. 1904 [2] 1487).
- $C_{16}H_{10}O_{12}N_4$  C 42,7 — H 2,2 — O 42,7 — N 12,4 — M. G. 450.
- 1) Dimethylester d. 4,6,4',6'-Tetranitrobiphenyl-2,2'-Dicarbonsäure. Sm. 176° (A. 366, 88 C. 1909 [2] 122).
- 2) Dimethylester d. 2,6,2',6'-Tetranitrobiphenyl-4,4'-Dicarbonsäure. Sm. 173° (B. 34, 2184).
- 3) Diacetat d. 3,5,3',5'-Tetranitro-4,4'-Dioxybiphenyl. Sm. 236° (B. 21, 3532). — II, 988.
- $C_{16}H_{10}O_{13}S$  1)  $\alpha$ -Phenylen- $\alpha$ -Naphtylenoxydtetrasulfonsäure.  $Ba_2 + 4H_2O$  (A. 209, 145). — II, 1002.

- $C_{16}H_{10}NBr_3$  1) ?-Tribrom-1-Phenylamidonaphtalin. Sm. 137° (A. 209, 155). — II, 599.
- $C_{16}H_{10}N_2Cl_2$  1) 2,5-Di[4-Chlorphenyl]-1,4-Diazin. Sm. 200—201° (Bl. [3] 25, 930). — \*IV, 697.
- $C_{16}H_{10}N_2Cl_4$  1) Azoverbindung (aus  $\beta\beta$ -Dichlor- $\alpha$ -?-Amidophenyläthen). Sm. 146 bis 147° (C. r. 141, 202 C. 1905 [2] 753).
- $C_{16}H_{10}N_2Br_2$  1) 2,5-Di[4-Bromphenyl]-1,4-Diazin. Sm. 235—236° (Bl. [3] 25, 930). — \*IV, 697.
- $C_{16}H_{10}N_4S_2$  1) 2,2'-Bi[5-Phenyl-1,3,4-Thiodiazol]. Sm. 245—252° (J. pr. [2] 70, 431 C. 1905 [1] 85).
- $C_{16}H_{10}N_4S_4$  1) Disulfid d. 5-Merkapto-2-Phenyl-1,2,4-Thiodiazol. Sm. 120° (B. 24, 389). — IV, 846.
- $C_{16}H_{10}N_4S_6$  1) Disulfid d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 124—125° (B. 27, 2513; 29, 2128; J. pr. [2] 60, 190, 331). — IV, 684; \*IV, 446.
- $C_{16}H_{10}N_4S_8$  1) Verbindung (aus 5-Hydrosulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol). Sm. 131—132° (B. 29, 2135). — IV, 684.
- $C_{16}H_{10}N_6S_4$  1) Verbindung (aus 3,5-Dithiocarbonyl-1-Phenyltetrahydro-1,2,4-Triazol). Sm. 181° (A. 348, 195 C. 1906 [2] 794).
- $C_{16}H_{11}ON$  C 82,4 — H 4,7 — O 6,9 — N 6,0 — M. G. 233.
- 1) 2-Phenylimido-1-Keto-1,2-Dihydronaphtalin. Sm. 99—100° (B. 39, 1040 C. 1906 [1] 1349).
- 2) 4-Phenylimido-1-Keto-1,4-Dihydronaphtalin. Sm. 103°. HCl (B. 39, 1038 C. 1906 [1] 1349).
- 3) 9,10-Anhydrid d. 9-Acetylamido-10-Oxyphenanthren. Sm. 146 bis 147° (B. 35, 3130 C. 1902 [2] 1213). — \*IV, 272.
- 4) 2-Benzoylchinolin. Sm. 110—111° (B. 41, 2002 C. 1908 [2] 330).
- 5) 4-Benzoylchinolin. Sm. 294° (B. 41, 1008 C. 1908 [1] 1705).
- $C_{16}H_{11}ON_3$  C 73,6 — H 4,2 — O 6,1 — N 16,1 — M. G. 261.
- 1) 3-[4-Cyanbenzyl]-5-Phenyl-1,2,4-Oxdiazol. Sm. 105° (B. 22, 2984). — II, 1844.
- 2) 2-[4-Oxy-1-Naphtyl]-2,1,3-Benzotriazol. Sm. 203—204° (J. pr. [2] 67, 584 C. 1903 [2] 205). — \*IV, 789.
- 3) 2-Oxyphenylazimido- $\beta$ -Naphtalin. Sm. 140° (B. 18, 3137). — IV, 1576.
- 4) 4-Oxyphenylazimido- $\beta$ -Naphtalin. Sm. 198—199° (B. 18, 3138). — IV, 1576.
- 5) Acetylisatohydrophenazin. Sm. 202° (B. 28, 2529). — IV, 1189.
- 6) 9-Amido-2-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 350° (B. 38, 1817 C. 1905 [1] 1655).
- 7) 6-Amido-5-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 225° (B. 33, 3071). — \*IV, 865.
- 8) 9-Amido-6-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 263° (B. 38, 1822 C. 1905 [1] 1655).
- 9) Indigoimid (B. 31, 1253). — \*II, 946.
- 10) Laktam d. 3-Amido-6[oder 7]-Methyl-2-Phenyl-1,4-Benzdiazin-2<sup>2</sup>-Carbonsäure. Sm. 303°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (G. 35 [2] 578 C. 1906 [1] 931).
- $C_{16}H_{11}OCl$  1) Oxoniumchlorid d. 2,3-Indenbenzpyran. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (Soc. 93, 1099 C. 1908 [2] 607).
- $C_{16}H_{11}OBr$  1) 6-Brom-1-Keto-2-Benzyliden-2,3-Dihydroinden. Sm. 162—163° (B. 31, 721). — \*III, 188.
- $C_{16}H_{11}O_2N$  C 77,1 — H 4,4 — O 12,8 — N 5,6 — M. G. 249.
- 1) 1[oder 2]-[4-Nitrophenyl]naphtalin. Sm. 129° (B. 29, 168). — \*II, 124.
- 2) 1,3-Diketo-2-[4-Amidobenzyliden]-2,3-Dihydroinden. Sm. 247° u. Zers. (B. 34, 2468). — \*III, 234.
- 3) 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin (Anilido- $\beta$ -Naphtochinon). Sm. 265° (240°). Ca, Ba, Ag (A. 211, 75; D.R.P. 79564, 79953; B. 14, 1314, 1494; 15, 279, 690; 25, 3607; 27, 25, 242). — III, 392; \*III, 282.
- 4) 2-Phenylamido-1,4-Naphtochinon. Sm. 190—191° (186°) (A. 211, 82; B. 12, 1645; 14, 1494, 1664; 25, 2732; 28, 349; 29, 1612; Soc. 37, 639; B. 39, 1042 C. 1906 [1] 1350). — III, 374; \*III, 275.
- 5) ?-Phenylamido-1,4-Naphtochinon. Sm. 263° (B. 39, 1042 C. 1906 [1] 1350).



- C<sub>16</sub>H<sub>11</sub>O<sub>2</sub>N** 6) *2-Oxy-2-Phenyl-1,4-Naphtochinonimid*. Sm. 173,5—174° (A. 226, 38). — III, 460.
- 7) *6-Benzylidenamido-1,2-Benzpyron*. Sm. 150—152° (Soc. 85, 1234 C. 1904 [2] 1124).
- 8) *2,3-Diketo-4,5-Diphenyl-2,3-Dihydropyrrol*. Sm. 184° u. Zers. (Soc. 95, 989 C. 1909 [2] 435).
- 9) *5-Keto-4-Benzyliden-3-Phenyl-4,5-Dihydroisoxazol*. Sm. 191° u. Zers. (C. r. 146, 638 C. 1908 [1] 1702).
- 10) *2-Oxy-3-Benzoylchinolin*. Sm. oberhalb 270° (B. 16, 1838). — IV, 375.
- 11) *1,4-Diketo-3-Benzyliden-1,2,3,4-Tetrahydroisochinolin*. Sm. 193 bis 194° (B. 35, 2424 C. 1902 [2] 456). — \*IV, 265.
- 12) *1,3-Diketo-4-Benzyliden-1,2,3,4-Tetrahydroisochinolin*. Sm. 173 bis 174° (B. 20, 1204). — II, 1897.
- 13) *α-Cyan-ββ-Diphenylakrylsäure*. Zers. oberhalb 190° (Am. 33, 343 C. 1905 [1] 1391).
- 14) *α-Cyan-αβ-Diphenyläthen-α²-Carbonsäure*. Sm. 163°. Ag (B. 40, 1201 C. 1907 [1] 1257).
- 15) *2-Phenylchinolin-4-Carbonsäure*. Sm. 208—209° (207°). Ca + 2½ H<sub>2</sub>O, Zn + H<sub>2</sub>O, Pb + H<sub>2</sub>O, Cu + H<sub>2</sub>O, Ag, (2HCl, PtCl<sub>4</sub>). Pikrat (J. pr. [2] 38, 583; [2] 56, 293; B. 32, 2276; A. 242, 291). — IV, 445; \*IV, 267.
- 16) *3-Phenylchinolin-4-Carbonsäure*. Sm. 273°. Ag, Chromat (B. 39, 984 C. 1906 [1] 1356).
- 17) *4-Phenylchinolin-2-Carbonsäure*. Sm. 171°. Na, K, (2HCl, PtCl<sub>4</sub>) (B. 19, 2429; 28, 1049; C. 1900 [2] 1022). — IV, 446.
- 18) *4-Phenylchinolin-3-Carbonsäure*. Ba + 6H<sub>2</sub>O (B. 18, 2706). — IV, 446.
- 19) *6-Phenylchinolin-6²-Carbonsäure*. Sm. 264—265° (B. 35, 3283 C. 1902 [2] 1262). — \*IV, 267.
- 20) *β-[5-Akridyl]akrylsäure*. Zers. bei 208°. Ag, HCl (B. 20, 1544). — IV, 446.
- 21) *Säure (aus Diphenylmaleinsäureisonitril)*. Sm. 222° (B. 14, 1801). — II, 1898.
- 22) *Inn. Anhydrid d. α-Benzoylamido-β-Phenylakrylsäure*. Sm. 165 bis 166° (B. 16, 2815; 33, 2036; A. 275, 3; G. 19, 55). — II, 1420; \*II, 857.
- 23) *Benzoat d. 6-Oxychinolin*. Sm. 230—231° (M. 3, 556). — IV, 272.
- 24) *Benzoat d. 7-Oxychinolin*. Sm. 88—89°. (2HCl, PtCl<sub>4</sub>) (M. 3, 567). — IV, 272.
- 25) *Benzoat d. 8-Oxychinolin*. Sm. 118—120° (B. 14, 1367). — IV, 275.
- 26) *Nitril d. α-Phenyl-β-[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure*. Sm. 122° (J. pr. [2] 61, 190; B. 34, 3083). — \*II, 1095.
- 27) *Nitril d. β-Benzoxyl-α-Phenylakrylsäure*. Sm. 116—117° (117—118°) (J. pr. [2] 55, 340; A. 316, 334). — \*II, 957.
- 28) *Nitril d. β-Oxy-α-Benzoyl-β-Phenylakrylsäure* (N. d. Dibenzoylessigsäure). Sm. 156,5° (J. pr. [2] 42, 268; [2] 58, 151). — II, 1896; \*II, 1099.
- 29) *Imid d. αβ-Diphenyläthen-αβ-Dicarbonsäure* (I. d. Diphenylmaleinsäure). Sm. 213° (B. 13, 746). — II, 1897.
- 30) *Verbindung (aus 4,4'-Di-1,2-Naphtochinonoxyd) oder C<sub>32</sub>H<sub>22</sub>O<sub>4</sub>N<sub>2</sub>* (B. 30, 2202). — \*III, 285.
- C<sub>16</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>** C 69,3 — H 4,0 — O 11,5 — N 15,2 — M. G. 277.
- 1) *1-[3-Nitrophenyl]azonaphtalin*. Sm. 127—128°. — IV, 1391.
- 2) *Indigooxim*. Sm. 205° u. Zers. (B. 31, 1252). — \*II, 946.
- 3) *Desoxyimidoisatin*. Sm. 209—210° u. Zers. (A. 190, 379; 194, 86). — II, 1610.
- 4) *Diamidophenonaphtoxazon* (B. 33, 3070). — \*IV, 874.
- 5) *2,4-Diphenyl-1,3,5-Triazin-6-Carbonsäure*. Sm. 192° u. Zers. K (B. 23, 2382). — IV, 1199.
- 6) *Verbindung (aus 3,4-Dibenzoyl-1,2,5-Oxdiazol)*. Sm. 221° (G. 23 [2] 24; B. 26, 529). — III, 323.
- C<sub>16</sub>H<sub>11</sub>O<sub>2</sub>Cl** 1) *2-Chlor-1,3-Diketo-2-[3-Methylphenyl]-2,3-Dihydroinden*. Sm. 92 bis 93° (B. 28, 1389). — III, 303.
- 2) *Oxoniumchlorid d. 7-Oxy-2,3-Indenbenzpyran + 3H<sub>2</sub>O. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> + 2H<sub>2</sub>O, + AuCl<sub>3</sub> + 2H<sub>2</sub>O* (Soc. 93, 1100 C. 1908 [2] 608).
- 3) *Methylester d. 10-Chloranthracen-9-Carbonsäure*. Sm. 123° (B. 20, 703). — II, 1478.

- C<sub>16</sub>H<sub>11</sub>O<sub>2</sub>Cl** 4) **Acetat d. 9-Chlor-10-Oxyphenanthren.** Sm. 145—147° (*B.* 41, 4221 *C.* 1909 [1] 181).
- C<sub>16</sub>H<sub>11</sub>O<sub>2</sub>Br** 1) **6-Brom-1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden.** Zers. bei 220° (*B.* 31, 721; *Bl.* [3] 27, 77 *C.* 1902 [1] 590). — \*III, 188.  
 2) **6-Brom-1-Keto-2-[3-Oxybenzyliden]-2,3-Dihydroinden.** Sm. 239° (*B.* 31, 722; *Bl.* [3] 27, 77 *C.* 1902 [1] 590). — \*III, 188.  
 3) **6-Brom-1-Keto-2-[4-Oxybenzyliden]-2,3-Dihydroinden.** Sm. 252° (*B.* 31, 723; *Bl.* [3] 27, 78 *C.* 1902 [1] 590). — \*III, 188.  
 4) **2-Brom-1,3-Diketo-5-Methyl-2-Phenyl-2,3-Dihydroinden.** Sm. 76 bis 77° (*B.* 29, 2379). — \*III, 233.  
 5) **2-Brom-1,3-Diketo-2-[2-Methylphenyl]-2,3-Dihydroinden.** Sm. 171 bis 172° (*B.* 33, 2822). — \*III, 233.  
 6) **2-Brom-1,3-Diketo-2-[3-Methylphenyl]-2,3-Dihydroinden.** Sm. 88° (*B.* 28, 1389). — III, 303.  
 7) **Lakton d. α-Brom-γ-Oxy-βγ-Diphenylpropen-α-Carbonsäure.** Sm. 118—119° (*A.* 319, 170 *C.* 1902 [1] 105). — \*II, 1008.  
 8) **Lakton d. γ-Brom-γ-Oxy-βγ-Diphenylpropen-α-Carbonsäure.** Sm. 107—108°; Zers. bei 130° (*A.* 319, 173 *C.* 1902 [1] 105). — \*II, 1008.
- C<sub>16</sub>H<sub>11</sub>O<sub>2</sub>J<sub>3</sub>** 1) **2-Triiod-3-Methylphenylester d. β-Phenylakrylsäure.** Sm. 135—136° (*C.* 1900 [1] 885). — \*II, 851.
- C<sub>16</sub>H<sub>11</sub>O<sub>3</sub>N** *C* 72,5 — *H* 4,1 — *O* 18,1 — *N* 5,3 — *M. G.* 265.  
 1) **2-[2-Oxyphenyl]amido-1,4-Naphtochinon.** Sm. 187—188° (*B.* 28, 354).  
 2) **3-Phenylamido-2-Oxy-1,4-Naphtochinon.** Sm. 210° (*B.* 16, 896; 25, 3605; *A.* 286, 73; 307, 22). — III, 385; \*III, 278.  
 3) **2-Phenylamido-7-Oxy-1,4-Naphtochinon.** Sm. oberhalb 240° u. Zers. (*B.* 27, 3051). — III, 385.  
 4) **Monoxim d. 3-Oxy-2-Phenyl-1,4-Naphtochinon.** Sm. 215—216° u. Zers. (*A.* 296, 22). — \*III, 327.  
 5) **1-Acetylamido-9,10-Anthrachinon.** Sm. 202° (215°) (*B.* 15, 1791; 30, 1117; *B.* 38, 2866 *C.* 1905 [2] 1094). — III, 413; \*III, 296.  
 6) **2-Acetylamido-9,10-Anthrachinon.** Sm. 257° (263°) (*B.* 12, 1570; 15, 228; *A.* 212, 61). — III, 413.  
 7) **3-Benzoylamido-1,2-Benzpyron.** Sm. 170—171° (172—173°). 2KHO (*B.* 18, 1184; *G.* 19, 43; *A.* 337, 291 *C.* 1905 [1] 379; *C.* 1908 [2] 1947). — II, 1633.  
 8) **6-Benzoylamido-1,2-Benzpyron (6-Benzoylamidocumarin).** Sm. 173° (*B.* 27, 1937). — II, 1632.  
 9) **Oxim d. 3-Benzoyl-1,2-Benzpyron.** Sm. 148—150° (*B.* 37, 4498 *C.* 1905 [1] 250).  
 10) **5-Keto-4-[2-Oxybenzyliden]-3-Phenyl-4,5-Dihydroisoxazol.** Sm. 187° (*C. r.* 146, 639 *C.* 1908 [1] 1703).  
 11) **5-Keto-4-[4-Oxybenzyliden]-3-Phenyl-4,5-Dihydroisoxazol.** Sm. 206—207° (*C. r.* 146, 639 *C.* 1908 [1] 1703).  
 12) **5-Keto-2-Benzoyl-3-Phenyl-2,5-Dihydroisoxazol.** Sm. 161° (*B.* 30, 1615). — \*IV, 195.  
 13) **4-Keto-5-Benzoyl-3-Phenyl-4,5-Dihydroisoxazol.** Sm. 175° (*B.* 25, 3470). — III, 318.  
 14) **3,4-Methylenäther d. 3-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroindol.** Sm. 221° (223—224°) (*C.* 1903 [1] 34; *Soc.* 95, 796 *C.* 1909 [2] 30). — \*IV, 253.  
 15) **3,4-Methylenäther d. 2-Keto-3-[3,4-Dioxybenzyliden]-2,3-Dihydroindol.** Sm. 228° (*C. r.* 148, 717 *C.* 1909 [1] 1576).  
 16) **1-Benzoyl-2,3-Diketo-5-Methyl-2,3-Dihydroindol (Benzoyl-p-Methylisatin).** Sm. 193° (*B.* 28, 735). — II, 1651.  
 17) **4-Oxy-1-Keto-3-Benzoyl-1,2-Dihydroisochinolin.** Sm. 196—198° (*B.* 33, 2633). — \*IV, 223.  
 18) **Phenylamidojuglon.** Sm. 230° (*B.* 18, 473). — III, 387.  
 19) **α-Cyan-α-Phenyl-β-[3-Oxyphenyl]äthen-α<sup>2</sup>-Carbonsäure.** Sm. 159 bis 161° (*B.* 40, 1209 *C.* 1907 [1] 1258).  
 20) **Desoxybenzoindicarbonimidosäure** (*B.* 24, 2822). — II, 1978.  
 21) **5-Benzoylinden-2-Carbonsäure.** Sm. 284—285° u. Zers. (*Soc.* 55, 617). — III, 187.  
 22) **4-Oxy-2-Phenylchinolin-3-Carbonsäure.** Sm. 232°. Ca, Ag (*B.* 18, 2633; 19, 1462; *D. R. P.* 33497). — IV, 446; \*IV, 268.

- C<sub>16</sub>H<sub>11</sub>O<sub>3</sub>N** 23) **6-Oxy-2-Phenylchinolin-4-Carbonsäure.** Sm. oberhalb 320°. Ca, Pb, Cu, CuOH, Ag, HCl (A. 281, 11; 282, 99). — IV, 446.
- 24) **7-Oxy-2-Phenylchinolin-4-Carbonsäure.** Sm. 333—334° (B. 41, 3889 C. 1909 [1] 298).
- 25) **8-Oxy-2-Phenylchinolin-4-Carbonsäure.** Sm. 247°. Ca, Cu + CuO, Ag (A. 281, 7). — IV, 447.
- 26) **2-Oxy-3-Phenylchinolin-4-Carbonsäure.** Sm. 291°. Ag + H<sub>2</sub>O (B. 41, 483 C. 1908 [1] 1065).
- 27) **2-[2-Oxyphenyl]chinolin-4-Carbonsäure.** Sm. 238°. Ag, (2 HCl, PtCl<sub>4</sub>) (A. 249, 100). — IV, 447.
- 28) **4-[2-Oxyphenyl]chinolin-2-Carbonsäure.** Sm. 243—245° u. Zers. (B. 27, 3039; D.R.P. 79173). — IV, 448; \*IV, 268.
- 29) **4-[3-Oxyphenyl]chinolin-2-Carbonsäure.** Sm. 235° (B. 27, 3043).
- 30) **4-[4-Oxyphenyl]chinolin-2-Carbonsäure.** Sm. 234—235° u. Zers. (B. 27, 912; D.R.P. 79173). — IV, 448; \*IV, 268.
- 31) **1-Keto-2-Phenyl-1,2-Dihydroisochinolin-3-Carbonsäure.** Sm. 265°. Ag (B. 27, 202). — IV, 365.
- 32) **1-Keto-2-Phenyl-1,2-Dihydroisochinolin-4-Carbonsäure.** Sm. 267° (B. 41, 3268 C. 1908 [2] 1434).
- 33) **Homoapocinchensäure.** Sm. oberhalb 290°. Ag + H<sub>2</sub>O (J. pr. [2] 61, 38). — \*IV, 268.
- 34) **Isaphensäure.** Sm. 294—296°. Ag (B. 26, 2484). — II, 1898.
- 35) **Phenylester d. 8-Oxychinolin-2-Carbonsäure.** Sm. 225—226° (B. 20, 2691). — IV, 364.
- 36) **Acetat d. 9-Oximido-10-Keto-9,10-Dihydroanthracen.** Sm. 153 bis 154° u. Zers. (Soc. 59, 644; A. 323, 232 C. 1902 [2] 802). — II, 261.
- 37) **Benzoat d. 5-Oxy-3-Phenylisoxazol.** Sm. 115° (B. 30, 1616). — \*IV, 195.
- 38) **Nitril d. 4-Äthoxyl-1,2-α-Naphtopyron-3-Carbonsäure.** Sm. 52° (A. 368, 46 C. 1909 [2] 1443).
- 39) **Phenylamid d. 1,2-Benzpyron-3-Carbonsäure.** Sm. 250° (D.R.P. 172724 C. 1906 [2] 724).
- 40) **Acetylimid d. Biphenyl-2,2'-Dicarbonsäure.** Sm. 92° (A. 252, 19). — II, 1884.
- 41) **Benzoylmethylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 167° (B. 21, 2685; 33, 2633; B. 40, 2649 C. 1907 [2] 330). — III, 128; \*III, 97.
- 42) **Verbindung** (aus Nitrosphenol u. α-Naphtol). Sm. noch nicht bei 300° (B. 39, 1045 C. 1906 [1] 1350).
- 43) **Verbindung** (aus d. Säure C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N). Sm. 181—182° (G. 19, 49). — II, 1633.
- C<sub>16</sub>H<sub>11</sub>O<sub>3</sub>N<sub>3</sub>** C 65,5 — H 3,7 — O 16,4 — N 14,3 — M. G. 293.
- 1) **2-[2-Nitrophenyl]azo-1-Oxynaphtalin.** Sm. 215—216° (B. 28, 1889; 30, 515). — IV, 1430.
- 2) **2-[4-Nitrophenyl]azo-1-Oxynaphtalin.** Sm. 234—235° (239°); Zers. bei 255—260° (B. 28, 849, 1125, 1894; 30, 515; Soc. 89, 184 C. 1906 [1] 1339). — IV, 1430.
- 3) **4-[2-Nitrophenyl]azo-1-Oxynaphtalin.** Sm. 244—245° u. Zers. (B. 28, 1888). — IV, 1430.
- 4) **4-[3-Nitrophenyl]azo-1-Oxynaphtalin** (J. 1881, 490). — IV, 1430.
- 5) **4-[4-Nitrophenyl]azo-1-Oxynaphtalin.** Sm. 277—279° u. Zers. (B. 28, 848, 1125, 1894). — IV, 1430.
- 6) **1-[2-Nitrophenyl]azo-2-Oxynaphtalin.** Sm. 209—210° (203°) (Soc. 59, 374; Soc. 89, 1170 C. 1906 [2] 1062). — IV, 1430.
- 7) **1-[3-Nitrophenyl]azo-2-Oxynaphtalin.** Sm. 193—194° (186°) (Soc. 45, 668; 51, 440; 53, 463; Soc. 89, 1170 C. 1906 [2] 1062). — IV, 1430.
- 8) **1-[4-Nitrophenyl]azo-2-Oxynaphtalin.** Sm. 249° (251,5°). Cu (Soc. 47, 662; 53, 466; B. 28, 853, 1894; 34, 2021; C. 1905 [1] 97; B. 38, 3209 C. 1905 [2] 1333; Soc. 89, 1169 C. 1906 [2] 1061; B. 41, 1096 C. 1908 [1] 1770). — IV, 1431.
- 9) **2-Nitro-4-Phenylazo-1-Oxynaphtalin.** Sm. 164° (Soc. 95, 1432 C. 1909 [2] 1247).
- 10) **4-Nitro-2-Phenylazo-1-Oxynaphtalin.** Sm. 180° (Soc. 95, 1434 C. 1909 [2] 1248).



- C<sub>16</sub>H<sub>11</sub>O<sub>3</sub>N<sub>3</sub>** 11) **p-Nitroso-1-Phenylazo-2,4-Dioxynaphtalin.** Zers. bei 175° (B. 22, 3165). — IV, 1450.
- 12) **1[oder 4]-Oxim d. 3-Phenylazo-2-Oxy-1,4-Naphtochinon** (B. 30, 2127). — IV, 1481.
- 13) **Imasatin** (*J. pr.* [1] 25, 459; [1] 35, 114; B. 10, 432). — II, 1608.
- 14) **Monamidoisatin.** Sm. 250—252°. NH<sub>4</sub>, K + 1½ H<sub>2</sub>O (M. 1, 579). — II, 1610.
- 15) **6-Oxy-4-Phenyl-2-[3-Nitrophenyl]-1,3-Diazin.** Sm. 271° (B. 28, 485). — IV, 1039.
- 16) **4-Benzoat d. 4-Oximido-5-Keto-3-Phenyl-4,5-Dihydropyrazol.** Sm. 142° (*J. pr.* [2] 52, 29). — IV, 905.
- 17) **4-Phenylazo-5-Phenylisoxazol-3-Carbonsäure.** Sm. 217° (B. 37, 2206 C. 1904 [2] 323).
- 18) **Nitroderivat d. Verb. C<sub>16</sub>H<sub>12</sub>ON<sub>2</sub>.** Sm. 232° (B. 32, 2208). — \*II, 924.
- C<sub>16</sub>H<sub>11</sub>O<sub>3</sub>Br** 1) **6-Brom-1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden.** Sm. 279 bis 280° (B. 31, 723). — \*III, 189.
- 2) **Methyläther d. 3[oder 4]-Brom-2-Oxy-1-Methyl-9,10-Anthrachinon.** Sm. 179—180° (*Soc.* 91, 1631 C. 1907 [2] 2058).
- 3) **Methyläther d. p-Brom-2-Oxy-1-Methyl-9,10-Anthrachinon.** Sm. 228° (*Soc.* 91, 1632 C. 1907 [2] 2058).
- C<sub>16</sub>H<sub>11</sub>O<sub>4</sub>N** 1) **p-Nitro-1,3-Diketo-2-[2-Methylphenyl]-2,3-Dihydroinden.** Sm. 131° (B. 33, 2822). — \*III, 233.
- 2) **2-Acetylamido-1-Oxy-9,10-Anthrachinon.** Sm. 242° (*J. pr.* [2] 18, 145; B. 39, 1205 C. 1906 [1] 1748). — III, 419.
- 3) **1-Acetylamido-2-Oxy-9,10-Anthrachinon.** Sm. 170° (*J. pr.* [2] 18, 143). — III, 420.
- 4) **2-Keto-1-[2-Nitrobenzyliden]-4-Methyl-1,2-Dihydrobenzofuran.** Sm. 156° (B. 41, 4280 C. 1909 [1] 379).
- 5) **2-Keto-1-[4-Nitrobenzyliden]-4-Methyl-1,2-Dihydrobenzofuran.** Sm. 208° (B. 41, 4279 C. 1909 [1] 379).
- 6) **2,4-Diketo-3-Benzoylmethyl-3,4-Dihydro-1,3-Benzoxazin.** Sm. 187° (B. 35, 3652 C. 1902 [2] 1457).
- 7) **α-Phtalylamidophenylelessigsäure.** Sm. 168° (B. 37, 1688 C. 1904 [1] 1524).
- 8) **Xanthen-9-Cyanessigsäure.** Sm. 164—166° u. Zers. Na, Ca, Ba, Pb, Ag (*Bl.* [3] 35, 1008 C. 1907 [1] 116).
- 9) **1-Benzoxylindol-2-Carbonsäure.** Sm. 151° u. Zers. (B. 29, 649). — IV, 237.
- 10) **3-Oxy-1-Benzoylindol-2-Carbonsäure.** Sm. 196° u. Zers. (B. 34, 1856; D. R. P. 131400 C. 1902 [1] 1344).
- 11) **Anhydrid d. 2-[2-Acetoxybenzoyl]amidobenzol-1-Carbonsäure.** Sm. 154° (A. 351, 280 C. 1907 [1] 1495).
- 12) **Lakton d. 1-[α-Oxy-β-Nitro-β-(2-Methylphenyl)äthenyl]benzol-2-Carbonsäure** (Nitro-o-Xylalptalid). Sm. 167—169° (B. 33, 2819). — \*II, 1010.
- 13) **Lakton d. 1-[α-Oxy-β-Nitro-β-(3-Methylphenyl)äthenyl]benzol-2-Carbonsäure** (Nitro-m-Xylalptalid). Sm. 144° u. Zers. (B. 23, 3163). — II, 1714.
- 14) **Lakton d. 1-[α-Oxy-β-Nitro-β-(4-Methylphenyl)äthenyl]benzol-2-Carbonsäure.** Sm. 205—207° u. Zers. (B. 24, 3971). — II, 1715.
- 15) **Lakton d. β-Nitro-α-Oxy-α-[3-Methylphenyl]-β-Phenyläthan-α<sup>2</sup>-Carbonsäure.** Sm. 198—199° (B. 42, 428 C. 1909 [1] 845).
- 16) **Nitril d. α-Benzoxyl-3,4-Dioxyphenylelessig-3,4-Methylenäthersäure.** Sm. 57° (*Soc.* 95, 1406 C. 1909 [2] 1228).
- 17) **Phenylamid d. 4-Oxy-1,2-Benzopyron-3-Carbonsäure.** Sm. 213°. Na, Ag (A. 367, 186 C. 1909 [2] 703).
- 18) **4-Acetoxyphenylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 238,5° (226°) (G. 16, 252; C. 1897 [1] 49). — II, 1809; \*II, 1055.
- 19) **Verbindung** (aus Chinolin u. Pyrogallolcarbonat). Sm. 103° (B. 37, 110 C. 1904 [1] 584).
- 20) **Verbindung** (aus Desoxybenzoindicarbonsäure). Sm. 229—230° (B. 24, 2824). — II, 1978.

- C<sub>18</sub>H<sub>11</sub>O<sub>4</sub>N<sub>3</sub>** C 62,1 — H 3,6 — O 20,7 — N 13,6 — M. G. 309.
- 1-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 190,5° (B. 21, 2302). — II, 600.
  - 2-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 179° (169,5°) (B. 21, 589; 23, 3429). — II, 602.
  - 2,4-Dinitro-1-Phenylamidonaphtalin. Sm. 182° (180°) (D.R.P. 194951 C. 1908 [1] 1115; D.R.P. 199318 C. 1908 [2] 210; B. 41, 3936 C. 1909 [1] 25).
  - p-Dinitro-1-Phenylamidonaphtalin. Sm. 77° (A. 209, 155). — II, 599.
  - p-Dinitro-2-Phenylamidonaphtalin. Sm. 192—195° (A. 209, 160). — II, 602.
  - p-[4-Nitrophenyl]azo-2,7-Dioxynaphtalin. Zers. bei 280—285° (B. 40, 3274 C. 1907 [2] 1074).
  - 5-Oximido-2,4,6-Triketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 227° u. Zers. K + 2½ H<sub>2</sub>O, Anilinsalz, Piperidinsalz (C. 1906 [2] 1404; Soc. 91, 1339 C. 1907 [2] 1065).
  - 8-Nitro-4-[4-Nitrobenzyl]isochinolin. Sm. 149—150° (A. 326, 283 C. 1903 [1] 928; A. 326, 235 C. 1903 [1] 929). — \*IV, 260.
  - 4-Phenylazo-5-Keto-3-Phenyl-4,5-Dihydroisoxazol-4<sup>2</sup>-Carbonsäure. Sm. 245—250° (B. 35, 928 C. 1902 [1] 807). — \*IV, 1060.
- C<sub>18</sub>H<sub>11</sub>O<sub>4</sub>N<sub>2</sub>** C 57,0 — H 3,2 — O 19,0 — N 20,8 — M. G. 337.
- 2-Methyl-4,6-Di[3-Nitrophenyl]-1,3,5-Triazin. Sm. 185° (B. 28, 483). — IV, 1191.
  - 2-Methyl-4,6-Di[4-Nitrophenyl]-1,3,5-Triazin. Sm. 280° (B. 34, 1990). — \*IV, 851.
- C<sub>18</sub>H<sub>11</sub>O<sub>4</sub>Cl** 1) 3-Chlor-2-[2,6-Diketo-hexahydrophenyl]-1,4-Naphtochinon. Sm. 258° (B. 33, 2409). — \*III, 290.
- C<sub>18</sub>H<sub>11</sub>O<sub>4</sub>Br** 2) Isobrasileinchlorhydrin (B. 15, 2345). — III, 655.
- C<sub>18</sub>H<sub>11</sub>O<sub>5</sub>N** 1) Isobrasileinbromhydrin (B. 15, 2345). — III, 655.
- C 64,7 — H 3,7 — O 26,9 — N 4,7 — M. G. 297.
- 1) Methyläther d. p-Nitro-2-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 179° (Soc. 91, 1632 C. 1907 [2] 2058).
  - 2) Äthyläther d. 1-Nitro-2-Oxy-9,10-Anthrachinon. Sm. 243° (B. 15, 1796). — III, 419.
  - 3) p-Phenylamido-5,6,8-Trioxy-1,4-Naphtochinon (D.R.P. 127766 C. 1902 [1] 340).
  - 4) Lakton d. α-Oxy-γ-Keto-α-Phenyl-β-[2-Nitrophenyl]propan-γ-Carbonsäure. Sm. 171° (A. 333, 235 C. 1904 [2] 1390).
  - 5) Monoacetat d. 3-Nitro-9,10-Dioxyphenanthren. Sm. 234—235° u. Zers. (B. 35, 3126 C. 1902 [2] 1213).
  - 6) 4-Methoxyl-3-Carboxylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 254—255° (G. 36 [2] 737 C. 1907 [1] 1122).
- C<sub>18</sub>H<sub>11</sub>O<sub>5</sub>N<sub>3</sub>** C 59,1 — H 3,4 — O 24,6 — N 12,9 — M. G. 325.
- 1) 2,4-Dinitro-1-[2-Oxyphenyl]amidonaphtalin. Sm. 178° (B. 41, 3938 C. 1909 [1] 25).
  - 2) 4,8-Dinitro-1-[4-Oxyphenyl]amidonaphtalin (C. 1901 [2] 799).
  - 3) 7-Nitro-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-6-Carbonsäure. Sm. 315° (C. 1909 [2] 2013).
  - 4) 2-Nitro-4-Acetylamidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 246° (B. 40, 3180 C. 1907 [2] 800).
  - 5) 3-Nitro-4-Acetylamidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 248,5—249° (B. 40, 3181 C. 1907 [2] 800).
- C<sub>18</sub>H<sub>11</sub>O<sub>5</sub>N<sub>2</sub>** C 54,4 — H 3,1 — O 22,7 — N 19,8 — M. G. 353.
- 1) 4-[4-Nitrophenyl]azo-3[oder 5]-Methyl-5[oder 3]-[4-Nitrophenyl]-isoxazol. Sm. 172° (B. 32, 2648). — \*IV, 1074.
  - 2) 1-Acetyl-2,5-Di[4-Nitrophenyl]-1,3,4-Triazol. Sm. 237° (A. 298, 52). — IV, 1187.
- C<sub>18</sub>H<sub>11</sub>O<sub>5</sub>Cl** 1) Isohämäteinchlorhydrin (B. 15, 2341). — III, 666.
- C<sub>18</sub>H<sub>11</sub>O<sub>5</sub>Br** 1) Isohämäteinbromhydrin (B. 15, 2342). — III, 666.
- C<sub>18</sub>H<sub>11</sub>O<sub>5</sub>Br<sub>3</sub>** 1) Tribrombrasilin. Zers. bei 197—200° (B. 22, 1552). — III, 654.
- C<sub>18</sub>H<sub>11</sub>O<sub>6</sub>N** C 61,3 — H 3,5 — O 30,7 — N 4,5 — M. G. 313.
- 1) 3,4,3',4'-Dimethylenäther d. β-Oximido-α-Keto-α-β-Di[3,4-Dioxyphenyl]äthan. Sm. 199° (A. 308, 13). — \*III, 224.

- C<sub>16</sub>H<sub>11</sub>O<sub>6</sub>N** 2) Dimethyläther d. *p*-Nitro-1,8-Dioxy-9,10-Anthrachinon. Sm. 232 bis 233° (D.R.P. 193104 C. 1908 [1] 429).
- 3) 2-Äthyläther d. 4-Nitro-1,2-Dioxy-9,10-Anthrachinon (D.R.P. 150322 C. 1904 [1] 1043).
- 4)  $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]äthen- $\alpha\alpha^2$ -Dicarbonsäure. Sm. 229° (B. 39, 3115 C. 1906 [2] 1329).
- 5) Berberidinsäure. Sm. 285° u. Zers. Ag, Ag<sub>2</sub> (Soc. 81, 158 C. 1902 [1] 358, 596; Soc. 83, 620 C. 1903 [1] 1364). — \*III, 622.
- 6) Oximacetat d. *p*-Acetoxynaphtalin-1,8-Dicarbonsäureanhydrid. Sm. 194° (B. 32, 3293). — \*II, 1140.
- 7) Anhydrid d. 2-[3,4-Dimethoxybenzoyl]pyridin-3,4-Dicarbonsäure (A. d. Papaverinsäure). Sm. 169–170° (M. 10, 159; 13, 698). — IV, 177.
- C<sub>16</sub>H<sub>11</sub>O<sub>6</sub>N<sub>3</sub>** C 56,3 — H 3,2 — O 28,2 — N 12,3 — M. G. 341.
- 1) 1,3,5-Trinitrobenzol + Naphtalin. Sm. 152° (Bl. 30, 6; A. 215, 377). — II, 182.
- 2) 4,8-Dinitro-1-Äthylamido-9,10-Anthrachinon (D.R.P. 156759 C. 1905 [1] 311).
- C<sub>16</sub>H<sub>11</sub>O<sub>6</sub>N<sub>5</sub>** C 52,0 — H 3,0 — O 26,0 — N 19,0 — M. G. 369.
- 1) 2-Amido-7-[2,4,6-Trinitrophenyl]amidonaphtalin. Sm. 212° (A. 351, 157 C. 1907 [1] 1127).
- 2)  $\alpha$ -[2,4,6-Trinitrophenyl]- $\beta$ -[1-Naphtyl]hydrazin. 2 Formen; stab. Form Zers. bei 176° (J. pr. [2] 43, 177). — IV, 926.
- 3)  $\alpha$ -[2,4,6-Trinitrophenyl]- $\beta$ -[2-Naphtyl]hydrazin. 2 Formen; stab. Form Zers. bei 175° (J. pr. [2] 43, 179). — IV, 928.
- 4) *p*-Trinitro-3-Methyl-1,5-Diphenylpyrazol. Sm. 176–178° (B. 22, 174). — IV, 936.
- C<sub>16</sub>H<sub>11</sub>O<sub>7</sub>N** C 58,4 — H 3,3 — O 34,1 — N 4,2 — M. G. 329.
- 1) Nitrophyscion. Sm. 210° (A. 284, 183). — III, 641.
- 2) Monomethyläther d. Nitroemodin. Sm. 215–217° (Soc. 65, 934). — III, 454.
- C<sub>16</sub>H<sub>11</sub>O<sub>7</sub>N<sub>3</sub>** C 53,8 — H 3,1 — O 31,4 — N 11,7 — M. G. 357.
- 1) 2,3,6-Trinitro-1-Oxybenzol + Naphtalin. Sm. 100° (A. 215, 332). — II, 183.
- 2) 2,4,5-Trinitro-1-Oxybenzol + Naphtalin. Sm. 72–73° (A. 215, 332). — II, 183.
- 3) 2,4,6-Trinitro-1-Oxybenzol + Naphtalin. Sm. 149° (J. 1857, 456; 1879, 376; J. r. 15, 477). — II, 182.
- C<sub>16</sub>H<sub>11</sub>O<sub>8</sub>N<sub>3</sub>** C 51,5 — H 2,9 — O 24,3 — N 11,3 — M. G. 373.
- 1) 2,4,6-Trinitro-1,3-Dioxybenzol + Naphtalin. Sm. 163,5°. + Aceton (C. 1897 [2] 430).
- 2) Methylester d.  $\alpha$ -[2,4-Dinitrophenyl]- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 169–170° (B. 42, 1317 C. 1909 [1] 1560).
- C<sub>16</sub>H<sub>11</sub>O<sub>9</sub>N<sub>3</sub>** C 49,3 — H 2,8 — O 37,0 — N 10,8 — M. G. 389.
- 1) Acetylderivat d. 4,6-Dinitrodiphenylamin-2,2'-Dicarbonsäure. Sm. 254–255° (M. 22, 397).
- C<sub>16</sub>H<sub>11</sub>O<sub>10</sub>N<sub>3</sub>** C 47,4 — H 2,7 — O 39,5 — N 10,4 — M. G. 405.
- 1) Äthylester d. 2',4',6'-Trinitrodiphenyläther-4-Ketocarbonsäure (Bl. [3] 17, 948).
- C<sub>16</sub>H<sub>11</sub>O<sub>15</sub>N<sub>4</sub>** 1) Säure (aus Strychnin) = (C<sub>16</sub>H<sub>11</sub>O<sub>15</sub>N<sub>4</sub>)<sub>x</sub>. Sm. oberhalb 300° u. Zers. (J. 1878, 910). — III, 935.
- C<sub>16</sub>H<sub>11</sub>NBr<sub>2</sub>** 1) *p*-Dibrom-2-Phenylamidonaphtalin. Sm. 140° (A. 209, 158). — II, 602.
- C<sub>16</sub>H<sub>11</sub>NS** 1) Thiophenyl-1-Naphtylamin. Sm. 178° (B. 23, 2466). — II, 867.
- 2) Thiophenyl-2-Naphtylamin. Sm. 137–138° (B. 23, 2464). — II, 887.
- C<sub>16</sub>H<sub>11</sub>N<sub>2</sub>Cl** 1) 1-Chlor-2-Phenylazonaphtalin. Sm. 115° (B. 21, 3542). — IV, 1391.
- C<sub>16</sub>H<sub>11</sub>N<sub>2</sub>Br** 1) 3-Brom-8-Phenylimidomethylechinolin. Sm. 142° (B. 38, 1287 C. 1905 [1] 1411).
- C<sub>16</sub>H<sub>11</sub>N<sub>4</sub>Cl** 1) 1-Phenylazonaphtalin-2-Diazochlorid. 2 + PtCl<sub>4</sub> (B. 20, 2898). — IV, 1542.
- C<sub>16</sub>H<sub>11</sub>N<sub>4</sub>Cl<sub>3</sub>** 1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Cyanphenylamido]äthan. Sm. 165–167° (C. 1904 [2] 103).
- C<sub>16</sub>H<sub>11</sub>N<sub>4</sub>Br<sub>3</sub>** 1)  $\beta\beta\beta$ -Tribrom- $\alpha\alpha$ -Di[3-Cyanphenylamido]äthan. Zers. bei 130° (C. 1904 [2] 103).
- 2) 1-Phenylazonaphtalin-2-Diazotribromid (B. 20, 2898). — IV, 1542.



- $C_{16}H_{11}BrJ_2$  1) **3-Bromphenyl-1-Naphtyljodoniumjodid.** Sm. 133° u. Zers. (*J. pr.* [2] 69, 332 *C.* 1904 [2] 36).
- $C_{16}H_{11}Br_2J$  1) **3-Bromphenyl-1-Naphtyljodoniumbromid.** Sm. 156° (*J. pr.* [2] 69, 332 *C.* 1904 [2] 36).
- $C_{16}H_{12}ON_2$  C 77,4 — H 4,8 — O 6,4 — N 11,3 — M. G. 248.
- 1) **4-Nitroso-1-Phenylamidonaphtalin.** Sm. 150° (*B.* 20, 1248; *A.* 286, 182). — II, 599; \*II, 332.
- 2) **1-Phenylnitrosamidonaphtalin.** Sm. 92° (*B.* 20, 1247; *A.* 243, 306). — II, 599.
- 3) **2-Phenylnitrosamidonaphtalin.** Sm. 93° (*A.* 209, 159). — II, 602.
- 4) **2-Oxy-1-Phenylazonaphtalin.** Sm. 134° (128—129,5°). Cu (*G.* 13, 438; 15, 406; 30 [2] 167; *B.* 16, 2860; 19, 2484; 20, 1579; 21, 415; 25, 3481; 28, 2418; 30, 1249; 32, 3100; 33, 805; 34, 2022; *C.* 1905 [1] 97). — IV, 1428; \*IV, 1042.
- 5) **isom. 2-Oxy-1-Phenylazonaphtalin?** Sm. 185—187° (*G.* 30 [2] 168, 170). — \*IV, 1043.
- 6) **4-Oxy-1-Phenylazonaphtalin.** Sm. 206° u. Zers. K (*B.* 10, 1580; 16, 2859; 17, 3026; 22, 2069; 28, 1219, 2418; 30, 2657; *G.* 15, 408; *Am.* 22, 376). — IV, 1427; \*IV, 1042.
- 7) **1-Oxy-2-Phenylazonaphtalin.** Sm. 138° (*B.* 16, 1563; 17, 3030; 19, 2484; 28, 2418). — IV, 1429.
- 8) **1-[4-Oxyphenylazo]naphtalin.** Sm. 136° (*Am.* 25, 491). — \*IV, 1039.
- 9) **2-[4-Oxyphenylazo]naphtalin.** Sm. 240° (*J. pr.* [2] 78, 395 *C.* 1909 [1] 362).
- 10) **3-Oximido-2,5-Diphenylisopyrrol.** Sm. 204° u. Zers. (*G.* 31 [2] 10). — \*IV, 261.
- 11) **4-Benzoyl-1-Phenylpyrazol.** Sm. 122—123° (*G.* 19, 139). — IV, 550.
- 12) **1-Benzoyl-5-Phenylpyrazol.** Sm. 59—60° (*A.* 279, 255). — IV, 906.
- 13) **5-Keto-4-Benzyliden-1-Phenyl-4,5-Dihydropyrazol.** Sm. 170° (*B.* 28, 39). — IV, 955.
- 14) **5-Keto-4-Benzyliden-3-Phenyl-4,5-Dihydropyrazol.** Sm. oberhalb 250° (*J. pr.* [2] 50, 227; [2] 52, 26; *B.* 27, 783). — IV, 1040.
- 15) **4-Keto-5-Benzyliden-2-Phenyl-4,5-Dihydroimidazol.** Sm. 274° (*Soc.* 75, 959). — \*IV, 698.
- 16) **2-Benzoyl-5-Phenylimidazol.** Sm. 280° (*B.* 35, 4135 *C.* 1903 [1] 295; *B.* 38, 1534 *C.* 1905 [1] 1560).
- 17) **5-Phenyl-3-[ $\beta$ -Phenyläthenyl]-1,2,4-Oxiazol.** Sm. 102° (*B.* 19, 1509). — II, 1409.
- 18) **6-Oxy-2,4-Diphenyl-1,3-Diazin.** Sm. 284° (*B.* 22, 1626; *Soc.* 77, 244; *J. pr.* [2] 42, 15). — IV, 1039; \*IV, 698.
- 19) **3-Oxy-2,5-Diphenyl-1,4-Diazin** (Isoindileucin). Sm. 202° (191—192°). Pikrat (*B.* 18, 2241; 22, 2559; *B.* 35, 4135 *C.* 1903 [1] 295; *B.* 38, 1532 *C.* 1905 [1] 1559). — III, 121; \*III, 92.
- 20) **2-Keto-3,6-Diphenyl-1,2-Dihydro-1,4-Diazin.** Sm. 196—197° (200 bis 203°?) (*B.* 32, 2207; *Soc.* 87, 703 *C.* 1905 [2] 236). — \*II, 924.
- 21) **6-Benzoylamidochinolin.** Sm. 130° (169°) (*J. pr.* [2] 53, 120; *A.* 310, 82). — IV, 913; \*IV, 606.
- 22) **5-Benzylidenamido-8-Oxychinolin** (*B.* 27, 1939). — IV, 912.
- 23) **2-Acetyl-3-Phenyl-1,4-Benzdiazin.** Sm. 99,5° (*B.* 35, 3318 *C.* 1902 [2] 1110). — \*IV, 696.
- 24) **Indileucin.** Sm. 258° u. Zers. Pikrat (*B.* 17, 978; 28, 542). — II, 1622.
- 25) **Nitril d.  $\beta$ -Amido- $\alpha$ -Benzoyl- $\beta$ -Phenylakrylsäure.** Sm. 213° (*J. pr.* [2] 58, 156). — \*II, 1099.
- 26) **Amid d. 2-Phenylchinolin-4-Carbonsäure.** Sm. 155° (*M.* 28, 40 *C.* 1907 [1] 1265).
- 27) **Amid d. 3-Phenylchinolin-4-Carbonsäure.** Sm. 274° (*B.* 39, 984 *C.* 1906 [1] 1357).
- 28) **Naphtylamid d. Pyridin-2-Carbonsäure.** Sm. 128° (*B.* 27, 1787).
- 29) **Base** (aus Indigweiß) (*J.* 1877, 512). — II, 1624.
- 30) **Leukoverbindung** (aus d. Verb.  $C_{18}H_{10}ON_2$ ) (*B.* 40, 2076 *C.* 1907 [2] 150).
- 31) **Farbstoff** (aus *Echinus esculentus*) (*Bl.* [3] 23, 864).
- 32) **Verbindung** (aus Benzil). Sm. 196° (*B.* 16, 2416; *Soc.* 51, 30). — II, 2023; III, 282.

- C<sub>16</sub>H<sub>19</sub>ON<sub>2</sub>** 33) Verbindung (aus d. Amid d.  $\alpha$ -Benzoylamido- $\beta$ -Phenylakrylsäure). Zers. bei 270° (B. 33, 2037). — \*II, 857.
- C<sub>16</sub>H<sub>12</sub>ON<sub>4</sub>** C 69,6 — H 4,3 — O 5,8 — N 20,3 — M. G. 276.
- 1) 3-Acetylamido-1,5-2,3-Diphenyl-2,3-Dihydro-1,2,4-Triazol. Sm. 269—270° (B. 28, 153). — IV, 1292.
  - 2) Nitril d. 3,3'-Dimethylazoxybenzol-6,6'-Dicarbonsäure. Sm. 182° (J. pr. [2] 40, 9). — IV, 1344.
  - 3) Verbindung (aus Diacetonitril u. Isatin). Sm. oberhalb 285° (J. pr. [2] 67, 511 C. 1903 [2] 252).
- C<sub>16</sub>H<sub>11</sub>ON<sub>6</sub>** C 63,2 — H 3,9 — O 5,3 — N 27,6 — M. G. 304.
- 1) Anhydro-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 162° (C. 1897 [1] 594). — IV, 1100.
- C<sub>16</sub>H<sub>12</sub>OBr<sub>2</sub>** 1) Äthyläther d. 9,9-Dibrom-10-Oxyanthracen. Sm. 116—117° (B. 21, 1180). — II, 902.
- 2) 2-Brom-1-Keto-2-[ $\alpha$ -Brombenzyl]-2,3-Dihydroinden. Sm. 144 bis 145° u. ger. Zers. (Soc. 65, 499). — III, 250.
  - 3) Verbindung (aus Äthylloxanthranol). Sm. 123° (A. 212, 96). — III, 243.
- C<sub>16</sub>H<sub>12</sub>OJ<sub>2</sub>** 1) 2,3-Diod-1-Keto-2-[ $\beta$ -Methylphenyl]-2-Dihydroinden. Sm. 250 bis 251° (C. 1896 [1] 167).
- C<sub>16</sub>H<sub>11</sub>OS** 1) 2-Keto-4-Methyl-1-Benzyliden-1,2-Dihydrobenzthiofuran. Sm. 145,5° (B. 42, 542 C. 1909 [1] 759).
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>** C 72,7 — H 4,5 — O 12,1 — N 10,6 — M. G. 264.
- 1)  $\beta$ -Nitro-2-Phenylamidonaphtalin. Sm. 85° (A. 209, 158). — II, 602.
  - 2)  $\alpha$ -Phenyl- $\beta$ -Phenylpropiolylharnstoff. Sm. 205° (Soc. 95, 1609 C. 1909 [2] 2172).
  - 3) 4-[4-Amidophenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Zers. oberhalb 280° (B. 27, 26).
  - 4)  $\beta$ -Amido-4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. HCl (B. 15, 286). — III, 393.
  - 5) 2-[4-Amidophenyl]amido-1,4-Naphtochinon. Sm. 175—177° (B. 14, 1905). — III, 376.
  - 6) 1-[2,4-Dioxyphenyl]azonaphtalin (Resorcin- $\alpha$ -Azonaphtalin). Sm. bei 200° (B. 15, 28). — IV, 1445.
  - 7) 2-[2,4-Dioxyphenyl]azonaphtalin. Sm. 181—182° (Soc. 93, 1019 C. 1908 [2] 409).
  - 8) 4-[4-Oxyphenyl]azo-1-Oxynaphtalin (B. 27, 2358). — IV, 1440.
  - 9) 1-[2-Oxyphenylazo]-2-Oxynaphtalin. Sm. 193° (C. 1902 [2] 938). — \*IV, 1047.
  - 10) 1-[4-Oxyphenylazo]-2-Oxynaphtalin. Sm. 194° (C. 1902 [2] 938). — \*IV, 1047.
  - 11) 1-Phenylazo-2,3-Dioxynaphtalin (M. 23, 520 C. 1902 [2] 744). — \*IV, 1050.
  - 12) 1-Phenylazo-2,4-Dioxynaphtalin. Sm. 230°. Ca + 4H<sub>2</sub>O, Ba + 10H<sub>2</sub>O (B. 17, 1810; 22, 3165). — IV, 1449.
  - 13) 1-Phenylazo-2,7-Dioxynaphtalin. Sm. 220° (B. 23, 523). — IV, 1450.
  - 14) 1-Phenylazo-3,4-Dioxynaphtalin. Sm. 214°. HCl (A. 286, 81). — IV, 1448.
  - 15) 6-Benzylidenhydrazido-1,2-Benzpyron. Sm. 190—194° (Soc. 85, 1236 C. 1904 [2] 1124).
  - 16) Diphensuccinindondioxim. Sm. 254° u. Zers. (A. 247, 155). — III, 304.
  - 17) Dihydrodiphtalylidimid. Sm. 284° u. Zers. (280—281°) (B. 26, 539; 29, 2745). — II, 1626; \*II, 949.
  - 18) 3-Oximido-2-Keto-4,5-Diphenyl-2,3-Dihydropyrrol. Sm. 200—201° u. Zers. (Soc. 95, 1605 C. 1909 [2] 2171).
  - 19) 3,5-Diketo-1-Phenyl-4-Benzylidentetrahydropyrazol (B. 25, 1509). — IV, 955.
  - 20) 4,5-Diketo-2-Methylen-1,3-Diphenyltetrahydroimidazol (Vinyliden-oxanilid). Sm. 208—210° (B. 30, 2791, 2878; 33, 616, 1300). — \*II, 208.
  - 21) 5-Benzoylimido-3-Phenyl-2,5-Dihydroisoxazol. Sm. 179—180° (C. r. 144, 1281 C. 1907 [2] 595).
  - 22) 2,5-Diketo-1,4-Diphenyl-1,2,4,5-Tetrahydro-1,4-Diazin (1,4-Diphenyl-2,5-Diacipiazin). Sm. oberhalb 300° (J. pr. [2] 47, 190). — II, 430.
  - 23) 1,1'-Bi- $\beta$ -Methylbenzoxazol. Sm. 195° (193°) (B. 21, 3333, 3532). — II, 989.

- $C_{16}H_{12}O_2N_2$  24) **2-Methyl-3-[2-Nitrobenzyliden]pseudoindol.** Sm. 210°. HCl (B. 36, 309; 38, 2648 C. 1905 [2] 630). — \*IV, 265.
- 25) **2-Methyl-3-[4-Nitrobenzyliden]pseudoindol** (B. 36, 309). — \*IV, 265.
- 26) **2-Furanyl-1-Furanylmethylbenzimidazol** (Phenylfurfuraldehydin). Sm. 95—96°. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 11, 1655). — IV, 564.
- 27) **p-Nitro-4-Methyl-2-Phenylchinolin** (Nitroflavolin) (B. 16, 68). — IV, 436.
- 28) **3-Methyl-2-[3-Nitrophenyl]chinolin.** Sm. 145°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (B. 19, 531). — IV, 436.
- 29) **4-[4-Nitrobenzyl]isochinolin.** Sm. 128,5—129°. HNO<sub>3</sub> (A. 326, 273 C. 1903 [1] 928). — \*IV, 260.
- 30) **Monomethyläther d. Dioxychindolin.** Sm. 184° (B. 39, 3938 C. 1907 [1] 119).
- 31) **2-Acetyl-1-Keto-4-Phenyl-1,2-Dihydro-2,3-Benzdiazin.** Sm. 178 bis 179° (J. pr. [2] 51, 153). — IV, 1023.
- 32) **1,1'-Dimethyl-6,6'-Bibenzoxazol.** Sm. 150° (B. 35, 309 C. 1902 [1] 587). — \*IV, 698.
- 33) **Äthyläther d. Oxycumarophenazin.** Sm. 162,5° (B. 34, 2297). — \*IV, 685.
- 34) **Indigweiß** (A. 48, 257; 136, 96; B. 15, 54; Z. Ang. 1900, 416; J. r. 13, 559; D.R.P. 137884 C. 1903 [1] 104; D.R.P. 164509 C. 1905 [2] 1753). — II, 1623; \*II, 947.
- 35)  **$\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[2-Amidophenyl]äthen- $\alpha^2$ -Carbonsäure.** Zers. bei 245° (B. 40, 1211 C. 1907 [1] 1258).
- 36) **1,5-Diphenylpyrazol-3-Carbonsäure.** Sm. 185°. + C<sub>2</sub>H<sub>6</sub>O (B. 20, 2186). — IV, 946.
- 37) **6-Methyl-2-Phenyl-1,3-Benzdiazin-4-Carbonsäure.** Sm. 155°. NH<sub>4</sub>, Ag (B. 28, 736). — IV, 1036.
- 38) **Nitril d.  $\beta$ -Phenylamidoformoxyl- $\alpha$ -Phenylakrylsäure.** Sm. 153 bis 154° (A. 291, 202). — \*II, 957.
- 39) **Nitril d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure** (N. d. Diphenylweinsäure). Sm. 132° (A. 34, 190; B. 19, 1519). — II, 2022.
- 40) **Acetat d. 3-Oximido-2-Phenylpseudoindol.** Sm. 121° (G. 29 [2] 52). — \*IV, 250.
- 41) **Benzoat d. 4-Oxy-1-Phenylpyrazol.** Sm. 78° (A. 313, 19). — \*IV, 316.
- 42) **Amid d. 2-Oxy-3-Phenylchinolin-4-Carbonsäure.** Sm. 296—298° (B. 41, 485 C. 1908 [1] 1065).
- 43) **Phenylimid d. Phenylamidomaleinsäure.** Sm. 231—232° (235°) (B. 19, 626; 22, 3350; Am. 9, 185; A. 239, 140; 279, 139; B. 40, 2303 C. 1907 [2] 298). — II, 441; \*II, 231.
- 44) **Benzoylderivat d. Verb. C<sub>9</sub>H<sub>5</sub>ON<sub>2</sub>.** Sm. 183—185° (Bl. [4] 1, 1088 C. 1908 [1] 234).
- 45) **Verbindung** (aus 1,2-Diamidobenzol u. 1,4-Diketo-1,2,3,4-Tetrahydro-naphtalin-2,3-Oxyd). Zers. oberhalb 150° (A. 286, 77). — IV, 1058.
- 46) **Verbindung** (aus 1,4-Diphenyl-2,6-Diacipiperazin oder C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>). Sm. 98° (B. 23, 1991). — II, 431.
- $C_{16}H_{12}O_2N_4$  C 65,8 — H 4,1 — O 10,9 — N 19,2 — M. G. 292.
- 1) **Dibenzoyldicyandiamid.** Sm. 225° (J. pr. [2] 77, 536 C. 1908 [2] 152).
- 2) **bim. Benzoylcyanamid.** Sm. 112° (J. pr. [2] 13, 285; [2] 42, 109). — II, 1173.
- 3) **2-Amido-1-[2-Nitrophenyl]azonaphtalin.** Sm. 198° (Soc. 59, 373). — IV, 1394.
- 4) **2-Amido-1-[3-Nitrophenyl]azonaphtalin.** Sm. 182° (Soc. 45, 116; 53, 463; B. 18, 797). — IV, 1395.
- 5) **2-Amido-1-[4-Nitrophenyl]azonaphtalin.** (2HCl, PtCl<sub>4</sub>) (Soc. 43, 430). — IV, 1395.
- 6) **4-Amido-1-[3-Nitrophenyl]azonaphtalin.** Sm. 202—203° (Soc. 45, 114). — IV, 1395.
- 7) **4-Amido-1-[4-Nitrophenyl]azonaphtalin.** Sm. 252°. (2HCl, PtCl<sub>4</sub>) (Soc. 43, 430; B. 28, 842). — IV, 1395.
- 8) **Phenanthrenchinondiurein** (B. 27 [2] 270; G. 27 [1] 233). — \*III, 321.
- 9) **Dimethylnaphtalloxazin.** Sm. 285° (B. 24, 3029). — IV, 919.



- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>N<sub>4</sub>** 10) **pp'-Diamidoindigo** (*M.* 24, 11 *C.* 1903 [1] 775; *M.* 24, 14 *C.* 1903 [1] 776).  
 11) **Diamidoindigo** (*B.* 12, 1317). — *II*, 1621.  
 12) **Diimidoisatin** (Isatindiamid). Sm. oberhalb 300° u. Zers. HCl, HNO<sub>3</sub>, H<sub>2</sub>CrO<sub>4</sub>, H<sub>2</sub>SO<sub>4</sub> (*A.* 190, 374; 194, 86; *B.* 12, 980; *M.* 1, 578). — *II*, 1609.  
 13) **4-Phenylazo-5-Phenylpyrazol-3-Carbonsäure**. Sm. 247—248° u. Zers. (*B.* 37, 2207 *C.* 1904 [2] 323).  
 14) **Verbindung** (aus Chlorbrommaleinsäureanhydrid u. Phenylhydrazin). Sm. 245° (*B.* 29 [2] 187).
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>N<sub>6</sub>** C 60,0 — H 3,7 — O 10,0 — N 26,3 — M. G. 320.  
 1) **1,2-Di[2-Pyridylnitrosamido]benzol**. Sm. 136° (*B.* 35, 3676 *C.* 1902 [2] 1473). — *\*IV*, 552.  
 2) **Verbindung** (aus d. Äthylenamid d. 2-Amidobenzol-1-Carbonsäure). Sm. 216° (*J. pr.* [2] 48, 92). — *II*, 1247.
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) **αβ-Dichlor-γγ-Diphenylcrotonsäure**. Sm. 152°. Ca + 2H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (*Am.* 19, 642). — *\*II*, 874.  
 2) **Äthylester d. 9,9-Dichlorfluoren-4-Carbonsäure?** Sm. 73° (*A.* 247, 280). — *II*, 1719.  
 3) **Chlorid d. αβ-Diphenyläthan-4,4'-Dicarbonsäure**. Sm. 119° (*B.* 37, 3217 *C.* 1904 [2] 1120).
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>Cl<sub>4</sub>** 1) **Verbindung** (aus Polyporsäure). Sm. 109—110° (*A.* 195, 371). — *II*, 1907.
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>2</sub>** 1) **Dimethyläther d. ?-Dibrom-1,5-Dioxyanthracen**. Sm. 302° (*B.* 42, 1417 *C.* 1909 [1] 1711).  
 2) **Dimethyläther d. ?-Dibrom-2,3-Dioxyphenanthren**. Sm. 160° (*B.* 33, 1831). — *\*II*, 608.  
 3) **Dimethyläther d. ?-Dibrom-3,4-Dioxyphenanthren**. Sm. 124—125° (*B.* 33, 1820, 1825). — *\*II*, 607.  
 4) **Methyläther d. αβ-Dibrom-γ-Keto-γ-[2-Oxyphenyl]-α-Phenylpropen**. Sm. 138—140° (*B.* 25, 3538). — *III*, 247.  
 5) **βγ-Dibrom-αδ-Diketo-αδ-Diphenylbutan**. Sm. 178° (175°) (*B.* 33, 3799; *B.* 35, 175 *C.* 1902 [1] 422; *B.* 41, 2469 *C.* 1908 [2] 767). — *\*III*, 229.  
 6) **1-Brom-2-Keto-1-[α-Brombenzyl]-1,2-Dihydrobenzofuran**. Sm. 158° u. Zers. (*B.* 41, 4238 *C.* 1909 [1] 184).  
 7) **αβ-Dibrom-γγ-Diphenylcrotonsäure**. Sm. 146—147°. Ca + 2H<sub>2</sub>O, Ba + 3H<sub>2</sub>O, Ag (*Am.* 19, 646). — *\*II*, 875.  
 8) **Lakton d. βγ-Dibrom-γ-Oxy-βγ-Diphenylbuttersäure**. Zers. bei 64° (*A.* 319, 171 *C.* 1902 [1] 105). — *\*II*, 998.  
 9) **Lakton d. αβ-Dibrom-α-Oxy-α-Phenyl-β-[4-Methylphenyl]äthan-α<sup>2</sup>-Carbonsäure** (Dibrom-p-Xylphtalid). Sm. 150° u. Zers. (*B.* 24, 3968). — *II*, 1702.  
 10) **Acetat d. α-Phenyl-β-[3,5-Dibrom-4-Oxyphenyl]äthan**. Sm. 130 bis 131° (*A.* 349, 118 *C.* 1906 [2] 1257).
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>4</sub>** 1) **Dimethyläther d. αβ-Di[3,5-Dibrom-4-Oxyphenyl]äthan**. Sm. 279 bis 280° (*B.* 36, 1889 *C.* 1903 [2] 291).  
 2) **Acetat d. αβ-Dibrom-α-Phenyl-β-[3,5-Dibrom-4-Oxyphenyl]äthan**. Sm. 182° (*A.* 349, 114 *C.* 1906 [2] 1257).
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>6</sub>** 1) **Dimethyläther d. αβ-Dibrom-αβ-Di[3,5-Dibrom-4-Oxyphenyl]äthan**. Sm. 228—230° u. Zers. (*B.* 36, 1888 *C.* 1903 [2] 291).
- C<sub>16</sub>H<sub>12</sub>O<sub>2</sub>S** 1) **Methyläther d. α-Thiocarbonyl-γ-Keto-γ-Phenyl-β-[4-Oxyphenyl]-propen** (*B.* 21, 2452). — *III*, 227.  
 2) **Phenyl-1-Naphtylsulfon**. Sm. 99,5—100,5° (*B.* 10, 585; 23, 3047). — *II*, 867.  
 3) **Phenyl-2-Naphtylsulfon**. Sm. 115—116° (*B.* 7, 1167; 10, 585; 11, 2069; 23, 3049). — *II*, 887.
- C<sub>16</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>** C 68,6 — H 4,3 — O 17,1 — N 10,0 — M. G. 280.  
 1) **2-Acetylamido-9[oder 10]-Imido-1-Oxy-10-Keto-9,10-Dihydroanthracen**. Zers. bei 225° (*B.* 39, 1204 *C.* 1906 [1] 1748).  
 2) **Monoacetyldianthranilid**. Zers. oberhalb 280° (*A.* 367, 152 *C.* 1909 [2] 701).  
 3) **?-Phenylazo-1,3,6-Trioxynaphtalin** (*B.* 38, 3955 *C.* 1906 [1] 241).

- $C_{16}H_{12}O_3N_2$  4)  $\beta$ -Phenylhydrazon- $\alpha$ -Keto- $\alpha\beta$ -Di[2-Furanyl]äthan (Furilphenylhydrazon). Sm. 82—83° (A. 258, 225). — IV, 788.
- 5) 4-Keto-3-Phenyl-5-[ $\alpha$ -Oximidobenzyl]-4,5-Dihydroisoxazol. Sm. 191° u. Zers. (B. 25, 3471). — III, 318.
- 6) 2,4,6-Triketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 238° (C. 1906 [2] 1404; Soc. 91, 1338 C. 1907 [2] 1065).
- 7) 4-Oxy-6-Benzoyl-4-Phenyl-1,2,5-Oxdiazin. Sm. 220—226°. HCl, Na (B. 40, 4057 C. 1907 [2] 1852).
- 8) 3-Keto-1-[ $\alpha$ -Nitro-3-Methylbenzyliden]-1,3-Dihydroisindol. Sm. 157—159° (B. 23, 3161). — II, 1714.
- 9) 3-Keto-1-[ $\alpha$ -Nitro-4-Methylbenzyliden]-1,3-Dihydroisindol. Sm. 227° u. Zers. (B. 24, 3970). — II, 1715.
- 10)  $p$ -Nitro-2-[4-Oxy-3-Methylphenyl]chinolin. Sm. 160° (M. 9, 107). — IV, 434.
- 11) Methyläther d. 6-Oxy-2-[3-Nitrophenyl]chinolin. Sm. 130° (B. 20, 1919). — IV, 427.
- 12) Methyläther d. 4-Nitro-1-Oxy-3-Phenylisochinolin. Sm. 167—169° (B. 19, 832). — II, 1711.
- 13) 1-Keto-3-[2-Acetylamidophenyl]-2,4-Benzoxazin. Sm. 211° (B. 40, 997 C. 1907 [1] 1325; J. pr. [2] 79, 323 C. 1909 [1] 1993).
- 14) 3-Oxy-6[oder 7]-Methyl-2-Phenyl-1,4-Benzdiazin-2<sup>o</sup>-Carbonsäure. Sm. 245° u. Zers.  $Ca + 8H_2O$  (G. 35 [2] 576 C. 1906 [1] 931).
- 15) 4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-3<sup>o</sup>-Carbonsäure. Sm. 248° (246—247°) (B. 30, 1187; B. 35, 3474, 3478 C. 1902 [2] 1317). — \*II, 782; \*IV, 602.
- 16) 4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-6-Carbon-säure (C. 1907 [1] 976).
- 17) 4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-7-Carbon-säure. Zers. oberhalb 300° (C. 1907 [1] 976).
- 18) 1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-4-Methylcarbonsäure. Sm. 160° u. Zers.  $Ca + 3H_2O$  (B. 18, 803). — IV, 718.
- 19) Anhydrid d. Phenylimidoessigsäure (A. d. Anilglyoxylsäure) (A. 198, 225). — II, 407.
- 20) Anhydrid d. Di[Phenylamido]maleinsäure. Sm. 231° (B. 38, 2596 C. 1905 [2] 759).
- 21) Anhydrid d.  $\alpha\beta$ -Di[3-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (A. 358, 360 C. 1908 [1] 1172).
- 22) Methylester d. 1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-4-Carbonsäure. Sm. 114° (B. 21, 1611; M. 25, 395 C. 1904 [2] 324). — IV, 718.
- 23) Benzylester d. 3-Phenyl-1,2,4-Oxdiazol-5-Carbonsäure. Sm. 105°; Sd. oberhalb 300° u. Zers. (B. 22, 3136). — II, 1203.
- 24) Acetat d. 3-Oximido-2-Phenyl-1,1-Dihydroindol-1-Oxyd. Sm. 140° (C. 1907 [1] 732).
- 25) Acetat d. 9-Oximidofluoren-4-Carbonsäureamid. Sm. 177—178° (A. 252, 29; M. 23, 891 Anm.). — II, 1719.
- 26) Nitril d.  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 162° (B. 32, 3400). — \*II, 1006.
- 27) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[4-Methoxyphenyl]akrylsäure. Sm. 165—166° (B. 23, 3135). — II, 1707.
- 28) Amid d. Säure  $C_{16}H_{11}O_4N$  (aus bim. Benzoylcyanid). Sm. 174—177° (B. 41, 1898 C. 1908 [2] 160).
- 29) 3-Cyanbenzylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 175° (B. 34, 3367).
- 30) 4-Cyanbenzylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 192° (B. 34, 3368 Anm.).
- 31) Phenylimid d. 3-Acetylamidobenzol-1,2-Dicarbonsäure. Sm. 191° (195,5°) (B. 37, 2611 C. 1904 [2] 522; C. 1909 [1] 1758).
- 32) 4-Acetylamidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. oberhalb 270° (B. 40, 3179 C. 1907 [2] 800).
- 33) Verbindung (aus Diacetylweinsäureanhydrid u. Anilin) oder  $C_{16}H_{12}O_2N_2$ . Zers. bei 200° (Soc. 71, 1061). — \*II, 222.
- 34) Verbindung (aus Indigo) (Soc. 91, 281 C. 1907 [1] 1272).
- 35) Verbindung (aus Indoxylsäure) (Soc. 95, 848 C. 1909 [2] 218).

- C<sub>16</sub>H<sub>12</sub>O<sub>3</sub>N<sub>4</sub>** C 62,3 — H 3,9 — O 15,6 — N 18,1 — M. G. 308.
- 1) 4-Nitroso-3-Methyl-5-Phenyl-1-[4-Nitrophenyl]pyrazol. Sm. 135° (B. 40, 676 C. 1907 [1] 970).
  - 2) 4-[4-Nitrophenyl]azo-3[oder 5]-Methyl-5[oder 3]-Phenylisoxazol. Sm. 192—193° (B. 32, 2648). — \*IV, 1074.
  - 3) 3,4-Di[α-Oximidobenzyl]-1,2,5-Oxdiazol. Sm. 179° (B. 26, 529). — III, 323.
  - 4) 5-Phenylhydrazon-2,4,6-Triketohexahydro-1,3-Diazin. Zers. oberhalb 270° (Soc. 87, 1291 C. 1905 [2] 1340).
  - 5) 2,4,6-Triketo-1-[2-Phenylamidophenyl]imido-hexahydro-1,3,5-Triazin. Sm. 232° (B. 39, 1319 C. 1906 [1] 1738).
  - 6) 5-Phenylhydrazon-4-Keto-1-Phenyl-4,5-Dihdropyrazol-3-Carbonsäure. Sm. 209° u. Zers. (A. 313, 16). — \*IV, 1080.
  - 7) 4-Phenylhydrazon-5-Keto-1-Phenyl-4,5-Dihdropyrazol-3-Carbonsäure. Sm. 230—232°. Na, Ag (B. 20, 839; 21, 1204; 24, 4213; A. 294, 238; B. 39, 2026 C. 1906 [2] 433). — IV, 729.
  - 8) Anhydrid d. Di[Phenylhydrazon]äthan-αβ-Dicarbonsäure. Sm. 235° u. Zers. (A. 299, 123). — IV, 728.
  - 9) Phenylamid d. 4-Oximido-5-Keto-1-Phenyl-4,5-Dihydroimidazol-2-Carbonsäure. Sm. 237° (B. 39, 3919 C. 1907 [1] 113; B. 41, 4078 C. 1909 [1] 190).
  - 10) Di[Phenylamid] d. 1,2,5-Oxdiazol-3,4-Dicarbonsäure. Sm. 119° (B. 41, 4075 C. 1909 [1] 189).
- C<sub>16</sub>H<sub>12</sub>O<sub>3</sub>Cl<sub>2</sub>** 1) 3',6'-Dichlor-2,3-Dimethyldiphenylketon-2'-Carbonsäure. Sm. 181° (Soc. 95, 1314 C. 1909 [2] 986).
- 2) 3',6'-Dichlor-2,4-Dimethylketon-2'-Carbonsäure. Sm. 164° (Soc. 95, 1316 C. 1909 [2] 986).
  - 3) 3',6'-Dichlor-2,5-Dimethyldiphenylketon-2'-Carbonsäure. Sm. 152° (Soc. 95, 1318 C. 1909 [2] 987).
  - 4) Äthylester d. 3,6-Dichlordiphenylketon-2-Carbonsäure. Sm. 85° (B. 33, 2027). — \*II, 1000.
- C<sub>16</sub>H<sub>12</sub>O<sub>3</sub>Br<sub>2</sub>** 1) Methyläther d. ββ-Dibrom-αγ-Diketo-γ-[4-Oxyphenyl]-α-Phenylpropan. Sm. 127—128° (C. 1899 [2] 1118).
- 2) Äthylester d. β-Dibrom-9-Oxyfluoren-9-Carbonsäure. Sm. 150 bis 151° (B. 10, 537). — II, 1706.
- C<sub>16</sub>H<sub>12</sub>O<sub>3</sub>S** 1) Atronylsulfonsäure. Sm. 258° u. Zers. (A. 206, 61). — II, 281.
- 2) Phenylester d. Naphtalin-1-Sulfonsäure. Sm. 75° (D.R.P. 91314). — \*II, 367.
  - 3) Phenylester d. Naphtalin-2-Sulfonsäure. Sm. 98—99° (D.R.P. 91314). — \*II, 367.
  - 4) 2-Naphtylester d. Benzolsulfonsäure. Sm. 105—107° (B. 24, 417). — II, 878.
- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>** C 64,8 — H 4,1 — O 21,6 — N 9,5 — M. G. 296.
- 1) βγ-Dinitro-αδ-Diphenyl-αγ-Butadien? Sm. 218° (A. 360, 314 C. 1908 [2] 325).
  - 2) 1,3-Dinitrobenzol + Naphtalin. Sm. 52—53° (A. 215, 379). — II, 182.
  - 3) 1,4-Dinitrobenzol + Naphtalin. Sm. 110—115° (118—119°) (Bl. 30, 6; A. 215, 379). — II, 182.
  - 4) 8-Nitro-1-Äthylamido-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
  - 5) 5-Nitro-1-Dimethylamido-9,10-Anthrachinon (D.R.P. 156759 C. 1905 [1] 312).
  - 6) 8-Nitro-1-Dimethylamido-9,10-Anthrachinon (D.R.P. 136777 C. 1902 [2] 1373; D.R.P. 156759 C. 1905 [1] 312).
  - 7) βγ-Dioximido-αδ-Diketo-αδ-Diphenylbutan. Sm. 168° u. Zers. (B. 26, 528). — III, 323.
  - 8) αδ-Dioximido-βγ-Diketo-αδ-Diphenylbutan. Sm. 176° u. Zers. + C<sub>2</sub>H<sub>6</sub>O (B. 25, 3472). — III, 323.
  - 9) Dimethylenäther d. Di[3,4-Dioxybenzyliden]hydrazin. Sm. 203° (B. 39, 807 C. 1906 [1] 1246; C. 1906 [2] 1249).
  - 10) 4,5-Diketo-2-Phenyl-1-[4-Nitrophenyl]tetrahydropyrrol. Sm. 188 bis 189° (B. 41, 3894 C. 1909 [1] 299).
  - 11) Methyläther d. 4-Nitro-3-[4-Oxyphenyl]-5-Phenylisoxazol (A. 340, 73 C. 1905 [2] 330).



- $C_{16}H_{12}O_4N_2$  12) Isatyd. Sm. 245° u. Zers. (217°) (*J. pr.* [1] 24, 15; [1] 25, 436, 438; *A.* 72, 285; 140, 9; *B.* 12, 1309; 34, 1541; *Bl.* [3] 9, 880; *B.* 37, 943 *C.* 1904 [1] 1217; *B.* 42, 477 *C.* 1909 [1] 760). — II, 1615.
- 13) Dibenzylidenhydrazin- $\alpha\alpha'$ -Dicarbonsäure. Sm. 179° (*C.* 1896 [2] 380; *Bl.* [3] 17, 367). — II, 942.
- 14) Dibenzylidenhydrazin-2,2'-Dicarbonsäure (Diphtalaldehydhydrazon-säure). Sm. 211°.  $Ag_2$  (*B.* 26, 535). — II, 1626.
- 15) Phenylazobenzoylbrenztraubensäure. Zers. bei 140—150° (*B.* 37, 2208 *C.* 1904 [2] 323).
- 16) 5-Methyl-1-[2-Naphtyl]pyrazol-3,4-Dicarbonsäure. Sm. 250°.  $K_2$ ,  $Ag$  (*B.* 33, 3367). — \*IV, 354.
- 17) 7-Oxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-7-Methyläther-4-Carbonsäure. Sm. 223° (*A.* 296, 360). — IV, 724.
- 18) 8-Oxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-8-Methyläther-4-Carbonsäure. Sm. 186—188° (*Soc.* 91, 109 *C.* 1907 [1] 1121).
- 19) 1,4-Naphtisodiazin-2,3-Di[Methylcarbonsäure].  $K_2$  (*Bl.* [3] 23, 441). — \*IV, 682.
- 20) Chrysaniilsäure (*A.* 39, 79; *J. pr.* [2] 60, 777). — \*II, 946.
- 21) Dianhydrid d. 4,4'-Diamidobiphenyl-3,3'-Di[Oxyessigsäure]. Sm. noch nicht bei 300° (*D.R.P.* 55506). — \*II, 602.
- 22) Diacetat d. 2,3-Dioxy-5,10-Naphtdiazin. Sm. 230° (226°) (*B.* 23, 843; *B.* 35, 4305 *C.* 1903 [1] 344). — IV, 1002; \*IV, 670.
- 23) s-Di[Benzoylamid] d. Oxalsäure. Sm. 227° u. Zers. (214—215°) (*Soc.* 85, 1681 *C.* 1905 [1] 512; *B.* 40, 1666 *C.* 1907 [1] 1576).
- 24) 4-Nitro-3-Methylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 155 bis 156° (*D.R.P.* 134979 *C.* 1902 [2] 1084; *D.R.P.* 134980 *C.* 1902 [2] 1164).
- 25) m-Nitromethylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 196 bis 197° (*D.R.P.* 134979 *C.* 1902 [2] 1084).
- 26) p-Nitromethylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 175 bis 176° (*D.R.P.* 134979 *C.* 1902 [2] 1084).
- 27) Phenylhydrazid d. 4-Keto-1,2-Benzpyron-3-Carbonsäure. Sm. 210° (*A.* 367, 190 *C.* 1909 [2] 704).
- $C_{16}H_{12}O_4N_4$  C 59,3 — H 3,7 — O 19,7 — N 17,3 — M. G. 324.
- 1) 1-Amido-8-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 203,5—204° (*A.* 365, 166 *C.* 1909 [1] 1823).
- 2) 2-Amido-7-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 227° (*A.* 351, 157 *C.* 1907 [1] 1127).
- 3)  $\alpha$ -[2,4-Dinitrophenyl]- $\beta$ -[1-Naphtyl]hydrazin. Sm. 181° (*J. pr.* [2] 43, 184). — IV, 926.
- 4)  $\alpha$ -[2,4-Dinitrophenyl]- $\beta$ -[2-Naphtyl]hydrazin. Sm. 188° u. Zers. (*J. pr.* [2] 43, 185). — IV, 928.
- 5) 5-Methyl-1-Phenyl-3-[3,5-Dinitrophenyl]pyrazol. Sm. 179° (*J. pr.* [2] 69, 467 *C.* 1904 [2] 596).
- 6) 4-Nitroso-2-Methyl-3-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,3-Oxyd. Sm. 225° (*A.* 358, 179 *C.* 1908 [1] 857).
- 7) Dinitroindolin (*J.* 1880, 586). — II, 1623.
- 8) 5- $\alpha$ -Cyan-4-Nitrobenzyliden]imido-2-Methylamidobenzol-1-Carbonsäure. Sm. 260° (*B.* 42, 2754 *C.* 1909 [2] 818).
- 9) Diimidohydrindincarbonsäure (*A.* 194, 98). — II, 1610.
- 10) Acetat d. 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]-1,2,4-Triazol. Sm. 130 bis 132° (*Soc.* 73, 373). — IV, 1157.
- 11) Acetat d. 3-Oxy-5-[3-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 116° (*Soc.* 71, 211). — IV, 1157.
- 12) Acetat d. 3-Oxy-5-[4-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 152° (*Soc.* 71, 206). — IV, 1158.
- 13) Amid d. 7-Nitro-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-3<sup>2</sup>-Carbonsäure. Sm. 320—321° (*C.* 1908 [2] 181).
- 14) Phenylamid d. 4-Oximido-5-Keto-1-Phenyltetrahydroimidazol-2,3-Oxyd-2-Carbonsäure. Sm. 195° (*B.* 39, 3919 *C.* 1907 [1] 113; *B.* 41, 4071, 4077 *C.* 1909 [1] 189).
- 15) Di[Phenylamid] d. 2,3-Dihydro-1,2,5-Oxdiazol-2,3-Oxyd-3,4-Dicarbonsäure. Sm. 187° (*B.* 39, 3918 *C.* 1907 [1] 113; *B.* 41, 4069 *C.* 1909 [1] 189).

- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Hydropiperoinchlorid. Sm. 198° (A. 159, 132). — III, 104.  
2) Dimethylester d. 4,4'-Dichlorbiphenyl-3,3'-Dicarbonsäure. Sm. 134° (A. 352, 128 C. 1907 [1] 1797).
- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Dimethylenäther d.  $\beta$ -Dibrom- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 164° (A. 345, 327 C. 1906 [1] 1696).
- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>S** 1) Phenyl-3,4-Dioxy-1-Naphtylsulfon. Sm. 185° u. Zers. (B. 28, 1316). — \*II, 626.
- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** C 61,5 — H 3,8 — O 25,6 — N 9,0 — M. G. 312.  
1) Äthyläther d.  $\beta$ -Nitro-9-Nitroso-10-Keto-2-Oxy-9,10-Dihydroanthracen (B. 15, 1429, 1794). — II, 901.  
2) 1,3-Dinitro- $\beta$ -Oxybenzol + Naphtalin (Z. 1868, 213). — II, 182.  
3) 5-[2-Nitrocinnamyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 194° (C. 1907 [1] 108).  
4) 5-[3-Nitrocinnamyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 198° (C. 1907 [1] 108).  
5) 5-[4-Nitrocinnamyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 155° (C. 1907 [1] 108).  
6)  $\alpha$ -Phenylazobenzoylessigsäure-2-Carbonsäure. Sm. 220° u. Zers. (B. 35, 928 C. 1902 [1] 807). — \*IV, 1059.  
7) Säure (aus 3-Cyanbenzol-1-Carbonsäure). Sm. oberhalb 300°. Ag<sub>4</sub> (B. 20, 530). — II, 1229.  
8) Nitril d.  $\alpha$ -[3-Nitrobenzoxyl]-4-Methoxyphenylelessigsäure. Sm. 129–130° (Soc. 95, 1408 C. 1909 [2] 1228).  
9) o-Nitromethoxybenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 160 bis 161° (D.R.P. 134979 C. 1902 [2] 1084).  
10) Verbindung (aus Diisatinsäure). Ag (C. 1898 [2] 203). — \*II, 948.  
C 52,2 — H 3,3 — O 21,7 — N 22,8 — M. G. 368.
- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>N<sub>6</sub>** 1) 5-Keto-4-[4-Nitrophenyl]azo-3-Methyl-1-[4-Nitrophenyl]-4,5-Dihydropyrazol. Sm. 296° (B. 29, 1489, 1663; 31, 3129; 32, 204; 33, 496; 34, 74, 80). — IV, 1489; \*IV, 1078.
- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>Cl<sub>2</sub>** 1) Dichlorbrasilin (B. 9, 1887). — III, 653.
- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>Br<sub>2</sub>** 1) Dibrombrasilin + 2½ H<sub>2</sub>O. Sm. 170–180° (B. 9, 1887; 22, 1550). — III, 653.  
2)  $\alpha,2'$ -Lakton d.  $\beta$ -Dibrom- $\alpha,4$ -Dioxy-3',4'-Dimethoxyldiphenylmethan-2'-Carbonsäure (Dibromoxyphenylmekonin). Sm. 195,5–196,5° (B. 27, 2640). — II, 2020.
- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>S** 1) 1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden- $\beta$ -Sulfonsäure. K (Soc. 91, 1088 C. 1907 [2] 602).  
2) Äthylester d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 125° (B. 28, 2262). — III, 415.
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>** C 58,5 — H 3,7 — O 29,3 — N 8,5 — M. G. 328.  
1) 3,4,3',4'-Dimethylenäther d.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[3,4-Dioxyphenyl]-äthan. Sm. 244° u. Zers. (A. 308, 14). — \*III, 224.  
2)  $\beta$ -Dinitro-10-Oxy-9-Keto- $\beta$ -Äthyl-9,10-Dihydroanthracen (B. 13, 1599). — III, 245.  
3) Benzol-1,3-Dicarbonsäure-2-Phenylhydrazonmethylcarbonsäure. Sm. 205–208° (A. 290, 210). — IV, 727.  
4) 2,2'-Dicarbonsäure d. Oxalsäurediphenylamid. Cu, Ag<sub>2</sub> (M. 9, 741). — II, 1253.  
5) 3,3'-Dicarbonsäure d. Oxalsäurediphenylamid (Oxaldibenzamsäure) (A. 232, 137; B. 18, 2412). — II, 1265.  
6) Lakton d.  $\alpha\beta$ -Dinitro- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure (o-Xylalptaliddinitrür). Sm. 158–159° u. Zers. (B. 33, 2819). — \*II, 1010.  
7) Lakton d.  $\alpha\beta$ -Dinitro- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[3-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure (m-Xylalptaliddinitrür). Sm. 133° u. Zers. (B. 23, 3162). — II, 1701.  
8) Lakton d.  $\alpha\beta$ -Dinitro- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure. Sm. 140° u. Zers. (B. 24, 3971). — II, 1702.  
9) Benzoat d.  $\beta$ -Oxy- $\alpha$ -[2,4-Dinitrophenyl]propen. Sm. 90° (B. 42, 608 C. 1909 [1] 999).  
10) Verbindung (aus 2-Nitrophenylbrenztraubensäure). Sm. 160° (B. 30, 1045). — \*III, 229.

- C<sub>18</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>** C 53,9 — H 3,4 — O 27,0 — N 15,7 — M. G. 356.  
 1) 1-Amidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 214° (Soc. 79, 525).  
 2) 2-Amidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 162° (Soc. 79, 529).  
 3) 2,4,6-Trinitro-1-Amidobenzol + Naphtalin. Sm. 168—169° (B. 8, 378). — II, 182.  
 4) 4,8-Dinitro-1,5-Di[Methylamido]-9,10-Anthrachinon (D. R. P. 144634 C. 1903 [2] 750; D. R. P. 156759 C. 1905 [1] 311).  
 5) 4,5-Dinitro-1,8-Di[Methylamido]-9,10-Anthrachinon (D. R. P. 156759 C. 1905 [1] 311).  
 6) β-[4-Nitrophenyl]azo-αγ-Diketo-α-[4-Nitrophenyl]butan. Sm. 198 bis 199° (B. 32, 2644). — \*IV, 1074.  
 7) 2,5-Diketo-1,4-Di[3-Nitrophenyl]hexahydro-1,4-Diazin. Sm. 157° (J. pr. [2] 76, 355 C. 1908 [1] 49).  
 8) 2,5-Diketo-1,4-Di[4-Nitrophenyl]hexahydro-1,4-Diazin. Sm. 147° (J. pr. [2] 76, 361 C. 1908 [1] 49).  
 9) Acetat d. 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol. Sm. 206° (Soc. 93, 1672 C. 1908 [2] 1922).
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>Br<sub>2</sub>** 1) Dibromeriodictyonon (M. 28, 1031 C. 1907 [2] 2065).  
 2) Dibromhämatoxylin. Zers. oberhalb 120° (B. 17, 373). — III, 655.  
 3) 3',4'-Methylenäther-β-Dimethyläther d. β-Brom-2,4,6,3',4'-Pentaoxydiphenylketon. Sm. 170° (B. 24, 2984). — III, 208.
- C<sub>18</sub>H<sub>12</sub>O<sub>6</sub>Br<sub>4</sub>** 1) Anhydrotetrabromkolatannin (C. 1898 [1] 579). — \*III, 497.
- C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>Br<sub>2</sub>** 1) Dibromlecanorsäure. Sm. 179° (A. 139, 28) — II, 1754.
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>N<sub>2</sub>** C 53,3 — H 3,3 — O 35,6 — N 7,8 — M. G. 360.  
 1) β-Dinitro-αβ-Diphenyläthan-αα-Dicarbonsäure. Sm. 242° (B. 14, 1804). — II, 1891.  
 2) β-Dinitro-αβ-Diphenyläthan-αβ-Dicarbonsäure + H<sub>2</sub>O. Sm. 100° (u. 226° zum zweiten Male) (B. 14, 1804). — II, 1890.  
 3) αβ-Di[4-Nitrophenyl]äthan-2,2'-Dicarbonsäure. Sm. 299—300° u. Zers. (Soc. 91, 2082 C. 1908 [1] 643).  
 4) αβ-Di[β-Nitrophenyl]äthan-2,2'-Dicarbonsäure. Ca (A. 239, 70). — II, 1889.  
 5) Dimethylester d. 4,4'-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 177—178° (A. 203, 111; B. 34, 2182). — II, 1885.  
 6) Dimethylester d. 6,6'-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 131 bis 132° (A. 203, 111). — II, 1886.  
 7) Dimethylester d. 2,2'-Dinitrobiphenyl-4,4'-Dicarbonsäure. Sm. 159—160° (155—156°) (B. 34, 2183; B. 42, 650 C. 1909 [1] 1012).  
 8) Di[4-Nitrobenzylester] d. Äthan-αα-Dicarbonsäure. Sm. 75° (A. 347, 96 C. 1906 [2] 500).  
 9) Di[2-Nitrophenylester] d. Bernsteinsäure. Sm. 162° (B. 35, 4082 C. 1903 [1] 74).  
 10) Di[3-Nitrophenylester] d. Bernsteinsäure. Sm. 153° (B. 35, 4082 C. 1903 [1] 74).  
 11) Di[4-Nitrophenylester] d. Bernsteinsäure. Sm. 178° (B. 35, 4082 C. 1903 [1] 74).  
 12) Diacetat d. 3,3'-Dinitro-4,4'-Dioxybiphenyl. Sm. 215° (B. 21, 3531). — II, 988.  
 13) Di[4-Oxy-3-Carboxylphenylamid] d. Oxalsäure. Sm. 280—281° (G. 36 [2] 736 C. 1907 [1] 1122).
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>N<sub>4</sub>** C 49,5 — H 3,1 — O 33,0 — N 14,4 — M. G. 388.  
 1) β-Dinitro-4-Acetylamidophenylmonamid d. Benzol-1,2-Dicarbonsäure. Zers. bei 180° (B. 40, 3184 C. 1907 [2] 801).
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>N<sub>6</sub>** C 46,1 — H 2,9 — O 30,8 — N 20,2 — M. G. 416.  
 1) Di[3-Nitrophenylhydrazon]äthan-αβ-Dicarbonsäure. Sm. bei 200° (B. 22, 2814). — IV, 729.  
 2) Di[4-Nitrophenylhydrazon]äthan-αβ-Dicarbonsäure (A. 299, 104). — IV, 729.  
 3) Verbindung (aus d. Base C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>) (J. pr. [2] 36, 233). — II, 510.
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>S** 1) Isobrasileinsulfat (Brasileinschwefelsäure) (B. 15, 2344). — III, 655.
- C<sub>16</sub>H<sub>12</sub>O<sub>9</sub>N<sub>2</sub>** C 51,1 — H 3,2 — O 38,3 — N 7,4 — M. G. 376.  
 1) 2-[β-Nitro-3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure (Nitropapaverinsäure). Sm. 215° (wasserfrei). Ag<sub>2</sub> (M. 6, 391). — IV, 177.
- C<sub>16</sub>H<sub>12</sub>O<sub>9</sub>S** 1) Isohämäteinsulfat (Isohämätein) (B. 15, 2339; C. 1906 [1] 467). — III, 665.



- $C_{16}H_{12}O_{10}N_2$  C 49,0 — H 3,1 — O 40,8 — N 7,1 — M. G. 392.  
 1) Di[*p*-Nitro-2-Methoxyphenylester] d. Oxalsäure. Sm. 225—235° (B. 35, 3450 C. 1902 [2] 1303).
- $C_{16}H_{12}O_{10}N_4$  C 45,7 — H 2,9 — O 38,1 — N 13,3 — M. G. 420.  
 1) Äthylester d. Di[2,4-Dinitrophenyl]essigsäure. Sm. 153—154° (150,5° u. Zers.). Na, K, + Anilin, 2 + Naphtalin (B. 21, 2471; A. 220, 137; B. 39, 1291 C. 1906 [1] 1771; B. 41, 1666 C. 1908 [2] 170). — II, 1464.
- $C_{16}H_{12}O_{10}N_6$  C 42,8 — H 2,7 — O 35,7 — N 18,8 — M. G. 448.  
 1) Di[4,6-Dinitro-2-Methylphenylamid] d. Oxalsäure. Sm. noch nicht bei 300° (Am. 11, 237; Soc. 61, 464, 1068; D.R.P. 74058). — II, 467; \*II, 257.  
 2) Di[2,6-Dinitro-4-Methylphenylamid] d. Oxalsäure (Am. 11, 239; Soc. 61, 465, 1068). — II, 501.
- $C_{16}H_{12}O_{11}N_8$  C 37,8 — H 2,4 — O 37,8 — N 22,0 — M. G. 508.  
 1) 1,4-Di[2,4,6-Trinitrophenyl]hexahydro-1,4-Diazin. Zers. bei 287° (R. 28, 76 C. 1909 [1] 1580).
- $C_{16}H_{12}NCl$  1) 2-Methyl-3-[2-Chlorbenzyliden]pseudoindol. HCl (B. 36, 309; B. 38, 2647 C. 1905 [2] 629). — \*IV, 265.  
 2) 4-Chlor-6-Methyl-3-Phenylchinolin. Sm. 94° (M. 27, 994 C. 1907 [1] 349).  
 3) 1-Chlor-8-Methyl-3-Phenylisochinolin. Sm. 64—65° (B. 42, 429 C. 1909 [1] 846).  
 4) 1-Chlor-3-[2-Methylphenyl]isochinolin. Sm. 67° (B. 32, 1112). — \*IV, 265.  
 5) 1-Chlor-3-[3-Methylphenyl]isochinolin. Sm. 43—44° (B. 23, 3167). — IV, 437.  
 6) 1-Chlor-3-[4-Methylphenyl]isochinolin. Sm. 70—71° (B. 24, 3975). — IV, 438.
- $C_{16}H_{12}NJ$  1) Jodmethylat d. Thebenidin. Sm. bei 240° (B. 34, 769). — \*IV, 271.
- $C_{16}H_{12}N_2Cl_2$  1) 2,4-Dichlor-1,3-Di[Phenylimido]tetrahydro-R-Buten. Sm. 133 bis 134°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 13, 518; A. 214, 221; 279, 52). — II, 363; \*II, 206.  
 2) Dichlorindolin (J. 1880, 586). — II, 1623.
- $C_{16}H_{12}N_2Br_2$  1) Dibromtetrahydro- $\alpha$ -Naphtinolin. Sm. 244°. + 3 C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (B. 27, 2256). — IV, 1032.
- $C_{16}H_{12}N_2S$  1) Di[2-Cyanbenzyl]sulfid. Sm. 111° (B. 31, 2648 Anm.). — \*II, 927.  
 2) Di[3-Cyanbenzyl]sulfid. Sm. 99,5° (B. 34, 3372).  
 3) Di[4-Cyanbenzyl]sulfid (Nitril d. Dibenzylsulfid-4,4'-Dicarbonsäure). Sm. 114,5° (B. 33, 2624). — \*II, 927.
- $C_{16}H_{12}N_2S_2$  1) Di[2-Cyanbenzyl]disulfid. Sm. 124° (B. 23, 2485). — II, 1561.  
 2) Di[3-Cyanbenzyl]disulfid. Sm. 116—117° (B. 34, 3372).  
 3) 3,3'-Dimethylbiphenylen-4,4'-Disenföl. Sm. 157° (B. 21, 1066; J. pr. [2] 59, 593). — IV, 932; \*IV, 655.  
 4) *s*-Dibenzthiazoläthan (Tetronamidothiophenol). Sm. 137°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 13, 1231; B. 39, 3306 C. 1906 [2] 1568). — II, 799.  
 5) Dibenzylidendithiooxamid? Sm. 209° (B. 24, 1027). — III, 35.
- $C_{16}H_{12}N_2Se_2$  1) Di[2-Cyanbenzyl]diselenid. Sm. 108—110° u. Zers. (B. 24, 2568). — II, 1061.
- $C_{16}H_{12}N_3Cl$  1) 2-Amido-1-[4-Chlorphenyl]azonaphtalin. Sm. 116° (Soc. 59, 690). — IV, 1394.  
 2) 4-Amido-1-[4-Chlorphenyl]azonaphtalin. Sm. 187,5—188° (B. 35, 78 Anm.). — \*IV, 1028.
- $C_{16}H_{12}N_3Br$  1) 2-[4-Bromphenyl]amidodiazonaphtalin. Sm. 164° (B. 21, 2570). — IV, 1574.  
 2) 4-Brom-2-Phenylazo-1-Amidonaphtalin. Sm. 146° (C. 1905 [1] 1104).
- $C_{16}H_{12}N_3Br_5$  1) Verbindung (aus Äthenyl- $\beta$ -o-Amido-*p*-Tolylbenzimidazol). Sm. 290° u. Zers. (B. 32, 1481).
- $C_{16}H_{12}N_4Cl_2$  1) 3,5-Dichlor-4-[4-Methylphenyl]azo-1-Phenylpyrazol. Sm. 112° (A. 338, 221 C. 1905 [1] 1158).
- $C_{16}H_{12}N_4S_2$  1) Phenanthrenchinondithiourein. Sm. oberhalb 320° u. Zers. (B. 27 [2] 270; G. 27 [1] 245). — \*III, 321.
- $C_{16}H_{12}N_6Br_3$  1) 4,6-Di[Phenylamido]-2-Tribrommethyl-1,3,5-Triazin. Sm. 280° (J. pr. [2] 50, 110). — \*II, 239.

- C<sub>16</sub>H<sub>12</sub>N<sub>6</sub>S** 1) Sulfid d. 3-Merkapto-1-Phenyl-1,2,4-Triazol. Sm. 136° (*G.* 28 [2] 553). — \*IV, 745.
- 2) Verbindung (aus 3,5-Diimido-2,4-Diphenyltetrahydro-1,2,4-Thiodiazol) (*B.* 22, 1180). — IV, 1236.
- C<sub>16</sub>H<sub>12</sub>ClJ** 1) Phenyl-1-Naphtyljodoniumchlorid. Sm. 168°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*B.* 33, 701). — \*II, 98.
- 2) Phenyl-2-Naphtyljodoniumchlorid. Sm. 197° (*B.* 31, 920). — \*II, 98.
- C<sub>16</sub>H<sub>12</sub>BrJ** 1) Phenyl-1-Naphtyljodoniumbromid. Sm. 179° (*B.* 33, 701). — \*II, 98.
- C<sub>16</sub>H<sub>13</sub>ON** C 81,7 — H 5,5 — O 6,8 — N 6,0 — M. G. 235.
- 1) 3-Amido-1-Oxy-2-Phenylnaphtalin. Sm. 185° (*Soc.* 91, 1303 *C.* 1907 [2] 992).
- 2) 1-Amido-3-Oxy-2-Phenylnaphtalin. Sm. 208° (*Soc.* 91, 1304 *C.* 1907 [2] 992).
- 3) 2-Phenylamido-1-Oxynaphtalin. Sm. 156° (*B.* 39, 1041 *C.* 1906 [1] 1350).
- 4) 7-Phenylamido-2-Oxynaphtalin. Sm. 163° (160°) (*B.* 23, 529; 26, 3087; D. R. P. 60103). — II, 885; \*II, 526.
- 5) 2-[4-Oxyphenyl]amidonaphtalin. Sm. 135° (*C.* 1904 [1] 1013).
- 6) 3-Benzylamido-1-Ketoinden. Sm. 164° (*B.* 33, 2428). — \*III, 135.
- 7) 1-Oximido-2-Benzyliden-2,3-Dihydroinden. Sm. 184—187° u. Zers. (*A.* 314, 548; *J. pr.* [2] 62, 547). — \*III, 188.
- 8) 1-Acetylamidoanthracen. Sm. 198° (*B.* 38, 2866 *C.* 1905 [2] 1094).
- 9) 9-Acetylamidoanthracen. Sm. 273—274° (*B.* 23, 2524; 33, 3549; *A.* 330, 166 *C.* 1904 [1] 891). — II, 640.
- 10) 2-Acetylamidoanthracen. Sm. 240° (*A.* 212, 61; *B.* 15, 225, 228). — II, 640.
- 11) 2-Acetylamidophenanthren. Sm. 225—226° (*B.* 34, 2527; *A.* 321, 319 *C.* 1902 [2] 60).
- 12) 3-Acetylamidophenanthren. Sm. 200—201° (*B.* 34, 2526; *A.* 321, 316 *C.* 1902 [2] 59).
- 13) 9-Acetylamidophenanthren. Sm. 207—208° (*B.* 34, 1466).
- 14) 2-Keto-4,5-Diphenyl-2,3-Dihydropyrrol. Sm. 188—189° (*A.* 269, 140). — IV, 443.
- 15) 2-Methyl-4,5-Diphenyloxazol. Sm. 28°; Sd. 214°<sub>17</sub> (*Soc.* 63, 472). — IV, 443.
- 16) 3-Phenyl-5-Benzylisoxazol. Sm. 92° (*B.* 34, 1484). — \*III, 229.
- 17) 1-Benzoyl-2-Methylindol. Sm. 82° (*B.* 20, 817). — IV, 221.
- 18) 3-Keto-1-Methylen-2-Benzyl-1,3-Dihydroisindol. Sm. 122° (*B.* 29, 2521 *Ann.*). — \*II, 959.
- 19) 3-Keto-1-[2-Methylbenzyliden]-1,3-Dihydroisindol. Sm. 196—197° (*B.* 32, 1105). — \*II, 1010.
- 20) 3-Keto-1-[3-Methylbenzyliden]-1,3-Dihydroisindol (m-Xylalphthalimidin). Sm. 165° (*B.* 23, 3161). — II, 1714.
- 21) 3-Keto-1-[4-Methylbenzyliden]-1,3-Dihydroisindol (p-Xylalphthalimidin). Sm. 203—204° (*B.* 24, 3968). — II, 1715.
- 22) 3-[2-Oxybenzyliden]-2-Methylpseudoindol. Sm. 185°. HCl (*B.* 37, 323 *C.* 1904 [1] 668; *B.* 38, 2650 *C.* 1905 [2] 630).
- 23) 3-[3-Oxybenzyliden]-2-Methylpseudoindol? HCl (*B.* 36, 309; *B.* 38, 2649 *C.* 1905 [2] 630). — \*IV, 265.
- 24) 4-Oxy-6-Methyl-2-Phenylchinolin. Sm. 291° (*B.* 19, 1544). — IV, 437.
- 25) 4-Oxy-7-Methyl-2-Phenylchinolin. Sm. 270° (*B.* 27, 1397). — IV, 437.
- 26) 4-Oxy-6-Methyl-3-Phenylchinolin. Sm. 315° (*C.* 1900 [1] 123; *M.* 27, 990 *C.* 1907 [1] 349). — \*IV, 264.
- 27) 6-Oxy-2-Methyl-4-Phenylchinolin. Sm. 248°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HBr, Pikrat (*B.* 28, 1048; D. R. P. 79871). — IV, 435; \*IV, 259.
- 28) 7-Oxy-2-Methyl-4-Phenylchinolin. Sm. 262°. HCl + 1½ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat, Oxalat + H<sub>2</sub>O (*B.* 36, 2453 *C.* 1903 [2] 670).
- 29) 2-[4-Oxy-3-Methylphenyl]chinolin (Pseudo flavenol). Sm. 195—196°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (*M.* 9, 104). — IV, 434.
- 30) 4-Methyl-2-[4-Oxyphenyl]chinolin (Oxyflavolin; p-Flavenol). Sm. 238°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (*B.* 15, 1502; 16, 69). — IV, 436.

- C<sub>18</sub>H<sub>13</sub>ON**
- 31) **2-Methyl-4-[2-Oxyphenyl]chinolin.** Sm. 187—188° (*B.* 27, 3038; D.R.P. 79173, 80501). — *IV*, 435; \**IV*, 259.
  - 32) **2-Methyl-4-[3-Oxyphenyl]chinolin.** Sm. 259—260° (D.R.P. 80501). — \**IV*, 259.
  - 33) **2-Methyl-4-[4-Oxyphenyl]chinolin.** Sm. 255° (*B.* 27, 912; D.R.P. 80501). — *IV*, 435; \**IV*, 259.
  - 34) **4-[4-Oxybenzyl]isochinolin.** Sm. 238°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*A.* 326, 289 *C.* 1903 [1] 929). — \**IV*, 260.
  - 35) **Methyläther d. 4-Oxy-2-Phenylchinolin.** Sm. 69—70° (*B.* 30, 939). — *IV*, 427.
  - 36) **Methyläther d. 6-Oxy-2-Phenylchinolin.** Sm. 133°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (*A.* 249, 106). — *IV*, 427.
  - 37) **Methyläther d. 8-Oxy-2-Phenylchinolin.** Fl. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*A.* 249, 108). — *IV*, 427.
  - 38) **1-Benzoyl-1,2-Dihydrochinolin.** Sm. 200° (*J. pr.* [2] 73, 385 *C.* 1906 [2] 246).
  - 39) **2-Keto-1-Methyl-3-Phenyl-1,2-Dihydrochinolin.** Sm. 138° (*B.* 41, 483 *C.* 1908 [1] 1065).
  - 40) **2-Keto-1-Methyl-4-Phenyl-1,2-Dihydrochinolin.** Sm. 143—144° (*B.* 28, 1040). — *IV*, 429.
  - 41) **2-Keto-4-Methyl-3-Phenyl-1,2-Dihydrochinolin.** Sm. 275° (*B.* 26, 1398; *Ar.* 239, 602). — *IV*, 437; \**IV*, 260.
  - 42) **4-Keto-1-Methyl-2-Phenyl-1,4-Dihydrochinolin.** Sm. 85° (*B.* 30, 939). — *IV*, 427.
  - 43) **1-Keto-8-Methyl-3-Phenyl-1,2-Dihydroisochinolin.** Sm. 231° (*B.* 42, 429 *C.* 1909 [1] 845).
  - 44) **1-Keto-3-[2-Methylphenyl]-1,2-Dihydroisochinolin.** Sm. 179° (*B.* 32, 1111). — \**IV*, 265.
  - 45) **1-Keto-3-[3-Methylphenyl]-1,2-Dihydroisochinolin** (Isoxylalptalimidin). Sm. 196° (*B.* 23, 3167). — *II*, 1715.
  - 46) **1-Keto-3-[4-Methylphenyl]-1,2-Dihydroisochinolin.** Sm. 226—228° (*B.* 24, 3974; 29, 2548). — *II*, 1715; \**II*, 1008.
  - 47) **Nitril d. β-Oxy-β-Phenylakryl-2-Methylphenyläthersäure.** Sm. 104—105° (*C. r.* 142, 451 *C.* 1906 [1] 1095; *Bl.* [3] 35, 533 *C.* 1906 [2] 760).
  - 48) **Nitril d. α-Phenyl-β-[4-Methoxyphenyl]akrylsäure.** Sm. 93° (*A.* 250, 159). — *II*, 1707.
  - 49) **Nitril d. β-Keto-αγ-Diphenylpropan-α-Carbonsäure.** Sm. 85—86° (*J. pr.* [2] 52, 115; [2] 55, 348; *Soc.* 89, 1933 *C.* 1907 [1] 729). — \**II*, 1009.
  - 50) **Nitril d. α-Phenyl-β-Benzoylpropionsäure.** Sm. 127.5° (126—127°) (*A.* 284, 2; *B.* 23, 960; *Soc.* 85, 1358 *C.* 1904 [2] 1646). — *II*, 1713. *C.* 73,0 — *H.* 4,9 — *O.* 6,1 — *N.* 16,0 — *M. G.* 263.
- C<sub>18</sub>H<sub>13</sub>ON<sub>3</sub>**
- 1) **1-[4-Amidophenyl]azo-2-Oxynaphtalin** (*Soc.* 87, 3 *C.* 1905 [1] 441, 733).
  - 2) **4-Amido-1-[3-Oxyphenylazo]naphtalin.** Sm. 196°. HCl + H<sub>2</sub>O (*B.* 27 [2] 596). — *IV*, 1414.
  - 3) **4-Amido-1-[4-Oxyphenylazo]naphtalin + 3H<sub>2</sub>O.** Sm. 170° (200°). H<sub>2</sub>SO<sub>4</sub> + 6H<sub>2</sub>O (*B.* 12, 229; *B.* 36, 4149 *C.* 1904 [1] 186). — *IV*, 1415.
  - 4) **2-Oxyphenylhydrazimido-β-Naphtalin.** Sm. 192—193° (*B.* 18, 3126). — *IV*, 1575.
  - 5) **4-Oxyphenylhydrazimido-β-Naphtalin.** Sm. 192—193° (*B.* 18, 3129). — *IV*, 1576.
  - 6) **4-Nitroso-3-Methyl-1,5-Diphenylpyrazol.** Sm. 137,5° (*B.* 40, 674 *C.* 1907 [1] 969).
  - 7) **4-Benzylidenamido-5-Keto-3-Phenyl-4,5-Dihydropyrazol.** Sm. 152° (*J. pr.* [2] 52, 30). — *IV*, 1162.
  - 8) **5-[β-Benzoylamidophenyl]pyrazol.** Sm. 227° (*B.* 35, 40 *C.* 1902 [1] 425). — \**IV*, 813.
  - 9) **1-Phenyl-4-[α-Oximidobenzyl]pyrazol.** Sm. 152—154° (*G.* 19, 140). — *IV*, 550.
  - 10) **3-Oxy-5-[β-Phenyläthenyl]-1-Phenyl-1,2,4-Triazol.** Sm. 287° (284°). Na + 3½ H<sub>2</sub>O, Ag + 1½ H<sub>2</sub>O (*B.* 29, 1952; *Soc.* 71, 215, 311). — *IV*, 1166; \**IV*, 819.



- C<sub>16</sub>H<sub>13</sub>ON<sub>3</sub>** 11) **3-Benzoyl-5-Methyl-1-Phenyl-1,2,4-Triazol.** Sm. 55,5° (B. 26, 2789; *J. pr.* [2] 65, 149 C. 1902 [1] 1002). — IV, 1119.  
 12) **1-Acetyl-2,5-Diphenyl-1,3,4-Triazol.** Sm. 105° (B. 27, 998; A. 297, 256). — II, 1214; IV, 1187.  
 13) **6-Oxy-5-Methyl-2-Phenyl-4-[2-Pyridyl]-1,3-Diazin.** Sm. 230° (2HCl, PtCl<sub>4</sub>) (B. 34, 4247 C. 1902 [1] 209). — \*IV, 852.  
 14) **3-Keto-2-Methyl-5,6-Diphenyl-1,2,4-Triazin.** Sm. 152—153° u. Zers. (A. 339, 255 C. 1905 [2] 46).  
 15) **Nitrosoindol?** HNO<sub>3</sub> (B. 8, 723). — IV, 218.  
 16) **7-Phenylazo-8-Oxy-5-Methylchinolin.** Sm. 120° (B. 24, 3978). — IV, 1486.  
 17) **p-[4-Methylphenyl]azo-6-Oxychinolin** (B. 21, 1643). — IV, 1486.  
 18) **p-[4-Methylphenyl]azo-8-Oxychinolin** (B. 21, 1644). — IV, 1486.  
 19) **Carbonyl-β-o-Amido-p-Tolyl-m[oder p]-Tolimidazol.** Sm. 182° (B. 32, 1489). — \*IV, 852.  
 20) **1-[β-Phenylakroyl]-5-Methyl-1,2,3-Benzotriazol.** Sm. 156° (*J. pr.* [2] 74, 326 C. 1906 [2] 1823).  
 21) **3-Benzylidenamido-4-Keto-2-Methyl-3,4-Dihydro-1,3-Benzdiazin.** Sm. 183° (C. 1909 [2] 1476).  
 22) **Äthyläther d. α-D-Oxyindophenazin.** Sm. 265° (B. 34, 4013 C. 1902 [1] 205). — \*IV, 849.  
 23) **Äthyläther d. β-D-Oxyindophenazin.** Sm. 230° (225°) (B. 32, 1869; B. 34, 4013 C. 1902 [1] 205). — \*IV, 849.  
 24) **Nitril d. α-[4-Acetylamidophenyl]imido-α-Phenylelessigsäure.** Sm. 146° (B. 35, 3341 C. 1902 [2] 1194). — \*IV, 391.  
 25) **Nitril d. α-Phenylhydrazon-α-[4-Methylbenzoyl]essigsäure.** Sm. 152—153° (*J. pr.* [2] 52, 113). — IV, 1478.  
 26) **Nitril d. Phenylazo-2-Methylbenzoylessigsäure.** Sm. 124,7° (*J.* 1890, 1435). — IV, 1478.  
 27) **Amid d. 6-Methyl-2-Phenyl-1,3-Benzdiazin-4-Carbonsäure.** Sm. 256° (B. 28, 737). — IV, 1036.  
 28) **Hydrazid d. 3-Phenylchinolin-4-Carbonsäure + H<sub>2</sub>O.** Sm. 154° (B. 39, 985 C. 1906 [1] 1357).  
 29) **Verbindung** (aus Benzoacetodinitril u. Carbanil). Sm. 192° (190°) (*J. pr.* [2] 52, 106; *J. pr.* [2] 79, 67 C. 1909 [1] 744).  
 30) **Verbindung** (aus 5-Nitrofur-2-Carbonsäure). Sm. 232° (*Am.* 27, 202 C. 1902 [1] 908). — \*III, 505.
- C<sub>16</sub>H<sub>13</sub>OCl** 1) **10-Chlor-9-Keto-10-Äthyl-9,10-Dihydroanthracen.** Sm. 88—89° u. Zers. (A. 212, 87; B. 14, 459). — III, 243.
- C<sub>16</sub>H<sub>13</sub>OCl<sub>3</sub>** 1) **Methyläther d. γ-Chlor-γ-Oxy-αγ-Di[4-Chlorphenyl]propen.** Fl. (B. 42, 1815 C. 1909 [2] 131).  
 2) **δδδ-Trichlor-α-Keto-αγ-Diphenylbutan.** Sm. 137° (*Am.* 38, 548 C. 1908 [1] 228).
- C<sub>16</sub>H<sub>13</sub>OJ** 1) **Phenyl-1-Naphtyljodoniumhydroxyd.** Salze, siehe (B. 33, 700). — \*II, 98.  
 2) **Phenyl-2-Naphtyljodoniumhydroxyd.** Chlorid, Jodid (B. 31, 920). — \*II, 98.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>N** C 76,5 — H 5,2 — O 12,7 — N 5,6 — M. G. 251.  
 1) **α-Nitro-αδ-Diphenyl-αγ-Butadien.** Sm. 111—112° (B. 40, 4829 C. 1908 [1] 362; A. 360, 313 C. 1908 [2] 325).  
 2) **10-Nitro-9-Äthylanthracen** (Äthylnitrosoanthron). Sm. 135° (B. 14, 475; A. 330, 173 C. 1904 [1] 891). — II, 253.  
 3) **Methylenäther d. γ-Phenylimido-α-[3,4-Dioxyphenyl]propen** (Piperonylakroleinanilid). Sm. 118° (B. 27, 2959). — III, 107.  
 4) **1-Dimethylamido-9,10-Anthrachinon.** Sm. 138° (D.R.P. 136777 C. 1902 [2] 1372).  
 5) **2-Dimethylamido-9,10-Anthrachinon + H<sub>2</sub>O.** Sm. 181° (180°) (*Bl.* [3] 19, 831; [3] 25, 206; A. 307, 312; C. 1900 [1] 1214; 1900 [2] 655). — \*III, 296.  
 6) **1-Methylamido-2-Methyl-9,10-Anthrachinon.** Sm. 114° (D.R.P. 144634 C. 1903 [2] 750).  
 7) **1-Acetylamido-2-Oxyanthracen.** Zers. bei 200—220° (A. 342, 79 C. 1905 [2] 1593).

- $C_{16}H_{13}O_2N$  8) 9-Acetylamido-10-Oxyphenanthren. Sm. 223—224° (*B.* 35, 2737 *C.* 1902 [2] 644).
- 9) Äthyläther d. 2-Oximido-1-Keto-1,2-Dihydroanthracen. Sm. 144° (*B.* 39, 929 *C.* 1906 [1] 1256).
- 10) Äthyläther d. 1-Oximido-2-Keto-1,2-Dihydroanthracen. Sm. 143° (*A.* 342, 72 *C.* 1905 [2] 1593).
- 11) Äthyläther d. 9-Oximido-10-Keto-9,10-Dihydroanthracen. Sm. 97° (*Soc.* 69, 73). — III, 410.
- 12) 4-Amido-1-Benzoyl-2-Methylbenzofuran. Sm. 138° (*B.* 36, 1261 *C.* 1903 [1] 1184).
- 13) 4-Phenylamido-7-Methyl-1,2-Benzpyron. Sm. 247° u. Zers. (*A.* 367, 242 *C.* 1909 [2] 1238).
- 14) 4-[2-Methylphenyl]amido-1,2-Benzpyron. Sm. 214—216° (*A.* 367, 205 *C.* 1909 [2] 704).
- 15) 4,5-Diketo-1,2-Diphenyltetrahydropyrrol. Zers. bei 147—148° (*B.* 31, 1310; *M.* 20, 485). — \*IV, 163.
- 16) 4,5-Diketo-1,3-Diphenyltetrahydropyrrol. Sm. 208° (*B.* 42, 4078 *C.* 1909 [2] 2175).
- 17) 2,3-Diketo-4,5-Diphenyltetrahydropyrrol. Sm. 233—234° (*Soc.* 95, 990 *C.* 1909 [2] 435).
- 18) Methyläther d. 5-[4-Oxyphenyl]-2-Phenyloxazol. Sm. 84—85°. HCl (*B.* 29, 2099). — IV, 433.
- 19) Methyläther d. 2-[4-Oxyphenyl]-5-Phenyloxazol. Sm. 99°; Sd. oberhalb 360°. HCl, Pikrat (*B.* 29, 2098). — IV, 433.
- 20) Methyläther d. 5-[4-Oxyphenyl]-3-Phenylisoxazol. Sm. 119—120° (*C.* 1900 [2] 1015). — \*IV, 259.
- 21) Methyläther d. isom. 5-[4-Oxyphenyl]-3-Phenylisoxazol. Sm. 127 bis 128° (*C.* 1900 [2] 1015). — \*III, 167.
- 22) Methyläther d. 3-[4-Oxyphenyl]-5-Phenylisoxazol. Sm. 128—129° (121°) (*C. r.* 137, 797 *C.* 1904 [1] 43; *Soc.* 85, 1326 *C.* 1904 [2] 1645).
- 23) 5-Keto-2-Phenyl-4-Benzyl-4,5-Dihydrooxazol. Sm. 71° (*B.* 42, 2523 *C.* 1909 [2] 606).
- 24) 5-Keto-4-Phenyl-3-Benzyl-4,5-Dihydroisoxazol. Sm. 106—107°. Ag, Anilinsalz, Toluidinsalz, Phenylhydrazinsalz (*A.* 296, 6). — \*II, 1009.
- 25) Methyläther d. 2-Keto-3-[4-Oxybenzyliden]-2,3-Dihydroindol. Sm. 157° (*C. r.* 149, 133 *C.* 1909 [2] 832).
- 26) 1-Acetyl-2-Keto-3-Phenyl-2,3-Dihydroindol. Sm. 103° (*M.* 18, 548). — \*IV, 251.
- 27) 2-Oxy-2-[4-Oxy-3-Methylphenyl]chinolin (Oxypseudoflavenol). Sm. 89° (*M.* 9, 107). — IV, 434.
- 28) 6-Methyläther d. 6-Oxy-2-[3-Oxyphenyl]chinolin. Sm. 188° (*B.* 20, 1922). — IV, 428.
- 29) 3<sup>4</sup>-Methyläther d. 2-Oxy-3-[4-Oxyphenyl]chinolin. Sm. 260° (*B.* 32, 3402). — \*IV, 257.
- 30) Methyläther d. 4-Oxy-1-Keto-3-Phenyl-1,2-Dihydroisochinolin. Sm. 235—240° (*B.* 20, 2868; *B.* 37, 1690 *C.* 1904 [1] 1524).
- 31) 2-Benzoyl-1-Keto-1,2,3,4-Tetrahydroisochinolin. Sm. 132° (*B.* 26, 1216). — II, 1372.
- 32) 1,3-Diketo-4-Benzyl-1,2,3,4-Tetrahydroisochinolin (Imid d. Benzylhomophthalsäure). Sm. 170°; Sd. oberhalb 300° (*B.* 21, 2681). — II, 1889.
- 33) 3,9-Diacetylcarbazon. Sm. 104° (*B.* 40, 380 *C.* 1907 [1] 823).
- 34)  $\beta$ -Cyan- $\alpha\beta$ -Diphenylpropionsäure? Sm. 196—198° (*B.* 37, 4067 *C.* 1904 [2] 1651).
- 35)  $\alpha$ -Cyan- $\beta\beta$ -Diphenylpropionsäure. Sm. 162° (*Am.* 33, 339 *C.* 1905 [1] 1390).
- 36) 2-Cinnamylidenamidobenzol-1-Carbonsäure. Sm. 163—164° (*B.* 37, 595 *C.* 1904 [1] 881).
- 37) 1-Benzylindol-2-Carbonsäure. Sm. 195° u. Zers. (*A.* 227, 362). — IV, 236.
- 38) 3-Äthyl- $\beta$ -Naphtochinolin-1-Carbonsäure + 2H<sub>2</sub>O. Sm. 283°. HCl (*B.* 27, 2021). — IV, 423.
- 39) Akridin-5-Äthyl- $\beta$ -Carbonsäure ( $\beta$ -5-Akridylpropionsäure). Sm. 310°. Na + 2 $\frac{1}{2}$ H<sub>2</sub>O, Ag, HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (*G.* 22 [2] 553; *B.* 39, 2425 *C.* 1906 [2] 801). — IV, 423.

- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>N** 40) Inn. Anhydrid d. 1-[ $\alpha$ -Oximido- $\beta$ -(3-Methylphenyl)äthyl]benzol-2-Carbonsäure. Sm. 133—134° (B. 23, 3160). — II, 1714.
- 41) Inn. Anhydrid d. 1-[ $\alpha$ -Oximido- $\beta$ -(4-Methylphenyl)äthyl]benzol-2-Carbonsäure. Sm. 126° (B. 24, 3967). — II, 1715.
- 42) Anhydroverbindung d.  $\alpha$ -Benzoylamidopropionsäurephenylester. Sm. 41—42° (H. 20, 424). — \*II, 747.
- 43) Oximilaktod.  $\alpha$ -Oximido- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure. Sm. 138,5° (B. 32, 1106). — \*II, 1010.
- 44) Aldehyd d.  $\beta$ -[2-Benzoylamidophenyl]akrylsäure. Sm. 184—185° (B. 38, 1607 C. 1905 [1] 1563; B. 38, 3415 C. 1905 [2] 1597).
- 45) Benzoat d. syn.  $\gamma$ -Oximido- $\alpha$ -Phenylpropen (B. 19, 1513). — III, 62.
- 46) Nitril d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-[2-Methoxyphenyl]äthersäure. Sm. 90—91° (C. r. 142, 451 C. 1906 [1] 1095; Bl. [3] 35, 534 C. 1906 [2] 760).
- 47) Nitril d.  $\alpha$ -Benzoxyl-4-Methylphenyllessigsäure. Sm. 55—56° (Soc. 95, 1405 C. 1909 [2] 1227).
- 48) Nitril d.  $\alpha$ -Phenyl- $\alpha$ -[Phenoxyl]acetessigsäure. Sm. 125° (J. pr. [2] 65, 480 C. 1902 [2] 23).
- 49) Phenylimid d.  $\pi$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 137—138° (Soc. 85, 1367 C. 1904 [2] 1646; A. 354, 139 C. 1907 [2] 694).
- 50) 4-Methylphenylimid d. 1-Methylbenzol-3,4-Dicarbonsäure. Sm. 180° (M. 12, 630). — II, 1846.
- 51) Benzylimid d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 127° (B. 20, 2497). — II, 1843.
- 52) 2-Methylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 148—149° (B. 21, 576). — II, 1805.
- 53) 3-Methylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 117—118° (B. 21, 2700). — II, 1805.
- 54) 4-Methylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 117° (B. 28, 2987; J. pr. [2] 62, 111). — \*II, 1054.
- 55) Verbindung (aus d. Verb. C<sub>15</sub>H<sub>11</sub>O<sub>2</sub>N). Sm. 119—121° (B. 20, 2868). — II, 1708.
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>3</sub>** C 68,8 — H 4,7 — O 11,5 — N 15,0 — M. G. 279.
- 1) 1-[4-Nitro-2-Amidophenyl]amidonaphtalin. Sm. 145—147° (B. 21, 2302). — IV, 556.
- 2) 2-[4-Nitro-2-Amidophenyl]amidonaphtalin. Sm. 195° (B. 21, 590; C. 1898 [2] 343). — IV, 556.
- 3) Cinnamyliden-4-Nitrobenzylidenhydrazin. Sm. 169° (B. 33, 2466). — \*III, 47.
- 4) 3-Methyl-5-[2-Nitrophenyl]-1-Phenylpyrazol. Sm. 95°; Sd. 285°<sub>70</sub>. (2HCl, PtCl<sub>4</sub>) (B. 18, 2261). — IV, 936.
- 5) 3-Methyl-5-[4-Nitrophenyl]-1-Phenylpyrazol. Fl. (2HCl, PtCl<sub>4</sub>) (B. 18, 2259). — IV, 936.
- 6) Nitromethylidiphenylpyrazol? Sm. 120° (A. 221, 333; B. 18, 2136). — III, 271.
- 7) 5-Keto-4-Benzoyl-3-Methyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 129°. — IV, 1105.
- 8) Acetat d. 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 133° (130—131°) (Soc. 67, 1066; B. 29, 1952, 2312). — IV, 1157.
- 9) 6-Benzoyl-2-[4-Methylphenyl]-1,2,3,5-Oxtriazin. Sm. 210° (R. 11, 261; 16, 340). — IV, 1119.
- 10) 6-[4-Methylbenzoyl]-2-Phenyl-1,2,3,5-Oxtriazin. Sm. 211° (R. 16, 340). — IV, 1119.
- 11) 5-[4-Methylbenzoyl]-2-Phenyl-1,2,3,6-Oxtriazin (R. 16, 321). — \*IV, 770.
- 12) 5-Benzoyl-2-Benzyl-1,2,3,6-Oxtriazin. Zers. bei 112° (R. 16, 319). — \*IV, 770.
- 13) 5-Benzoyl-2-[4-Methylphenyl]-1,2,3,6-Oxtriazin (R. 16, 316). — \*IV, 770.
- 14) 3-Oxy-2-[2-Acetylamidophenyl]-1,4-Benzdiazin. Sm. 285—286° (B. 28, 2529; 29, 197). — IV, 1187; \*IV, 846.
- 15) 4-[3-Nitro-4-Amidobenzyl]isochinolin. Sm. 231—232° (A. 326, 281 C. 1903 [1] 928). — \*IV, 692.
- 16) 5-[ $\alpha$ -Cyanbenzyliden]imido-2-Methylamidobenzol-1-Carbonsäure. Sm. 223—224° (B. 42, 2753 C. 1909 [2] 817).



- C<sub>15</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>** 17) Methylester d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 135 bis 136° (B. 35, 4048 C. 1903 [1] 169). — \*IV, 817.
- 18) Methylester d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 159° (B. 22, 799). — IV, 1164.
- 19) 2-Acetat d. 3-Phenylhydrazon-2-Oxypseudoindol (Phenylhydrazon d. Acetylisatin). Sm. 131° (B. 28, 543). — IV, 695.
- 20) Benzoat d. 4-Cyan-1-[β-Oximido-β-Amidoäthyl]benzol. Sm. 171,5 bis 172° (B. 22, 2983). — II, 1844.
- 21) Benzoat d. 5-Oxy-4-Methyl-1-Phenyl-1,2,3-Triazol. Sm. 91° (A. 335, 94 C. 1904 [2] 1232).
- 22) Phenylamidoformiat d. 4-Oxy-1-Phenylpyrazol. Sm. 168° (A. 313, 20). — \*IV, 316.
- 23) Nitril d. 2,6-Diketo-4-[4-Isopropylphenyl]-1,2,3,6-Tetrahydropyridin-3,5-Dicarbonsäure. NH<sub>4</sub>, Cu + 8H<sub>2</sub>O, Ag, Coniinsalz, Nikotinsalz (C. 1902 [2] 699; A. 325, 213 C. 1903 [1] 439).
- 24) Nitril d. 2,6-Diketo-4-Methyl-4-[β-Phenyläthethyl]hexahydropyridin-3,5-Dicarbonsäure. Sm. 275—277° (C. 1901 [1] 581).
- 25) Imid d. 2,3-Dicyan-1-Methyl-1-[β-Phenyläthethyl]-R-Trimethylen-2,3-Dicarbonsäure. Sm. 203—205° (C. 1901 [1] 581). — \*II, 1218.
- 26) Hydrazid d. 2-Oxy-3-Phenylchinolin-4-Carbonsäure. Sm. 298° (B. 41, 485 C. 1908 [1] 1065).
- 27) Verbindung (aus 3-Oximido-2,5-Diphenylisopyrrol). Sm. 141—142° (C. 1905 [2] 627).
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>N<sub>5</sub>** C 62,5 — H 4,2 — O 10,4 — N 22,8 — M. G. 307.
- 1) 4-Semicarbazon-5-Keto-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 205,5° (B. 36, 1135 C. 1903 [1] 1254). — \*IV, 604.
- 2) 4-[4-Nitrophenyl]azo-3[oder 5]-Methyl-5[oder 3]-Phenylpyrazol. Sm. 241° (B. 32, 2646). — \*IV, 1083.
- 3) Verbindung (aus Dichlormaleinsäureimid). Sm. 269—271° (B. 22, 2495). — IV, 707.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Cl** 1) β-Chlor-αδ-Dioxy-αδ-Diphenyl-αγ-Butadien (α-Chlordiphenacyl). Sm. 117° (B. 9, 1759; 13, 836; 32, 531; B. 36, 2395 C. 1903 [2] 498; B. 42, 3261 C. 1909 [2] 1559). — III, 120; \*III, 92.
- 2) isom. β-Chlor-αδ-Dioxy-αδ-Diphenyl-αγ-Butadien (β-Chlordiphenacyl). Sm. 155° (B. 9, 1759; 13, 836; 32, 531; B. 36, 2395 C. 1903 [2] 498; B. 42, 3261 C. 1909 [2] 1559). — III, 120; \*III, 92.
- 3) β-Chlor-αδ-Diketo-αδ-Diphenylbutan (γ-Chlordiphenacyl). Sm. 141° (B. 35, 171 C. 1902 [1] 422; B. 42, 3261 C. 1909 [2] 1559). — \*III, 228.
- 4) δ-Chlordiphenacyl. Sm. 189° (B. 36, 2403 C. 1903 [2] 499; B. 42, 3261 C. 1909 [2] 1559).
- 5) Oxoniumchlorid d. 2-[4-Methoxyphenyl]benzpyran + 5H<sub>2</sub>O. HCl + H<sub>2</sub>O, + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (Soc. 93, 1111 C. 1908 [2] 608).
- 6) Äthylester d. 9-Chlorfluoren-9-Carbonsäure. Sm. 46—47° (B. 39, 3061 C. 1906 [2] 1500; B. 39, 3063 C. 1906 [2] 1500).
- 7) 6-Chlor-3-Methylphenylester d. β-Phenylakrylsäure. Sm. 93—94° (C. 1900 [1] 885). — \*II, 850.
- 8) Chlorid d. 3,4-Dimethyldiphenylketon-2'-Carbonsäure. Sm. 113 bis 114° (A. 312, 100). — \*II, 1009.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Cl<sub>3</sub>** 1) βββ-Trichlor-α-[p-Methylphenyl]-α-Phenyläthan-β-Carbonsäure. Sm. 173—174° (B. 7, 1192). — II, 1471.
- 2) Benzoat d. βββ-Trichlor-α-Oxy-α-[4-Methylphenyl]äthan. Sm. 100 bis 101° (C. r. 141, 202 C. 1905 [2] 753).
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Br** 1) Dimethyläther d. 8-Brom-3,4-Dioxyphenanthren. Sm. 81—82° (B. 39, 3120 C. 1906 [2] 1331).
- 2) β-Brom-αδ-Dioxy-αδ-Diphenyl-αγ-Butadien (α-Bromdiphenacyl). Sm. 129° (124°) (B. 29, 2094; 34, 1610; B. 36, 2395 C. 1903 [2] 498; A. 348, 105 C. 1906 [2] 783; B. 42, 3261 C. 1909 [2] 1558). — \*III, 228.
- 3) isom. β-Brom-αδ-Dioxy-αδ-Diphenyl-αγ-Butadien (β-Bromdiphenacyl). Sm. 161° (158°) (B. 22, 3231; 28, 2106, 3029; 29, 1750, 2092; 34, 1610; B. 36, 2395 C. 1903 [2] 498; A. 348, 106 C. 1906 [2] 783; B. 42, 3261 C. 1909 [2] 1558). — III, 298; \*III, 228.
- 4) β-Brom-αδ-Diketo-αδ-Diphenylbutan (γ-Bromdiphenacyl). Sm. 139° (B. 35, 172 C. 1902 [1] 422; B. 42, 3261 C. 1909 [2] 1558). — \*III, 228.

- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Br** 5)  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[5-Brom-2-Oxyphenyl]propen. Sm. 196° u. Zers. (B. 31, 714 Anm.). — \*III, 184.
- 6) Methyläther d.  $\alpha$ -Brom- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 95,5° (C. 1900 [2] 1015). — \*III, 181.
- 7) 4-Brom-3-[2-Methylphenyl]-3,4-Dihydro-2,1-Benzpyron. Sm. 101 bis 102° (B. 32, 1109). — \*II, 998.
- 8) Säure (aus  $\gamma\gamma$ -Diphenylparakonsäure). Sm. 141°; Zers. bei 151° (A. 308, 105). — \*II, 875.
- 9) Methylester d.  $\beta$ -Brom- $\alpha\beta$ -Diphenylakrylsäure. Sm. 70° (B. 26, 663). — II, 1474.
- 10) Verbindung (aus 10-Oxyanthracen). Sm. 135—138° (B. 21, 1180). — II, 902.
- 11) Verbindung (aus Tolandibromid). Sm. 107° (B. 4, 380). — II, 272.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Br<sub>3</sub>** 1) Benzoat d. 4,6-Dibrom-2-Oxy-5-Brommethyl-1,3-Dimethylbenzol. Sm. 160—161° (B. 32, 3329). — \*II, 718.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>J** 1)  $\beta$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\alpha$ -Joddiphenacyl). Sm. 90° u. Zers. (B. 36, 2407 C. 1903 [2] 500; B. 42, 3268 C. 1909 [2] 1560).
- 2) isom.  $\beta$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\beta$ -Joddiphenacyl). Sm. 105° (B. 32, 533; B. 36, 2409 C. 1903 [2] 500; B. 42, 3268 C. 1909 [2] 1560). — \*III, 229.
- 3) isom.  $\beta$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien ( $\delta$ -Joddiphenacyl). Sm. 150—153° (B. 36, 2411 C. 1903 [2] 500; B. 42, 3268 C. 1909 [2] 1560).
- 4)  $\beta$ -Jod- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan ( $\gamma$ -Joddiphenacyl). Sm. 121° (B. 36, 2407 C. 1903 [2] 499; B. 42, 3268 C. 1909 [2] 1560).
- 5) 3-Methylphenylester d.  $\beta$ -[2-Jodphenyl]akrylsäure. Sm. 74° (C. 1900 [1] 704). — \*II, 853.
- 6) 3-Methylphenylester d.  $\beta$ -[3-Jodphenyl]akrylsäure. Sm. 40—41° (C. 1900 [1] 704). — \*II, 853.
- 7) 3-Methylphenylester d.  $\beta$ -[4-Jodphenyl]akrylsäure Sm. 85—86° (C. 1900 [1] 704). — \*II, 853.
- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>N** C 71,9 — H 4,9 — O 18,0 — N 5,2 — M. G. 267.
- 1) Äthyläther d. 10-Nitro-2-Oxyphenanthren. Sm. 157—158° (Soc. 89, 1528 C. 1906 [2] 1765).
- 2)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[3-Nitro-4-Methylphenyl]propen. Sm. 142—143° (B. 32, 2285). — \*III, 185.
- 3)  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[2-Nitrophenyl]propen. Sm. 106—107° (B. 35, 1071 C. 1902 [1] 930). — \*III, 184.
- 4)  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[3-Nitrophenyl]propen. Sm. 137° (B. 35, 1072 C. 1902 [1] 930). — \*III, 184.
- 5)  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[4-Nitrophenyl]propen. Sm. 161° (B. 35, 1073 C. 1902 [1] 930). — \*III, 184.
- 6) 3,4-Methylenäther d.  $\gamma$ -Keto- $\gamma$ -[4-Amidophenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 198—200° (B. 37, 393 C. 1904 [1] 657).
- 7) 3,4-Methylenäther d. Methyl-4-[3,4-Dioxybenzyliden]amidophenylketon. Sm. 147° (B. 37, 393 C. 1904 [1] 657).
- 8) 3-Phenylamido-2-Oxy-1,4-Diketo-1,2,3,4-Tetrahydronaphtalin (B. 25, 3604; A. 286, 73). — III, 382.
- 9) 10-Nitro-9-Keto-10-Äthyl-9,10-Dihydroanthracen (Äthylnitroanthron). Sm. 102° (B. 14, 474; A. 330, 176 C. 1904 [1] 891). — II, 253.
- 10) 4-Äthylamido-1-Oxy-9,10-Anthrachinon (U.R.P. 154353 C. 1904 [2] 1013).
- 11) 4-Dimethylamido-1-Oxy-9,10-Anthrachinon. Sm. 245° (D.R.P. 136777 C. 1902 [2] 1374).
- 12) Methyläther d.  $\beta$ -Amido-2-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 181° (Soc. 91, 1632 C. 1907 [2] 2058).
- 13) Äthyläther d. 1-Amido-2-Oxy-9,10-Anthrachinon. Sm. 182° (B. 15, 1796). — III, 419.
- 14)  $\beta$ -Oximido- $\alpha\gamma$ -Diketo- $\alpha\delta$ -Diphenylbutan. Sm. 131° u. Zers. (B. 34, 1487). — \*III, 243.
- 15) Monoxim d. 3-Oxy-9,10-Phenanthrenchinon-3-Äthyläther. Sm. 174° (Soc. 89, 1530 C. 1906 [2] 1765).
- 16) 3-Diacetylamidodiphenylenoxyd. Sm. 83° (B. 41, 1941 C. 1908 [2] 173).

- $C_{18}H_{19}O_3N$  17) 3 - Oximido-6-Methyl-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 148—149° (B. 41, 4241 C. 1909 [1] 185).
- 18) 3-Methyläther d. 2-Keto-3-[3,4-Dioxybenzyliden]-2,3-Dihydroindol. Sm. 224° (Bl. [4] 5, 1038 C. 1909 [2] 2173).
- 19) 6,7-Dioxy-1-Keto-2-Benzyl-1,2-Dihydroisochinolin. Sm. 225° (B. 37, 531 C. 1904 [1] 819).
- 20) Methylenäther d. 7,8-Dioxy-1-Keto-2-Phenyl-1,2,3,4-Tetrahydroisochinolin. Sm. 157° (Soc. 57, 1035). — II, 1765.
- 21) 8-Methyläther d. 2,7,8-Triox-3-Phenylchinolin. Sm. 243° (B. 33, 1822). — \*IV, 257.
- 22) 3 - Acetyl-4-Keto-2-Phenyl-3,4-Dihydro-1,3-Benzoxazin. Sm. 88° (Soc. 91, 266 C. 1907 [1] 1262).
- 23)  $\alpha$ -Benzoylamido- $\beta$ -Phenylakrylsäure. Sm. 225° u. Zers. (A. 275, 3; 307, 856; B. 16, 2815; 30, 2976; J. 1883, 1177). — II, 1420; \*II, 856.
- 24)  $\beta$ -[2-Benzoylamidophenyl]akrylsäure. Sm. 262° u. Zers. (B. 38, 3423 C. 1905 [2] 1597).
- 25) isom.  $\beta$ -[2-Benzoylamidophenyl]akrylsäure? Sm. 191—193°. Ba (B. 25, 1263). — II, 1419.
- 26) 5-Cinnamylidenamido-2-Oxybenzol-1-Carbonsäure. Sm. 164° (130° u. Zers.) (C. 1907 [1] 107; G. 38 [1] 15 C. 1908 [1] 828).
- 27) 2-Cinnamoylamidobenzol-1-Carbonsäure. Sm. 192° (A. 341, 94 C. 1905 [2] 823).
- 28) 3 - Cinnamoylamidobenzol-1-Carbonsäure. Sm. 253° (A. 341, 95 C. 1905 [2] 823).
- 29) 4-Cinnamoylamidobenzol-1-Carbonsäure. Sm. 282° u. Zers. (A. 341, 96 C. 1905 [2] 823).
- 30)  $\gamma$ -Phenylimido- $\alpha$ -Keto- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure (Benzoylanilbrenztraubensäure). Sm. 168—170° (B. 21, 1134). — II, 1862.
- 31) 2[oder 3]-Phenylhydrazon-3[oder 2]-Keto-2,3-Dihydroindol-1-Methylcarbonsäure. Sm. 242° (D.R.P. 168292 C. 1906 [1] 1122).
- 32) Dihydroisaphensäure. Sm. 202°. Ag (B. 26, 2485). — II, 1892.
- 33) Lakton d.  $\alpha$ -Acetylamido-2-Oxydiphenylelessigsäure. Sm. 225—228° (B. 31, 2817). — \*II, 996.
- 34) Lakton d.  $\gamma$ -Oximido- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\alpha^2$ -Carbonsäure (Oxim d. Phtalidmethylphenylketon). Sm. 181—182° (M. 19, 440; 20, 715). — \*II, 1097.
- 35) Acetat d.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan (A. d.  $\alpha$ -Benziloxim). Sm. 61—62° (B. 22, 545). — III, 289.
- 36) Acetat d. isom.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 78—79° (B. 22, 545; B. 38, 77 C. 1905 [1] 533). — III, 290.
- 37) Acetat d. 5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 113—114° (B. 30, 1106). — \*II, 742.
- 38) Acetat d. 9-Acetyl-3-Oxycarbazol. Sm. 113—114° (B. 34, 1683). — \*IV, 233.
- 39) Acetat d. 2-Oxy-2-Phenyl-1,3-Benzoxazin. Sm. 212—213° (B. 31, 1603). — \*III, 54.
- 40) Valerat d.  $\alpha$ -Valerylmethylamido- $\beta$ -Oxy- $\beta$ -Methylbutan. Sd. 162°<sub>38</sub> (D. R. P. 199148 C. 1908 [2] 122).
- 41) N-Benzoat d.  $\gamma$ -Oximido- $\gamma$ -Oxy- $\alpha$ -Phenylpropen (N-Benzoat d. Zimthydroxamsäure). Sm. 144°. K (A. 309, 195). — \*II, 852.
- 42) Benzoat d. 5-Oxy-1,3-Dimethylbenzoxazol. Sm. 108—110° (M. 19, 511). — \*II, 720.
- 43) Benzoat d. 2-Oxy-2-Methyl-1,3-Benzoxazin. Sm. 191° u. Zers. (B. 31, 1598). — \*III, 54.
- 44) Phenylamidoformiat d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\gamma$ -Phenylpropen. Sm. 123 bis 125° (B. 37, 4636 C. 1905 [1] 238).
- 45) Phenylamidoformiat d. 4-Oxymethylbenzfuran. Sm. 90° (B. 37, 201 C. 1904 [1] 661).
- 46) Nitril d.  $\alpha$ -[4-Methoxybenzoxyl]phenylelessigsäure. Sm. 58—59° (Soc. 95, 1407 C. 1909 [2] 1228).
- 47) Nitril d.  $\alpha$ -Benzoxyl-2-Methoxyphenylelessigsäure. Sm. 87—88° (Soc. 95, 1405 C. 1909 [2] 1227).
- 48) Nitril d.  $\alpha$ -Benzoxyl-4-Methoxyphenylelessigsäure. Sm. 66—67° (Soc. 95, 1405 C. 1909 [2] 1227).



- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>N** 49) Phenylamid d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\gamma$ -Phenylpropen- $\beta$ -Carbonsäure. Sm. 93—94° (B. 37, 4637 C. 1905 [1] 238).
- 50) 4-Äthoxyphenylimid d. Benzol-1,2-Dicarbonsäure (2 isom. Formen). Sm. 206,5° (B. 36, 1002 C. 1903 [1] 1132).
- 51)  $\beta$ -Phenoxyäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 129—130° (B. 22, 3255). — II, 1800.
- C<sub>16</sub>H<sub>18</sub>O<sub>8</sub>N<sub>3</sub>** C 65,1 — H 4,4 — O 16,3 — N 14,2 — M. G. 295.
- 1) Trioxim d. 2-Benzoyl-1,3-Diketo-2,3-Dihydroinden + H<sub>2</sub>O. Sm. 232° u. Zers. (B. 27, 108). — III, 318.
- 2)  $\delta$ -Phenylazo- $\gamma$ -Keto- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -Buten + H<sub>2</sub>O. Sm. 210° u. Zers. (B. 36, 1450 C. 1903 [1] 1345). — \*IV, 1073.
- 3) 2-Methyl-5-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,3-Oxyd. Sm. 117° (A. 358, 168 C. 1908 [1] 856).
- 4) 2-Methyl-3-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 178°. (2HCl, PtCl<sub>4</sub>), HJ (A. 358, 178 C. 1908 [1] 857).
- 5) 4-Oximido-5-[ $\alpha$ -Oximidobenzyl]-3-Phenyl-4,5-Dihydroisoxazol. Sm. 219° (207—211°; 221—222°) (B. 22, 2560; 23, 3580; 30, 1312; 34, 1909; B. 40, 4059 C. 1907 [2] 1852). — III, 92; \*III, 68.
- 6) 2-Keto-5-Methyl-3-[4-Benzoylamidophenyl]-2,3-Dihydro-1,3,4-Ox-diazol. Sm. 207—208° (B. 26, 1319). — IV, 1127.
- 7) 3,5-Diketo-2-Benzoyl-4-Methyl-1-Phenyltetrahydro-1,2,4-Triazol. Sm. 185° (Am. 38, 68 C. 1907 [2] 1173).
- 8) 6-Keto-2-Phenyl-4-[3-Nitrophenyl]-3,4,5,6-Tetrahydro-1,3-Diazin. Sm. 192—193° (Soc. 83, 719 C. 1903 [2] 54). — \*IV, 693.
- 9) 5-Amido-2,4,6-Triketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 195° u. Zers. (C. 1906 [2] 1404; Soc. 91, 1340 C. 1907 [2] 1065).
- 10) Methyläther d. 6-[4-Oxybenzoyl]-2-Phenyl-1,2,3,5-Oxtriazin. Sm. 185° (R. 11, 265; 16, 265). — IV, 1120.
- 11) Methyläther d. 5-[4-Oxybenzoyl]-2-Phenyl-1,2,3,6-Oxtriazin (R. 11, 205). — \*IV, 771.
- 12) 7-Nitro-4-Keto-2-Methyl-3-Benzyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 131—132°. HCl (C. 1908 [2] 180).
- 13) Dihydroamidoisatin. Sm. 213°. Na, K (A. 194, 88; M. 1, 582). — II, 1610.
- 14) Oxyamidohydroisatin. Fest; Zers. bei 187—190° ohne Sm. (A. 194, 100). — II, 1610.
- 15) Anhydroamidohemipinsäurephenylhydrazid. Sm. 222° (B. 19, 2275). — IV, 717; \*IV, 467.
- 16) Acetat d. 5-Keto-3-Oxy-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 166° (B. 34, 2337). — \*IV, 748.
- 17) Acetat d. 3-Acetylamido-2-Oxy-5,10-Naphtdiazin. Sm. 230° (B. 35, 4305 C. 1903 [1] 344). — \*IV, 835.
- 18) Acetat d. 7-Acetylamido-2-Oxy-5,10-Naphtdiazin. Sm. 258° (B. 28, 2975). — IV, 1178.
- 19) Phenylamid d. 3-Oxy-5-Keto-1-Phenyltetrahydropyrazol-2-Carbon-säure + H<sub>2</sub>O. Sm. 166° (B. 25, 1505). — IV, 702.
- 20) Phenylimid d. Phenylnitrosamidobornsteinsäure. Sm. 180° (A. 252, 166). — II, 437.
- 21) Amidoxim (aus bim. Benzoylcyamid). Sm. 181° u. Zers. (B. 41, 1899 C. 1908 [2] 160).
- C<sub>16</sub>H<sub>18</sub>O<sub>8</sub>N<sub>5</sub>** C 59,4 — H 4,0 — O 14,9 — N 21,7 — M. G. 323.
- 1) 5-Keto-4-[4-Nitrophenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyr-azol. Sm. 199,5°. Na + H<sub>2</sub>O (B. 31, 3128; 32, 204, 209; C. r. 139, 135 C. 1904 [2] 588). — IV, 1489; \*IV, 1078.
- 2) ?-Nitro-5-Keto-4-Phenylazo-3-Methyl-1-Phenyl-4,5-Dihydropyr-azol. Sm. 234° u. Zers. (235—240°) (B. 29, 1662; 32, 204; 33, 495). — IV, 1489; \*IV, 1078.
- 3) 5-Keto-4-Phenylazo-3-Methyl-1-[4-Nitrophenyl]-4,5-Dihydropyr-azol. Sm. 249° (B. 34, 80). — \*IV, 1078.
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>Cl** 1) Methylester d.  $\alpha$ -Benzoyl- $\alpha$ -[4-Chlorphenyl]essigsäure. Sm. 176° (J. pr. [2] 67, 37 C. 1903 [1] 1357).
- 2) Benzoat d. Chlormethyl-6-Oxy-3-Methylphenylketon. Sm. 92° (A. 364, 167 C. 1909 [1] 918).

- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>Br** 1) Methyläther d.  $\beta$ -Brom- $\alpha\gamma$ -Diketo- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan. Sm. 128° (C. 1900 [2] 1015). — \*III, 226.  
2)  $\alpha\gamma$ -Lakton d.  $\beta$ -Brom- $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 105° u. Zers. (A. 333, 233 C. 1904 [2] 1390).
- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>Br<sub>3</sub>** 1) Acetat d. 3,5-Dibrom-4-Keto-1-[ $\beta$ -Brom- $\alpha$ -Oxy- $\beta$ -Phenyläthyl]-1,4-Dihydrobenzol. Sm. 135° (A. 349, 116 C. 1906 [2] 1257).
- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>J** 1) Northebenoljodhydrin. Zers. bei 270° (B. 30, 1383). — \*III, 677.  
**C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N** 1) Methyläther d.  $\beta$ -Nitro- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sd. 115°<sub>10</sub> u. Zers. (A. 340, 76 C. 1905 [2] 330).  
2) 4-Methyläther d.  $\beta$ -Oximido- $\alpha\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[4-Oxyphenyl]-propan. Sm. 127° (B. 37, 1535 C. 1904 [1] 1609).  
3) 4-Dimethylamido-1,2-Dioxy-9,10-Anthrachinon (D.R.P. 136777 C. 1902 [2] 1375).  
4) Dimethyläther d.  $\beta$ -Amido-1,3-Dioxy-9,10-Anthrachinon. Sm. 231° (M. 26, 591 C. 1905 [2] 334).  
5) Dimethyläther d. 5-Amido-1,6-Dioxy-9,10-Anthrachinon. Sm. 243° (Soc. 95, 1095 C. 1909 [2] 623).  
6) 6-Methyläther d. 3-Oximido-6-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 160° u. Zers. (B. 37, 775 C. 1904 [1] 1155).  
7) 7-Methyläther d. 3-Oximido-7-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 188° u. Zers. (B. 37, 1181 C. 1904 [1] 1275).  
8) 2<sup>3</sup>-Methyläther d. 3-Oximido-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 159—160° u. Zers. (B. 38, 934 C. 1905 [1] 1026).  
9) 2<sup>4</sup>-Methyläther d. 3-Oximido-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron (B. 38, 1508 C. 1905 [1] 1404).  
10) 6,7-Dioxy-1-[3,4-Dioxybenzyl]isochinolin + 2H<sub>2</sub>O (Papaverolin). HCl + H<sub>2</sub>O, HJ + 2H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 8½ H<sub>2</sub>O, Oxalat + 3H<sub>2</sub>O (M. 6, 967; II, 351). — IV, 443.  
11) 2-Oxy-4-Keto-3-Acetyl-2-Phenyl-3,4-Dihydro-1,3-Benzoxazin. Sm. 106° (Soc. 89, 1337 C. 1906 [2] 1417).  
12)  $\alpha$ -[2-Methylphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 168° (B. 39, 3110 C. 1906 [2] 1328).  
13)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 204° (B. 39, 3112 C. 1906 [2] 1328).  
14)  $\alpha$ -Benzoylamido- $\beta$ -[2-Oxyphenyl]akrylsäure. Sm. 185° (181°) (G. 19, 49; A. 337, 291 C. 1905 [1] 379; C. 1908 [2] 1947). — II, 1633.  
15)  $\alpha$ -Benzoylamido- $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 204° (205—206°) (A. 337, 295 C. 1905 [1] 379; C. 1908 [2] 1946).  
16)  $\alpha$ -Benzoylamido- $\beta$ -[4-Oxyphenyl]akrylsäure. Sm. 228—229° u. Zers. (A. 307, 141). — \*II, 953.  
17) 2-Benzoylmethylformylamidobenzol-1-Carbonsäure. Sm. 184° (B. 20, 3342). — II, 1254.  
18) 4-Benzoylamido-1-Methylbenzol-3-Ketocarbonsäure (Benzoyl-p-Methylisatinsäure). Sm. 183° (B. 28, 735). — II, 1652.  
19)  $\alpha$ -Phenyl- $\beta$ -[2-Amidophenyl]äthen- $\alpha\alpha'$ -Dicarbonsäure. Sm. 255 bis 256° (B. 39, 3115 C. 1906 [2] 1329).  
20) Säure (aus Benzil). Sm. 196° (Soc. 51, 31). — III, 282.  
21) Gem. Anhydrid d. Benzoylamidoessigsäure u. Benzolcarbonsäure (A. 133, 107). — II, 1186.  
22) Methylester d.  $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 75—76° (G. 25 [1] 172, 322). — II, 1474.  
23) Methylester d. isom.  $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]akrylsäure (vom Sm. 146—147°). Sm. 94—95° (G. 25 [1] 173). — II, 1474.  
24) Methylester d.  $\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]akrylsäure. Sm. 78 bis 79° (G. 25 [1] 174, 323). — II, 1474.  
25) Methylester d. isom.  $\alpha$ -Phenyl- $\beta$ -[3-Nitrophenyl]akrylsäure (vom Sm. 195—196°). Sm. 115—116° (G. 25 [1] 175). — II, 1474.  
26) Methylester d.  $\alpha$ -Phenyl- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 141 bis 142° (G. 25 [1] 176, 324). — II, 1475.  
27) Methylester d. isom.  $\alpha$ -Phenyl- $\beta$ -[4-Nitrophenyl]akrylsäure (vom Sm. 138—142°). Sm. 147—148,5° (G. 25 [1] 176). — II, 1475.  
28) Methylester d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -Phenylakrylsäure. Sm. 104° (J. pr. [2] 61, 183). — \*II, 874.

- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N** 29) Acetat d. 10-Nitro-9-Oxy-9,10-Dihydroanthracen. Sm. 120° u. Zers. (A. 330, 158 C. 1904 [1] 890).
- 30) Acetat d. Orcirufin. Sm. 204° (B. 23, 721). — II, 965.
- 31) Benzoat d. Acetylbenzoylhydroxylamin. Sm. 68—69° (Am. 20, 14). — \*II, 755.
- 32) N-Benzoat d. Acetbenzhydroxamsäure. Sm. 84—85° (Am. 20, 19). — \*II, 755.
- 33) Dibenzoat d. Acethydroxamsäure. Fl. (B. 29, 1220; Am. 20, 15). — \*II, 757.
- 34) Acetylamid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 97° (94°). +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (Soc. 87, 1227 C. 1905 [2] 1336; Soc. 89, 1335 C. 1906 [2] 1416).
- 35) Benzoylamid d. 2-Acetoxybenzol-1-Carbonsäure. Sm. 124° (Soc. 89, 1338 C. 1906 [2] 1416).
- 36) Benzoylmethylamid d. Benzol-1,2-Dicarbonsäure. Sm. 160°. Ag (B. 21, 2686). — III, 128.
- 37) 4-Methoxylbenzoylamid d. Benzolketocarbonsäure. Sm. 150° (B. 29, 2105). — \*II, 941.
- 38) 2-Naphtylamid d. Acetyläpfelsäure. Sm. 116° u. Zers. (B. 24, 2008). — II, 620.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>** C 61,7 — H 4,2 — O 20,6 — N 13,5 — M. G. 311.
- 1)  $\beta$ -[4-Nitrophenyl]azo- $\alpha\gamma$ -Diketo- $\alpha$ -Phenylbutan (4-Nitrophenylazobenzoylacetone). Sm. 141—142°. K + 2H<sub>2</sub>O (B. 32, 2641). — \*IV, 1074.
- 2) Dimethyläther d. 3-Nitro-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 190—192° (B. 41, 3689 C. 1908 [2] 1869).
- 3) 2,4,6-Triketo-5-Oxy-5-[4-Phenylamidophenyl]hexahydro-1,3-Diazin (4-Phenylamidophenylalloxan). Zers. bei 232° (C. 1900 [2] 789). — \*II, 221.
- 4) 1,3-Dinitro-1-Äthyl-2-Phenylindol. Sm. 221° (G. 30 [2] 280). — \*IV, 251.
- 5) Methyläther d. 7-Nitro-4-Keto-2-Methyl-3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 228° (C. 1908 [2] 180).
- 6) 6[oder 7]-Äthyläther d. 3,6[oder 3,7]-Dioxy-2-[2-Nitrophenyl]-1,4-Benzdiazin. Sm. 215—216° (B. 34, 4009 C. 1902 [1] 204). — \*IV, 685.
- 7) Anhydrid d. 3,5-Di[Acetylamido]-9-Oxyphenoxazoniumhydroxyd (A. 322, 28 C. 1902 [2] 222). — \*IV, 837.
- 8) Diacetylderivat d. 3-Nitro-3-Amidocarbazol. Sm. 199,5° (B. 34, 1684). — \*IV, 665.
- 9) 5-Methyl-2-[4-Acetoxyphenyl]-2,1,3-Benztriazol-2<sup>3</sup>-Carbonsäure. Sm. 198° (B. 40, 4208 C. 1907 [2] 2047).
- 10) Isamsäure. Ba, Ag (J. pr. [1] 35, 462; [1] 35, 115). — II, 1609.
- 11) Äthylester d. 6-Nitro-1-Phenylisoindazol-3-Carbonsäure. Sm. 158° (B. 23, 715). — IV, 1465.
- 12) Äthylester d. 5-Nitro-1-Phenylbenzimidazol-2-Carbonsäure. Sm. 150,5° (B. 38, 100 C. 1905 [1] 540).
- 13) Diacetat d. 1,3-Dioximidonaphtisoindol. Sm. 213° (B. 25, 2476). — II, 1879.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>Cl** 1) Chlorderivat d. Verb. C<sub>20</sub>H<sub>13</sub>O<sub>6</sub> (aus  $\alpha\beta\beta$ -Tri[1,4-Dioxyphenyl]äthan) (A. 243, 192). — II, 1046.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>Br** 1)  $\beta$ -Brom-4-Oxy-3-Methyldiphenylketon-4-Methyläther-2'-Carbonsäure. Sm. 219—220° (Soc. 91, 1631 C. 1907 [2] 2058).
- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>N** C 64,2 — H 4,3 — O 26,7 — N 4,7 — M. G. 299.
- 1)  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3-Methoxyphenyl]akrylsäure. Sm. 226—227° (B. 33, 1826). — \*II, 1006.
- 2)  $\alpha$ -Phenyl- $\beta$ -[6-Nitro-3-Methoxyphenyl]akrylsäure. Sm. 165—166° (B. 34, 4000 C. 1902 [1] 202).
- 3)  $\pi$ -[2-Methoxyphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 219—220° (B. 33, 168). — \*II, 1006.
- 4)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 177° u. Zers. (B. 33, 172). — \*II, 1006.
- 5) 1-[ $\alpha$ -Oxy- $\beta$ -Nitro- $\beta$ -(2-Methylphenyl)äthenyl]benzol-2-Carbonsäure. Na<sub>2</sub> + 2H<sub>2</sub>O (B. 33, 2819).
- 6)  $\alpha$ -Benzoylamidophenylelessigsäure- $\alpha^2$ -Carbonsäure. Sm. 162—163° (B. 37, 1690 C. 1904 [1] 1524).



- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>N** 7) Benzoylphenylamidoessigsäure-2-Carbonsäure. Sm. 197° (195° u. Zers.) (C. 1899 [2] 462; B. 35, 1685 C. 1902 [1] 1362). — \*II, 786.  
 8) Dimethylester d. 3-Benzoylpyridin-2,3'-Dicarbonsäure. Sm. 110 bis 111° (M. 21, 986). — \*IV, 129.  
 9) Äthylester d. Säure C<sub>14</sub>H<sub>9</sub>O<sub>5</sub>N (aus bim. Benzoylcyanid). Sm. 143 bis 144° (B. 41, 1897 C. 1908 [2] 160).  
 10) 3-Carboxylbenzylmonamid d. Benzol-1,2-Dicarbonsäure (m-Carboxylbenzylphthalamidsäure). Sm. 228—230° (B. 24, 2420). — II, 1798.  
 11) 4-Carboxylbenzylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 255°. Ag (B. 23, 1059). — II, 1798.
- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>** C 58,7 — H 4,0 — O 24,5 — N 12,8 — M. G. 327.  
 1) Dimethyläther d. 5-Nitro-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin (Nitroopiansäurephenylhydrazid). Sm. 173° (B. 19, 765). — IV, 717.  
 2) 2-Nitro-4-Methylphenylazobenzoylessigsäure. Sm. 194° (B. 18, 2566). — IV, 1473.  
 3) Methylester d. β-[4-Nitrophenyl]hydrazon-α-Keto-α-Phenyläthan-β-Carbonsäure. Sm. 148—149° (C. r. 147, 74 C. 1908 [2] 694).  
 4) 3,3'-Dicarboxylmonamid d. Oxalsäurediphenylamid (Oxalidibenzamidsäure) (A. 232, 138). — II, 1265.  
 5) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>N<sub>4</sub>). Zers. bei 175° (B. 41, 376 C. 1908 [1] 827).
- C<sub>16</sub>H<sub>18</sub>O<sub>5</sub>Cl** 1) Äthylester d. 3-Chlor-1,2-Naphtochinon-4-Acetylessigsäure. Sm. 175° (B. 33, 2415). — \*II, 1143.  
 2) Äthylester d. 3-Chlor-1,4-Naphtochinon-2-Acetylessigsäure. Sm. 106—107° (B. 33, 2404). — \*II, 1143.
- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>Br** 1) Brombrasilin (B. 18, 1140). — III, 653.  
 2) Äthylester d. 3-Brom-1,4-Naphtochinon-2-Acetylessigsäure. Sm. 98° (B. 32, 263). — \*II, 1144.
- C<sub>16</sub>H<sub>13</sub>O<sub>6</sub>N** C 61,0 — H 4,1 — O 30,5 — N 4,4 — M. G. 315.  
 1) Säure + 2H<sub>2</sub>O (aus Corydinsäure). Sm. 278°. Pb (Soc. 71, 663; Ar. 243, 186 C. 1905 [2] 56). — \*III, 650.  
 2) Äthylester d. 3'-Nitro-4-Oxydiphenylketon-3-Carbonsäure. Sm. 116° (A. 290, 170). — \*II, 1094.  
 3) Acetat d. 2-Methyl-6-[2-Nitro-5-Oxy-3-Methylphenyl]-1,4-Benzochinon. Sm. 143° (B. 31, 1336). — \*II, 578.  
 4) 4-Methoxyl-3-Carboxylphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 244° (G. 36 [2] 737 C. 1907 [1] 1122).
- C<sub>16</sub>H<sub>13</sub>O<sub>6</sub>N<sub>3</sub>** C 56,0 — H 3,8 — O 28,0 — N 12,2 — M. G. 343.  
 1) 9,9,10-Trinitro-10-Äthyl-9,10-Dihydroanthracen. Sm. 130° u. Zers. (136°) (B. 14, 473; A. 330, 175 C. 1904 [1] 891). — II, 252.  
 2) 3-Nitro-4-Acetylamidobiphenyl-4'-Oxaminsäure. Sm. 155° (J. pr. [2] 77, 361 C. 1908 [1] 1695).  
 3) 3-Nitro-4'-Acetylamidobiphenyl-4-Oxaminsäure. Sm. oberhalb 250° (J. pr. [2] 77, 360 C. 1908 [1] 1695).  
 4) 2-Nitro-4'-Acetoxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 167° (171°) (B. 40, 4206 C. 1907 [2] 2047; C. 1908 [2] 310).  
 5) 3-Nitro-4'-Acetoxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 180° (C. 1908 [2] 310).  
 6) Methylester d. 4'-Nitro-4-Acetoxyazobenzol-3-Carbonsäure. Sm. 131° (J. pr. [2] 78, 396 C. 1909 [1] 362).  
 7) Diacetat d. 4'-Nitro-3,4-Dioxyazobenzol. Sm. 126—127° (B. 26, 1075). — IV, 1441.  
 8) Diacetat d. 6-Nitro-3,3'-Dioxyazobenzol. Sm. 141° (J. pr. [2] 67, 268 C. 1903 [1] 1221). — \*IV, 1032.  
 9) 2-Nitro-4-Acetylamidophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 177° (B. 40, 3184 C. 1907 [2] 800).
- C<sub>16</sub>H<sub>18</sub>O<sub>6</sub>N<sub>5</sub>** C 51,7 — H 3,5 — O 25,9 — N 18,9 — M. G. 371.  
 1) 1-Amidonaphtalin + 2,4,6-Trinitro-1-Amidobenzol. Sm. 203° (Soc. 79, 532).  
 2) 2-Amidonaphtalin + 2,4,6-Trinitro-1-Amidobenzol. Sm. 161,5° (Soc. 79, 532).

- C<sub>16</sub>H<sub>13</sub>O<sub>7</sub>N** C 58,0 — H 3,9 — O 33,8 — N 4,3 — M. G. 331.  
 1) 2-[3,4-Dimethoxybenzoyl]pyridin-3,4-Dicarbonsäure + H<sub>2</sub>O (Papaverinsäure). Sm. 233° u. Zers. K, K<sub>2</sub> + 2½ H<sub>2</sub>O, Ca + 1½ H<sub>2</sub>O, Ba, 2Cu + Cu(OH)<sub>2</sub> + 6 H<sub>2</sub>O, AgH + H<sub>2</sub>O, Ag<sub>2</sub> + 2½ H<sub>2</sub>O, HCl + 2½ H<sub>2</sub>O (M. 6, 380; 10, 692; 18, 466; Ph. Ch. 3, 398; 5, 419; M. 23, 384 C. 1902 [2] 204). — IV, 176; \*IV, 131.  
 2) α,2'-Lakton d. p-Nitro-α,4-Dioxy-3',4'-Dimethoxyldiphenylmethan-2'-Carbonsäure (Nitrooxyphenylmekonin). Sm. 177,5—179° (B. 27, 2639). — II, 2021.
- C<sub>16</sub>H<sub>13</sub>O<sub>7</sub>N<sub>3</sub>** C 53,5 — H 3,6 — O 31,2 — N 11,7 — M. G. 359.  
 1) p-Trinitro-2,4,5-Trimethyldiphenylketon. Sm. 155° (J. pr. [2] 35, 493). — III, 236.  
 2) p-Trinitro-2,4,5-Trimethyldiphenylketon. Sm. 185° (J. pr. [2] 35, 493). — III, 236.  
 3) p-Trinitro-2,4,6-Trimethyldiphenylketon. Sm. 145° (J. pr. [2] 35, 488). — III, 237.  
 4) p-Trinitro-2,4,6-Trimethyldiphenylketon. Sm. 188° (J. pr. [2] 35, 488). — III, 237.
- C<sub>16</sub>H<sub>13</sub>O<sub>7</sub>Cl<sub>3</sub>** 1) Trichlorbarbaloin + 1½ H<sub>2</sub>O. Na<sub>2</sub> (C. 1898 [2] 582; Bl. [3] 21, 673; [3] 23, 786, 793).  
 2) Trichlorisobarbaloin + 4 H<sub>2</sub>O (C. 1898 [2] 582; Bl. [3] 23, 788).
- C<sub>16</sub>H<sub>13</sub>O<sub>7</sub>Br<sub>3</sub>** 1) Tribrombarbaloin + 3 H<sub>2</sub>O (Bl. [3] 23, 786, 793).  
 2) Tribromisobarbaloin (oder C<sub>21</sub>H<sub>16</sub>O<sub>8</sub>Br<sub>3</sub>). Sm. 191° (B. 23 [2] 207; C. 1898 [2] 582; 1903 [1] 235; Bl. [3] 21, 670 Anm.; [3] 23, 789). — III, 618; \*III, 454.
- C<sub>16</sub>H<sub>13</sub>O<sub>8</sub>N<sub>3</sub>** C 51,2 — H 3,5 — O 34,1 — N 11,2 — M. G. 375.  
 1) 3-Methyläther-4-[2,4,6-Trinitrophenyl]äther d. 3,4-Dioxy-1-Allylbenzol. Sm. 92—93° (B. 27, 2458; D.R.P. 74433). — II, 974; \*II, 588.  
 2) 3-Methyläther-4-[2,4,6-Trinitrophenyl]äther d. 3,4-Dioxy-1-Propenylbenzol. Sm. 145—146° (B. 27, 2459; D.R.P. 74433). — II, 977; \*II, 590.
- C<sub>16</sub>H<sub>13</sub>O<sub>9</sub>N<sub>5</sub>** C 45,8 — H 3,1 — O 34,3 — N 16,7 — M. G. 419.  
 1) Äthylester d. p-Trinitro-4-Benzoylamidophenylamidoameisensäure. Sm. 210° (B. 17, 2628). — IV, 595.
- C<sub>16</sub>H<sub>13</sub>O<sub>10</sub>N** C 50,7 — H 3,4 — O 42,2 — N 3,7 — M. G. 379.  
 1) Methylentanninformamid (D.R.P. 165980 C. 1906 [1] 512).
- C<sub>16</sub>H<sub>13</sub>O<sub>10</sub>N<sub>3</sub>** C 47,2 — H 3,2 — O 39,3 — N 10,3 — M. G. 407.  
 1) Diäthylester d. p-Trinitronaphtalin-1,5-Dicarbonsäure. Sm. 152 bis 153° (G. 26 [1] 106). — \*II, 1088.
- C<sub>16</sub>H<sub>13</sub>O<sub>12</sub>N<sub>7</sub>** C 38,8 — H 2,6 — O 38,8 — N 19,8 — M. G. 495.  
 1) 2,4,6,2',4',6'-Hexanitro-3,5,3',5'-Tetramethyldiphenylamin. Sm. 222° (R. 25, 375 C. 1907 [1] 464).
- C<sub>16</sub>H<sub>13</sub>NBr<sub>2</sub>** 1) Brommethylat d. 3[oder 4]-Brom-2-Phenylchinolin. Sm. 248—250° (B. 37, 4670 C. 1905 [1] 382).
- C<sub>16</sub>H<sub>13</sub>NS** 1) 2-Methyl-4,5-Diphenylthiazol. Sm. 51—52°. HCl (A. 259, 244). — IV, 443.  
 2) Benzyläther d. 8-Merkaptochinolin. Sm. 112° (B. 41, 939 C. 1908 [1] 1704).
- C<sub>16</sub>H<sub>13</sub>NS<sub>2</sub>** 1) 2-Thiocarbonyl-4-Phenyl-3-[2-Methylphenyl]-2,3-Dihydrothiazol. Sm. 146° (J. pr. [2] 75, 197 C. 1907 [1] 1501).  
 2) 2-Thiocarbonyl-4-Phenyl-3-[3-Methylphenyl]-2,3-Dihydrothiazol. Sm. 195° (J. pr. [2] 75, 198 C. 1907 [1] 1501).  
 3) 2-Thiocarbonyl-4-Phenyl-3-[4-Methylphenyl]-2,3-Dihydrothiazol. Sm. 146° (J. pr. [2] 75, 193 C. 1907 [1] 1501).
- C<sub>16</sub>H<sub>13</sub>NS<sub>4</sub>** 1) Rhodanid (aus Trithiodibutolakton). Sm. 212° u. Zers. (B. 34, 3404). — \*III, 594.
- C<sub>16</sub>H<sub>13</sub>N<sub>2</sub>Cl** 1) 2-Chlor-4-[2,4-Dimethylphenyl]-1,3-Benzdiazin. Sm. 126° (B. 32, 1262). — \*IV, 692.  
 2) Nitril d. β-Imido-γ-Phenyl-α-[4-Chlorphenyl]buttersäure. Sm. 67 bis 70° (J. pr. [2] 67, 392 C. 1903 [1] 1357).
- C<sub>16</sub>H<sub>13</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) αβδ-Trichlor-αγ-Di[Phenylimido]butan. Sm. 209—211° (A. 214, 221; 279, 50). — \*II, 206.

- $C_{16}H_{15}N_2Br$  1) 4-Brom-3-Methyl-1,5-Diphenylpyrazol. Sm. 75° (B. 18, 316). — IV, 936.  
 2) p-Brom-5-Methyl-2-[ $\beta$ -Phenyläthenyl]benzimidazol. Sm. 195°. HBr (J. pr. [2] 74, 321 C. 1906 [2] 1822).
- $C_{16}H_{13}N_2J$  1) Jodmethylat d. Chindolin. +  $J_2$  (B. 39, 3941 C. 1907 [1] 119).
- $C_{16}H_{13}N_2Cl_2$  1) 3-Chlor-5-[ $\alpha$ - oder  $\beta$ -Chlor- $\beta$ -Phenyläthyl]-1-Phenyl-1,2,4-Triazol. Sm. 112—113° (B. 30, 2435). — IV, 1163.
- $C_{16}H_{13}N_3Br_2$  1) 5-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]-1-Phenyl-1,2,4-Triazol. Sm. 152° (B. 30, 2438). — IV, 1163.
- $C_{16}H_{13}N_3S$  1) 3-Benzylidenamido-2-Thiocarbonyl-1-Phenyl-2,3-Dihydroimidazol. Sm. 140—141° (B. 27, 2206).  
 2) Verbindung (aus Benzoacetodinitril u. Phenylsenföhl). Sm. 166° (J. pr. [2] 79, 68 C. 1909 [1] 744).  
 3) Verbindung (aus Anilin u. 8-Rhodanchinolin). Sm. 142° (B. 41, 941 C. 1908 [1] 1704).
- $C_{16}H_{13}N_3S_2$  1) 5-Dimethylamidobiphenyl-2,4'-Dithiocarbonimid. Sm. 149° (A. 303, 358). — \*IV, 822.
- $C_{16}H_{13}N_4Cl$  1) 3-Chlor-4-Phenylazo-5-Methyl-1-Phenylpyrazol. Sm. 90° (B. 38, 155 C. 1905 [1] 449; A. 338, 232 C. 1905 [1] 1159).  
 2) 5-Chlor-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 109°. 2 + AgNO<sub>3</sub> (B. 36, 3597 C. 1903 [2] 1378; A. 338, 189 C. 1905 [1] 1156).  
 3) 5-Chlor-4-Phenylazo-1-Methyl-3-Phenylpyrazol. Sm. 94° (A. 352, 168 C. 1907 [1] 1047).  
 4) 3-Chlor-4-[4-Methylphenyl]azo-1-Phenylpyrazol. Sm. 106° (A. 338, 223 C. 1905 [1] 1158).
- $C_{16}H_{13}N_4Br$  1) 5-Brom-2,4-Di[Phenylamido]-1,3-Diazin. Sm. 191° (Am. 33, 444 C. 1905 [1] 1711).
- $C_{16}H_{13}N_4J$  1) 5-Jod-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 129° (A. 338, 191 C. 1905 [1] 1156).
- $C_{16}H_{13}Cl_3Br_2$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[p-Brom-4-Methylphenyl]äthan. Sm. 148° (B. 7, 1192). — II, 239.
- $C_{16}H_{14}ON_2$  C 76,8 — H 5,6 — O 6,4 — N 11,2 — M. G. 250.  
 1)  $\alpha$ -Imido- $\alpha$ -Benzoylmethylenamido- $\alpha$ -[4-Methylphenyl]methan. Sm. 220°. HCl (B. 34, 3028). — \*IV, 572.  
 2)  $\alpha$ -Imido- $\alpha$ -[4-Methylbenzoyl]methylenamido- $\alpha$ -Phenylmethan. Sm. 254°. HCl, (2HCl, PtCl<sub>4</sub>), Ag (B. 34, 3026). — \*IV, 569.  
 3) 3-Phenylhydrazon-1-Keto-2-Methyl-2,3-Dihydroinden. Sm. 162 bis 164° (A. 252, 84). — IV, 784.  
 4) 2-Phenylhydrazon-3-Methyl-1,2-Benzpyran. Sm. 116° (B. 24, 3461). — IV, 697.  
 5) 2-Phenylhydrazon-4-Methyl-1,2-Benzpyran. Sm. 106° (B. 41, 837 Anm. C. 1908 [1] 1460).  
 6) 2-Phenylhydrazon-7-Methyl-1,2-Benzpyran. Sm. 139° (Soc. 93, 527 C. 1908 [1] 1932).  
 7) Methyläther d. 3-Phenyl-5-[4-Oxyphenyl]pyrazol. Sm. 170° (C. r. 136, 1264 C. 1903 [2] 122). — \*IV, 688.  
 8) 5-Methyl-3-Phenyl-1-[4-Oxyphenyl]pyrazol. Sm. 206° (A. 278, 300). — IV, 937.  
 9) 3-Keto-2-Phenyl-5-Benzyl-2,3-Dihidropyrazol. Sm. 131—134° (A. 298, 381). — IV, 938.  
 10) 3-Keto-4-Phenyl-5-Benzyl-2,3-Dihidropyrazol. Sm. 172°. + C<sub>2</sub>H<sub>5</sub>O (Sm. 125—126°) (A. 296, 10). — IV, 1033.  
 11) 3-Keto-2-Methyl-1,5-Diphenyl-2,3-Dihidropyrazol. Sm. 139°. Pikrat (B. 26, 110; A. 358, 160 C. 1908 [1] 855). — IV, 907.  
 12) 3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihidropyrazol. Sm. 150°. HCl, 4CHN + Fe(CN)<sub>2</sub>, Pikrat (B. 20, 2549). — IV, 906.  
 13) 5-Keto-3-Methyl-1,4-Diphenyl-4,5-Dihidropyrazol. Sm. 196° (B. 31, 3164). — \*IV, 619.  
 14) 2-Keto-1-Methyl-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. 274—275° (A. 284, 33; B. 40, 4802 C. 1908 [1] 373). — III, 223.  
 15) 1-Benzoyl-2-Phenyl-4,5-Dihydroimidazol (B. 25, 2136). — IV, 841.  
 16) 5-Imido-4-Phenyl-3-Benzyl-4,5-Dihydroisoxazol. Sm. 107—108°. HCl (J. pr. [2] 55, 351). — \*II, 1009.



- C<sub>16</sub>H<sub>14</sub>ON<sub>2</sub>** 17) **3,5-Di[2-Methylphenyl]-1,2,4-Oxdiazol.** Sm. 58—59° (*B.* 22, 3156). — II, 1331.
- 18) **3,5-Di[4-Methylphenyl]-1,2,4-Oxdiazol.** Sm. 135° (*B.* 22, 2437; 28, 2229). — II, 1344; \*II, 828.
- 19) **5-Phenyl-3-[2,4-Dimethylphenyl]-1,2,4-Oxdiazol.** Sm. 98° (*B.* 22, 2444). — II, 1377.
- 20) **2,5-Di[2-Methylphenyl]-1,3,4-Oxdiazol.** Sm. 121°. + 2AgNO<sub>3</sub> (*J. pr.* [2] 69, 374 *C.* 1904 [2] 535).
- 21) **2,5-Di[3-Methylphenyl]-1,3,4-Oxdiazol.** Sm. 72°. + AgNO<sub>3</sub> (*J. pr.* [2] 69, 376 *C.* 1904 [2] 535).
- 22) **2,5-Di[4-Methylphenyl]-1,3,4-Oxdiazol.** Sm. 175° (233—234°). + AgNO<sub>3</sub> (*B.* 27, 3288; *A.* 298, 16; *J. pr.* [2] 69, 377 *C.* 1904 [2] 535). — IV, 1034, 1290.
- 23) **2,5-Dibenzyl-1,3,4-Oxdiazol.** Sm. 98° (*J. pr.* [2] 69, 378 *C.* 1904 [2] 535).
- 24) **3-Keto-2,6-Diphenyl-2,3,4,5-Tetrahydro-1,2-Diazin** (Inneres Anhydrid d.  $\gamma$ -Phenylhydrazon- $\gamma$ -Phenylbuttersäure). Sm. 98° (*B.* 24, 4081; 26, 462; *C.* 1900 [2] 329; *A.* 299, 16, 53). — IV, 697.
- 25) **6-Keto-2,4-Diphenyl-3,4,5,6-Tetrahydro-1,3-Diazin.** Sm. 180°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 83, 377 *C.* 1903 [1] 845, 1144; *Soc.* 83, 722 *C.* 1903 [2] 54). — \*IV, 693.
- 26) **6-Oxy-4,5-Dimethyl-2-[2-Naphtyl]-1,3-Diazin.** Sm. 248° (*B.* 25, 1427). — IV, 1032.
- 27) **6-Benzoylamido-2-Methylindol.** Sm. 209° (*B.* 37, 4377 *C.* 1905 [1] 170).
- 28) **3-[2-Methylphenyl]imido-2-Keto-5-Methyl-2,3-Dihydroindol** (p-Methylisatin-o-Tolyimid). Sm. 191° (*B.* 16, 2268). — II, 1652.
- 29) **3-[4-Methylphenyl]imido-2-Keto-5-Methyl-2,3-Dihydroindol.** Sm. 259° (*B.* 16, 2262; 18, 198; 28 [2] 613; D.R.P. 25136; *A.* 332, 261 *C.* 1904 [2] 699). — II, 1652; \*II, 961.
- 30) **3-[2-Methylphenyl]imido-2-Keto-7-Methyl-2,3-Dihydroindol** (o-Tolyl-o-Methylimesatin). Sm. 225° u. Zers. (*B.* 40, 4974 *C.* 1908 [1] 457).
- 31) **Äthyläther d. 3-Oximido-2-Phenylpseudindol.** Sm. 91° (45°) (*C.* 1905 [2] 899; *G.* 36 [2] 59 *C.* 1906 [2] 1128; *C.* 1908 [2] 605).
- 32) **2-[4-Methylphenyl]amido-3-Keto-5-Methylpseudindol.** Sm. 180° u. Zers. (*C.* 1901 [1] 71). — \*II, 961.
- 33) **2-[2-Methylphenyl]amido-3-Keto-7-Methylpseudindol.** Sm. 140° (*C.* 1901 [1] 71). — \*II, 960.
- 34) **2-Oxy-4-Methyl-6-[4-Amidophenyl]chinolin** (*M.* 19, 704). — \*IV, 691.
- 35) **Methyläther d. 6-Oxy-2-[3-Amidophenyl]chinolin.** Sm. 127°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (*B.* 20, 1920). — IV, 1024.
- 36) **Methyläther d. 2-Amido-3-[4-Oxyphenyl]chinolin.** Sm. 151—152°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (*B.* 32, 3401).
- 37) **2-Amido-1-Keto-3-[3-Methylphenyl]-1,2-Dihydroisochinolin.** Sm. 98 bis 99° (*B.* 38, 3855 *C.* 1906 [1] 39).
- 38) **Methylchindanol.** Zers. bei 160°. Jodid, Pikrat (*B.* 39, 3941 *C.* 1907 [1] 119; *B.* 40, 3478 *C.* 1907 [2] 1422).
- 39) **3-Keto-2-[ $\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydro-1,4-Benzdiazin.** Sm. 223—224° (*B.* 25, 954). — IV, 1033.
- 40) **2-Keto-2-[2,4-Dimethylphenyl]-1,2-Dihydro-1,3-Benzdiazin.** Sm. 260—261°. HCl, H<sub>2</sub>SO<sub>4</sub>, Bichromat, Pikrat (*B.* 32, 1261). — \*IV, 692.
- 41) **2-Keto-6-Methyl-1-[4-Methylphenyl]-1,2-Dihydro-1,4-Benzdiazin.** Sm. 170—171° (*B.* 39, 1322 *C.* 1906 [1] 1738).
- 42) **2-Keto-7-Methyl-1-[4-Methylphenyl]-1,2-Dihydro-1,4-Benzdiazin.** Sm. 173° (*B.* 39, 1323 *C.* 1906 [1] 1738).
- 43) **2-Keto-3-Methyl-1-Benzyl-1,2-Dihydro-1,4-Benzdiazin.** Sm. 99 bis 100°; Sd. oberhalb 350° u. Zers. (*B.* 25, 1631; D.R.P. 64923). — IV, 903; \*IV, 602.
- 44) **1-Keto-4-Äthyl-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin.** Sm. 102° (*B.* 32, 959). — \*IV, 618.
- 45) **1-Keto-2-Äthyl-4-Phenyl-1,2-Dihydro-2,3-Benzdiazin.** Sm. 109° (*J. pr.* [2] 51, 152). — IV, 1023.
- 46) **1-Keto-2-Methyl-4-Benzyl-1,2-Dihydro-2,3-Benzdiazin.** Sm. 148° (*B.* 29, 1434). — \*II, 1004.
- 47) **1-Keto-2-Methyl-4-[4-Methylphenyl]-1,2-Dihydro-2,3-Benzdiazin.** Sm. 170° (*J. pr.* [2] 51, 154). — IV, 1029.

- C<sub>16</sub>H<sub>14</sub>ON<sub>2</sub>** 48) 1-Keto-4-[<sup>2</sup>-Dimethylphenyl]-1,2-Dihydro-2,3-Benzdiazin. Sm. oberhalb 250° (*J. pr.* [2] 51, 154). — IV, 1033.
- 49) Phenyläther d. 4-Oxy-1-Äthyl-2,3-Benzdiazin. Sm. 89° (*B.* 38, 209 *C.* 1905 [1] 520).
- 50) Hydroisocindileucin. Sm. 160° u. Zers. (*B.* 18, 2243). — III, 121.
- 51) Nitrosotetrahydrofluorennicholin. Sm. 162° (*B.* 35, 3280 *C.* 1902 [2] 1261). — \*IV, 254.
- 52) Oxymethylphenylchinizin +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 122°. (2HCl, PtCl<sub>4</sub>) (*B.* 19, 1771; D.R.P. 39563, 39564; *M.* 7, 194). — IV, 1496; \*IV, 1089.
- 53) N-Anhydrid d.  $\alpha$ -Methylhydrazon- $\alpha\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure. Sm. 133° (*B.* 38, 3846 *C.* 1908 [1] 38).
- 54) N-Anhydrid d.  $\alpha$ -Hydrazon- $\alpha$ -[3-Methylphenyl]- $\beta$ -Phenyläthan- $\beta^2$ -Carbonsäure. Sm. 190—191° (*B.* 38, 3855 *C.* 1906 [1] 39).
- 55) Anhydroderivat d.  $\beta$ -Phenylhydrazon- $\alpha$ -Phenylpropan-2-Carbonsäure. Sm. 198—199° (*B.* 32, 966). — \*IV, 619.
- 56) Nitril d.  $\beta$ -Oximido- $\alpha\gamma$ -Diphenylpropan- $\alpha$ -Carbonsäure. Sm. 107° (*J. pr.* [2] 52, 115). — \*II, 1010.
- 57) Nitril d. 5-Keto-2-Methyl-1-[1-Naphtyl]tetrahydropyrrol-2-Carbonsäure. Fl. (*B.* 38, 1224 *C.* 1905 [1] 1257).
- 58) Nitril d. 5-Keto-2-Methyl-1-[2-Naphtyl]tetrahydropyrrol-2-Carbonsäure. Sm. 78,5° (*B.* 38, 1223 *C.* 1905 [1] 1257).
- 59) Phenylamid d. 2-Methylindol-1-Carbonsäure. Sm. 170° (*J. pr.* [2] 61, 262). — \*IV, 159.
- 60) 2-Methylphenylamid d. Phenylcyanessigsäure. Sm. 139° (*Am.* 39, 76 *C.* 1908 [1] 826).
- 61) 3-Methylphenylamid d. Phenylcyanessigsäure. Sm. 131° (*Am.* 39, 76 *C.* 1908 [1] 826).
- 62) 4-Methylphenylamid d. Phenylcyanessigsäure. Sm. 139° (*Am.* 39, 76 *C.* 1908 [1] 826).
- 63) Dibenzylamid d. Cyanameisensäure. + AgCN (*B.* 25, 1827). — II, 524.
- 64) Di[4-Methylphenyl]amid d. Cyanameisensäure. + 2AgCN (*B.* 25, 1828). — II, 490.
- 65) Benzylidenhydrazid d.  $\beta$ -Phenylakrylsäure. Sm. 180° (*B.* 42, 3454 *C.* 1909 [2] 1660).
- 66)  $\gamma$ -Phenylallylidenhydrazid d. Benzolcarbonsäure (Cinnamalbenzoylhydrazin). Sm. 193° (*J. pr.* [2] 50, 303). — III, 62.
- 67) Base (aus Benzidin u. Formaldehyd) oder C<sub>15</sub>H<sub>14</sub>ON<sub>2</sub>. (2HCl, PtCl<sub>4</sub>) (*B.* 25, 1936). — IV, 967.
- 68) Verbindung (aus Amidomethylphenylketon). Sm. 118—119° (*B.* 21, 1276). — III, 125.
- 69) Verbindung (aus 3,4-Diamido-1-Methylbenzol u. Phenylbrenztraubensäure). Sm. 202—203° (*A.* 271, 168). — IV, 618.
- C<sub>16</sub>H<sub>14</sub>ON<sub>4</sub>** C 69,1 — H 5,0 — O 5,8 — N 20,1 — M. G. 278.
- 1) 3-Oxy-4-Phenylazo-5-Methyl-1-Phenylpyrazol. Sm. 99—100°. Na, HCl (*A.* 338, 230 *C.* 1905 [1] 1159).
- 2) 3-Keto-4-Phenylazo-5-Methyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 99—100° (*B.* 38, 155 *C.* 1905 [1] 449).
- 3) 5-Keto-4-Phenylazo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 156° (153°) (*A.* 238, 197; 247, 205; 253, 188; 295, 338; 325, 157; *B.* 21, 1203; 22, 1407, 2546; 23, 560, 851; 27, 1143, 1176; 28, 625, 1790; 29, 1662; 32, 203; 33, 495; 34, 2739; *Soc.* 59, 336; *B.* 35, 1439 *C.* 1902 [1] 1230; *B.* 36, 2687 *C.* 1903 [2] 1009; *J. pr.* [2] 70, 379 *C.* 1904 [2] 1719; *B.* 39, 2024 *C.* 1906 [2] 433). — IV, 801, 1488; \*IV, 1078.
- 4) 5-Keto-4-Phenylazo-1-Methyl-3-Phenyl-4,5-Dihydropyrazol. Sm. 158° (*A.* 352, 168 *C.* 1907 [1] 1047).
- 5) 5-Keto-4-[2-Methylphenyl]hydrazon-3-Phenyl-4,5-Dihydropyrazol. Sm. 179° (*B.* 27, 783; *J. pr.* [2] 51, 62). — IV, 1490.
- 6) 5-Keto-4-[4-Methylphenyl]hydrazon-3-Phenyl-4,5-Dihydropyrazol. Sm. 185° (*B.* 27, 784; *J. pr.* [2] 51, 62). — IV, 1490.
- 7) 5-Nitrosimido-1-Phenyl-3-[4-Methylphenyl]-4,5-Dihydropyrazol. Sm. 232° (*J. pr.* [2] 58, 145). — \*IV, 816.
- 8) 5-Acetylamido-1,4-Diphenyl-1,2,3-Triazol. Sm. 172° (*B.* 35, 4058 *C.* 1903 [1] 171). — \*IV, 942.

- C<sub>18</sub>H<sub>14</sub>ON<sub>4</sub>** 9) **3-Acetylamido-1,5-Diphenyl-1,2,4-Triazol.** HCl (*Am.* 29, 78 *C.* 1903 [1] 523). — \*IV, 941.
- 10) **2-Acetylphenylamido-1-Phenyl-1,3,4-Triazol.** Sm. 170—171° (*B.* 33, 1067). — \*IV, 898.
- 11) **4-[4-Amidophenyl]azo-3-Methyl-5-Phenylisoxazol.** Sm. 191° (*B.* 39, 2463 *C.* 1906 [2] 677).
- 12) **1-Acetyl-3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin.** Sm. 267° (*B.* 27, 1005; *A.* 297, 262). — II, 1215; \*II, 762.
- 13) **2-Acetyl-3-[2-Methylphenylazo]indazol.** Sm. 163° (*J. pr.* [2] 78, 403 *Anm. C.* 1909 [1] 363).
- C<sub>16</sub>H<sub>14</sub>OBr<sub>2</sub>** 1) **Methyläther d.  $\beta,\beta$ -Dibrom- $\alpha$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen.** Sm. 98—99° (*B.* 37, 229 *C.* 1904 [1] 659).
- 2)  **$\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\alpha\delta$ -Diphenylbutan.** Sm. 93° (*M.* 19, 413). — \*III, 172.
- 3)  **$\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropan.** Fl. (*Soc.* 79, 935). — \*III, 174.
- 4)  **$\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -Phenylpropan.** Sm. 159° (*B.* 32, 2283). — \*III, 174.
- 5)  **$\beta$ -Dibrom- $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthan.** Sm. 113° (*B.* 15, 1681). — III, 235.
- 6) **3,4-Dibrom-2,5-Diphenyltetrahydrofuran.** Sm. 110—111° (*A.* 306, 215). — \*III, 500.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** C 72,2 — H 5,3 — O 12,0 — N 10,5 — M. G. 266.
- 1)  **$\alpha\beta$ -Di[Benzoylamido]äthen.** Sm. 202—203° (*A.* 273, 352; *B.* 37, 3115 *C.* 1904 [2] 1316). — II, 1170.
- 2) **isom.  $\alpha\beta$ -Di[Benzoylamido]äthen.** Zers. bei 280—290° (*A.* 273, 355). — II, 1170.
- 3) **s-Cinnamoylphenylharnstoff.** Sm. 211—212° (*Soc.* 67, 1047). — \*II, 851.
- 4) **polym. 2-Methylphenylisocyanat,** siehe C<sub>8</sub>H<sub>7</sub>ON. — II, 463.
- 5) **polym. 4-Methylphenylisocyanat,** siehe C<sub>8</sub>H<sub>7</sub>ON. — II, 494.
- 6) **1-Amido-4-Dimethylamido-9,10-Anthrachinon** (*D.R.P.* 136777 *C.* 1902 [2] 1375).
- 7) **1,5-Di[Methylamido]-9,10-Anthrachinon** (*D.R.P.* 144634 *C.* 1903 [2] 750; *B.* 37, 70 *C.* 1904 [1] 666; *D.R.P.* 156056 *C.* 1904 [2] 1631; *D.R.P.* 165728 *C.* 1906 [1] 516; *D.R.P.* 181722 *C.* 1907 [1] 1652; *D.R.P.* 205881 *C.* 1909 [1] 882).
- 8) **1,8-Di[Methylamido]-9,10-Anthrachinon** (*D.R.P.* 144634 *C.* 1903 [2] 750; *D.R.P.* 156056 *C.* 1904 [2] 1631; *D.R.P.* 165728 *C.* 1906 [1] 516).
- 9)  **$\gamma$ -Oximido- $\alpha$ -[2-Benzoylamidophenyl]propen.** Sm. 170—171° (*B.* 38, 3420 *C.* 1905 [2] 1597).
- 10) **1,3-Dioximido-5-Methyl-2-Phenyl-2,3-Dihydroinden.** Sm. 204° u. Zers. (*B.* 29, 2380). — \*III, 233.
- 11) **1,3-Dioximido-2-[2-Methylphenyl]-2,3-Dihydroinden.** Sm. 212° (*B.* 33, 2820). — \*III, 233.
- 12) **1,3-Dioximido-2-[3-Methylphenyl]-2,3-Dihydroinden.** Sm. 222° u. Zers. (*B.* 28, 1389). — III, 303.
- 13) **Dimethyläther d. 9,10-Dioximido-9,10-Dihydrophenanthren.** Sm. 145—146° (*B.* 40, 2457 *C.* 1907 [2] 245).
- 14) **Methylenäther d.  $\gamma$ -Phenylhydrazon- $\alpha$ -[3,4-Dioxyphenyl]propen** (Piperonylakroleinphenylhydrazon). Sm. 160° (163—164°) (*B.* 27, 2959; *B.* 41, 2380 *C.* 1908 [2] 890). — IV, 764.
- 15)  **$\gamma$ -Phenylhydrazon- $\alpha\beta$ -Diketo- $\alpha$ -Phenylbutan.** Sm. 167° (*B.* 35, 3316 *C.* 1902 [2] 1110). — \*IV, 516.
- 16)  **$\alpha$ -Phenylazo- $\alpha$ -Benzoyl- $\beta$ -Ketopropan** (Benzolazobenzoylacetone). Sm. 99° (*B.* 21, 1705; *J. pr.* [2] 65, 140 *C.* 1902 [1] 1001). — IV, 1480.
- 17)  **$\alpha$ -Benzoylphenylhydrazon- $\beta$ -Ketopropan.** Sm. 122° (*B.* 25, 1345). — IV, 757.
- 18) **2-Äthyläther d. 2-Oxy-10-Diazophenanthren.** 2 Chlorid + PtCl<sub>4</sub>, NaSO<sub>4</sub> + 6H<sub>2</sub>O (*Soc.* 89, 1529 *C.* 1906 [2] 1765).
- 19) **3-Äthyläther d. 3-Oxy-10-Diazophenanthren.** NaSO<sub>4</sub> (*Soc.* 89, 1531 *C.* 1906 [2] 1765).
- 20) **3,3'-Diacetylazobenzol.** Sm. 105° (*C.* 1903 [2] 112). — \*IV, 1072.



- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** 21) **Methyläther d. 7-Oxy-2-Phenylhydrazon-1,2-Benzpyron.** Sm. 115° (B. 24, 3467). — IV, 709.
- 22) **4-Phenylamido-5-Oxy-3-Keto-1-Phenyl-2,3-Dihdropyrrol.** Sm. 195° u. Zers. (B. 33, 2469). — \*IV, 335.
- 23) **4-Oxy-3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihdropyrazol.** Sm. 221° (B. 36, 1137 C. 1903 [1] 1254). — \*IV, 603.
- 24) **Methyläther d. 5-Keto-3-[2-Oxyphenyl]-1-Phenyl-4,5-Dihdropyrazol.** Sm. 114° (B. 25, 1307). — IV, 709.
- 25) **Methyläther d. 5-Oxy-2-Keto-4,5-Diphenyl-2,5-Dihydroimidazol.** Sm. 179—180° (A. 368, 199 C. 1909 [2] 1465).
- 26) **2,5-Diketo-1-Methyl-4,4-Diphenyltetrahydroimidazol.** Sm. 216 bis 217° (B. 41, 169 C. 1908 [1] 847; B. 41, 1386 C. 1908 [1] 2103).
- 27) **4,5-Diketo-2-Methyl-1,3-Diphenyltetrahydroimidazol.** Sm. 218 bis 219° (B. 33, 617). — \*II, 235.
- 28) **2,5-Diketo-4-Benzyl-1-Phenyltetrahydroimidazol.** Sm. 173—174° (B. 33, 2396). — \*II, 837.
- 29) **Methyläther d. 4-Amido-3-[4-Oxyphenyl]-5-Phenylisoxazol.** Sm. 123° (A. 340, 74 C. 1905 [2] 330).
- 30) **Äthyläther d. 5-Phenyl-3-[3-Oxyphenyl]-1,2,4-Oxdiazol.** Sm. 71° (B. 18, 2476). — II, 1519.
- 31) **3-Acetyl-2,5-Diphenyl-2,3-Dihydro-1,3,4-Oxdiazol.** Sm. 98° (J. pr. [2] 70, 410 C. 1905 [1] 83).
- 32) **3-Benzoyl-5-Methyl-2-Phenyl-2,3-Dihydro-1,3,4-Oxdiazol.** Sm. 53° (J. pr. [2] 70, 411 C. 1905 [1] 83).
- 33) **6-Oxy-2-Furanyl-4-Methyl-5-Benzyl-1,3-Diazin.** Sm. 238° (B. 25, 1419). — IV, 1034.
- 34) **2,3-Diketo-1,4-Diphenylhexahydro-1,4-Diazin.** Sm. 258—260°; Sd. 325°, <sub>2</sub> (B. 22, 1805; 23, 2028; B. 35, 3439 C. 1902 [2] 1303). — II, 411.
- 35) **2,5-Diketo-1,4-Diphenylhexahydro-1,4-Diazin.** Sm. 263° (273°) (B. 10, 1967; 22, 1797; 33, 2468; J. pr. [2] 40, 430; Am. 24, 167; A. 301, 68). — II, 430; \*II, 227.
- 36) **2,6-Diketo-1,4-Diphenylhexahydro-1,4-Diazin.** Sm. 152—153° (B. 22, 1802; 23, 1990). — II, 430.
- 37) **3,6-Diketo-2,5-Diphenylhexahydro-1,4-Diazin** (Inn. Anhydrid d.  $\alpha$ -Amido- $\alpha$ -Phenyllessigsäure). Sm. 274° u. Zers. (B. 24, 4149). — II, 1323.
- 38) **4,5-Di[4-Methylphenyl]-1,2,3,6-Dioxdiazin.** Sm. 143° (C. 1906 [2] 1003; B. 41, 2220 C. 1908 [2] 416).
- 39) **3-Nitro-1-Äthyl-2-Phenylindol.** Sm. 175° (G. 30 [2] 279). — \*IV, 251.
- 40) **Äthyläther d. 3-Oximido-2-Phenyl-1,1-Dihydroindol-1-Oxyd.** Sm. 96° (C. 1907 [1] 732).
- 41) **3-Keto-2-Acetyl-1-Benzyl-2,3-Dihydrobenzpyrazol.** Sm. 81—82° (M. 29, 925 C. 1908 [2] 2008).
- 42) **1-Phenylacetylamido-4-Methylbenzoxazol.** Sm. 86—87° (B. 22, 3237). — II, 753.
- 43) **6[oder 7]-Äthyläther d. 3,6[oder 3,7]-Dioxy-2-Phenyl-1,4-Benzdiazin.** Sm. 205° (B. 34, 4009 C. 1902 [1] 205). — \*IV, 685.
- 44) **2,4-Diketo-1-Methyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.** Sm. 254° (J. pr. [2] 55, 131). — \*IV, 599.
- 45) **1,4-Diketo-3-Äthyl-2-Phenyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin.** Sm. 105—106° (J. pr. [2] 35, 286). — IV, 711.
- 46) **9-Acetyl-3-[ $\alpha$ -Oximidoäthyl]carbazon.** Sm. 172° (B. 40, 380 C. 1907 [1] 823).
- 47) **Diacetylderivat d. 3-Amidocarbazon.** Sm. 199,5° (B. 34, 1684). — \*IV, 664.
- 48) **5,10-Diacetyl-5,10-Dihydrophenazin.** Sm. 180° (A. 292, 259; B. 38, 2801 C. 1905 [2] 1265; C. 1906 [2] 1621). — IV, 993.
- 49) **Hydrastalphenylhydrazon.** Sm. 103—104° (B. 22, 2333). — IV, 764.
- 50)  **$\gamma$ -Phenylhydrazon- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure.** Sm. 158° (162°) (B. 36, 2528 C. 1903 [2] 496; B. 38, 3125 C. 1905 [2] 1428).
- 51) **isom.  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure.** Sm. 94° (B. 38, 3125 C. 1905 [2] 1428).
- 52)  **$\gamma$ -Phenylhydrazon- $\gamma$ -Phenylpropen- $\alpha$ -Carbonsäure.** Sm. 197° (C. 1906 [2] 1190).
- 53) **Bilaktam d. 2-Methylamidobenzol-1-Carbonsäure** (A. 367, 151 C. 1909 [2] 701).

- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** 54) **Methylester d. Azobenzol-4-Akrylsäure.** Sm. 145° (*C. r.* 135, 1117 *C.* 1903 [1] 286). — \*IV, 1056.
- 55) **Äthylester d. 2-Phenylbenzimidazol-2<sup>2</sup>-Carbonsäure.** Sm. 163 bis 164° (*A.* 347, 128 *C.* 1906 [2] 777).
- 56) **Äthylester d. 2-Phenylbenzimidazol-2<sup>4</sup>-Carbonsäure.** Sm. 242 bis 243° (*A.* 205, 121; 210, 340; *B.* 11, 296). — IV, 1021.
- 57) **Äthylester d. 2-Phenylindazol-2<sup>2</sup>-Carbonsäure.** Sm. 92° (*B.* 25, 3595). — IV, 867.
- 58) **Benzoat d.  $\gamma$ -Oximido- $\gamma$ -Amido- $\alpha$ -Phenylpropen** (*B. d.  $\gamma$ -Phenylallenyl-amidoxim*). Sm. 160° (*B.* 19, 1508). — II, 1409.
- 59) **Amid d.  $\alpha$ -Benzoylamido- $\beta$ -Phenylakrylsäure.** Sm. 168° (*B.* 33, 2036). — \*II, 857.
- 60) **Diphenylamid d. Fumarsäure.** Sm. 313—314° u. Zers. (*A.* 259, 138; *B.* 23, 2041; 24, 2002; *R.* 19, 316). — II, 416; \*II, 216.
- 61) **Di[Phenylamid] d. Maleinsäure.** Sm. 175° (184—186°). + PHOCl<sub>2</sub> (*R.* 19, 313; *R.* 25, 103 *C.* 1906 [2] 20). — \*II, 217.
- 62) **3,3'-Dimethyl-4,4'-Biphenylenamid d. Oxalsäure.** Sm. 335° (*M.* 25, 385 *C.* 1904 [2] 320).
- 63) **Phenylimid d. Phenylamidobernsteinsäure.** Sm. 211° (213—214°). HCl (*G.* 14, 474; *B.* 19, 1373; 25, 651; *A.* 239, 154; 252, 166; 279, 131; 303, 215; *Am.* 9, 183; *R.* 19, 314 *Ann.*). — II, 437; \*II, 231.
- 64)  **$\beta$ -Phenylamidoäthylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 99 bis 100° (*B.* 22, 2224). — II, 1800.
- 65) **3-Dimethylamidophenylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 144° (*B.* 42, 4019 *C.* 1909 [2] 2167).
- 66) **4-Dimethylamidophenylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 255° (*B.* 42, 4019 *C.* 1909 [2] 2167).
- 67) **Monacetylderivat d. Verb. C<sub>14</sub>H<sub>12</sub>ON<sub>2</sub>.** Sm. 81—82° (*B.* 41, 1868 *C.* 1908 [2] 505).
- 68) **Verbindung** (aus Amidobenzol u. Nitro-1,3-Dioxybenzol). Sm. 238—239° (*Bl.* 39, 594). — II, 934.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>3</sub>** 1) **Verbindung** (aus d. Phenylamid d.  $\alpha$ -Phenylhydrazidoessigsäure). Sm. 205° (*A.* 301, 67). — \*IV, 476.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>** C 65,3 — H 4,8 — O 10,9 — N 19,0 — M. G. 294.
- 1) **Tolanharbstoff** (Diphenylacetylendiurein). Zers. oberhalb 310° (*G.* 19, 563; *A.* 261, 133; *B.* 40, 4813 *C.* 1908 [1] 374). — III, 285.
- 2)  **$\alpha\beta$ -Di[Benzoylhydrazon]äthan** (Glyoxalbenzoylosazon). Zers. bei 380°. Na<sub>2</sub>, Ag<sub>2</sub>, Hg + 2C<sub>2</sub>H<sub>5</sub>O (*B.* 31, 33; *J. pr.* [2] 70, 403 *C.* 1905 [1] 82; *B.* 42, 668 *C.* 1909 [1] 1017). — \*II, 810.
- 3) **4-Phenylhydrazon-3,5-Diketo-1-[4-Methylphenyl]tetrahydropyrazol.** Sm. 234° (*B.* 30, 1022). — IV, 808.
- 4) **4-[4-Methylphenylazo-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydropyrazol.** Sm. 253° (*A.* 338, 221 *C.* 1905 [1] 1158).
- 5) **3-Oxy-5-[3-Acetylamidophenyl]-1-Phenyl-1,2,4-Triazol.** Sm. 294° (*Soc.* 71, 212). — IV, 1271.
- 6) **3-Oxy-5-[4-Acetylamidophenyl]-1-Phenyl-1,2,4-Triazol.** Sm. 278° (*Soc.* 71, 209). — IV, 1271.
- 7) **4-Benzylidenamido-3,5-Diketo-2-Methyl-1-Phenyltetrahydro-1,2,4-Triazol.** Sm. 139—140° (*C.* 1901 [1] 936). — \*IV, 901.
- 8) **5-[4-Methylbenzoyl]-2-Phenylamido-1,2,3,6-Oxtriazin** (*R.* 16, 326). — IV, 764.
- 9) **3-[4-Nitrophenyl]hydrazonmethyl-2-Methylindol.** Sm. 273° (*C.* 1907 [1] 1135).
- 10) **3-[ $\beta$ -Phenylureido]-4-Keto-2-Methyl-3,4-Dihydro-1,3-Benzdiazin.** Sm. noch nicht bei 300° (*C.* 1909 [2] 1476).
- 11) **2,3-Di[Acetylamido]-5,10-Naphtdiazin.** Sm. 270° (*B.* 22, 357). — IV, 1281.
- 12) **2,8-Di[Acetylamido]-5,10-Naphtdiazin.** Sm. bei 330° (*B.* 23, 1855). — IV, 1282.
- 13)  **$\gamma$ -Phenylazo- $\gamma$ -Phenylhydrazoncrotonsäure** (Formazylakrylsäure). Sm. 199° (*B.* 40, 4927 *C.* 1908 [1] 458).
- 14)  **$\alpha$ -[2-Benzimidazolyl]phenylhydrazonpropionsäure.** Zers. bei 120 bis 180° (*B.* 34, 2968). — \*IV, 956.

- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>** 15)  $\alpha$ -[3-Benzimidazolyl]phenylhydrazonpropionsäure. Sm. 184° (B. 34, 2969). — \*IV, 956.
- 16)  $\alpha$ -[4-Benzimidazolyl]phenylhydrazonpropionsäure. Sm. 220° u. Zers. (B. 34, 2969). — \*IV, 956.
- 17) Lakton d.  $\alpha\beta$ -Di[Phenylhydrazon]- $\gamma$ -Oxybuttersäure. Sm. 242° u. Zers. (A. 312, 158). — \*IV, 466.
- 18) Äthylester d. Cycloformazylameisensäure. Sm. noch nicht bei 280° (A. 295, 332). — IV, 1291.
- 19) Nitrild.  $\alpha$ -[4-Äthylamidophenyl]imido- $\alpha$ -[4-Nitrophenyl]essigsäure. Sm. 164° (B. 34, 119). — \*IV, 392.
- 20) Nitril d. 4-Dimethylamidophenylimido-4-Nitrophenylessigsäure. Sm. 176° (B. 32, 2346). — \*IV, 391.
- 21) Di[Benzylidenhydrazid] d. Oxalsäure. Sm. noch nicht bei 250° (J. pr. [2] 51, 195; B. 40, 719 C. 1907 [1] 946). — III, 40.
- 22) Verbindung (aus 3,5,3',5'-Tetraamido-4,4'-Dioxybiphenyl) (B. 21, 3533). — II, 989.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>Cl<sub>2</sub>** 1)  $\gamma\gamma$ -Dichlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 164° (B. 36, 2400 C. 1903 [2] 498).
- 2) Dimethyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthen. Sm. 113° (A. 306, 78). — \*II, 606.
- 3) Dichlorlapachonon. Sm. 108° (C. 1896 [1] 375; 1900 [2] 728). — \*III, 467.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>Cl<sub>4</sub>** 1) Dimethyläther d.  $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 169° (A. 279, 339). — II, 993.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>Br<sub>2</sub>** 1)  $\gamma\gamma$ -Dibrom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 145° u. Zers. (B. 36, 2402 C. 1903 [2] 499).
- 2)  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[4-Oxy-3-Methylphenyl]- $\alpha$ -Phenylpropan. Sm. 135° (M. 27, 1155 C. 1907 [1] 721).
- 3) Methyläther d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropan. Sm. 140—141° (139—140°) (C. 1899 [2] 1118; 1900 [2] 1014). — \*III, 167.
- 4) Methyläther d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha$ -[ $\beta$ -Oxyphenyl]- $\gamma$ -Phenylpropan. Sm. 158—159° (B. 25, 3536). — III, 228.
- 5) Dimethyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 197° (A. 279, 339). — II, 998.
- 6) Methylester d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropionsäure. Sm. 111° (B. 26, 662; G. 14, 115). — II, 1467.
- 7) Acetat d.  $\alpha\beta$ -Dibrom-2-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 83° (B. 36, 4003 C. 1904 [1] 174).
- 8) Acetat d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]äthan. Sm. 150° (B. 42, 826 C. 1909 [1] 1162).
- 9) Acetat d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthan. Sm. 190 bis 192° u. Zers. (A. 349, 121 C. 1906 [2] 1258).
- 10) Benzoat d. 3,6-Dibrom-5-Oxy-1,2,4-Trimethylbenzol. Sm. 120 bis 120,5° (B. 28, 2923). — \*II, 718.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>Br<sub>4</sub>** 1)  $\beta\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]butan. Sm. 155° (A. 362, 207 C. 1908 [2] 942).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>S** 1) Di[Benzoylmethyl]sulfid (Phenacylsulfid). Sm. 77° (B. 23, 3474). — III, 129.
- 2)  $\alpha$ -Merkapto- $\beta$ -Phenylakrylbenzyläthersäure. Sm. 109° (C. 1899 [2] 805). — \*II, 953.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub>** 1) Di[2-Acetylphenyl]disulfid (D.R.P. 198509 C. 1908 [1] 2118).
- 2) Disulfid d. Phenylthiolessigsäure. Sm. 62° (C. 1906 [2] 1835).
- 3) Disulfid d. 1-Methylbenzol-2-Thiolcarbonsäure. Sm. 62—75° (B. 36, 1012 C. 1903 [1] 1078).
- 4) Disulfid d. 1-Methylbenzol-4-Thiolcarbonsäure. Sm. 116° (B. 36, 1012 C. 1903 [1] 1078).
- 5) Äthylenester d. Benzolthiolcarbonsäure. Sm. 96° (B. 24, 784). — II, 1291.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>S<sub>4</sub>** 1) Disulfid d. 4-Oxybenzoylmethyläther-1-Dithiocarbonsäure. Sm. 163° (D.R.P. 214888 C. 1909 [2] 1780).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>Se** 1) Di[Benzoylmethyl]selenid (Selenoacetophenon). Sm. 73° (A. 314, 282). — \*III, 111.



- $C_{16}H_{14}O_2Se_2$  1) Di[Benzoylmethyl]diselenid (Diselenoacetophenon). Sm. 125° (A. 314, 287). — \*III, 111.
- $C_{18}H_{14}O_3N$  1) Verbindung (aus p-Anisaldehydecyanhydrin). Sm. 156° (Soc. 95, 587 C. 1909 [1] 1991).
- $C_{16}H_{14}O_3N_2$  C 68,1 — H 5,0 — O 17,0 — N 9,9 — M. G. 282.
- 1) 2-Nitro-4-Acetylamido- $\alpha\beta$ -Diphenyläthen. Sm. 192—193° (B. 34, 2846).
  - 2) 4-Nitro-2-Acetylamido- $\alpha\beta$ -Diphenyläthen. Sm. 220° (B. 34, 2845).
  - 3) Di[Benzoylmethyl]nitrosamin. Sm. 90° (B. 41, 1146 C. 1908 [1] 1894).
  - 4)  $\alpha\beta$ [oder  $\beta\gamma$ ]-Dioximido- $\alpha$ [oder  $\gamma$ ]-Keto- $\alpha\delta$ -Diphenylbutan. Sm. 167° (B. 34, 1488). — \*III, 243.
  - 5)  $\gamma$ -Oximido- $\gamma$ -Phenyl- $\alpha$ -[3-Nitro-4-Methylphenyl]propen. Sm. 71 bis 72° (B. 32, 2285). — \*III, 185.
  - 6) N-Benzyl-3-Nitrozimtaldoxim. Sm. 123° (A. 298, 193). — \*III, 47.
  - 7) Phtalaldehydsäureacetylphenylhydrazon. Sm. 191° (B. 24, 2353). — IV, 696.
  - 8)  $\alpha$ -Acetyl- $\alpha\beta$ -Dibenzoylhydrazin. Sm. 169—170° (J. pr. [2] 70, 275 C. 1904 [2] 1544).
  - 9)  $\beta$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha\beta$ -Di[2-Furanyl]äthan (Furoinphenylhydrazon). Sm. 79—81° (A. 258, 222). — IV, 788.
  - 10) 3,5-Diketo-4-Phenylhydrazon-2-Furanyl-1,2,3,4-Tetrahydrobenzol. Sm. 152° (A. 294, 314). — IV, 1480.
  - 11) 3,3'-Diacyltazybenzol. Sm. 137,5° (130—131° (C. 1903 [2] 112; B. 36, 1618 C. 1903 [2] 36). — \*IV, 1004.
  - 12) 2-Oxy-4,5-Diketo-2-Methyl-1,3-Diphenyltetrahydroimidazol. Sm. 174° (B. 33, 1299). — \*II, 208.
  - 13) 2,5-Diketo-1-Phenyl-4-[4-Oxybenzyl]tetrahydroimidazol. Sm. 184° (B. 36, 3345 C. 1903 [2] 1176).
  - 14) Dimethyläther d. 3,5-Di[4-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 175 bis 176° (C. 1906 [2] 233).
  - 15) Dimethyläther d. 2,5-Di[4-Oxyphenyl]-1,3,4-Oxdiazol. Sm. 164°. + AgNO<sub>3</sub> (J. pr. [2] 74, 15 C. 1906 [2] 791).
  - 16) 6[oder 7]-Äthyläther d. 3,6[oder 3,7]-Dioxy-2-[2-Oxyphenyl]-1,4-Benzdiazin. Sm. 242—243° (B. 34, 2298). — \*IV, 685.
  - 17) 6-Methyläther d. 5,6-Dioxy-4-Keto-3-Benzyl-3,4-Dihydro-2,3-Benzdiazin. Sm. 199—200° (B. 27, 1419). — II, 1939.
  - 18) Dimethyläther d. 7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin (Opianylphenylhydrazid). Sm. 175° (B. 19, 764). — IV, 716.
  - 19)  $\alpha$ -[4-Benzoylphenyl]hydrazonpropionsäure. Sm. 210° u. Zers. (Soc. 55, 616). — III, 187.
  - 20) 4-Methylphenylazobenzoylessigsäure. Sm. 169—170° (B. 21, 2123). — IV, 1473.
  - 21)  $\beta$ -[2- $\beta$ -Phenylureidophenyl]akrylsäure. Sm. 236°. Ag (B. 28, 3228). — \*II, 855.
  - 22)  $\beta$ -[3- $\beta$ -Phenylureidophenyl]akrylsäure. Sm. 249°. Ag (B. 28, 3230). — \*II, 856.
  - 23)  $\beta$ -[4- $\beta$ -Phenylureidophenyl]akrylsäure. Sm. 252°. Ag (B. 28, 3231). — \*II, 856.
  - 24) Lakton d.  $\alpha$ -Oxy- $\beta$ -Nitroso-4-Dimethylamidodiphenylmethan-2'-Carbonsäure. Sm. 157° (A. 300, 235). — \*II, 994.
  - 25) Methylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Keto- $\alpha$ -Phenyläthan- $\beta$ -Carbonsäure. Sm. 76° (C. r. 147, 74 C. 1908 [2] 694).
  - 26) Äthylester d. Azobenzol-3-Carbonsäure-3'-Carbonsäurealdehyd. Sm. 156° (90°) (B. 36, 3474 C. 1903 [2] 1269; C. 1905 [2] 1091).
  - 27) Äthylester d. Azobenzol-4-Carbonsäure-4'-Carbonsäurealdehyd. Sm. 159° (60°) (B. 36, 3475 C. 1903 [2] 1270; B. 38, 2520 C. 1905 [2] 619; C. 1905 [2] 1091).
  - 28) Äthylester d. 2-Keto-3-Cyan-6-Methyl-4-Phenyl-1,2-Dihydropyridin-5-Carbonsäure. Sm. 226—227° (C. 1907 [1] 333).
  - 29) Äthylester d. 3-Oxy-2-Phenylindazol-2'-Carbonsäure. Sm. 132° (C. r. 143, 56 C. 1906 [2] 611).

- $C_{16}H_{14}O_3N_2$  30) Acetat d. Anhydro-*o*-Phenylendiimidoglykobrenzkatechin. Sm. 141° (*B.* 27, 1984). — IV, 565.  
 31) Amid d. 4-Benzoylamido-1-Methylbenzol-3-Ketocarbonsäure. Sm. 219° (*B.* 28, 737). — II, 1652.  
 32) Phenylmonamid d.  $\beta$ -Phenylamidoäthen- $\alpha\alpha$ -Dicarbonsäure. Sm. 182,5°. Ag (*A.* 285, 125). — \*II, 232.  
 33) Phenylmonamid d. Phenylamidoäthen- $\alpha\beta$ -Dicarbonsäure (Ph. d. Phenylamidomaleinsäure). Sm. 175—176° (*Am.* 9, 185; *B.* 19, 1377; 20, 3105; 26, 1764; *A.* 285, 131). — II, 441.  
 34) 2-Nitro-4-Methylphenylamid d.  $\beta$ -Phenylakrylsäure. Sm. 147° (*J. pr.* [2] 74, 326 *C.* 1906 [2] 1823).  
 35) Phenylamid-Phenylacetylamid d. Oxalsäure. Sm. 197—198° (*G.* 24 [1] 447). — \*II, 208.  
 36) Benzoylamid d. Benzoylamidoessigsäure. Sm. 179° (*Soc.* 81, 1532 *C.* 1903 [1] 157).  
 37) Verbindung (aus Benzaldehyd u. Hippurazid) (*J. pr.* [2] 52, 270). — III, 39.

$C_{16}H_{14}O_3N_4$  C 61,9 — H 4,5 — O 15,5 — N 18,1 — M. G. 310.

- 1)  $\gamma$ -Semicarbazon- $\gamma$ -Phenyl- $\alpha$ -[2-Nitrophenyl]propen. Sm. 177,5° (*B.* 35, 1067 *C.* 1902 [1] 929). — \*III, 179.
- 2)  $\gamma$ -Semicarbazon- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 178—179° (*B.* 35, 1069 *C.* 1902 [1] 929). — \*III, 179.
- 3) Isamid (Amasantin) (*J. pr.* [1] 25, 460; [1] 35, 117). — II, 1609.
- 4)  $\gamma$ -Phenylhydrazon- $\delta$ -Oximido- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 99 bis 100° (*C.* 1904 [1] 28; *A.* 330, 253 *C.* 1904 [1] 946).
- 5) Acetylcarbonylphenylhydrazin (*G.* 22 [2] 103). — IV, 671.
- 6) Äthyläther d. 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]-1,2,4-Triazol. Sm. 96° (*Soc.* 73, 373). — IV, 1157.
- 7) Äthyläther d. 3-Oxy-5-[3-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 98° (*Soc.* 71, 210). — IV, 1157.
- 8) Äthyläther d. 3-Oxy-5-[4-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 140° (*Soc.* 71, 206). — IV, 1158.
- 9) Methyläther d. 5-[4-Oxybenzoyl]-2-Phenylamido-1,2,3,6-Oxtriazin. Zers. bei 97° (*R.* 16, 328). — IV, 764.
- 10) Methylester d. Formazylglyoxalsäure. Sm. 124—125°. Ag (*B.* 27, 151; *J. pr.* [2] 64, 206). — IV, 1228.
- 11) Methylester d. Isoformazylglyoxalsäure. Sm. 109—111° (*B.* 28, 1285 Anm.). — IV, 1228.
- 12) Acetat d. 4-Phenylamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 173° (*B.* 21, 2330; 34, 2311; *G.* 38 [1] 345 *C.* 1908 [1] 2030). — IV, 674.
- 13) Phenylamid d. Phenylamidoformoximidoamidoessigsäure. Sm. 175° (*B.* 41, 4080 *C.* 1909 [1] 190).

$C_{16}H_{14}O_3N_6$  C 56,8 — H 4,1 — O 14,2 — N 24,8 — M. G. 338.

- 1) Oxydiimidodiamidoisatin. Sm. 295—300°.  $HNO_3$ ,  $H_2SO_4$  (*A.* 190, 377; 194, 92). — II, 1610.

$C_{16}H_{14}O_3Br_2$  1)  $\beta\gamma$ -Dibrom- $\alpha$ -Oxy- $\beta\gamma$ -Diphenylbuttersäure. Zers. bei 144° (*A.* 333, 233 *C.* 1904 [2] 1390).

- 2)  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenyläthan- $\alpha^2$ -Oxyessigsäure. Sm. 188° u. Zers. (*B.* 42, 827 *C.* 1909 [1] 1163).
- 3) 4-Acetat d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan- $\alpha$ -Methyläther. Sm. 97° (*A.* 334, 382 *C.* 1904 [2] 1052).

$C_{16}H_{14}O_3S$  1) Atronolsulfonsäure. Sm. 130—131° u. Zers.  $Ca + 2H_2O$ , *Ba* (*A.* 206, 52). — II, 275.

- 2) Äthylester d. Anthracen-2-Sulfonsäure. Sm. 160° (*B.* 28, 2261). — \*II, 122.
- 3) Äthylester d. Phenanthren-3-Sulfonsäure. Sm. 107—108° (*A.* 369, 115 *C.* 1909 [2] 1809).

$C_{16}H_{14}O_3S_2$  1) Diphenylmethylthiolcarbonatessigsäure. Sm. 130,6° (*C.* 1907 [2] 1779; *A.* 364, 323 *C.* 1909 [1] 1150).

$C_{16}H_{14}O_4N_2$  C 64,4 — H 4,7 — O 21,5 — N 9,4 — M. G. 298.

- 1)  $\alpha\delta$ -Dinitro- $\alpha\delta$ -Diphenyl- $\beta$ -Buten. Sm. 158° u. Zers. (*B.* 40, 4828 *C.* 1908 [1] 362; *A.* 360, 309 *C.* 1908 [2] 325).

- $C_{16}H_{14}O_4N_2$  2) Di[4-Nitro-2-Methylphenyl]äthen. Sm. 288—290° (*Soc.* 93, 1723 *C.* 1908 [2] 1926).
- 3) bim.  $\beta$ -Nitro- $\alpha$ -Phenyläthan. Sm. 172—180° u. Zers. (280°) (*A.* 225, 340; 320, 78; *C.* 1899 [1] 730; *A.* 355, 268 *C.* 1907 [2] 1622). — II, 167; \*II, 86.
- 4) 3-Nitrotetrahydro-1,2-Naphtochinonphenylamid. Sm. 186° (*B.* 17, 1134). — III, 392.
- 5) Diacetylderivat d. 3,5-Diamido-1,2-Dioxybenzol-1,2-Phenylenäther. Sm. 252,5—253° u. Zers. (*Am.* 26, 364).
- 6) Dimethyläther d. 4,5-Di[4-Oxyphenyl]-1,2,3,6-Dioxdiazin (Peroxyd d.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan-4,4'-Dimethyläther). Sm. 113° (*C.* 1906 [2] 1003).
- 7) Di[Benzoylamido]essigsäure. Sm. 234° u. Zers. (*A.* 343, 227 *C.* 1906 [1] 923).
- 8) polym. 3-Methylenamidobenzol-1-Carbonsäure. Sm. 175—200° (*B.* 36, 51 *C.* 1903 [1] 505).
- 9) 2-[2-Acetylamidobenzoyl]amidobenzol-1-Carbonsäure (Äthylenyldi-anthranilsäure). Sm. 226° (224—225°) (*B.* 30, 1188; *B.* 35, 3478 *C.* 1902 [2] 1317; *B.* 39, 1058 *C.* 1906 [1] 1488). — \*II, 782.
- 10) 4-Acetylamidobiphenyl-4'-Oxaminsäure. Sm. oberhalb 250°. *Ca* (*J. pr.* [2] 77, 361 *C.* 1908 [1] 1695).
- 11) 2-[ $\alpha$ -Acetyl- $\beta$ -Phenylureido]benzol-1-Carbonsäure. Sm. 175° (*J. pr.* [2] 55, 135). — \*II, 784.
- 12) 3'-Nitroso-4'-Dimethylamidodiphenylketon-2-Carbonsäure +  $H_2O$ . Sm. 112° (164° wasserfrei). *Ba* (*A.* 300, 232). — \*II, 1001.
- 13)  $\alpha\beta$ -Dibenzoylhydrazidoessigsäure. Sm. 195° u. Zers. *Ag* (*J. pr.* [2] 70, 277 *C.* 1904 [2] 1544).
- 14)  $\alpha$ -Benzyliden- $\beta$ -[2-Oxymethylbenzoyl]hydrazin- $\alpha$ -Carbonsäure. Sm. 115° (*B.* 33, 770). — \*II, 950.
- 15) Di[Phenylamido]maleinsäure. Sm. 140°.  $Na_2$ ,  $Ag_2$  (*B.* 38, 2599 *C.* 1905 [2] 759).
- 16)  $\alpha\beta$ -Di[2-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 270 *C.* 1904 [2] 700).
- 17) isom.  $\alpha\beta$ -Di[2-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 270 *C.* 1904 [2] 700).
- 18)  $\alpha\beta$ -Di[4-Amidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (*A.* 332, 282 *C.* 1904 [2] 702).
- 19) 2,3-Dicyan-1-Methyl-1-[ $\beta$ -Phenyläthyl]-R-Trimethylen-2,3-Dicarbonsäure.  $Na_2$  (*C.* 1901 [1] 581).
- 20)  $\alpha$ -Methylphenylhydrazon-2-Carboxyphenylessigsäure. Sm. 140° (*B.* 41, 2180 *C.* 1908 [2] 709).
- 21)  $\alpha$ -Phenylhydrazon-4-Methylphenylessigsäure-2-Carbonsäure (oder  $C_{16}H_{12}O_5N_2$ ). Sm. 213° (*B.* 38, 3552 *C.* 1905 [2] 1680).
- 22)  $\alpha$ -Phenyl- $\beta$ -[6-Diazo-3-Methoxyphenyl]akrylsäure. Sulfat (*B.* 34, 4001 *C.* 1902 [1] 202). — \*IV, 1126.
- 23) 4'-Acetoxyl-2-Methylazobenzol-3'-Carbonsäure. Sm. 145° (*C.* 1908 [2] 310).
- 24) 4'-Acetoxyl-3-Methylazobenzol-3'-Carbonsäure. Sm. 155° (*C.* 1908 [2] 310).
- 25) 4'-Acetoxyl-4-Methylazobenzol-3'-Carbonsäure. Sm. 159,5° (*C.* 1908 [2] 310).
- 26) 6'-Acetoxyl-4-Methylazobenzol-3'-Carbonsäure. Sm. 205° (*J. pr.* [2] 78, 403 *C.* 1909 [1] 363).
- 27) 2,2'-Dimethylazobenzol-5,5'-Dicarbonsäure. Sm. 182—184° (*B.* 7, 1358). — IV, 1465.
- 28) Azobenzol-4,4'-Dimethylcarbonsäure. Sm. noch nicht bei 300°.  $Ba + 5H_2O$ ,  $Ag_2$  (*J. r.* 16, 590). — IV, 1465.
- 29) isom. Azobenzol-4,4'-Dimethylcarbonsäure. Sm. 138° (*B.* 2, 210). — IV, 1465.
- 30) 3[oder 5]-[2-Methylphenyl]azo-2-Acetoxylbenzol-1-Carbonsäure. Sm. 145° (*B.* 40, 3452 *C.* 1907 [2] 1505).
- 31) 4'-Acetoxyl-4-Methylazobenzol-3'-Carbonsäure. Sm. 157° (*B.* 40, 4207 *C.* 1907 [2] 2047).
- 32)  $\alpha$ -Pyridyltruxillsäure. ( $HCl$ ,  $AuCl_3$ ) (*Ar.* 240, 198 *C.* 1902 [1] 1233). — \*IV, 112.



$C_{16}H_{14}O_4N_2$  33)  $\beta$ -Pyridyltruxillsäure. (HCl,  $AuCl_3$ ) (*Ar.* 240, 190 *C.* 1902 [1] 1232). — \*IV, 112.

33) Dimethylester d. Azobenzol-2,2'-Dicarbonsäure. Sm. 101° (*A.* 326, 346 *C.* 1903 [1] 1130). — \*IV, 1054.

34) Dimethylester d. Azobenzol-3,3'-Dicarbonsäure. Sm. 163° (corr.) (*A.* 326, 343 *C.* 1903 [1] 1130). — \*IV, 1054.

35) Dimethylester d. Azobenzol-4,4'-Dicarbonsäure. Sm. 242° (corr.) (*A.* 326, 338 *C.* 1903 [1] 1130). — \*IV, 1054.

36) Diacetat d. 2,4-Dioxyazobenzol. Sm. 104° (106°) (*B.* 25, 1342; *Am.* 26, 161). — IV, 1442; \*IV, 1049.

37) Diacetat d. 3,3'-Dioxyazobenzol. Sm. 137° (*J. pr.* [2] 67, 267 *C.* 1903 [1] 1221). — \*IV, 1032.

38) Diacetat d. 4,4'-Dioxyazobenzol. Sm. 198—199° (*B.* 40, 1582 *C.* 1907 [1] 1686).

39) Amid d. 9,10-Dioxy-9,10-Dihydrophenanthren-9,10-Dicarbonsäure (Biphenylentartramid). Sm. 274° u. Zers. +  $C_2H_4O_2$  (*Soc.* 87, 693 *C.* 1905 [2] 244).

40) 5-Nitro-2-Methoxyphenylamid d.  $\beta$ -Phenylakrylsäure (*A.* 74, 306). — II, 1408.

41) 4-Acetylamidophenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. oberhalb 270°. Ba (*B.* 40, 3183 *C.* 1907 [2] 800).

42) Acetylderivat d. Verb.  $C_{14}H_{12}O_4N_2$  (*J. pr.* [2] 70, 330 *C.* 1904 [2] 1541).

43) Verbindung +  $\frac{1}{2}H_2O$  (aus Cusparin). Sm. 144—146° (*C.* 1909 [2] 1571).

44) Verbindung (aus Indigo) (*Soc.* 91, 284 *C.* 1907 [1] 1273).

45) Verbindung (aus d. Aldehyd d. 2-Nitro-1-Methylbenzol-4-Carbonsäure). Sm. 168° (*A.* 347, 355 *C.* 1906 [2] 604).

$C_{16}H_{14}O_4N_4$  C 58,9 — H 4,3 — O 19,6 — N 17,2 — M. G. 326.

1)  $\alpha\beta\gamma\delta$ -Tetraoximido- $\alpha\delta$ -Diphenylbutan. Sm. 225° (*B.* 26, 530). — III, 323.

2)  $\gamma$ -Oximido- $\delta$ -[4-Nitrophenyl]hydrazon- $\beta$ -Ketopentan. Sm. 211° u. Zers. (*B.* 40, 677 *C.* 1907 [1] 970).

3)  $\gamma$ -Phenylhydrazon- $\alpha$ -[2,4-Dinitrophenyl]- $\alpha$ -Buten. Sm. 191° (*M.* 23, 1006 *C.* 1903 [1] 292). — \*IV, 503.

4) Di[ $\alpha$ -3-Nitrophenyläthyliden]hydrazin. Sm. 194—195° (*M.* 30, 36 *C.* 1909 [1] 916).

5) Di[3-Nitro-4-Methylbenzyliden]hydrazin. Sm. 184—185° (*B.* 32, 1288). — \*III, 41.

6)  $\alpha\beta$ -Diimido- $\alpha\beta$ -Di[Phenylamido]äthan- $\alpha^3\beta^3$ -Dicarbonsäure (3-Amido-benzol-1-Carbonsäurecyanid)? (*A.* 113, 332; *Z.* 1866, 35; 1867, 535; *B.* 1, 192, 194; 3, 703; 11, 1986; 16, 338 Anm.). — II, 1268.

7) Di[Phenylhydrazon]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 194—196° u. Zers. ( $NH_4$ )<sub>2</sub>, Ba + 4H<sub>2</sub>O, Ag<sub>2</sub> (*B.* 26, 1983). — IV, 728.

8) Methylester d. 4-Semicarbazon-3-Oxy-1,4-Dihydronaphtalin-1-Cyanmethylen-carbonsäure. Sm. 261° u. Zers. (*C.* 1907 [1] 1130).

9) Dibenzoat d.  $\alpha\beta$ -Diamido- $\alpha\beta$ -Dioximidoäthan. Sm. 217° (222°) (*R.* 13, 84; *B.* 22, 2947). — II, 1210.

10) 3,3'-Dicarbonsäurediamid d. Oxalsäurediphenylamid (Oxaldibenzam-diamid) (*A.* 232, 139). — II, 1265.

11) Di[4-Oxybenzylidenhydrazid] d. Oxalsäure (*J. pr.* [2] 51, 196). — III, 86.

12) Di[ $\beta$ -Benzoylhydrazid] d. Oxalsäure + 2H<sub>2</sub>O. Sm. 278° wasserfrei (*J. pr.* [2] 70, 430 *C.* 1905 [1] 84).

13) Monoureid d. 2-Phenylamidophenylimidomalonsäure. Sm. 170° (*B.* 39, 1319 *C.* 1906 [1] 1738).

14) Verbindung (aus Oxanilsäurechlorid u. Oxanilhydroxamsäureamid). Sm. 181—183° (*B.* 41, 4080 *C.* 1909 [1] 190).

15) Verbindung (aus 2,3-Diamido-1-Methylbenzol-4-Carbonsäure) (*B.* 22, 1984). — II, 1352.

$C_{16}H_{14}O_4N_6$  C 54,2 — H 3,9 — O 18,1 — N 23,7 — M. G. 354.

1) ?-Tetranitroso-2,3-Diphenylhexahydro-1,4-Diazin. Sm. 142—143° (*Soc.* 55, 103). — IV, 996.

$C_{16}H_{14}O_4Cl_2$  1) Trimethyläther d. 3,5-Dichlor-2,4,6-Trioxydiphenylketon? (Di-chlormethylhydrocotoin). Sm. 81—82° (*B.* 24, 2980). — III, 204.

- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>Cl<sub>4</sub>** 1)  $\alpha\beta$ -Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]-äthan. Sm. 242° (A. 325, 56 C. 1903 [1] 462).  
 2)  $\alpha\beta$ -Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 168° (A. 325, 57 C. 1903 [1] 462).
- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Trimethyläther d.  $\beta$ -Dibrom-2,4,6-Trioxydiphenylketon (Dibrom-methylhydrocotoin). Sm. 84° (A. 199, 56). — III, 204.  
 2) Acetat d. Dibromsaliretin. Sm. 95° (C. 1897 [2] 1075). — \*II, 680.  
 3) Verbindung (aus  $\beta$ -Brom-8-Oxy-5,7-Dimethylfluoron). Sm. 117—118° (M. 25, 329 C. 1904 [1] 1495).
- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>4</sub>** 1)  $\alpha\beta$ -Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]-äthan. Sm. 209° (A. 325, 37 C. 1903 [1] 461).  
 2)  $\alpha\beta$ -Dimethyläther d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan? Sm. 160° (A. 325, 38 C. 1903 [1] 461).  
 3) 3,3'-Dimethyläther d.  $\beta$ -Tetrabrom- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 214° (A. 345, 329 C. 1906 [1] 1696).  
 4) Dibromxylochinhydrone. Sm. 171—172° (B. 35, 436; B. 35, 2303 C. 1902 [2] 271). — \*III, 269.  
 5) 2,3,4,5-Tetrabrom-3,4-Dimethyl-2,3,4,5-Tetrahydroindacen-2,5-Dicarbonensäure. Sm. noch nicht bei 300° (B. 34, 2792).
- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>S** 1) Dibenzylsulfid-3,3'-Dicarbonensäure. Sm. 197°. Ag<sub>2</sub> (B. 34, 3371).  
 2) Dibenzylsulfid-4,4'-Dicarbonensäure. Sm. oberhalb 400° (B. 33, 2623). — \*II, 927.  
 3) Diacetat d. 2,2'-Dioxydiphenylsulfid. Sm. 95—96° (B. 39, 1350 C. 1906 [1] 1788).  
 4) Diacetat d. 4,4'-Dioxydiphenylsulfid. Sm. 92—94° (G. 17, 85). — II, 951.
- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>S<sub>2</sub>** 1) Dimethylenäther d. Di[3,4-Dioxybenzyl]disulfid. Sm. 69,5° (A. 345, 315 C. 1906 [1] 1695).  
 2) Dibenzyldisulfid- $\alpha\alpha'$ -Dicarbonensäure + 2H<sub>2</sub>O. Sm. 198—200° (215°) (C. 1903 [2] 1272; 1907 [1] 36).  
 3) Dibenzyldisulfid-3,3'-Dicarbonensäure. Sm. 200—202°. Ag<sub>2</sub> (B. 34, 3372).  
 4) Merkaptoessig-4,4'-Biphenyläthersäure (Biphenyldisulfacetsäure). Sm. 252° (B. 13, 390). — II, 989.  
 5) Dimethylester d. Diphenyldisulfid-2,2'-Dicarbonensäure. Sm. 130,5° (134°) (B. 31, 1670; 32, 1151; Am. 21, 210). — \*II, 901.  
 6) Diacetat d. Di[4-Oxyphenyl]disulfid. Sm. 88—89° (J. pr. [2] 41, 196). — II, 951.  
 7) Verbindung (aus Phenylessigsäure). Fl. (Soc. 95, 1239 C. 1909 [2] 1047).  
 8) Verbindung (aus 1-Methylbenzol-2-Carbonensäure) (Soc. 95, 1239 C. 1909 [2] 1047).  
 9) Verbindung (aus 1-Methylbenzol-3-Carbonensäure). Fl. (Soc. 95, 1239 C. 1909 [2] 1047).  
 10) Verbindung (aus 1-Methylbenzol-4-Carbonensäure) (Soc. 95, 1240 C. 1909 [2] 1047).
- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>S<sub>3</sub>** 1) Dibenzyltrisulfid- $\alpha\alpha'$ -Dicarbonensäure (Trithiodiphenylessigsäure). Sm. 145—148° (C. 1903 [2] 1271).  
 2) Diacetat d. Di[ $\beta$ -Oxyphenyl]trisulfid (G. 22 [2] 615). — II, 913.
- C<sub>16</sub>H<sub>14</sub>O<sub>5</sub>N<sub>2</sub>** C 61,2 — H 4,4 — O 25,5 — N 8,9 — M. G. 314.  
 1) Methyläther d. Galloeyanin (Prune). HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 21, 1742; D.R.P. 45786; J. pr. [2] 77, 500 C. 1908 [2] 175). — III, 677; \*III, 493.  
 2) Dioxim d. Brasileïn (B. 23, 1436; 35, 2306). — III, 654; \*III, 479.  
 3) 3-[2-Nitrobenzylacetyl]amidobenzol-1-Carbonensäure. Sm. 239° (B. 25, 3594). — II, 1260.  
 4) 3'-Nitro-4'-Dimethylamidodiphenylketon-2-Carbonensäure + H<sub>2</sub>O. Sm. 114—115° (165° wasserfrei). Ag (A. 307, 308; Bl. [3] 25, 511). — \*II, 1002.  
 5)  $\alpha$ -Phenyl- $\beta$ -[2-Diazo-3-Oxy-4-Methoxyphenyl]akrylsäure. Zers. bei 150° (B. 35, 4413 C. 1903 [1] 343). — \*IV, 1127.  
 6) Azoxybenzol-2,2'-Di[Methylcarbonensäure]. Sm. 250—251° (B. 41, 3924 C. 1909 [1] 294).  
 7) Methylester d. 2-[Methyl-2-Nitrobenzoylamido]benzol-1-Carbonensäure. Sm. 117° (A. 367, 143 C. 1909 [2] 701).

- C<sub>16</sub>H<sub>14</sub>O<sub>5</sub>N<sub>2</sub>** 8) Dimethylester d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 115,5° (117° corr.) (*J. r.* 23, 89; *A.* 326, 346 *C.* 1903 [1] 1130; *J. pr.* [2] 77, 164 *C.* 1908 [1] 1269). — *IV*, 1343.
- 9) Dimethylester d. Azoxybenzol-3,3'-Dicarbonsäure. Sm. 134° (136 bis 136,5°) (*A.* 326, 344 *C.* 1903 [1] 1130; *B.* 36, 2313 *C.* 1903 [2] 430). — *\*IV*, 1003.
- 10) Dimethylester d. Azoxybenzol-4,4'-Dicarbonsäure. Sm. 207° (corr.) (*A.* 326, 340 *C.* 1903 [1] 1130; *B.* 36, 2314 *C.* 1903 [2] 430; *B.* 39, 805 *C.* 1906 [1] 1245). — *\*IV*, 1003.
- 11) Äthylester d. 3-Nitro-2-Benzoylamidobenzol-1-Carbonsäure. Sm. 85,5° (*J. pr.* [2] 43, 444). — *II*, 1282.
- 12) Äthylester d. 2-[2-Nitrobenzoyl]amidobenzol-1-Carbonsäure. Sm. 132° (*B.* 40, 1618 *C.* 1907 [1] 1630).
- 13) Diacetat d. 4,4'-Dioxyazoxybenzol. Sm. 169° (*B.* 36, 4150 *C.* 1904 [1] 187).
- 14) 2-Carboxylphenylamid d. 2-Carboxylphenylamidoessigsäure. Fest, Zers. bei 250° (*B.* 27, 3253). — *II*, 1252.
- C<sub>16</sub>H<sub>14</sub>O<sub>5</sub>N<sub>4</sub>** C 56,1 — H 4,1 — O 23,4 — N 16,4 — *M. G.* 342.
- 1) Monobenzoylderivat d.  $\alpha\beta$ -Dioximido- $\beta$ -Phenylhydrazidopropionsäure. Sm. 158° (*A.* 367, 99 *C.* 1909 [2] 629).
- C<sub>16</sub>H<sub>14</sub>O<sub>5</sub>N<sub>6</sub>** C 51,9 — H 3,8 — O 21,6 — N 22,7 — *M. G.* 370.
- 1) Dibenzoat d. Azoxydicarbonamidoxim. Zers. bei 155° (*B.* 40, 1689 *C.* 1907 [1] 1685).
- C<sub>16</sub>H<sub>14</sub>O<sub>5</sub>S** 1) Diacetat d. 4,4'-Dioxydiphenylsulfoxyd. Sm. 110,5° (*B.* 25, 1894). — *II*, 951.
- 2) Diacetat d. isom. 4,4'-Dioxydiphenylsulfoxyd. Sm. 84—85° (*Soc.* 91, 1120 *C.* 1907 [2] 899).
- 3) 4-Methylbenzolsulfonat d. 4-Oxy-1-Methylbenzol-3,5-Dicarbonsäurealdehyd. Sm. 146,5° (*B.* 42, 2547 *C.* 1909 [2] 523).
- C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>N<sub>2</sub>** C 58,2 — H 4,2 — O 29,1 — N 8,5 — *M. G.* 330.
- 1) Dimethyläther d. Di[4-Nitro-2-Oxyphenyl]äthen. Sm. 268—269° (*Soc.* 93, 1724 *C.* 1908 [2] 1927).
- 2) 3-Methyläther-4-[2,4-Dinitrophenyl]äther d. 3,4-Dioxy-1-Allylbenzol. Sm. 114—115° (*B.* 27, 2457; *D. R. P.* 74433). — *II*, 974; *\*II*, 588.
- 3) 3-Methyläther-4-[2,4-Dinitrophenyl]äther d. 3,4-Dioxy-1-Propenylbenzol. Sm. 129—130° (*B.* 27, 2457; *D. R. P.* 74433). — *II*, 977; *\*II*, 590.
- 4) Anisalacetophenondinitrür. Fl. (*A.* 340, 75 *C.* 1905 [2] 330).
- 5) 1,3,5,7-Tetraoxy-2,6-Di[Amidomethyl]-9,10-Anthrachinon (*D. R. P.* 188189 *C.* 1907 [2] 1368).
- 6) Dimethyläther d.  $\beta$ -Diamido-1,3,5,7-Tetraoxy-9,10-Anthrachinon (*D. R. P.* 155633 *C.* 1904 [2] 1487).
- 7) Oxyprune (*B.* 41, 609 *C.* 1908 [1] 1286).
- 8) Ketazin (aus Dehydracetsäurehydrazon). Sm. 265° (*B.* 38, 3031 *C.* 1905 [2] 1326).
- 9) Diisatinsäure. Sm. 226—227°. Ag (*J. pr.* [2] 58, 106). — *\*II*, 948.
- 10)  $\beta\beta'$ -Di[2-Nitrophenyl]isobuttersäure. Sm. 149°.  $\text{NH}_4 + \frac{1}{2}\text{H}_2\text{O}$  (*B.* 27, 2248). — *II*, 1471.
- 11)  $\beta\beta'$ -Di[4-Nitrophenyl]isobuttersäure. Sm. 185° (*B.* 27, 2251). — *II*, 1471.
- 12)  $\beta$ -[2-Nitrophenyl]- $\beta'$ -[4-Nitrophenyl]isobuttersäure. Sm. 161° (*B.* 27, 2250; 29, 637). — *II*, 1471; *\*II*, 871.
- 13) 6-Nitro-3,4-Dioxy-1-Phenylimidomethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Anilidonitroopiansäure). Sm. 183—184° (*B.* 19, 2285). — *II*, 1944.
- 14) 6,6'-Dimethoxylazobenzol-3,3'-Dicarbonsäure (Azoanissäure). Ba +  $\text{H}_2\text{O}$  (*A.* 129, 345). — *IV*, 1471.
- 15) 2,2'-Azophenoxylessigsäure +  $2\text{H}_2\text{O}$ . Sm. 162° (wasserfrei).  $\text{Na}_2 + 3\text{H}_2\text{O}$ ,  $\text{K}_2 + 3\text{H}_2\text{O}$ , Ca +  $8\text{H}_2\text{O}$ , Ba +  $2\text{H}_2\text{O}$ ,  $\text{Ag}_2 + 3\text{H}_2\text{O}$  (*J. pr.* [2] 29, 161). — *IV*, 1405.
- 16) Äthylester d. 2-[3-Nitrobenzoxylphenyl]amidoameisensäure. Sm. 86,5° (*Ann.* 23, 22; *B.* 33, 202). — *\*II*, 772.
- 17) Monoamid d. 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure (Papaverinaminsäure).  $\text{NH}_4$ , Ag (*M.* 13, 700). — *IV*, 177.
- 18) Verbindung (aus 3-Amidobenzol-1-Carbonsäure). Ba (*Soc.* 69, 1515). — *\*II*, 788.



- C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>N<sub>4</sub>** C 53,6 — H 3,9 — O 26,8 — N 15,6 — M. G. 358.
- 1)  $\alpha\beta$ -Di[3-Nitrobenzoylamido]äthan. Sm. 257° (Soc. 87, 385 C. 1905 [1] 1587).
  - 2)  $\alpha\beta$ -Di[4-Nitrobenzoylamido]äthan. Sm. 254° (Soc. 87, 386 C. 1905 [1] 1587).
  - 3) *p*-Dinitro-4,4'-Di[Acetylamido]biphenyl. Sm. oberhalb 300° (B. 20, 1024; D.R.P. 82748, 91720). — IV, 964; \*IV, 542.
  - 4) Monoacetylderivat d.  $\alpha$ -[4-Nitrophenyl]imido- $\alpha$ -[5-Nitro-2-Amido-3-Oxymethylphenyl]methan. Sm. 223—225° u. Zers. (B. 35, 744 C. 1902 [1] 754). — \*III, 66.
  - 5)  $\alpha\beta$ -Diacetyl- $\alpha\beta$ -Di[4-Nitrophenyl]hydrazin. Sm. 186—187° (C. r. 134, 1219 C. 1902 [2] 41). — \*IV, 1090.
  - 6) Dimethyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Oxyphenyl]-benzimidazol. Sm. 168° (Soc. 93, 1674 C. 1908 [2] 1922).
  - 7) Dimethyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[4-Oxyphenyl]-benzimidazol. Sm. 169—170° (Soc. 93, 1675 C. 1908 [2] 1922).
  - 8)  $\alpha\beta$ -Di[Phenylnitrosamido]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 142,5° (B. 26, 1765). — II, 438.
  - 9) Methylester d. *p*-Methylphenylazo-2,4-Dinitrophenylessigsäure. Sm. 168° (B. 22, 325). — IV, 1465.
  - 10) Acetat d. 3,3'-Dinitro-4-Oxy-2,2'-Dimethylazobenzol. Sm. 161° (B. 40, 3329 C. 1907 [2] 799).
  - 11) Acetat d. 5,6'-Dinitro-2'-Oxy-2,3'-Dimethylazobenzol. Sm. 205° (B. 26, 2353). — IV, 1423.
  - 12) Acetat d. 5,6'-Dinitro-4'-Oxy-2,3'-Dimethylazobenzol. Sm. 211° (B. 26, 2354). — IV, 1423.
  - 13) Di[4-Nitrophenylamid] d. Bernsteinsäure. Sm. 260° (A. 209, 377). — II, 414.
  - 14) Di[4-Nitro-2-Methylphenylamid] d. Oxalsäure. Sm. oberhalb 260° (Soc. 61, 463). — II, 467.
  - 15) Di[2-Nitro-4-Methylphenylamid] d. Oxalsäure (B. 8, 474; 15, 2691; A. 209, 372). — II, 501.
  - 16) Di[3-Nitro-4-Methylphenylamid] d. Oxalsäure (B. 31, 396). — \*II, 276.
- C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>N<sub>6</sub>** C 49,7 — H 3,6 — O 24,9 — N 21,7 — M. G. 386.
- 1) Äthylester d. 3-Nitrophenylazo-3-Nitrophenylhydrazonessigsäure (Ä. d. Di-3-Nitrophenylformazylameinsäure). Sm. 217° (B. 28, 1695).
- C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>Br<sub>4</sub>** 1) Tetrarmethyläther d. Tetrabromhexaoxybiphenyl. Sm. 217—218° (B. 9, 930). — II, 1042.
- 2) Tetrabromid d. Eriodiktyonon. Sm. 207° u. Zers. (A. 351, 248 C. 1907 [1] 1209).
- C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>S** 1) Diacetat d. 2,2'-Dioxydiphenylsulfon. Sm. 147—148° (B. 39, 1351 C. 1906 [1] 1788).
- 2) Diacetat d. 4,4'-Dioxydiphenylsulfon. Sm. 163—165° (A. 147, 58; G. 17, 90). — II, 840.
- C<sub>16</sub>H<sub>14</sub>O<sub>6</sub>As<sub>2</sub>** 1) Arsenobenzol-4,4'-Di[Oxyessigsäure] (D.R.P. 216270 C. 1909 [2] 2105).
- C<sub>16</sub>H<sub>14</sub>O<sub>7</sub>N<sub>2</sub>** C 55,5 — H 4,0 — O 32,4 — N 8,1 — M. G. 346.
- 1) 2,2'-Azoxyphenoxylessigsäure + H<sub>2</sub>O. Sm. 186—187° (NH<sub>4</sub>)<sub>2</sub>, Ba + 2H<sub>2</sub>O, Ag<sub>2</sub> (J. pr. [2] 29, 152). — IV, 1342.
  - 2) 2-[ $\alpha$ -Oximido-3,4-Dimethoxylbenzyl]pyridin-3,4-Dicarbonsäure (Oxim d. Papaverinsäure). Sm. 154—157° (M. 10, 693). — IV, 177.
  - 3) Verbindung (aus 4-Nitrobenzol-1-Carbonsäure u. 4-Acetylamidobenzol-1-Carbonsäure). Sm. 252—254°. Ca + xH<sub>2</sub>O, Ag<sub>2</sub> (H. 17, 296). — II, 1272.
- C<sub>16</sub>H<sub>14</sub>O<sub>7</sub>N<sub>4</sub>** C 51,3 — H 3,7 — O 30,0 — N 15,0 — M. G. 374.
- 1) 3,5-Dinitro-2,4,6-Trimethylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 307° (B. 10, 1711). — II, 1234.
  - 2) 3,5-Dinitro-2,4,6-Trimethylphenylamid d. *p*-Nitrobenzolcarbon-säure. Sm. bei 300° (B. 10, 1711). — II, 1167.
- C<sub>16</sub>H<sub>14</sub>O<sub>8</sub>N<sub>2</sub>** C 53,0 — H 3,9 — O 35,4 — N 7,7 — M. G. 362.
- 1) Äthylester d. Dioxyessigdi[4-Nitrophenyläther]säure. Sm. 137° (B. 40, 3175 C. 1907 [2] 981).
  - 2) Diäthylester d. *p*-Dinitronaphtalin-1,5-Dicarbonsäure. Sm. 160° u. Zers. (G. 26 [1] 108). — \*II, 1088.

- C<sub>16</sub>H<sub>14</sub>O<sub>8</sub>N<sub>2</sub>** 3) Diäthylester d. isom. *p*-Dinitronaphtalin-1,5-Dicarbonsäure. Sm. 253 bis 254° u. Zers. (*G.* 26 [1] 110). — \*II, 1088.
- C<sub>16</sub>H<sub>14</sub>O<sub>8</sub>N<sub>4</sub>** C 49,2 — H 3,6 — O 32,8 — N 14,4 — M. G. 390.
- C<sub>16</sub>H<sub>14</sub>O<sub>8</sub>Br** 1) Äthylenerester d. 2-Nitrophenylamidoameisensäure. Sm. 160° (*Am.* 19, 315). — \*II, 182.
- C<sub>16</sub>H<sub>14</sub>O<sub>8</sub>Br<sub>6</sub>** 1) Verbindung (aus Quebrachogerbstoff). Zers. bei 273° (*C.* 1905 [1] 936).
- C<sub>16</sub>H<sub>14</sub>O<sub>9</sub>N<sub>4</sub>** C 47,3 — H 3,4 — O 35,5 — N 13,8 — M. G. 406.
- 1) Tetraspartid + 4½H<sub>2</sub>O (*A.* 157, 28; 303, 195; *B.* 30, 2450; *G.* 30 [1] 10). — I, 1211; \*I, 667.
- C<sub>16</sub>H<sub>14</sub>O<sub>10</sub>N<sub>2</sub>** C 48,7 — H 3,5 — O 40,6 — N 7,1 — M. G. 394.
- 1) Methylentannincarbamid. Zers. bei 220° (*D.R.P.* 160273 *C.* 1905 [1] 1488).
- C<sub>16</sub>H<sub>14</sub>O<sub>10</sub>N<sub>4</sub>** C 45,5 — H 3,3 — O 37,9 — N 13,3 — M. G. 422.
- 1) Dimethyläther d. *p*-Tetranitro-4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 130,5° (*Am.* 31, 127 *C.* 1904 [1] 809).
- C<sub>16</sub>H<sub>14</sub>NCl** 1) 5-Chlor-1-Äthyl-2-Phenylindol. Sm. 107° (*D.R.P.* 128660 *C.* 1902 [1] 611).
- 2) Chlormethylat d. 4-Phenylchinolin. 2 + PtCl<sub>4</sub> (*B.* 28, 1040). — IV, 428.
- 3) Chlormethylat d. 6-Phenylchinolin. 2 + PtCl<sub>4</sub> (*A.* 230, 18). — IV, 430.
- 4) Chlormethylat d. 8-Phenylchinolin. 2 + PtCl<sub>4</sub> (*A.* 230, 42). — IV, 430.
- 5) Chlorbenzylat d. Chinolin + 3H<sub>2</sub>O. Sm. 65° (170° wasserfrei). 2 + PtCl<sub>4</sub> (*B.* 13, 2045; 16, 1279; 18, 36; *J.* 1882, 1109; *J. pr.* [2] 51, 96; *Bl.* [3] 29, 135 *C.* 1903 [1] 584). — IV, 252; \*IV, 179.
- 6) Chlorbenzylat d. Isochinolin (*M.* 9, 678). — IV, 300.
- C<sub>16</sub>H<sub>14</sub>NBr<sub>3</sub>** 1) Bromid d. Chinolinbrombenzylat. Sm. 100° (*B.* 18, 1305). — IV, 252.
- C<sub>16</sub>H<sub>14</sub>NJ** 1) Jodmethylat d. 2-Phenylchinolin. Sm. 197° (*B.* 19, 1198). — IV, 425.
- 2) Jodmethylat d. 3-Phenylchinolin. Sm. 224° (*B.* 41, 483 *C.* 1908 [1] 1065).
- 3) Jodmethylat d. 4-Phenylchinolin. Sm. 222° u. Zers. (*B.* 28, 1039). — IV, 428.
- 4) Jodmethylat d. 6-Phenylchinolin + 2H<sub>2</sub>O. Sm. 194° (*A.* 230, 17). — IV, 430.
- 5) Jodmethylat d. 8-Phenylchinolin. Sm. 163° (*A.* 230, 41). — IV, 430.
- 6) Jodbenzylat d. Chinolin. Sm. 135° (*Soc.* 91, 1822 *C.* 1908 [1] 263).
- 7) Jodbenzylat d. Isochinolin. Sm. 175—176° (*B.* 34, 3989 *C.* 1902 [1] 210). — \*IV, 191.
- C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) αβ-Dichlor-αβ-Di[2-Methylphenylimido]äthan. Sm. 130—131° (*A.* 279, 181; *B.* 40, 2656 *C.* 1907 [2] 223). — \*II, 257.
- 2) αβ-Dichlor-αβ-Di[3-Methylphenylimido]äthan. Sm. 72° (*B.* 40, 2661 *C.* 1907 [2] 224).
- 3) αβ-Dichlor-αβ-Di[4-Methylphenylimido]äthan. Sm. 107° (*B.* 40, 2660 *C.* 1907 [2] 224).
- 4) Chlormethylat d. 5-Chlor-1,3-Diphenylpyrazol. Sm. 194°. 2 + PtCl<sub>4</sub> (*A.* 358, 172 *C.* 1908 [1] 857).
- 5) Chlormethylat d. 3-Chlor-1,5-Diphenylpyrazol. Zers. bei 145°. 2 + PtCl<sub>4</sub> (*A.* 358, 162 *C.* 1908 [1] 855).
- C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>S** 1) 2-Methyl-1,5-Diphenyl-2,2-Dihydropyrazol-2,3-Sulfid. Sm. 185°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*A.* 358, 163 *C.* 1908 [1] 855).
- 2) 2-Methyl-1,3-Diphenyl-2,2-Dihydropyrazol-2,5-Sulfid. Sm. 163°. (2HCl, PtCl<sub>4</sub>) (*A.* 358, 173 *C.* 1908 [1] 857).
- 3) Methyläther d. 3-Merkapto-1,5-Diphenylpyrazol. Sm. 62° (*A.* 358, 165 *C.* 1908 [1] 856).
- 4) Methyläther d. 2-Merkapto-4,5-Diphenylimidazol. Sm. 233—234°. HJ, HJ + CH<sub>4</sub>O (*A.* 284, 14). — III, 224.
- 5) 2-Phenylimido-4-Methyl-3-Phenyl-2,3-Dihydrothiazol. Sm. 138,5° (*A.* 249, 51). — IV, 821; \*IV, 556.

- C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>S** 6) 2,5-Dibenzyl-1,3,4-Thiodiazol. Sm. 98° (41—42°) (A. 184, 310; J. pr. [2] 69, 381 C. 1904 [2] 535). — II, 1328.
- 7) 2,5-Di[4-Methylphenyl]-1,3,4-Thiodiazol. Sm. 156—158° (J. pr. [2] 69, 380 C. 1904 [2] 535).
- C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>S<sub>2</sub>** 1) Dibenzyläther d.  $\alpha$ -Cyanimido- $\alpha\alpha$ -Dimerkaptomethan. Sm. 82° (A. 355, 196 C. 1907 [2] 1326).
- 2) Thiocarbonyldi[4-Methylphenyl]thioharnstoff. Sm. 109° (B. 25, 1465). — II, 500.
- 3) Phenylamid d. Benzthiazol-1-[Äthyl- $\beta$ -Thiocarbonsäure]. Sm. 127° (B. 39, 3306 C. 1906 [2] 1568).
- 4) Verbindung (aus  $\alpha\beta$ -Dirhodanäthylbenzol u. Benzol). Sm. 62° (J. 1880, 404). — II, 1098.
- C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>S<sub>3</sub>** 1) 4-Methylphenylsenfölsulfid. Sm. 183—184° (175—176°) (J. pr. [2] 59, 577; B. 25, 3527). — II, 497; \*II, 273.
- 2) Dibenzyläther d. 3,5-Dimerkapto-1,2,4-Thiodiazol. Sm. 52° (B. 42, 2927 C. 1909 [2] 1218).
- 3) Dibenzyläther d. 2,5-Dimerkapto-1,3,4-Thiodiazol. Sm. 89° (B. 27, 2520). — \*IV, 312.
- C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>Se** 1) 3,5-Di[4-Methylphenyl]-1,2,4-Selendiazol. Sm. 116° (B. 37, 2553 C. 1904 [2] 520).
- C<sub>16</sub>H<sub>14</sub>N<sub>4</sub>Br<sub>2</sub>** 1)  $\beta$ -Dibrom-1,4-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 245° u. Zers. (Soc. 57, 51). — IV, 1234.
- C<sub>16</sub>H<sub>14</sub>N<sub>4</sub>S** 1) Inn. Anhydrid d.  $\alpha$ -Acetylamido- $\alpha$ -Phenylimido- $\alpha$ -[ $\beta$ -Phenylthio-ureido]methan. Sm. 200° (A. 356, 187 C. 1907 [2] 1797).
- 2) 5-Merkapto-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 97°. Hg, HgCl (B. 37, 2775 C. 1904 [2] 711; A. 338, 193 C. 1905 [1] 1156; A. 361, 271 C. 1908 [2] 521).
- 3)  $\alpha$ -Phenyl- $\beta$ -[2-Chinolyl]amidothioharnstoff + H<sub>2</sub>O. Sm. 106° (144° wasserfrei). Pikrat (B. 33, 1887). — \*IV, 812.
- C<sub>16</sub>H<sub>14</sub>N<sub>4</sub>S<sub>2</sub>** 1) Tolanthioharnstoff. Sm. 307° u. Zers. (A. 261, 134; B. 42, 1796 C. 1909 [2] 203). — III, 285.
- 2) 2-Thiocarbonyl-5-[2-Methylphenyl]azo-3-[2-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 155° (B. 24, 4204). — IV, 803.
- 3) 2-Thiocarbonyl-5-[4-Methylphenyl]azo-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 237—238° (B. 24, 4191). — IV, 806.
- C<sub>16</sub>H<sub>14</sub>N<sub>4</sub>S<sub>4</sub>** 1) Sulfid d. 5-Merkapto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 135° (B. 28, 2639). — IV, 745.
- C<sub>16</sub>H<sub>15</sub>ON** C 81,0 — H 6,3 — O 6,7 — N 5,9 — M. G. 237.
- 1) Äthyläther d. 10-Amido-2-Oxyphenanthren. Sm. 127° (Soc. 89, 1529 C. 1906 [2] 1765).
- 2) Äthyläther d. 10-Amido-3-Oxyphenanthren. Sm. 94° (Soc. 89, 1531 C. 1906 [2] 1765).
- 3)  $\gamma$ -Keto- $\gamma$ -[4-Amidophenyl]- $\alpha$ -[4-Methylphenyl]propen. HCl (B. 37, 393 C. 1904 [1] 657).
- 4)  $\alpha$ -Phenylamido- $\beta$ -Benzoylpropen. Sm. 132° (B. 22, 3278). — III, 163.
- 5)  $\gamma$ -Phenylimido- $\alpha$ -Keto- $\alpha$ -Phenylbutan. Sm. 110° (B. 20, 1770, 2180). — III, 270.
- 6)  $\gamma$ -[4-Methylphenyl]imido- $\alpha$ -Keto- $\alpha$ -Phenylpropan. Sm. 160—163° (B. 21, 2193). — III, 95.
- 7) 2-Dimethylamido-9[oder 10]-Oxyanthracen. Sm. 80—85° (A. 307, 313). — \*II, 541.
- 8) 2-Acetylamido- $\alpha\alpha$ -Diphenyläthen. Sm. 122° (B. 42, 3120 C. 1909 [2] 1353).
- 9) 2-Acetylamido- $\alpha\beta$ -Diphenyläthen. Sm. 140° (B. 39, 904 C. 1906 [1] 1168).
- 10)  $\gamma$ -Benzoylamido- $\alpha$ -Phenylpropen. Sm. 94—95° (B. 26, 1860; Ar. 244, 274 C. 1906 [2] 1420). — II, 1167.
- 11) 1-Benzoylamido-2,3-Dihydroinden. Sm. 142—143° (Soc. 71, 251). — \*II, 732.
- 12)  $\gamma$ -Oximido- $\alpha\alpha$ -Diphenyl- $\alpha$ -Buten. Sm. 88° (B. 32, 1436). — \*III, 185.
- 13)  $\gamma$ -Oximido- $\alpha\beta$ -Diphenyl- $\alpha$ -Buten. Sm. 153° (M. 19, 410; 20, 739; 22, 667). — \*III, 185.
- 14)  $\gamma$ -Oximido- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 102—103° (M. 18, 439). — \*III, 185.



- $C_{16}H_{15}ON$
- 15)  $\delta$ -Oximido- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 104° (B. 40, 4832 C. 1908 [1] 363).
  - 16) anti- $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten (Dyponoxim). Sm. 78° (65°) (B. 37, 731 C. 1904 [1] 1012; M. 25, 435 C. 1904 [2] 336; A. 351, 172 C. 1907 [1] 1414). — III, 249.
  - 17) syn- $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\beta$ -Buten. Sm. 134° (B. 37, 732 C. 1904 [1] 1012; M. 25, 433 C. 1904 [2] 336; A. 351, 172 C. 1907 [1] 1418).
  - 18)  $\gamma$ -Oximido- $\gamma$ -Phenyl- $\alpha$ -[4-Methylphenyl]propen. Sm. 91° (B. 32, 2284). — \*III, 185.
  - 19) N-Benzylzimtaldoxim. Sm. 130° (A. 298, 192). — \*III, 47.
  - 20) 5-Keto-1,2-Diphenyltetrahydropyrrol. Sm. 149° (C. r. 143, 432 C. 1906 [2] 1495).
  - 21) 5-Keto-2,3-Diphenyltetrahydropyrrol. Sm. 207° (A. 269, 139). — IV, 420.
  - 22) Methyläther d. 3-Methyl-2-[4-Oxyphenyl]indol. Sm. 123° (B. 37, 870 C. 1904 [1] 1154).
  - 23) d-1-Benzoyl-2-Methyl-2,3-Dihydroindol. Sm. 119° (Soc. 85, 1335 C. 1904 [2] 1657).
  - 24) l-1-Benzoyl-2-Methyl-2,3-Dihydroindol. Sm. 119° (Soc. 85, 1333 C. 1904 [2] 1657).
  - 25) r-1-Benzoyl-2-Methyl-2,3-Dihydroindol. Sm. 91,5° (B. 26, 1303; B. 37, 4583 C. 1905 [1] 183; B. 37, 4729 C. 1905 [1] 385). — IV, 189.
  - 26) 2-Keto-3,3-Dimethyl-1-Phenyl-2,3-Dihydroindol. Sm. 72; Sd. 210 bis 212°<sub>30</sub> (M. 21, 177). — \*IV, 162.
  - 27) 1-Benzoyl-1,2,3,4-Tetrahydrochinolin. Sm. 75° (76°) (B. 13, 2400; B. 16, 734; B. 37, 4726 C. 1905 [1] 384). — IV, 195; \*IV, 143.
  - 28) 2-Benzoyl-1,2,3,4-Tetrahydroisochinolin. Sm. 129°; Sd. 245—250°<sub>50</sub> (B. 26, 1213; A. 326, 263). — IV, 201; \*IV, 145.
  - 29) Benzylhydroxyd d. Chinolin. Chlorid, d-Camphersulfonat, d-Bromcamphersulfonat (Bl. [3] 29, 135 C. 1903 [1] 584; Soc. 91, 1822 C. 1908 [1] 263). — \*IV, 179.
  - 30) 1-Acetyl-3,6-Dimethylcarbazol. Sm. 129° (B. 24, 2598). — IV, 398.
  - 31) 5-[ $\beta$ -Oxyisopropyl]akridin. Sm. 183°. (2HCl, PtCl<sub>4</sub>) (B. 32, 3609). — \*IV, 254.
  - 32) 3-[ $\beta$ -Oxypropyl]- $\beta$ -Naphthochinolin. Fl. (B. 27, 2028).
  - 33) Inn. Anhydrid d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthan- $\alpha^2$ -Carbonsäureamid (p-Xylylphtalimidin). Sm. 149° (B. 24, 3969). — II, 1702.
  - 34) Aldehyd d.  $\beta$ -Methylphenylamido- $\alpha$ -Keto- $\alpha$ -Phenyläthan- $\beta$ -Carbonsäure? Sm. 103° (B. 21, 1137). — III, 95.
  - 35) Nitril d.  $\beta$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 113° u. Zers. (B. 14, 1688; A. 119, 45). — II, 1701.
  - 36) Phenylamid d.  $\beta$ -Phenylpropan- $\alpha$ -Carbonsäure. Sm. 121° (B. 37, 734 C. 1904 [1] 1012; C. r. 138, 987 C. 1904 [1] 1439).
  - 37) Phenylamid d. Phenylisocrotonsäure. Sm. 89—90° (B. 37, 2001 C. 1904 [2] 24).
  - 38) Phenylamid d. 2,3-Dihydroinden-2-Carbonsäure. Sm. 182° (Soc. 65, 236). — II, 1430.
  - 39) 2-Methylphenylamid d.  $\beta$ -Phenylakrylsäure. Sm. 167°. — II, 1408.
  - 40) 4-Methylphenylamid d.  $\beta$ -Phenylakrylsäure. Sm. 168°. — II, 1408.
  - 41) 2-Allylphenylamid d. Benzolcarbonsäure. Sm. 123—124° (B. 37, 4726 C. 1905 [1] 385).
  - 42) Diphenylamid d. Propen- $\alpha$ -Carbonsäure. Sm. 115—116° (B. 34, 2140).
  - 43) Diphenylamid d. Propen- $\beta$ -Carbonsäure. Sm. 108° (B. 34, 2141).
  - 44) Verbindung (aus Phenol u. 1-Amidonaphthalin). Sm. 30,1 (Soc. 43, 468). — II, 592.
- $C_{16}H_{15}ON_3$
- C 72,5 — H 5,7 — O 6,1 — N 15,8 — M. G. 265.
- 1)  $\alpha$ -Phenylhydrazon- $\alpha$ -Benzylidenamido- $\beta$ -Ketopropan. Sm. 159 bis 159,5° (B. 34, 542). — \*IV, 894.
  - 2) 5-Oxy-1-Phenyl-3-[ $\beta$ -Phenyläthyl]-1,2,4-Triazol. Sm. 182—183° (B. 36, 1102 C. 1903 [1] 1140). — \*IV, 815.
  - 3) 3-Keto-5-Methyl-2-Phenyl-1-Benzyl-2,3-Dihydro-1,2,4-Triazol. Sm. 79—80°. — IV, 1105.
  - 4) 1[oder 4]-Acetyl-3,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol (B. 27, 1009).

- C<sub>16</sub>H<sub>15</sub>ON<sub>3</sub>** 5) Äthyläther d. 5-Oxy-1,3-Diphenyl-1,2,4-Triazol. Sm. 85—86° (*Am.* 34, 128 *C.* 1905 [2] 1031).
- 6) Äthyläther d. 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 92° (85—86°) (*Soc.* 67, 1066; *Am.* 24, 212). — IV, 1157; \*IV, 807.
- 7) 3-Keto-2-Methyl-5,6-Diphenyl-2,3,4,5-Tetrahydro-1,2,4-Triazin. Sm. 199° (*A.* 339, 285 *C.* 1905 [2] 47).
- 8) 3-[4-Dimethylamidophenyl]imido-2-Keto-2,3-Dihydroindol. Sm. 215° (*J. pr.* [2] 73, 470 *C.* 1906 [2] 504).
- 9) 2-Phenylureido-2-Methylindol. Sm. 194° (*J. pr.* [2] 61, 288). — \*IV, 593.
- 10) Monophenylhydrazon d. 2,3-Diketo-4,6-Dimethyl-2,3-Dihydroindol. Sm. 238—239° (*A.* 358, 368 *C.* 1908 [1] 1172).
- 11) Monophenylhydrazon d. 2,3-Diketo-5,7-Dimethyl-2,3-Dihydroindol. Sm. 272° (*A.* 358, 367 *C.* 1908 [1] 1172).
- 12) 2-[2-Acetylamido-4-Methylphenyl]benzimidazol. Sm. 255° u. Zers. (*B.* 32, 1470). — \*IV, 841.
- 13) 2-Methyl-1-[4-Acetylamidophenyl]benzimidazol. Sm. 219° (*B.* 28, 2979).
- 14) 5[oder 6]-Methyl-2-[2-Acetylamidophenyl]benzimidazol. Sm. 193° (*B.* 32, 1470). — \*IV, 842.
- 15) 5-Acetylamido-2-Methyl-1-Phenylbenzimidazol. Sm. 229—230° (*J. pr.* [2] 74, 198 *C.* 1906 [2] 1436).
- 16) 1-Acetyl-2-[4-Methylphenyl]imido-2,3-Dihydrobenzimidazol. Sm. 152° (*B.* 24, 2511). — IV, 567.
- 17) 1[oder 3]-Acetyl-2-Phenylimido-5-Methyl-2,3-Dihydrobenzimidazol. Sm. 147° (*B.* 24, 2516). — IV, 623.
- 18) Nitril d. β-Phenylamido-α-Benzylidenamido-α-Oxypropionsäure. Sm. 253° (*B.* 31, 2710). — \*III, 25.
- 19) Nitril d. α-[4-Acetylamidophenyl]amido-α-Phenylelessigsäure. Sm. 180° (*B.* 35, 3341 *C.* 1902 [2] 1194). — \*IV, 390.
- 20) Nitril d. 2,6-Dimethyl-4-[4-Methoxyphenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 215—216° (*J. pr.* [2] 56, 132). — \*IV, 221.
- 21) Cinnamylidenhydrazid d. Phenylamidoameisensäure (*J. pr.* [2] 53, 529).
- C<sub>16</sub>H<sub>15</sub>ON<sub>5</sub>** C 65,5 — H 5,1 — O 5,5 — N 23,9 — M. G. 293.
- 1) 5-Keto-4-[4-Amidophenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 206—207° (*B.* 33, 195). — \*IV, 1079.
- 2) 3-Acetylamido-5-Phenylamido-1-Phenyl-1,2,4-Triazol + H<sub>2</sub>O. Sm. 166° (wasserfrei) (*A.* 355, 215 *C.* 1907 [2] 1327; *A.* 356, 194 *C.* 1907 [2] 1798).
- 3) 5-Acetylamido-3-Phenylamido-1-Phenyl-1,2,4-Triazol. Sm. 189° (*A.* 355, 214 *C.* 1907 [2] 1327).
- 4) 4-Phenylureido-1-Phenyl-3-Methyl-1,2,5-Triazol. Sm. 240° (*J. pr.* [2] 64, 229; *B.* 28, 1287). — IV, 1238.
- C<sub>16</sub>H<sub>15</sub>OCl** 1) α-Chlor-γ-Keto-αβ-Diphenylbutan. Sm. bei 140° u. Zers. (*M.* 18, 443; 19, 407; 22, 667). — \*III, 174.
- 2) γ-Chlor-α-Keto-α-Phenyl-β-Methylpropan. Sm. 83° (*Am.* 31, 656 *C.* 1904 [2] 446).
- C<sub>16</sub>H<sub>15</sub>OBr** 1) Methyläther d. β-Brom-α-Phenyl-α-[4-Oxyphenyl]propen. Sm. 51 bis 52° (*B.* 37, 228 *C.* 1904 [1] 659).
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>N** C 75,9 — H 5,9 — O 12,6 — N 5,5 — M. G. 253.
- 1) γ-[3-Oxyphenyl]imido-α-Oxy-α-Phenyl-α-Buten. Sm. 160° (*B.* 36, 2451 *C.* 1903 [2] 670).
- 2) Dimethyläther d. 8-Amido-3,4-Dioxyphenanthren. HCl (*B.* 40, 2000 *C.* 1907 [2] 158).
- 3) Dimethyläther d. 9-Amido-3,4-Dioxyphenanthren. Fl. HCl (*B.* 40, 2042 *C.* 1907 [2] 162).
- 4) Di[Benzoyl]methylamin (Diphenacylamin). Sm. 74—75°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 41, 1146 *C.* 1908 [1] 1894).
- 5) N-Acetylphenyl-6-Oxy-3-Methylbenzylamin. Sm. 102° (*B.* 41, 622 *C.* 1908 [1] 1268).
- 6) 4-Diacetylamidobiphenyl. Sm. 120° (*J. pr.* [2] 63, 456).
- 7) 3-Diacetylamidoacenaphthen. Sm. 122° (*B.* 21, 1458). — II, 634.
- 8) Äthyläther d. Benzoylimidooxymethylbenzol. Sm. 65° (*Am.* 19, 137; 20, 73). — \*II, 761.
- 9) 2-Propionylamidodiphenylketon. Sm. 78,5° (*B.* 25, 3085). — III, 182.

- $C_{16}H_{15}O_2N$  10) 4-Propionylamidodiphenylketon. Sm. 139° (C. 1903 [1] 1137).  
 11) 4-Acetyl-amido-3-Methyldiphenylketon. Sm. 175° (Soc. 85, 593 C. 1904 [1] 1554).  
 12) 6-Acetyl-amido-3-Methyldiphenylketon. Sm. 159° (Soc. 85, 595 C. 1904 [1] 1554).  
 13) 3'-Acetyl-amido-4-Methyldiphenylketon. Sm. 139° (A. 286, 314). — III, 214.  
 14) 4'-Acetyl-amido-4-Methyldiphenylketon. Sm. 155° (A. 286, 326). — III, 214.  
 15)  $\alpha$ -Benzoylamidoäthylphenylketon. Sm. 103° (B. 30, 1523). — \*III, 113.  
 16) Äthyl-4-Benzoylamidophenylketon. Sm. 190° (C. 1903 [1] 1223).  
 17) Methyl-2-Phenylacetylamidophenylketon. Sm. 79° (79–80°) (B. 26, 1392; Ar. 239, 602; C. 1901 [2] 1228). — III, 124; \*III, 95.  
 18) Phenylacetylamidobenzoylmethan. Sm. 126–127° (B. 15, 2470). — III, 127.  
 19)  $\gamma$ -Oximido- $\gamma$ -[4-Oxy-3-Methylphenyl]- $\alpha$ -Phenylpropen. Sm. 49° (M. 27, 1153 C. 1907 [1] 721).  
 20) 2-Methyläther d.  $\gamma$ -Oximido- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 122–123° (B. 25, 3536). — III, 247.  
 21)  $\beta$ -Phenyläther d.  $\gamma$ -Oximido- $\beta$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 169° (B. 35, 3554 C. 1902 [2] 1311).  
 22) Benzyläther d.  $\alpha$ -Oximido- $\beta$ -Keto- $\alpha$ -Phenylpropan. Sm. 62° (A. 291, 284). — III, 268.  
 23) 6-Phenylamido-4-Keto-2-Furanyl-1,2,3,4-Tetrahydrobenzol. Sm. 214° (A. 294, 313). — \*III, 522.  
 24) 9-Propionylamidoxanthen. Sm. 211–214° (C. r. 145, 815 C. 1908 [1] 140).  
 25) 2-Phenylamido-5,6,7,8-Tetrahydro-1,4-Naphtochinon. Sm. 164° (B. 31, 903). — \*III, 274.  
 26) 3,4-Methylenäther d.  $\beta$ -[3,4-Dioxyphenyl]- $\alpha$ -[5-Äthyl-2-Pyridyl]-äthen. Sm. 92°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (B. 34, 2225). — \*IV, 239.  
 27) 3,4-Methylenäther d.  $\beta$ -[3,4-Dioxyphenyl]- $\alpha$ -[4,6-Dimethyl-4-Pyridyl]äthen (Piperonal- $\gamma$ -Kollidin). Sd. 55–60°<sub>50–60</sub>. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 42, 1195 C. 1909 [1] 1576).  
 28) 1-Oxy-3-Keto-1-Äthyl-2-Phenyl-1,3-Dihydroisindol. Sm. 160° (C. r. 143, 432 C. 1906 [2] 1495).  
 29) 1-Oxy-3-Keto-2-Äthyl-1-Phenyl-1,3-Dihydroisindol. Sm. 166–167°. HCl (B. 37, 388 C. 1904 [1] 669).  
 30) 6-Oxychinolinbenzylhydroxyd + 2H<sub>2</sub>O. Zers. bei 120–125° (J. pr. [2] 43, 527). — IV, 271.  
 31) 8-Oxychinolinbenzylhydroxyd + xH<sub>2</sub>O. Chlorid (J. pr. [2] 47, 429; [2] 54, 8). — IV, 273.  
 32) 8-Oxyisochinolinbenzylhydroxyd + 2H<sub>2</sub>O. Sm. 72° (110° wasserfrei). Salze, siehe diese (J. pr. [2] 52, 15). — IV, 303.  
 33) Äthyläther d. 2-Oxy-2-Phenyl-1,3-Benzoxazin. Zers. bei 200° (B. 31, 1603). — \*III, 54.  
 34) Benzyläther d. 2-Oxy-2-Methyl-1,3-Benzoxazin. Zers. bei 185° (B. 31, 1599). — \*III, 54.  
 35) 4-Benzoyl-3-Methyl-3,4-Dihydro-1,4-Benzoxazin. Sm. 126° (B. 30, 1638). — \*II, 739.  
 36) 1-Acetyl-2-Keto-3,3-Dimethyl-2,3-Dihydro- $\alpha$ -Naphtindol. Sm. 106,5° (M. 29, 425 C. 1908 [2] 879).  
 37) 3-Acetyl-2-Keto-1,1-Dimethyl-1,2-Dihydro- $\beta$ -Naphtindol. Sm. 139,5° (M. 26, 428 C. 1908 [2] 879).  
 38) 5-[ $\beta\beta$ -Dioxyisopropyl]akridin. Sm. 194° u. Zers. (B. 32, 3609). — \*IV, 254.  
 39)  $\gamma$ -Phenylamido- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 154°. Cu (B. 17, 2116). — II, 1424.  
 40)  $\alpha$ -[2-Methylphenyl]- $\beta$ -[2-Amidophenyl]akrylsäure. Sm. 225° (B. 39, 3110 C. 1906 [2] 1328).  
 41)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Amidophenyl]akrylsäure. Sm. 206° (B. 39, 3112 C. 1906 [2] 1328).



- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>N** 42) **Lakton d.  $\alpha$ -Oxy-4-Dimethylamidodiphenylmethan-2'-Carbonsäure.** Sm. 186° (188°) (*B.* 28 [2] 995; *C.* 1896 [1] 105; *A.* 300, 234; *Bl.* [3] 19, 830). — \*II, 994.
- 43) **Aldehyd d. 2-Benzoylamidomethylphenylelessigsäure.** Sm. 106—108° (*B.* 30, 2191). — \*III, 42.
- 44) **Methylester d.  $\beta$ -Phenylamido- $\beta$ -Phenylakrylsäure.** Sm. 92—93° (*A.* 245, 372). — II, 1644.
- 45) **Phenylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure.** Sm. 51 bis 52°; Sd. bei 300° (*Bl.* [3] 21, 12). — \*IV, 143.
- 46) **Acetat d. 4-Oxy-3-Phenylimido-1-Methylbenzol.** + C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (Sm. 101°) (*B.* 40, 3472 *C.* 1907 [2] 1332).
- 47) **Acetat d. anti- $\alpha$ -Oximido-4-Methyldiphenylmethan.** Sm. 123—124° (*B.* 23, 403). — III, 215.
- 48) **Acetat d. syn- $\alpha$ -Oximido-4-Methyldiphenylmethan.** Sm. 118—122° (*B.* 23, 2777). — III, 215.
- 49) **Amid d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-2-Methylphenyläthersäure.** Sm. 168° (*C. r.* 142, 895 *C.* 1906 [1] 1551; *Bl.* [3] 35, 537 *C.* 1906 [2] 760).
- 50) **Amid d.  $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure.** Sm. 149° (*B.* 28, 963). — II, 1713.
- 51) **Amid d.  $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan- $\alpha$ -Carbonsäure.** Sm. 162—164° (*J. pr.* [2] 55, 354). — \*II, 1009.
- 52) **Amid d.  $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -[2-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure.** Sm. 155° (*B.* 32, 1105). — \*II, 1010.
- 53) **Amid d.  $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthan- $\alpha^2$ -Carbonsäure.** Sm. 135—140° (*B.* 24, 3967). — II, 1715.
- 54) **Amid d. 2,4-Dimethyldiphenylketon-2'-Carbonsäure.** Sm. 152 bis 153° (*B.* 32, 1259). — \*II, 1008.
- 55) **Methylamid d.  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure.** Sm. 143 bis 144° (*B.* 20, 2866). — II, 1711.
- 56) **Phenylamid d.  $\beta$ -Benzoylpropionsäure.** Sm. 145° (150°) (*Bl.* [3] 19, 392; *B.* 24, 4080). — II, 1658; \*II, 967.
- 57) **Acetylbenzylamid d. Benzolcarbonsäure** (*B.* 26, 2279). — II, 1170.
- 58) **Benzoylamid d.  $\beta$ -Phenylpropionsäure.** Sm. 106° (*Am.* 13, 7). — II, 1357.
- 59) **Imid d. Phenylelessigsäure.** Sm. 192° (195°) (*Am.* 13, 3; *B.* 36, 747 *C.* 1903 [1] 827). — II, 1312.
- 60) **Imid d. 1-Methylbenzol-2-Carbonsäure.** Sm. 147—148° (*B.* 25, 456). — II, 1330.
- 61) **Imid d. 1-Methylbenzol-4-Carbonsäure.** Sm. 155° (*B.* 25, 454; 26, 2838). — II, 1342.
- 62) **Äthylimid d. Benzolcarbonsäure.** Sm. 101—102° (*Am.* 20, 73). — \*II, 735.
- 63) **2-Naphtylimid d. fum. Butan- $\beta\gamma$ -Dicarbonsäure.** Sm. 195—200° (*A.* 285, 232). — \*II, 339.
- 64) **2-Naphtylimid d. mal. Butan- $\beta\gamma$ -Dicarbonsäure.** Sm. 220° (*A.* 285, 234; 309, 334). — \*II, 339.
- 65) **1-Naphtylimid d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure.** Sm. 135—136° (*B.* 30, 617). — \*II, 336.
- 66) **2-Naphtylimid d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure.** Sm. 147—148° (149—150°) (*A.* 292, 187; *B.* 30, 617). — \*II, 339.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>3</sub>** 67) **Nitril d. Säure C<sub>16</sub>H<sub>16</sub>O<sub>4</sub> (aus Acetophenon)** (*B.* 20, 389). — II, 1882. C 68,3 — H 5,3 — O 10,8 — N 14,9 — M. G. 281.
- 1) **Cinnamylphenylamidoharnstoff.** Sm. 241—242° (*B.* 29, 1952). — IV, 675.
- 2)  **$\gamma$ -Oximido- $\gamma$ -Phenylureido- $\alpha$ -Phenylpropen ( $\gamma$ -Phenylallenylphenyluramidoxim).** Sm. 158—159° (*B.* 22, 2398). — II, 1409.
- 3)  **$\gamma$ -Semicarbazon- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropen.** Sm. 187° u. Zers. (*A.* 308, 255). — \*III, 226.
- 4)  **$\epsilon$ -Semicarbazon- $\alpha$ -Furanyl- $\epsilon$ -Phenyl- $\alpha\gamma$ -Pentadien.** Sm. 59—60° (*B.* 31, 284). — \*III, 522.
- 5)  **$\gamma$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten.** Sm. 155° (*A.* 294, 294). — IV, 774.
- 6)  **$\gamma$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]- $\beta$ -Methylpropen.** Sm. 135° (*B.* 19, 531). — IV, 755.

- $C_{18}H_{15}O_2N_3$  7)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Nitrophenyl]- $\beta$ -Methylpropen. Sm. 196°. — IV, 755.
- 8)  $\beta$ -Phenylhydrazon- $\beta$ -Acetylamido- $\alpha$ -Keto- $\alpha$ -Phenyläthan. Sm. 143 bis 156° (B. 26, 2789; J. pr. [2] 65, 148 C. 1902 [1] 1002). — IV, 1166; \*IV, 818.
- 9)  $\beta$ -Formyl- $\beta$ -Acetyl- $\alpha$ -Benzylidenamido- $\alpha$ -Phenylhydrazin. Sm. 125° (B. 35, 1902 C. 1902 [2] 42). — \*IV, 777.
- 10) 3,5-Diketo-1-Äthyl-2,4-Diphenyltetrahydro-1,2,4-Triazol. Sm. 125 bis 126° (Am. 34, 123 C. 1905 [2] 1031).
- 11) Äthyläther d. 3-Oxy-5-Keto-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 86° (Am. 24, 442; Am. 34, 122 C. 1905 [2] 1030).
- 12) Äthyläther d. 2-Phenylimido-5-Oxy-3-Phenyl-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 86° (Am. 24, 442). — \*IV, 751.
- 13) Dimethyläther d. 2,5-Di[4-Oxyphenyl]-1,3,4-Triazol +  $H_2O$ . Sm. 183° (181—182°) (A. 298, 112; J. pr. [2] 74, 16 C. 1906 [2] 791). — IV, 1188.
- 14) 3,5-Dicyan-2,6-Diketo-4-Methyl-4-[ $\beta$ -Phenyläthyl]hexahydropyridin. Sm. 223—224,5° (NH<sub>4</sub>)<sub>2</sub> (C. 1901 [1] 581). — \*II, 1217.
- 15) p-Nitroso-2-Keto-1,4-Diphenylhexahydro-1,4-Diazin. Zers. bei 220 bis 235° (B. 23, 2027). — II, 429.
- 16) 4,6-Diketo-2-Phenyl-5-Benzylhexahydro-1,2,3-Triazin (Benzylmalonsäurephenylazimid). Sm. 258° (Soc. 61, 796). — IV, 711.
- 17) 1[oder 3]-Nitroso-3-[4-Methylphenyl]amido-2-Keto-5-Methyl-2,3-Dihydroindol. Sm. oberhalb 220° u. Zers. (B. 18, 193). — II, 1653.
- 18) 5-Methyl-1-Äthyl-2-[2-Nitrophenyl]benzimidazol. Sm. 170° (B. 26, 202). — IV, 1014.
- 19) 5-Methyl-1-Äthyl-2-[4-Nitrophenyl]benzimidazol. Sm. 176° (B. 26, 202). — IV, 1014.
- 20) 6[oder 7]-Äthyläther d. 3,6[oder 3,7]-Dioxy-2-[Amidophenyl]-1,4-Benzdiazin. Sm. 234—235° (B. 32, 1870; 34, 2297). — \*IV, 846.
- 21) Äthylester d. 1-Phenyl-5-Pyrrylpyrazol-3-Carbonsäure. Sm. 163° (B. 23, 2159). — IV, 798.
- 22) Phenylamid d.  $\alpha$ -Phenylhydrazon- $\alpha$ -Acetessigsäure. Sm. 98—99° (B. 27, 1170). — IV, 705.
- 23) Benzylimid d.  $\alpha\gamma$ -Dicyan- $\beta\beta$ -Dimethylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 149—150° (C. 1901 [1] 578).
- 24) Benzylidenhydrazid d. Benzoylamidoessigsäure. Sm. 182° (J. pr. [2] 52, 246). — III, 39.
- 25) Benzylidenhydrazid d. 2-Acetylamidobenzol-1-Carbonsäure. Sm. 180° u. Zers. (J. pr. [2] 69, 98 C. 1904 [1] 729).
- $C_{16}H_{15}O_2N_5$  C 62,1 — H 4,8 — O 10,4 — N 22,7 — M. G. 309.
- 1) p-Nitro-1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 206—207° (Soc. 57, 54). — IV, 1234.
- 2) p-Nitro-1,4-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 144° (Soc. 57, 51). — IV, 1234.
- $C_{16}H_{15}O_2Cl$  1) Dimethyläther d.  $\beta$ -Chlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthen. Sm. 76° (A. 279, 338). — II, 998.
- 2) Äthylester d. Diphenylchloroessigsäure. Sm. 43—44° (B. 22, 1537). — II, 1464.
- 3) Acetochlorid d. Isohydrobenzoin (A. 182, 281). — II, 1102.
- $C_{16}H_{15}O_2Cl_3$  1) Dimethyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 92° (89°) (J. pr. [2] 47, 68; A. 306, 77). — II, 995; \*II, 604.
- $C_{16}H_{15}O_2Br$  1) Bromlapachonon. Sm. 126° (C. 1901 [1] 114). — \*III, 467.
- 2)  $\gamma$ -Brom- $\beta\gamma$ -Diphenylbuttersäure. Sm. 139° (J. pr. [2] 74, 331 C. 1906 [2] 1823).
- 3)  $\alpha$ -Brom- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 191,5° (B. 39, 3048 C. 1906 [2] 1263).
- $C_{16}H_{15}O_3N$  C 71,4 — H 5,6 — O 17,8 — N 5,2 — M. G. 269.
- 1) 10-Nitro-9-Oxy-9-Äthyl-9,10-Dihydroanthracen. Sm. 166° u. Zers. (A. 330, 172 C. 1904 [1] 891).
- 2) Anthracenäthylnitrat. Sm. bei 160° (Soc. 59, 648; 61, 872). — II, 260.
- 3) 3,4-Methylenäther-1-Äthyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol (Piperonal-p-Phenetidin). Sm. 105° (B. 29, 2328). — \*III, 75.

- $C_{16}H_{15}O_3N$  4) 3-Methyläther d. Methyl-4-[3,4-Dioxybenzyliden]amidophenylketon. Sm. 167° (B. 37, 396 C. 1904 [1] 658).
- 5) 4-Acetylamidophenyläther d. Oxymethylphenylketon (Hypnoacetin). Sm. bei 160° (C. 1897 [1] 410). — \*III, 102.
- 6) Dimethyläther d.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 93–94° (A. 355, 290 C. 1907 [2] 1624).
- 7) Dimethyläther d. isom.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 79,5° (A. 355, 290 C. 1907 [2] 1625).
- 8) 9,9-Dimethyläther d. 10-Oximido-9,9-Dioxy-9,10-Dihydroanthracen. Sm. 171° (A. 323, 227 C. 1902 [2] 802).
- 9) 9,9-Dimethyläther d. 10-Oximido-9,9-Dioxy-9,10-Dihydrophenanthren. Sm. 166–167° u. Zers. (A. 355, 310 C. 1907 [2] 1626).
- 10) Äthyläther d. Orcirufin. Sm. 269° (B. 23, 721). — II, 965.
- 11) Äthyläther d. Benzoylhydroxamsäure. Sm. 48–49° (A. 217, 8; B. 16, 874). — II, 1208.
- 12) Dimethyläther d. 6,7-Dioxy-1-Keto-2-Phenyl-1,3-Dihydroisindol. Sm. 141° (M. 30, 493 C. 1909 [2] 1339).
- 13)  $\alpha$ -Phenyl- $\beta$ -[2-Amido-3-Methoxylphenyl]akrylsäure. Sm. 208–209° (B. 33, 1827). — \*II, 1006.
- 14)  $\alpha$ -Phenyl- $\beta$ -[6-Amido-3-Methoxylphenyl]akrylsäure. Sm. 227–228°. Pb, Ag (B. 34, 4001 C. 1902 [1] 202).
- 15)  $\alpha$ -[2-Methoxylphenyl]- $\beta$ -[2-Amidophenyl]akrylsäure. Sm. 169° (B. 33, 168). — \*II, 1006.
- 16)  $\alpha$ -[4-Methoxyl]- $\beta$ -[2-Amidophenyl]akrylsäure. Sm. 149° (B. 33, 173). — \*II, 1007.
- 17)  $\alpha$ -Benzylidenamido- $\beta$ -Oxy- $\beta$ -Phenylpropionsäure. Na (A. 284, 42). — II, 1576.
- 18)  $\gamma$ -Phenylamido- $\alpha$ -Keto- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure. Sm. 127° (C. 1909 [1] 531).
- 19) d- $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionsäure (d-Benzoylphenylalanin). Sm. 142–143° (145–146°) (B. 33, 2384). — \*II, 837.
- 20) l- $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionsäure (l-Benzoylphenylalanin) (B. 33, 2386).
- 21) r- $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionsäure (r-Benzoylphenylalanin). Sm. 182–183° (187–188°) (A. 275, 17; B. 33, 2383). — II, 1365; \*II, 836.
- 22)  $\beta$ -Benzoylamido- $\beta$ -Phenylpropionsäure. Sm. 194–196° (B. 36, 4313 C. 1904 [1] 448; B. 38, 2322 C. 1905 [2] 479).
- 23)  $\beta$ -[2-Benzoylamidophenyl]propionsäure. Sm. 153° (B. 38, 3424 C. 1905 [2] 1598).
- 24) 4-[Methylbenzylamido]benzol-1-Ketocarbonsäure. Sm. 85–87° u. Zers. (C. 1901 [1] 239). — \*II, 948.
- 25) 1-[ $\beta$ -Benzoylamidoäthyl]benzol-2-Carbonsäure. Sm. 172°. Ba + 6H<sub>2</sub>O, Pb + H<sub>2</sub>O, Cu + 2H<sub>2</sub>O, Ag (B. 26, 1214). — II, 1372.
- 26) 4'-Dimethylamidodiphenylketon-2-Carbonsäure + xH<sub>2</sub>O. Sm. 199° (205° wasserfrei). Mg + 6H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Ag, HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), + CH<sub>3</sub>O, + C<sub>2</sub>H<sub>5</sub>O (B. 27 [2] 665; A. 300, 229; 307, 306; B. [3] 19, 830; [3] 25, 168). — \*II, 1000.
- 27)  $\gamma$ -Oximido- $\alpha$ - $\gamma$ -Diphenylbuttersäure. Sm. 83–87°. + C<sub>6</sub>H<sub>6</sub> (Soc. 85, 1364 C. 1904 [2] 1646).
- 28) 5-Keto-2-Methyl-1-[1-Naphtyl]tetrahydropyrrol-2-Carbonsäure. Sm. 255° (B. 38, 1225 C. 1905 [1] 1257).
- 29) 5-Keto-2-Methyl-1-[2-Naphtyl]tetrahydropyrrol-2-Carbonsäure. Sm. 231°. Ba, Zn + 2½H<sub>2</sub>O (B. 38, 1224 C. 1905 [1] 1257).
- 30) Methylester d. 4-Benzoyl-2-Methylphenylamidoameisensäure. Sm. 107° (Soc. 85, 593 C. 1904 [1] 1554).
- 31) Methylester d. 2-Benzoyl-4-Methylphenylamidoameisensäure. Sm. 110° (Soc. 85, 596 C. 1904 [1] 1554).
- 32) Äthylester d. 4-[2-Oxybenzyliden]amidobenzol-1-Carbonsäure. Sm. 83° (B. 42, 3031 C. 1909 [2] 1554).
- 33) Äthylester d. isom. 4-[2-Oxybenzyliden]amidobenzol-1-Carbonsäure. Sm. 87,5° (B. 42, 3031 C. 1909 [2] 1554).
- 34) Äthylester d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 98° (J. pr. [2] 64, 84).



- $C_{16}H_{15}O_3N$  35) Äthylester d. 3-Benzoylamidobenzol-1-Carbonsäure. Sm. 114° (A. 303, 277). — \*II, 789.
- 36) Äthylester d. 4-Benzoylamidobenzol-1-Carbonsäure. Sm. 148° (A. 303, 278). — \*II, 791.
- 37) Äthylester d. Phenylbenzoylamidoameisensäure. Sm. 67—68° (Am. 30, 35 C. 1903 [2] 363).
- 38) Äthylester d. 4-Benzoylphenylamidoameisensäure. Sm. 189° (A. 210, 273; 311, 149; B. 14, 1839). — III, 184; \*III, 148.
- 39) Äthylester d.  $\alpha$ -Oxyphenylmethylenamidoameisenphenyläthersäure. Sm. 91° (B. 26, 928). — II, 1181.
- 40) Äthylester d. Xanthen-9-Amidoameisensäure. Sm. 168—169° (C. r. 145, 815 C. 1908 [1] 139).
- 41) Äthylester d. 3-[4-Methylbenzoyl]pyridin-2-Carbonsäure. Sm. 58° (M. 22, 116). — \*IV, 119.
- 42) Phenylester d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 133° (H. 20, 423). — \*II, 747.
- 43) Benzylester d. Benzoylamidoessigsäure. Sm. 85,5—86°; Sd. 289,9° (G. 11, 256; B. 14, 2242). — II, 1184.
- 44) Acetat d. 3-Benzoylamido-4-Oxy-1-Methylbenzol. Sm. 134° (A. 369, 225 C. 1909 [2] 1995).
- 45)  $\beta$ -Acetat d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 112° (B. 38, 76 C. 1905 [1] 533).
- 46)  $\beta$ -Acetat d. isom.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 111° (B. 38, 76 C. 1905 [1] 533).
- 47) Benzoat d.  $\beta$ -Benzoylamido- $\alpha$ -Oxyäthan. Fl. (B. 38, 2412 C. 1905 [2] 478).
- 48) Benzoat d. 2-Oxy-1-Acetylamidomethylbenzol. Sm. 108—109° (A. 369, 236 C. 1909 [2] 1996).
- 49) Benzoat d. 3-Acetylamido-4-Oxy-1-Methylbenzol. Sm. 146° (A. 369, 226 C. 1909 [2] 1995).
- 50) Benzoat d.  $\alpha$ -Äthylbenzhydroxamsäure. Sm. 58° (A. 205, 208; 281, 232; B. 16, 874; 26, 1564). — II, 1207.
- 51) Benzoat d.  $\beta$ -Äthylbenzhydroxamsäure. Sm. 63° (A. 205, 281; 281, 232). — II, 1207.
- 52) 4-Methylbenzoat d.  $\alpha$ -Methylbenzhydroxamsäure. Sm. 108,5° (A. 281, 249). — II, 1344.
- 53) 4-Methylbenzoat d.  $\beta$ -Methylbenzhydroxamsäure. Sm. 65° (A. 281, 251). — II, 1344.
- 54) 3-Methylbenzoat d. 3-Methylbenzhydroxamsäure. Sm. 95,5° (A. 281, 222). — II, 1336.
- 55) 4-Methylbenzoat d. 4-Methylbenzhydroxamsäure. Sm. 167° (A. 281, 223). — II, 1345.
- 56) Amid d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-2-Methoxylphenyläthersäure. Sm. 158° (C. r. 142, 895 C. 1906 [1] 1551; Bl. [3] 35, 538 C. 1906 [2] 760).
- 57) Monamid d.  $\alpha\alpha$ -Diphenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 170°? (Am. 33, 341 C. 1905 [1] 1390).
- 58) Methylamid d.  $\alpha$ -Benzoxyl- $\alpha$ -Phenylessigsäure (M. d. Benzoylmandelsäure). Sm. 139° (Soc. 79, 1355 C. 1902 [1] 25).
- 59) Phenylamid d.  $\alpha$ -Acetoxylphenylessigsäure. Sm. 117,5° (A. 368, 61 C. 1909 [2] 1444).
- 60) Phenylamid d.  $\alpha$ -Benzoxylpropionsäure. Sm. 153° (Bl. [3] 17, 362). — \*II, 722.
- 61) Phenylmonamid d.  $\alpha$ -Phenyläthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 97° (B. 37, 4633 C. 1905 [1] 238).
- 62)  $\alpha$ -Phenylamid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 175° (A. 354, 137 C. 1907 [2] 694).
- 63)  $\beta$ -Phenylamid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 170—171°. Ag (Soc. 85, 1367 C. 1904 [2] 1646; A. 354, 136 C. 1907 [2] 694).
- 64) Benzylamid d. 2-Acetoxylbenzol-1-Carbonsäure. Sm. 102° (B. 26, 2628). — II, 1500.
- 65) Benzylidenamid d.  $\alpha$ -Oxy-4-Methoxylphenylessigsäure. Sm. 183° (B. 29, 2100). — \*III, 28.
- 66)  $\alpha$ -Methoxylbenzylamid d. Benzolketocarbonsäure. Sm. 105° (B. 29, 2105). — \*II, 941.

- C<sub>16</sub>H<sub>15</sub>O<sub>3</sub>N** 67) 4-Methoxybenzylidenamid d.  $\alpha$ -Oxyphenylessigsäure. Sm. 182° (B. 29, 2099). — \*III, 62.
- 68) Äthylphenylmonamid d. Benzol-1,2-Dicarbonsäure (Äthylphenylphtalamidsäure). Fl. Cu (A. 227, 185). — II, 1797.
- 69) 2-Methylbenzylmonamid d. Benzol-1,2-Dicarbonsäure (o-Xylphtalamidsäure). Sm. 156°. Ag (B. 21, 577). — II, 1797.
- 70) 3-Methylbenzylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 131°. Ag (B. 21, 2700). — II, 1797.
- 71) 4-Methylbenzylamid d. Benzol-1,2-Dicarbonsäure. Zers. bei 147°. Ag (B. 28, 2988). — \*II, 1050.
- 72) Diphenylmonamid d. Bernsteinsäure (Diphenylsuccinaminsäure). Sm. 119° (116,5°). Ag (G. 14, 468; A. 292, 193). — II, 413; \*II, 210.
- 73) Formiat d.  $\beta$ -Formylamido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 208° u. Zers. (B. 29, 1213). — \*II, 660.
- 74) Acetat d. 4-Phenylacetylamido-1-Oxybenzol. Sm. 120° (B. 17, 2436). — II, 719.
- 75)  $\alpha$ -Acetat d. anti- $\alpha$ -Oximido-4-Methoxyldiphenylmethan. Sm. 133 bis 135° (B. 24, 54). — III, 194.
- 76)  $\alpha$ -Acetat d. syn.  $\alpha$ -Oximido-4-Methoxyldiphenylmethan. Sm. 52 bis 53° (B. 24, 54). — II, 194.
- 77) N-Benzooat d.  $\gamma$ -Oximido- $\gamma$ -Oxy- $\alpha$ -Phenylpropan. Sm. 117° (A. 309, 199). — \*II, 834.
- 78) Benzoat d.  $\beta$ -Benzoylamido- $\alpha$ -Oxyäthan. Sm. 76° (88–89°) (B. 30, 914; Soc. 93, 1867 C. 1909 [1] 158). — \*II, 738.
- C<sub>16</sub>H<sub>15</sub>O<sub>3</sub>N<sub>3</sub>** C 64,6 — H 5,0 — O 16,2 — N 14,1 — M. G. 297.
- 1)  $\alpha$ -[3-Nitrobenzoyl]hydrazon- $\beta$ -Phenylpropan. Sm. 156–157° (B. 38, 1971 C. 1905 [2] 130).
- 2) 5-Benzoylamidoacetylazo-2-Oxy-1-Methylbenzol. Sm. 169–170° (A. 340, 96 C. 1905 [2] 322).
- 3) Dimethyläther d. 5-Amido-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin (Amidoopiansäurephenylhydrazid). Sm. 137–143° (B. 19, 2276). — IV, 717.
- 4) 3,5-Di[Acetylamido]phenoxazin (A. 322, 25 C. 1902 [2] 222). — \*IV, 829.
- 5) 2-Oxybenzylidenhydrazid d. 2-Oxybenzylidenamidoessigsäure. Sm. 189–191° (J. pr. [2] 70, 104 C. 1904 [2] 1036).
- 6) Acetat d. 4'-Acetylamido-4-Oxyazobenzol. Sm. 236–237° (C. 1899 [1] 1113). — \*IV, 1036.
- 7) Amid d. 2-[2-Acetylamidobenzoyl]amidobenzol-1-Carbonsäure. Sm. 226° u. Zers. (B. 40, 998 C. 1907 [1] 1325).
- 8) Benzoylhydrazid d. Benzoylamidoessigsäure. Sm. 213° (J. pr. [2] 70, 106 C. 1904 [2] 1036).
- C<sub>16</sub>H<sub>15</sub>O<sub>3</sub>N<sub>5</sub>** C 59,1 — H 4,6 — O 14,8 — N 21,5 — M. G. 325.
- 1)  $\alpha$ -Ureido- $\beta$ -[ $\alpha$ -Benzoylbenzyliden]amidoharnstoff. Sm. 240° (G. 37 [1] 444 C. 1907 [2] 587).
- C<sub>16</sub>H<sub>15</sub>O<sub>3</sub>Br** 1) 4-Methyläther d.  $\beta$ -Brom- $\gamma$ -Keto- $\alpha$ -Oxy- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan. Sm. 78° (B. 38, 36 C. 1908 [1] 674).
- C<sub>16</sub>H<sub>15</sub>O<sub>4</sub>N** C 67,4 — H 5,3 — O 22,4 — N 4,9 — M. G. 285.
- 1) Dimethyläther d.  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3,4-Dioxyphenyl]äthen. Sm. 122–123° (B. 33, 1817). — \*II, 606.
- 2) Dimethyläther d.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 133° (130°) (B. 22, 379; A. 279, 340). — III, 296.
- 3) Dimethyläther d. 10-Nitro-9,9-Dioxy-9,10-Dihydroanthracen. Sm. 135° u. Zers. (A. 330, 183 C. 1904 [1] 892).
- 4) 1,2-Dihydropapaverolin. HCl (Soc. 95, 1622 C. 1909 [2] 2180).
- 5)  $\alpha$ -Phenyl- $\beta$ -[2-Amido-3-Oxy-4-Methoxyphenyl]akrylsäure. Sm. 180° (B. 35, 4413 C. 1903 [1] 343).
- 6)  $\alpha$ -Benzoylamido- $\beta$ -[2-Oxyphenyl]propionsäure. Sm. 176° (C. 1908 [2] 1947).
- 7)  $\alpha$ -Benzoylamido- $\beta$ -[3-Oxyphenyl]propionsäure. Sm. 180° (C. 1908 [2] 1946).
- 8) d- $\alpha$ -Benzoylamido- $\beta$ -[4-Oxyphenyl]propionsäure (d-Benzoyltyrosin). Sm. 163–164° (B. 32, 2471, 3642). — \*II, 929.

- $C_{16}H_{15}O_4N$  9) 1- $\alpha$ -Benzoylamido- $\beta$ -[4-Oxyphenyl]propionsäure (1-Benzoyltyrosin). Sm. 162° (B. 32, 3644). — \*II, 929.
- 10) r- $\alpha$ -Benzoylamido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 182° (191 bis 193°) (A. 307, 142; B. 32, 3639). — \*II, 929.
- 11)  $\beta$ -Benzoylamido- $\beta$ -[2-Oxyphenyl]propionsäure. Sm. 168—169° (B. 42, 2531 C. 1909 [2] 698).
- 12) Benzol-1-Carbonsäure-2-Benzylamidoessigsäure. Sm. 190° u. Zers. (B. 35, 1699 C. 1902 [1] 1363).
- 13) 2-[p-Äthylamidooxybenzoyl]benzol-1-Carbonsäure. Sm. 152—153° (D.R.P. 162034 C. 1905 [2] 729).
- 14)  $\alpha$ -Phenylamido- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure (Anilidobenzylmalonsäure). Na<sub>2</sub>, K<sub>2</sub>, Ag<sub>2</sub> (B. 28, 1453; 29, 816). — II, 1850; \*II, 1069.
- 15) Dibenzylamin-4,4'-Dicarbonsäure. HCl (B. 33, 2629). — \*II, 830.
- 16)  $\alpha$ -Oximido- $\gamma$ -Oxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 96° (B. 38, 3120 C. 1905 [2] 1427).
- 17) Säure (aus d. Verb.  $C_{16}H_{12}O_4N_2S$ ). Sm. oberhalb 300°; subl. Zn (B. 20, 529). — II, 1229.
- 18) 1,2-Lakton d. 3,4-Dioxy-1-[4-Methylphenyl]amidooxymethylbenzol-3[oder 4]-Methyläther-2-Carbonsäure. Sm. 211° u. Zers. (B. 29, 2034).
- 19) Methyl ester d.  $\alpha$ -Benzoxyl- $\beta$ -[2-Pyridyl]propionsäure. Sm. 41°. (2HCl, PtCl<sub>4</sub>) (A. 265, 218). — IV, 154.
- 20) Methyl ester d.  $\beta$ -Benzoxyl- $\beta$ -[2-Pyridyl]propionsäure. Sm. 79° (A. 265, 235). — IV, 155.
- 21) Äthylester d. 2-Benzoxylphenylamidoameisensäure. Sm. 75,5° (B. 31, 1062; 33, 205; Am. 23, 16). — \*II, 717.
- 22) Äthylester d. 2-Phenylamidoformoxylbenzol-1-Carbonsäure. Sm. 98—100° (A. 363, 87 C. 1908 [2] 1724).
- 23) Äthylester d. 3-Phenylamidoformoxylbenzol-1-Carbonsäure. Sm. 115—116° (A. 363, 89 C. 1908 [2] 1724).
- 24) Äthylester d. 4-Phenylamidoformoxylbenzol-1-Carbonsäure. Sm. 134—135° (A. 363, 89 C. 1908 [2] 1724).
- 25) Äthylester d.  $\alpha$ -Benzoylamido- $\beta$ -[2-Furanyl]akrylsäure. Sm. 132 bis 133° (A. 337, 284 C. 1905 [1] 378).
- 26) Phenylester d.  $\alpha$ -Benzoylamido- $\alpha$ -Oxypropionsäure. Sm. 134° (B. 26, 2644). — II, 1192.
- 27) 2-Methoxylphenylester d. 4-Acetylamidobenzol-1-Carbonsäure. Sm. 179° (D.R.P. 67923). — \*II, 789.
- 28) 4-Acetylamidophenylester d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 181° (D.R.P. 70714). — \*II, 919.
- 29) 4-Acetylamidophenylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 167° (D.R.P. 70714). — \*II, 920.
- 30) 4-Acetylamidophenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 198° (D.R.P. 70714). — \*II, 922.
- 31) Äthylester-4-Benzoylamidophenylester d. Kohlensäure. Sm. 183 bis 184° (C. 1897 [1] 469). — \*II, 740.
- 32) Benzoat d.  $\alpha$ -Methyl-4-Methoxylbenzhydroxamsäure. Sm. 96° (A. 281, 261). — II, 1533.
- 33) Benzoat d.  $\beta$ -Methyl-4-Methoxylbenzhydroxamsäure. Sm. 89° (A. 281, 261). — II, 1533.
- 34) 4-Methylbenzoat d. 4-Methoxylbenzhydroxamsäure. Sm. 146° (C. 1899 [2] 179). — \*II, 909.
- 35) 4-Methoxylbenzoat d. anti-Methylbenzhydroxamsäure. Sm. 55° (B. 29, 1156). — \*II, 909.
- 36) 4-Methoxylbenzoat d. syn-Methylbenzhydroxamsäure. Sm. 96—98° (B. 29, 1159). — \*II, 909.
- 37) 4-Methoxylbenzoat d. 4-Methylbenzhydroxamsäure. Sm. 155° (C. 1899 [2] 179). — \*II, 909.
- 38)  $\alpha$ -Phenylamidoformiat d. 3,4-Dioxy-1-[ $\alpha$ -Oxyäthyl]benzol-3,4-Methylenäther. Sm. 65—67° (B. 36, 3595 C. 1903 [2] 1366).
- 39) Phenylamid d. 3,4-Dioxybenzoldimethyläther-1-Carbonsäurealdehyd-2-Carbonsäure. Sm. 179° (M. 28, 1230 C. 1908 [1] 737; M. 30, 490 C. 1909 [2] 1338).



- C<sub>16</sub>H<sub>15</sub>O<sub>4</sub>N** 40) Pseudophenylamid d. 3,4-Dioxybenzoldimethyläther-1-Carbonsäure-aldehyd-2-Carbonsäure (Anilidoopiansäure). Sm. 186—187° (B. 19, 2284; 29, 176, 2030; M. 30, 490 C. 1909 [2] 1338). — II, 1942.
- 41) Phenylamid d. Oxyessig-2-Acetoxyphenyläthersäure. Sm. 105° (J. pr. [2] 61, 357). — \*II, 552.
- 42) Mono[ $\beta$ -Phenoxy]lithylamid d. Benzol-1,2-Dicarbonsäure. Sm. 125° (B. 22, 3255). — II, 1796.
- 43) 4-Äthoxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 160 bis 165° (B. 36, 998 C. 1903 [1] 1131).
- 44) Imid d. 4-Oxybenzoldimethyläther-1-Carbonsäure. Sm. 170° (Soc. 85, 1540 C. 1905 [1] 167).

**C<sub>16</sub>H<sub>15</sub>O<sub>4</sub>N<sub>8</sub>** C 61,4 — H 4,8 — O 20,4 — N 13,4 — M. G. 313.

- 1)  $\alpha$ -[2,4-Dinitrophenyl]- $\beta$ -[4-Dimethylamidophenyl]äthen. Sm. 181° (B. 37, 1744 C. 1904 [1] 1599).
- 2) Äthyläther d. Benzoylimido-3-Nitrophenylamidooxymethan. Sm. 86—88° (Am. 32, 366 C. 1904 [2] 1507).
- 3)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]hydrazin. Sm. 241—242° (B. 37, 3919 C. 1904 [2] 1594).
- 4)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-4-Oxy-3-Methylbenzyliden]hydrazin. Sm. 188—189° (B. 37, 3928 C. 1904 [2] 1595).
- 5)  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 252—253° (B. 37, 3924 C. 1904 [2] 1595).
- 6) 5-Methyläther d. 2'-Nitro-5,6-Dioxy-3-Allylazobenzol. Sm. 143° (G. 36 [2] 37 C. 1906 [2] 1193).
- 7) 5-Methyläther d. 3'-Nitro-5,6-Dioxy-3-Allylazobenzol. Sm. 106 bis 107° (G. 36 [2] 39 C. 1906 [2] 1193).
- 8) 5-Methyläther d. 2'-Nitro-5,6-Dioxy-3-Propenylazobenzol (C. 1906 [2] 1125).
- 9) 5-Methyläther d. 3'-Nitro-5,6-Dioxy-3-Propenylazobenzol (C. 1906 [2] 1125).
- 10)  $\alpha$ -Phenylhydrazon- $\beta$ -[6-Nitro-3-Methylphenyl]propionsäure. Sm. bei 150° u. Zers. (B. 31, 390). — \*IV, 456.
- 11)  $\alpha$ -Phenylhydrazon- $\beta$ -[2-Nitro-4-Methylphenyl]propionsäure. Sm. bei 170° (B. 30, 1050). — IV, 697.
- 12)  $\alpha$ -[3-Methylphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 189° u. Zers. (J. pr. [2] 75, 130 C. 1907 [1] 1037).
- 13)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 191° (J. pr. [2] 75, 129 C. 1907 [1] 1037).
- 14)  $\beta$ -Dimethylamidoazobenzol-3,4'-Dicarbonsäure? (B. 10, 528). — IV, 1459.
- 15) Azobenzol-4-Methylamidoessigsäure-4'-Carbonsäure. Ba (B. 35, 579 C. 1902 [1] 580). — \*IV, 1055.
- 16) Säure (aus  $\alpha\beta$ -Di[Phenylnitrosamido]äthan- $\alpha\beta$ -Dicarbonsäure). Sm. 95° u. Zers. (B. 26, 1765). — II, 438.
- 17) Dimethylester d. Diazoamidobenzol-3,3'-Dicarbonsäure. Sm. 160° (A. 117, 12). — IV, 1577.
- 18) Äthylester d.  $\beta$ -[2-Nitrobenzyliden]- $\alpha$ -Phenylhydrazidoameisensäure. Sm. 85—86° (B. 32, 12). — \*IV, 486.
- 19) Äthylester d.  $\alpha$ -Phenylhydrazon-2-Nitrophenylessigsäure. Sm. 126 bis 128° (B. 23, 3621). — IV, 695.
- 20) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]hydrazin. Sm. 205—206° (B. 37, 3920 C. 1904 [2] 1594).
- 21) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-4-Oxy-3-Methylbenzyliden]hydrazin. Sm. 162—163° (B. 37, 3928 C. 1904 [2] 1595).
- 22) Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 155—156° (B. 37, 3924 C. 1904 [2] 1595).
- 23) Verbindung (aus Phenylcarbonimid u. N-Äthyl-syn-3-Nitrobenzaldoxim). Sm. 148° (B. 24, 2816). — III, 48.
- 24) Verbindung (aus d. Methylenäther d.  $\beta$ -[3,4-Dioxyphenyl]- $\alpha$ -Nitropropionsäurealdehyd). Sm. 86° (G. 23 [2] 130). — II, 980.

**C<sub>16</sub>H<sub>15</sub>O<sub>4</sub>N<sub>5</sub>** C 56,3 — H 4,4 — O 18,8 — N 20,5 — M. G. 341.

- 1)  $\alpha$ -[4-Nitrophenyl]azo- $\beta$ -Phenylhydrazonbuttersäure (B. 32, 209). — \*IV, 1057.

- $C_{16}H_{15}O_4Br$  1) Trimethyläther d. **p-Brom-2,4,6-Trioxydiphenylketon** (Brommethylhydrocötin). Sm. 147° (A. 199, 56). — III, 204.
- $C_{16}H_{15}O_4Br_3$  1) Phenylhydrazon d. **Tribrommethoxy-1,2-Benzochinonmethylacetacetal**. Sm. 205° (Am. 39, 85 C. 1908 [1] 823).  
C 63,8 — H 5,0 — O 26,6 — N 4,6 — M. G. 301.
- $C_{16}H_{15}O_5N$
- 5-[4-Oxy-3-Methoxylbenzyliden]amido-2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 274° u. Zers. (G. 39 [1] 125 C. 1909 [1] 1234).
  - 3,4-Dioxy-1-[4-Oxyphenylimido]methylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opianal-4-Oxyanilin). Sm. 223° (B. 34, 1018).
  - 3,4-Dioxy-1-N-Phenylbenzaloxim-3,4-Dimethyläther-2-Carbonsäure (Opiansäure-N-Phenyloxim). Sm. 174° (B. 34, 1017).
  - 2-[4-Methoxyphenylamidoformyl]phenoxylessigsäure. Sm. 174° (J. pr. [2] 60, 406). — \*II, 892.
  - 4-Benzylamidophenyltartronsäure. Sm. 137° (C. 1900 [2] 791). — \*II, 1123.
  - Colechicinsäure (M. 9, 17, 22). — III, 875.
  - Methylbetain d. 2-[3,4-Dimethoxylbenzoyl]pyridin-4-Carbonsäure + 3H<sub>2</sub>O (M. d. Pyropapaverinsäure). (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (M. 24, 702 C. 1903 [2] 1282; M. 24, 715 C. 1904 [1] 218).
  - Methylester d. 2-[3,4-Dimethoxylbenzoyl]pyridin-4-Carbonsäure (M. d. Pyropapaverinsäure). Sm. 108° (M. 17, 498). — IV, 177.
  - Methylester-4-Phenylglykolamidophenylester d. Kohlensäure. Sm. 135—136° (C. 1897 [1] 469). — \*II, 924.
  - 1-Äthylester-4-2-Oxyphenylester d. Benzol-1-Carbonsäure-2-Amidomeisensäure. Sm. 170—171° (D.R.P. 92535). — \*II, 790.
  - Diacetat d. 3-Acetylamido-1,2-Dioxynaphtalin. Zers. oberhalb 200° (A. 295, 15). — \*II, 593.
  - Diacetat d. 4-Acetylamido-1,2-Dioxynaphtalin. Sm. 193° (B. 27, 3341). — \*II, 593.
  - Diacetat d. 4-Acetylamido-1,3-Dioxynaphtalin. Sm. 155—156° (B. 28, 353). — \*II, 594.
  - Diacetat d. 2-Acetylamido-1,4-Dioxynaphtalin. Sm. 259—260° (B. 27, 3344). — \*II, 595.
  - Diacetat d. 5-Acetylamido-1,4-Dioxynaphtalin. Sm. 165° (B. 32, 2878; A. 335, 150 C. 1904 [2] 1136). — \*II, 596.
  - Diacetat d. 1-Acetylamido-2,7-Dioxynaphtalin. Sm. 183° (B. 30, 1123). — \*II, 598.
  - 2-Oxybenzoat d. 4-[α-Oxypropionyl]amido-1-Oxybenzol. Sm. 268° (D.R.P. 82635). — \*II, 888.
  - 4-Methoxylbenzoat d. 4-Methoxylbenzhydroxamsäure. Sm. 142 bis 143° (A. 175, 287). — II, 1534.  
C 58,4 — H 4,5 — O 24,3 — N 12,8 — M. G. 329.
- $C_{16}H_{15}O_5N_3$
- 3-Methyläther d. 2-Nitro-4-Acetoxy-3-Oxy-1-Phenylhydrazonmethylbenzol. Sm. 154° (B. 32, 3408). — \*IV, 497.
  - 4-Methyläther d. 5-Nitro-3-Acetoxy-4-Oxy-1-Phenylhydrazonmethylbenzol. Sm. 165° (B. 35, 4398 C. 1903 [1] 341). — \*IV, 497.
  - α-Phenylhydrazon-β-[4-Nitro-3-Methoxylphenyl]propionsäure. Sm. 107—108° (B. 31, 398). — \*IV, 463.
  - α-[4-Methoxylphenyl]-β-[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 159° (J. pr. [2] 75, 131 C. 1907 [1] 1037).
  - Phenylamid d. 4,6-Dinitro-1,3,5-Trimethylbenzol-2-Carbonsäure. Sm. 300—310° (B. 34, 1828).
  - 3-Nitro-2,4,6-Trimethylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 207° (B. 10, 1711). — II, 1234.
  - Verbindung (aus trim. Benzoylcyamid). Sm. 153° (B. 40, 1664 C. 1907 [1] 1576).
- $C_{16}H_{15}O_5Cl$  1) Diäthylester d. 2[oder 3]-Chlor-1-Ketoinden-3[oder 2]-Methyldicarbonsäure. Sm. 103—104° (B. 32, 262; WIEDERMANN, Dissert. Berlin, 1900). — \*II, 1141.
- $C_{16}H_{15}O_5Br$  1) Äthylester d. α-[3-Brom-1,4-Dioxy-2-Naphtyl]-β-Ketopropan-α-Carbonsäure. Sm. 125° u. Zers. (B. 34, 1552).
- Diäthylester d. 2[oder 3]-Brom-1-Ketoinden-3[oder 2]-Methyldicarbonsäure (D. d. Bromindonmalonsäure). Sm. 129—130° (B. 31, 2082). — \*II, 1141.

- C<sub>16</sub>H<sub>15</sub>O<sub>8</sub>N** C 60,6 — H 4,7 — O 30,3 — N 4,4 — M. G. 317.  
 1) Nitropeucedanin. Sm. oberhalb 100° u. Zers. (A. 176, 78; J. 1849, 476). — III, 641.  
 2) Oxim d. Eriodiktyonon. Sm. 192—194° u. Zers. (A. 351, 249 C. 1907 [1] 1209).  
 3) Äthylester d. β-Phtalylamidoacetoxypropen-α-Carbonsäure. Sm. 97—98° (B. 42, 1442 C. 1909 [1] 1814).  
 4) Äthylester d. α-Phtalylamido-βδ-Diketopentan-γ-Carbonsäure. Sm. 135—136° (B. 42, 1442 C. 1909 [1] 1814).  
 5) Diäthylester d. 4-Nitronaphtalin-1,8-Dicarbonsäure. Sm. 86° (A. 327, 82 C. 1903 [1] 1227).  
 6) Acetat d. 8-Diacetyl-amido-7-Oxy-4-Methyl-1,2-Benzpyron. Sm. 183—184° (B. 34, 674). — \*II, 1041.
- C<sub>16</sub>H<sub>15</sub>O<sub>6</sub>N<sub>3</sub>** C 55,7 — H 4,3 — O 27,8 — N 12,2 — M. G. 345.  
 1) p-Trinitro-2,4,6-Trimethyldiphenylmethan. Sm. 185° (A. ch. [6] 6, 182). — II, 241.  
 2) 6-Nitro-3,4-Dimethoxyl-1-Phenylhydrazonmethylbenzol-2-Carbonsäure (Nitroopiansäurephenylhydrazon). Sm. 184° (B. 19, 764). — IV, 717.  
 3) 6,6'-Dimethoxyldiazoamidobenzol-3,3'-Dicarbonsäure. Na<sub>2</sub> + 1½H<sub>2</sub>O, K<sub>2</sub> + 2H<sub>2</sub>O (A. 117, 44). — IV, 1578.  
 4) Dimethylester d. 4-Semicarbazon-3-Oxy-1,4-Dihydronaphtalin-1-Methylen-carbonsäure. Sm. 199° (C. 1907 [1] 1130).  
 5) Acetat d. 3-Nitro-2,4-Di[Acetyl-amido]-1-Oxynaphtalin. Sm. 235° u. Zers. (B. 21, 1197). — II, 866.  
 6) Acetat d. Di[2-Nitrobenzyl]hydroxylamin. Sm. 134° (B. 30, 59). — \*II, 306.
- C<sub>16</sub>H<sub>15</sub>O<sub>8</sub>N<sub>5</sub>** C 51,5 — H 4,0 — O 25,7 — N 18,8 — M. G. 373.  
 1) 4,2',4'-Trinitro-3-Methyl-6-Isopropylazobenzol. Sm. 198° (A. 357, 190 C. 1908 [1] 249).
- C<sub>16</sub>H<sub>15</sub>O<sub>6</sub>As** 1) Dimethylester d. Diphenylarsinsäure-4,4'-Dicarbonsäure. Sm. oberhalb 280° (A. 208, 23). — IV, 1693.
- C<sub>16</sub>H<sub>15</sub>O<sub>6</sub>Br<sub>3</sub>** 1) Äthylester d. p-Tribrom-5-Keto-3-Acetyl-4,7-Dimethyl-3,4,5,8-Tetrahydro-1,2-Benzpyron-6-Carbonsäure? Sm. 182,5° (Soc. 91, 1803 C. 1908 [1] 245).
- C<sub>16</sub>H<sub>15</sub>O<sub>7</sub>Br** 1) Verbindung (aus Methylxanthophansäure). Sm. 188° u. Zers. (B. 40, 3581 C. 1907 [2] 1745).
- C<sub>16</sub>H<sub>15</sub>O<sub>8</sub>Br<sub>5</sub>** 1) Pentabromkolatannin (C. 1898 [1] 579). — \*III, 497.
- C<sub>16</sub>H<sub>15</sub>O<sub>9</sub>N** C 52,6 — H 4,1 — O 39,5 — N 3,8 — M. G. 365.  
 1) Oxim d. Ketogersäure C<sub>16</sub>H<sub>14</sub>O<sub>9</sub> (M. 10, 656). — II, 2091.
- C<sub>16</sub>H<sub>15</sub>O<sub>9</sub>N<sub>5</sub>** C 45,6 — H 3,6 — O 34,1 — N 16,6 — M. G. 421.  
 1) Diäthyläther d. p-Trinitro-4,4'-Dioxyazoxybenzol. Sm. 168° (J. pr. [2] 21, 334). — IV, 1343.  
 2) Diäthyläther d. isom. p-Trinitro-4,4'-Dioxyazoxybenzol. Sm. 187° (J. pr. [2] 21, 334). — IV, 1343.
- C<sub>16</sub>H<sub>15</sub>NS** 1) Benzylchinolinammoniumsulfhydrat. 2 + PtCl<sub>4</sub> (J. pr. [2] 51, 94). — IV, 252.  
 2) 3,5-Dimethyl-1-[3-Methylphenyl]benzthiazol. Sm. 74,5° (J. pr. [2] 65, 152 C. 1902 [1] 991). — \*IV, 255.
- C<sub>16</sub>H<sub>15</sub>N<sub>2</sub>Cl** 1) δ-Chlor-αγ-Di[Phenylimido]butan. Sm. 172° (A. 279, 54). — \*II, 206.  
 2) γ-Phenylhydrazon-α-[4-Chlorphenyl]-α-Buten. Sm. 160° (J. pr. [2] 65, 279 C. 1902 [1] 1215). — \*IV, 503.  
 3) Chlormethylat d. 2-Phenylamidochinolin + 2H<sub>2</sub>O. Sm. 99°. 2 + PtCl<sub>4</sub> (A. 282, 378). — IV, 908.  
 4) Chlorbenzylat d. 5[oder 8]-Amidoisochinolin + 2H<sub>2</sub>O. Sm. 218° (wasserfrei) (J. pr. [2] 52, 20). — IV, 915.  
 5) Verbindung (Base aus d. Phenylamid d. Essigsäure). Sm. 116—117°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 184, 95). — II, 362.
- C<sub>16</sub>H<sub>15</sub>N<sub>2</sub>Cl<sub>5</sub>** 1) βββ-Trichlor-αα-Di[2-Chlor-4-Methylphenylamido]äthan. Sm. 110° (C. 1909 [2] 1419).
- C<sub>16</sub>H<sub>15</sub>N<sub>2</sub>Br** 1) α-Brom-γ-Phenylhydrazon-α-Phenyl-α-Buten. Sm. 97° u. Zers. (Soc. 85, 464 C. 1904 [1] 1438).  
 2) 1-[4-Bromphenyl]hydrazon-1,2,3,4-Tetrahydronaphtalin. Sm. 117 bis 118° (Soc. 75, 151). — \*IV, 504.



- C<sub>16</sub>H<sub>15</sub>N<sub>2</sub>Br** 3) 2-Brom-4-[2,4-Dimethylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 170—171° HBr (*B.* 32, 1265). — \*IV, 680.
- C<sub>16</sub>H<sub>15</sub>N<sub>2</sub>J** 1) Jodmethylat d. 2-Phenylamidochinolin. Sm. 118—119° (*A.* 282, 378). — IV, 908.  
 2) Jodmethylat d. 2-[4-Amidophenyl]chinolin. Sm. bei 220° u. Zers. (*M.* 7, 358). — IV, 1024.  
 3) Jodmethylat d. 2-Methyl-4-Phenyl-1,3-Benzdiazin. Sm. 190° (*B.* 25, 3084). — IV, 1026.
- C<sub>16</sub>H<sub>15</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>15</sub>ON<sub>3</sub>Cl) (*B.* 31, 1414).
- C<sub>16</sub>H<sub>15</sub>N<sub>3</sub>S** 1) Benzyläther d. α-Cyanimido-α-[2-Methylphenyl]amidomerkapto-methan. Sm. 165° (*A.* 348, 172 *C.* 1906 [2] 793; *A.* 355, 203 *C.* 1907 [2] 1327).  
 2) Benzyläther d. α-Cyanimido-α-[4-Methylphenyl]amidomerkapto-methan. Sm. 182° (*A.* 348, 170 *C.* 1906 [2] 793; *A.* 355, 203 *C.* 1907 [2] 1327; *A.* 361, 351 *C.* 1908 [2] 883).  
 3) α-[γ-Phenylallyliden]amido-β-Phenylthioharnstoff. Sm. 175—176° (*B.* 27, 617). — III, 61.  
 4) Äthyläther d. 5-Merkapto-1,3-Diphenyl-1,2,4-Triazol. Sm. 52 bis 53° (*Am.* 34, 131 *C.* 1905 [2] 1031).  
 5) Äthyläther d. 3-Merkapto-1,5-Diphenyl-1,2,4-Triazol. Sm. 97° (99 bis 100°) (*Am.* 27, 266 *C.* 1902 [1] 1299; *J. pr.* [2] 67, 242 *C.* 1903 [1] 1263). — \*IV, 807.  
 6) 4-Äthyl-1,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 232° (*J. pr.* [2] 67, 227 *C.* 1903 [1] 1261). — \*IV, 810.  
 7) 5-Methyl-1-Phenyl-4-Benzyl-4,5-Dihydro-1,2,4-Triazol-3,5-Sulfid. Sm. 205° (*J. pr.* [2] 67, 256 *C.* 1903 [1] 1265). — \*IV, 756.  
 8) p-Phenylthioureido-2-Methylindol. Sm. 162° (*J. pr.* [2] 61, 288). — \*IV, 593.
- C<sub>16</sub>H<sub>15</sub>N<sub>3</sub>S<sub>2</sub>** 1) Phenyläthylenäther d. Phenyl-di[Imidomerkaptomethyl]amin (Pseudophenyläthylenphenyldithiobiuret). Sm. 205° (*C.* 1902 [1] 1401).  
 2) Methyl-α-Phenyl-γ-Phenyldithioalduret. Sm. 168° (*B.* 28, 1109). — III, 34.  
 3) 2-[αβ-Diphenylthioureido]-4,5-Dihydrothiazol. Sm. 113° (*B.* 33, 660). — \*II, 195.  
 4) Methyläther d. 5-Merkapto-2-Phenylimido-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 68° (*B.* 34, 316). — \*IV, 536.  
 5) Methyläther d. 5-Merkapto-2-[4-Methylphenyl]imido-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 101° (*B.* 34, 318). — \*IV, 450.  
 6) Methyläther d. 3-Merkapto-5-Thiocarbonyl-1-Phenyl-4-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 152° (*B.* 34, 318). — \*IV, 750.  
 7) Methyläther d. 3-Merkapto-5-Thiocarbonyl-4-Phenyl-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 153° (*B.* 34, 315). — \*IV, 751.
- C<sub>16</sub>H<sub>15</sub>N<sub>3</sub>S<sub>3</sub>** 1) 4-Methylamidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 184° (*J. pr.* [2] 60, 211). — \*IV, 535.  
 2) 4-Äthylamidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 165° (*B.* 29, 2142). — IV, 683.
- C<sub>16</sub>H<sub>15</sub>N<sub>4</sub>J** 1) Jodmethylat d. 6-Phenyldiazoamidochinolin. Sm. 220° (*A.* 310, 88). — \*IV, 1140.
- C<sub>16</sub>H<sub>15</sub>N<sub>5</sub>S** 1) 4-Phenylthioureido-1-Phenyl-3-Methyl-1,2,5-Triazol. Sm. 195°. Zers. bei 220° (*J. pr.* [2] 64, 229; *B.* 28, 1287). — IV, 1238.
- C<sub>16</sub>H<sub>15</sub>ClBr<sub>2</sub>** 1) α-Chlor-αβ-Dibrom-αβ-Diphenylbutan. Sm. 97—99° (*Soc.* 71, 227). — \*II, 116.
- C<sub>16</sub>H<sub>15</sub>ON<sub>2</sub>** C 76,1 — H 6,4 — O 6,3 — N 11,1 — M. G. 252.  
 1) Äther d. 2-Amido-1,3-Di[Oxymethyl]benzol-1,2-Anhydrid (*C.* 1906 [1] 1414).  
 2) α-Phenylimido-α-Propionylamidophenylmethan. Sm. 138° (*Am.* 20, 575). — \*IV, 567.  
 3) α-[4-Methylphenyl]imido-α-Acetylamidophenylmethan. Sm. 136,5° (*Am.* 20, 574). — \*IV, 567.  
 4) α-Äthylimido-α-Benzoylamidophenylmethan. Sm. 88° (*A.* 265, 162; *Am.* 20, 573). — IV, 848; \*IV, 568.

- $C_{16}H_{16}ON_2$  5)  $\alpha$ -Methylimido- $\alpha$ -Benzoylmethylamido- $\alpha$ -Phenylmethan. Sm. 116 bis 117,5°. (2HCl, PtCl<sub>4</sub>) (Soc. 83, 324 C. 1903 [1] 581, 876). — \*IV, 568.
- 6) Anhydrobiphenacylamin. Sm. 132—133°. 2HNO<sub>3</sub> (B. 41, 1136 C. 1908 [1] 1893).
- 7)  $\alpha$ -Acetyl- $\alpha$ -Benzyl- $\beta$ -Benzylidenhydrazin. Sm. 78° (79°) (B. 28, 2346; 33, 2738; J. pr. [2] 58, 378; [2] 62, 91). — IV, 811; \*IV, 539.
- 8)  $\alpha$ -Acetyl- $\alpha$ -[4-Methylphenyl]- $\beta$ -Benzylidenhydrazin. Sm. 132,5° (B. 27, 1698). — IV, 810.
- 9)  $\beta$ -Benzoyl- $\alpha$ -Allyl- $\alpha$ -Phenylhydrazin. Sm. 139° (B. 22, 2237). — IV, 669.
- 10) 4-Isopropylidenhydrazidodiphenylketon. Sm. 125° (Soc. 55, 615). — III, 187.
- 11)  $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten. Sm. 159—160° (B. 24, 3182). — IV, 774.
- 12) Methyläther d.  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]propen. Sm. 136—137° (B. 36, 853 C. 1903 [1] 976). — \*IV, 495.
- 13)  $\gamma$ -Phenylhydrazon- $\alpha$ -Keto- $\alpha$ -Phenylbutan. Sm. 105—110° (B. 28, 1149 Anm.). — IV, 784.
- 14)  $\alpha$ -Benzoylhydrazon- $\beta$ -Phenylpropan. Sm. 191—192° (B. 38, 1971 C. 1905 [2] 130).
- 15)  $\beta$ -Benzoylphenylhydrazonpropan. Sm. 115,5° (B. 20, 1718). — IV, 766.
- 16) 8-Phenylazo-5-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 144—145° (B. 23, 216; 31, 897). — IV, 1426.
- 17) 2-Methylamido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 158—159°. 2+(2HCl, PtCl<sub>4</sub>) (B. 28, 1900). — \*II, 660.
- 18) 5-[2-Oxyphenyl]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 147 bis 148° (B. 41, 4231 C. 1909 [1] 183).
- 19) 2-Benzoyl-1-Phenyltetrahydropyrazol. Sm. 79° (A. 274, 325). — IV, 480.
- 20) 2-Keto-4-Methyl-1,3-Diphenyltetrahydroimidazol (s-Propylen- $\alpha\beta$ -Diphenylharnstoff). Sm. 121—122° (B. 25, 3273). — II, 381.
- 21) 2-Keto-1,3-Diphenylhexahydro-1,3-Diazin (s-Trimethylen- $\alpha\beta$ -Diphenylharnstoff). Sm. 156° (B. 20, 782). — II, 331.
- 22) 2-Keto-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 146—147° (B. 22, 1784; 23, 2026; 25, 2932). — II, 429.
- 23) 3-[4-Methylphenyl]amido-2-Keto-5-Methyl-2,3-Dihydroindol? (p-Tolylamido-p-Methyloxindol). Sm. 166—167°. HCl (B. 18, 191; D. R. P. 27979). — II, 1653; \*II, 961.
- 24) 1-Phenylamido-3,4,6-Trimethylbenzoxazol. Sm. 145°. Pikrat (B. 22, 3238). — II, 764.
- 25) Äthyläther d. 6-Oxy-2-Methyl-1-Phenylbenzimidazol. Fl. HNO<sub>3</sub> (B. 25, 1001). — II, 723.
- 26) Äthyläther d. 6-Oxy-5-Methyl-1-Phenylbenzimidazol. Sm. 102°. HCl (A. 287, 149). — \*II, 427.
- 27) Äthyläther d. 6-Oxy-1-[2-Methylphenyl]benzimidazol. Sm. 77 bis 78° (B. 36, 3862 C. 1904 [1] 91).
- 28) Äthyläther d. 6-Oxy-1-[3-Methylphenyl]benzimidazol. HNO<sub>3</sub> (A. 287, 173). — \*II, 414.
- 29) 1-Nitroso-4-Phenyl-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 97 bis 98° (B. 28, 1045). — IV, 401.
- 30) 6-Nitroso-4-Phenyl-2-Methyl-1,2,3,4-Tetrahydrochinolin. Zers. bei 164° (D. R. P. 79385). — \*IV, 240.
- 31) Äthyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 109°. HCl, (HCl, SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Bioxalat + H<sub>2</sub>O, Pikrat (J. pr. [2] 48, 557; D. R. P. 51712). — IV, 873; \*IV, 584.
- 32) 2-Keto-4-[2,4-Dimethylphenyl]tetrahydro-1,3-Benzdiazin. Sm. 200°. Acetat, Pikrat (B. 32, 1263). — \*IV, 680.
- 33) 2-Keto-6-Methyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 238—240° (J. pr. [2] 73, 222 C. 1906 [1] 1261).
- 34) 3-Keto-6[oder 7]-Methyl-2-Benzyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 240° u. Zers. (B. 25, 953). — IV, 1018.

- $C_{16}H_{16}ON_2$  35) Äthyläther d. 1-Oxy-2-Phenyl-1,2-Dihydro-2,3-Benzodiazin. Sm. 96 bis 97° (A. 347, 123 C. 1906 [2] 776).
- 36) Anhydro-2-Methylamidobenzol-1-Carbonsäurealdehyd. Sm. 139,5 bis 140° (B. 37, 985 C. 1904 [1] 1079).
- 37) Nitril d.  $\alpha$ -[4-Äthoxyphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 85° (B. 35, 3347 C. 1902 [2] 1194).
- 38) Amid d.  $\gamma$ -Phenylamido- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 171° (B. 17, 2116). — II, 1425.
- 39) Phenylamid d. 1,2,3,4-Tetrahydroisochinolin-2-Carbonsäure. Sm. 144° (B. 26, 1212). — IV, 201.
- 40) 4-Methylphenylamid d. 4-Methylphenylimidoessigsäure (B. 28 [2] 613).
- 41) 2-Amido-4-Methylphenylamid d.  $\beta$ -Phenylakrylsäure. Sm. 201° (J. pr. [2] 74, 326 C. 1906 [2] 1823).
- 42) Benzylidenamid d.  $\alpha$ -Phenylamidopropionsäure. Sm. 203° (B. 31, 2716). — \*III, 26.
- 43) Benzylidenamid d. 4-Methylphenylamidoessigsäure. Sm. 245° (B. 31, 2711). — \*III, 26.
- 44) Benzylidenamid d.  $\alpha$ -Methylamido- $\alpha$ -Phenylelessigsäure. Sm. 152° (B. 31, 2717). — \*III, 27.
- 45)  $\alpha$ -Imido-2-Methylbenzylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 103° (B. 25, 455). — II, 1330.
- 46)  $\alpha$ -Imido-4-Methylbenzylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 145° (B. 25, 454). — II, 1342.
- 47) Benzylidenhydrazid d.  $\beta$ -Phenylpropionsäure. Sm. 132,5° (J. pr. [2] 64, 302). — \*III, 31.
- 48) Verbindung (aus 1-Oxynaphtalin u. Phenylhydrazin). Sm. 26° (C. 1909 [2] 695).
- 49) Verbindung (aus 2-Oxynaphtalin u. Phenylhydrazin). Sm. 62–63° (C. 1909 [2] 695).
- 50) Verbindung (aus  $\alpha$ -Benzildioxim). Sm. 165–166° (B. 21, 3515). — III, 292.
- 51) Verbindung (aus d. Verb.  $C_8H_9ON$ ). +  $HgCl_2$  (C. 1905 [1] 674).  
C 68,6 — H 5,7 — O 5,7 — N 20,0 — M. G. 280.
- $C_{16}H_{16}ON_4$  1) 4-Dimethylamidophenyl-4-Cyanbenzylnitrosamin. Sm. 105–106° (J. pr. [2] 80, 111 C. 1909 [2] 1329).
- 2)  $\gamma\delta$ -Di[-Phenylhydrazon]- $\beta$ -Ketobutan. Sm. 218° (B. 21, 1700). — IV, 763.
- 3)  $\alpha$ -[4-Methylphenyl]azo- $\alpha$ -Phenylhydrazon- $\beta$ -Ketopropan. Sm. 126° (B. 25, 3546). — IV, 1230.
- 4)  $\alpha$ -Phenylazo- $\alpha$ -[Acetyl-4-Methylphenyl]hydrazonmethan. Sm. 161° (B. 27, 1698). — IV, 1227.
- 5)  $\alpha$ -[4-Methylphenyl]azo- $\alpha$ -Acetylphenylhydrazonmethan. Sm. 157,5° (B. 27, 1697). — IV, 1227.
- 6) 5-[2-Methylphenyl]amido-2-Keto-1-[2-Methylphenyl]-2,3-Dihydro-1,3,4-Triazol. Sm. 183° (J. pr. [2] 74, 548 C. 1907 [1] 482).
- 7) 3-Acetyl-6-Methyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,3,4-Benzotetrazin. Sm. 132–134° (B. 19, 1458). — IV, 1260.
- 8) Verbindung (aus Diphenyläthanamin). Sm. 165° u. Zers. (G. 19, 2343). — II, 347.
- $C_{16}H_{16}OBr_2$  1) Benzyläther d. 3,6-Dibrom-5-Oxy-1,2,4-Trimethylbenzol. Sm. 110 bis 111° (A. 357, 94 C. 1907 [2] 1974).
- $C_{16}H_{16}OS$  1) Phenyläther d.  $\alpha$ -Merkapto- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 58–59° (Soc. 87, 20 C. 1905 [1] 741).
- $C_{16}H_{16}O_2N_2$  C 71,7 — H 6,0 — O 11,9 — N 10,4 — M. G. 268.
- 1) 6-Nitro-4-[4-Methylbenzyliden]amido-1,3-Dimethylbenzol. Sm. 145° (B. 32, 1287). — \*III, 41.
- 2) 6-Nitro-2-[4-Methylbenzyliden]amido-1,4-Dimethylbenzol. Sm. 110° (B. 32, 1287). — \*III, 41.
- 3)  $\alpha\beta$ -Di[2-Oxybenzylidenamido]äthan. Sm. 125–126° (B. 20, 271). — III, 72.
- 4) 3,4-Methylenäther d. 4-[3,4-Dioxybenzyliden]amido-1-Dimethylamidobenzol. Sm. 110°. HCl, 2HCl (B. 18, 575; C. 1908 [1] 1540). — IV, 598.



- $C_{18}H_{16}O_2N_2$  5) Äthyläther d. Benzoylimidophenylamidooxymethan (Benzoylpseudo-äthylphenylharnstoff). Fl. (*Am.* 24, 219; 26, 227). — \*II, 736.
- 6) 4-Nitroso-4'-Acetylamido-3,3'-Dimethylbiphenyl. Sm. 154—155° (*Soc.* 95, 717 *C.* 1909 [2] 18).
- 7) 4-[ $\beta$ -Ketobutyryl]amido-4'-Amidobiphenyl. Zers. bei 300°. HCl,  $HNO_3$ ,  $H_2SO_4$  (*M.* 19, 701). — \*IV, 642.
- 8) 2,2'-Di[Acetylamido]biphenyl. Sm. 161° (*B.* 24, 199). — IV, 959.
- 9) 2,4'-Di[Acetylamido]biphenyl. Sm. 202° (*A.* 207, 356). — IV, 959.
- 10) 3,3'-Di[Acetylamido]biphenyl. Sm. 257—258° (*B.* 20, 1029). — IV, 960.
- 11) 4,4'-Di[Acetylamido]biphenyl. Sm. 317° (330—331°) (*B.* 5, 236; 31, 662; *A.* 207, 332; *B.* 35, 1435 *C.* 1902 [1] 1206). — IV, 964; \*IV, 642.
- 12)  $\alpha\beta$ -Di[Formylamido]- $\alpha\beta$ -Diphenyläthan. Sm. 294° (*J. pr.* [2] 77, 128 *C.* 1908 [1] 962).
- 13) 4,4'-Di[Formylamido]-3,3'-Dimethylbiphenyl. Sm. 254° (*B.* 21, 1066). — IV, 981.
- 14) 2,2'-Di[Formylamido]-4,4'-Dimethylbiphenyl. Sm. 187° (*B.* 34, 3333). — \*IV, 657.
- 15) Monoacetylderivat d.  $\alpha$ -Keto- $\alpha\beta$ -Di[4-Amidophenyl]äthan. Sm. 198—205° (*A.* 325, 75 *C.* 1903 [1] 463).
- 16) 2-Acetylamido-1-Benzoylamidomethylbenzol. Sm. 170° (*B.* 26, 1892). — IV, 631.
- 17)  $\alpha\alpha$ -Di[Benzoylamido]äthan. Sm. 204° (187—188°) (*A.* 99, 119; 223, 44; *B.* 7, 159; 9, 1425; *Bl.* [3] 21, 60; *B.* 38, 1370 *C.* 1905 [1] 1373). — II, 1193.
- 18)  $\alpha\beta$ -Di[Benzoylamido]äthan. Sm. 249° (244°) (*B.* 5, 246; 21, 2334; 28, 3068; *A.* 223, 43). — II, 1169; \*II, 733.
- 19)  $\alpha$ -Benzoyl- $\beta$ -[2,4-Dimethylphenyl]harnstoff. Sm. 220—221° (215 bis 217°) (*J. pr.* [2] 59, 276; *Am.* 24, 210). — \*II, 736.
- 20)  $\alpha$ -Phenacetyl- $\beta$ -[2-Methylphenyl]harnstoff. Sm. 161,5—162° (*Soc.* 69, 867). — \*II, 814.
- 21)  $\alpha$ -Phenacetyl- $\beta$ -[4-Methylphenyl]harnstoff. Sm. 189—189,5° (*Soc.* 69, 868). — \*II, 814.
- 22)  $\alpha\delta$ -Dioximido- $\alpha\delta$ -Diphenylbutan. Sm. 203—204° (*B.* 21, 3057). — III, 298.
- 23) amphi- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 229—232° (*B.* 41, 2221 *C.* 1908 [2] 416).
- 24) anti- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 225° (*B.* 22, 382; *C.* 1906 [2] 1003). — III, 299.
- 25) syn- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 217° (*B.* 22, 382; *Z. a. Ch.* 46, 149 *C.* 1905 [2] 961). — III, 299.
- 26) 2,2'-Di[ $\alpha$ -Oximidoäthyl]biphenyl. Sm. 212° u. Zers. (*A.* 363, 305 *C.* 1909 [1] 178).
- 27) Dimethyläther d.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d.  $\alpha$ -Benzildioxim). Sm. 109—110°. HCl (*B.* 21, 3515; 23, 3604). — III, 291.
- 28) Dimethyläther d. isom.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d.  $\beta$ -Benzildioxim). Sm. 88—89°. HCl (*B.* 21, 3517; 23, 3591). — III, 293.
- 29)  $\alpha$ -Benzyläther d.  $\alpha\beta$ -Dioximidopropylbenzol. Sm. 157—158° (*A.* 291, 295). — III, 269.
- 30) Glyoxim-N-2-Methylphenyläther. Sm. 188° (*B.* 31, 559). — \*II, 259.
- 31) Glyoxim-N-4-Methylphenyläther. Sm. 218° (208°) (*B.* 31, 559; 33, 950). — \*II, 285.
- 32) Peroxyd d. 4-Methylbenzaldoxim. Sm. 121° u. Zers. (108°) (*C.* 1906 [2] 1003; *B.* 41, 2220 *C.* 1908 [2] 416).
- 33) 4-Oxy-3-Acetylphenylhydrazonmethyl-1-Methylbenzol. Sm. 126° (*B.* 35, 4106 *C.* 1903 [1] 149). — \*IV, 494.
- 34) Methylenäther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[3,4-Dioxyphenyl]propan. Sm. 97° (*G.* 22 [2] 482). — IV, 773.
- 35)  $\beta$ -Acetylhydrazon- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 132° (*J. pr.* [2] 52, 127). — III, 225.
- 36) Di[2-Oxy-3-Methylbenzyliden]hydrazin. Sm. 229° (*B.* 35, 4106 *C.* 1903 [1] 149).
- 37) Di[6-Oxy-3-Methylbenzyliden]hydrazin. Sm. 122° (232°) (*B.* 37, 3187 *C.* 1904 [2] 991; *A.* 357, 322 *C.* 1908 [1] 353).

- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 38) Dimethyläther d. Di[2-Oxybenzyliden]hydrazin. Sm. 143° (B. 39, 807 C. 1906 [1] 1246).
- 39) Dimethyläther d. Di[3-Oxybenzyliden]hydrazin. Sm. 152° (C. 1896 [2] 380; Bl. [3] 17, 945). — \*III, 58.
- 40) Dimethyläther d. Di[4-Oxybenzyliden]hydrazin. Sm. 168° (160°) (C. 1896 [2] 380; Bl. [3] 17, 944; B. 37, 3422 C. 1904 [2] 1294). — \*III, 716.
- 41) Methyläther d.  $\alpha$ -Benzoyl- $\alpha$ -Methyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 115° (B. 41, 3288 C. 1908 [2] 1676).
- 42)  $\alpha$ -Acetyl- $\alpha$ -[2-Methylphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 121 bis 122° (A. 365, 320 C. 1909 [1] 1866).
- 43)  $\alpha\beta$ -Diacetyl- $\alpha\beta$ -Diphenylhydrazin. Sm. 105°. 2 + Azobenzol (A. 207, 327; C. r. 134, 466, 1219). — IV, 1496; \*IV, 1089.
- 44)  $\alpha\beta$ -Dibenzoyl- $\alpha$ -Äthylhydrazin + H<sub>2</sub>O. Sm. 133° (wasserfrei) (B. 34, 3268; J. pr. [2] 70, 278 C. 1904 [2] 1545).
- 45)  $\alpha\beta$ -Dibenzoyl- $\alpha\beta$ -Dimethylhydrazin. Sm. 85° (B. 39, 3264 C. 1906 [2] 1245).
- 46) s-Di[2-Methylbenzoyl]hydrazin. Sm. 217° (J. pr. [2] 69, 372 C. 1904 [2] 534).
- 47) s-Di[3-Methylbenzoyl]hydrazin. Sm. 214—216° (J. pr. [2] 69, 373 C. 1904 [2] 534).
- 48) s-Di[4-Methylbenzoyl]hydrazin. Sm. 250° (J. pr. [2] 69, 374 C. 1904 [2] 534).
- 49) s-Di[Phenylacetyl]hydrazin. Sm. 231° (B. 30, 1889; J. pr. [2] 64, 318; A. 298, 24). — \*II, 815.
- 50) 5-Methyläther d. 5,6-Dioxy-3-Allylazobenzol (Benzolazoeugenol). Sm. 76—77° (79—80°) (B. 37, 4135 C. 1904 [2] 1736; G. 35 [1] 62 C. 1905 [1] 1238; G. 36 [2] 19 C. 1906 [2] 1191).
- 51) 5-Methyläther d. 5,6-Dioxy-3-Propenylazobenzol (Benzolazoisoeugenol) (B. 37, 4135 C. 1904 [2] 1736; C. 1906 [2] 1124).
- 52) Resorcinazo- $\alpha$ -Tetrahydronaphtalin. Zers. bei 219° (B. 22, 627). — IV, 1445.
- 53) 4-Oxy-3-Keto-2-Methyl-1,5-Diphenyltetrahydropyrazol. Sm. 163 bis 164° (Soc. 85, 1494 C. 1905 [1] 173).
- 54) 5[oder 6]-Äthyläther-2-Phenyläther d. 5[oder 6]-Oxy-2-Oxymethylbenzimidazol. Sm. 168—169°. HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat (J. pr. [2] 63, 188). — \*IV, 588.
- 55) 2-[2-Methoxyphenyl]äther d. 2-Oxymethyl-5[oder 6]-Methylbenzimidazol. Sm. 78—80°. Pikrat (J. pr. [2] 63, 192). — \*IV, 591.
- 56) 1-[2-Nitrobenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 111°. (2HCl, PtCl<sub>4</sub>) (A. 259, 51). — IV, 192.
- 57) 1-[3-Nitrobenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 99° (A. 259, 51). — IV, 192.
- 58) 1-[4-Nitrobenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 102° (A. 259, 50). — IV, 192.
- 59) Äthyläther d. 2-Keto-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzodiazin. Sm. 223° (J. pr. [2] 52, 398). — IV, 632.
- 60) 4-Phenylamidoformyl-3-Methyl-3,4-Dihydro-1,4-Benzoxazin. Sm. 138° (B. 30, 1638). — \*II, 391.
- 61) 4-Methylphenylimido-4-Methylphenylamidoessigsäure (Soc. 85, 995 C. 1904 [2] 831).
- 62)  $\alpha$ -Phenylhydrazon- $\gamma$ -Phenylbuttersäure. Sm. 144—145° (149—151°) (A. 299, 31; B. 31, 555). — IV, 697; \*IV, 456.
- 63)  $\gamma$ -Phenylhydrazon- $\gamma$ -Phenylbuttersäure. Sm. 63—65° (B. 18, 3326). — IV, 697.
- 64)  $\alpha$ -Äthylphenylhydrazonphenylessigsäure. Sm. 109,5° u. Zers. (A. 227, 346). — IV, 694.
- 65)  $\alpha$ -Benzylidenhydrazido- $\beta$ -Phenylpropionsäure. Sm. 153° (B. 29, 675). — \*II, 33.
- 66)  $\alpha$ -[3-Methylphenyl]- $\beta$ -Benzylidenhydrazidoessigsäure. Sm. 158° u. Zers. (J. pr. [2] 75, 131 C. 1907 [1] 1037).
- 67)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Benzylidenhydrazidoessigsäure. Sm. 166° (J. pr. [2] 75, 129 C. 1907 [1] 1037).
- 68) Lakton d.  $\beta$ -[5-Oxy-3-Methyl-1-Phenyl-4-Pyrazolyl]- $\beta$ -Penten- $\gamma$ -Carbonsäure. Sm. 142° (B. 38, 3029 C. 1905 [2] 1326).

- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 69) Methylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Phenylpropionsäure. Sm. 116 bis 117° (C. 1900 [1] 123). — \*IV, 455.
- 70) Äthylester d.  $\alpha$ -Phenylimido- $\alpha$ -Phenylamidoessigsäure. Sm. 73—74°. (2HCl, PtCl<sub>4</sub>) (Soc. 79, 699).
- 71) Äthylester d.  $\alpha$ -[1-Naphtyl]amido- $\alpha$ -Cyanpropionsäure. Sm. 134° (B. 19, 2968). — II, 614.
- 72) Äthylester d.  $\alpha$ -[2-Naphtyl]amido- $\alpha$ -Cyanpropionsäure. Zers. bei 200° (B. 19, 2969). — II, 622.
- 73) Äthylester d.  $\beta$ -Benzyliden- $\alpha$ -Phenylhydrazidoameisensäure. Sm. 97—98° (B. 32, 11). — \*IV, 482.
- 74) Acetat d.  $\alpha$ -[2-Methylphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 111,5° (A. 365, 320 C. 1909 [1] 1866).
- 75) Acetat d. 6-Oxy-3,4-Dimethylazobenzol. Sm. 113° (A. 365, 297 C. 1909 [1] 1864).
- 76) Acetat d. 2-Oxy-3,5-Dimethylazobenzol. Sm. 68° (A. 365, 295 C. 1909 [1] 1864).
- 77) Acetat d. 6'-Oxy-2,3'-Dimethylazobenzol. Sm. 59° (A. 365, 300 C. 1909 [1] 1865).
- 78) Acetat d. 6-Oxy-3,3'-Dimethylazobenzol. Sm. 61—63° (A. 365, 301 C. 1909 [1] 1865).
- 79) Acetat d. 6-Oxy-3,4'-Dimethylazobenzol. Sm. 91° (B. 17, 354). — IV, 1422.
- 80) Propionat d. 6-Oxy-3-Methylazobenzol. Sm. 48—49° (A. 364, 177 C. 1909 [1] 919).
- 81) Butyrat d. 4-Oxyazobenzol. Sm. 77° (B. 41, 1157 C. 1908 [1] 1880).
- 82) Benzoat d. 2-[ $\alpha$ -Oximidobutyl]pyridin. Sm. 56—57° (B. 24, 2537). — IV, 184.
- 83) Benzoat d. 4-Amidooximidomethyl-1,3-Dimethylbenzol. Sm. 158° (B. 22, 2444). — II, 1377.
- 84) 2-Methylbenzoat d. 2-Amidooximidomethyl-1-Methylbenzol. Sm. 117—118° (B. 22, 3156). — II, 1331.
- 85) Amid d.  $\alpha\beta$ -Diphenyläthan- $\alpha, \alpha^2$ -Dicarbonsäure. Sm. 224° u. Zers. (B. 21, 2680). — II, 1889.
- 86) Amid d.  $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionsäure. Sm. 196° (198° corr.) (B. 42, 2523 C. 1909 [2] 606; A. 369, 282 C. 1909 [2] 2140).
- 87) Amid d. 5-Keto-2-Methyl-1-[1-Naphtyl]tetrahydropyrrol-2-Carbonsäure. Sm. 247,5—248° (B. 38, 1224 C. 1905 [1] 1257).
- 88) Amid d. 5-Keto-2-Methyl-1-[2-Naphtyl]tetrahydropyrrol-2-Carbonsäure. Sm. 223° (B. 38, 1223 C. 1905 [1] 1257).
- 89) Phenylamid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 163—165° (175°) (J. pr. [2] 70, 147 C. 1904 [2] 1394; B. 42, 2521 C. 1909 [2] 606).
- 90) Phenylamid d. 4-Dimethylamidobenzol-1-Ketocarbonsäure. Sm. 158 bis 159° (B. 42, 3491 C. 1909 [2] 1541).
- 91) 4-Methylphenylamid d. Benzoylamidoessigsäure (J. pr. [2] 52, 259). — \*II, 746.
- 92) Di[Phenylamid] d. Äthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 214° (180—181°) (G. 35 [2] 311 C. 1905 [2] 1331; A. 347, 97 C. 1906 [2] 500).
- 93) Di[Phenylamid] d. Äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 226,5—227° (A. 68, 27; 162, 187; B. 30, 1795; J. pr. [2] 55, 265; C. 1903 [2] 432). — II, 414; \*II, 211.
- 94) Di[Methylphenylamid] d. Oxalsäure. Sm. 86° (B. 20, 2273; B. 39, 3979 C. 1907 [1] 156). — II, 411.
- 95) Di[2-Methylphenylamid] d. Oxalsäure. Sm. 207—208° (210°; 212 bis 213°) (B. 10, 1129; Bl. 41, 129; M. 7, 233; 9, 739; A. 279, 182; B. 39, 3970 C. 1907 [1] 155). — II, 466.
- 96) Di[3-Methylphenylamid] d. Oxalsäure. Sm. 131° (Bl. 41, 130). — II, 479.
- 97) Di[4-Methylphenylamid] d. Oxalsäure. Sm. 263° (269°); Sd. 300°<sub>60</sub> (B. 8, 1196; A. 209, 371; 279, 66; Bl. 41, 127; A. 332, 265 C. 1904 [2] 700; B. 39, 3971 C. 1907 [1] 155). — II, 501; \*II, 275.
- 98) s-Dibenzylamid d. Oxalsäure. Sm. 216° (218°) (B. 5, 694; R. 13, 413; A. 295, 363). — II, 529.
- 99) Benzylidenhydrazid d. Oxyessigbenzyläthersäure. Sm. 95° (J. pr. [2] 51, 365). — III, 40.



- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 100) **2-Oxybenzylidenhydrazid** d.  $\beta$ -Phenylpropionsäure. Sm. 148,5° (*J. pr.* [2] 64, 302). — \*III, 56.
- 101) **Verbindung** (aus  $\beta\gamma$ -Diketobutan u. 2-Amido-1-Oxybenzol). Sm. 239 bis 240° u. Zers. (*B.* 28, 344). — \*II, 393.
- 102) **Verbindung** (aus 4-Amido-1-Methylbenzol u. Brompropionsäure). Sm. 241 bis 242° (*B.* 22, 3307). — II, 494.
- 103) **Verbindung** (aus Cantharidin u. 1,2-Diamidobenzol). Sm. 163° (*G.* 23 [1] 138). — III, 623.
- 104) **Verbindung** (aus  $\beta$ -Benzildioxim). Sm. 72—73° (*B.* 21, 3517). — III, 293.
- 105) **Verbindung** (aus Carbanilidoisatinsäure). Sm. 175° (*J. pr.* [2] 32, 285). — II, 1604.
- 106) **Verbindung** (aus N-Äthyl-syn-Benzaldoxim u. Phenylcarbonimid). Sm. 116—117° (*B.* 24, 2815). — III, 43.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>4</sub>** C 64,8 — H 5,4 — O 10,8 — N 18,9 — M. G. 296.
- 1) **bim. Nitrosoäthylidenanilin**.  $\alpha$ -Modif. Sm. 120°;  $\beta$ -Modif. Sm. 161° (*B.* 29, 2977; *A.* 318, 62). — \*II, 234.
- 2) **p-Nitro-4-Dimethylamidophenyl-2-Cyanbenzylamin**. Sm. 139° (*J. pr.* [2] 80, 110 *C.* 1909 [2] 1328).
- 3)  **$\alpha$ -Phenylureido- $\alpha$ -Phenylamidoformylimidoäthan** (Äthenyldiphenylureid). Sm. 169° (*B.* 23, 2923). — II, 378.
- 4) **1,2-Dioximido-1,2-Dihydronaphtalin + Phenylhydrazin**. Sm. 138° (*B.* 21, 184). — IV, 795.
- 5)  **$\alpha$ -Nitrosamido- $\alpha$ -[4-Methylbenzoyl]hydrazon- $\alpha$ -[4-Methylphenyl]methan** (Nitroso-4-Toluy-4-Tolylhydrazidin). HCl +  $\frac{1}{2}$ H<sub>2</sub>O (*B.* 27, 3283; *A.* 298, 12). — IV, 1139.
- 6)  **$\alpha$ -Phenylbenzylidenhydrazidoacetylharnstoff**. Sm. 219° (*C.* 1899 [2] 422). — \*IV, 484.
- 7) **5-[4-Nitrophenyl]diazoamido-1,2,3,4-Tetrahydronaphtalin** (*C.* 1905 [2] 331).
- 8) **6-[2-Nitrophenyl]diazoamido-1,2,3,4-Tetrahydronaphtalin**. Sm. 134° (*Soc.* 81, 904 *C.* 1902 [2] 214). — \*IV, 1136.
- 9) **6-[4-Nitrophenyl]diazoamido-1,2,3,4-Tetrahydronaphtalin**. Sm. 179° u. Zers. (*Soc.* 81, 904 *C.* 1902 [2] 214). — \*IV, 1136.
- 10) **2,4-Di[Acetylamido]azobenzol**. Sm. 250,5° (*B.* 10, 658). — IV, 1360.
- 11) **2,2'-Di[Acetylamido]azobenzol**. Sm. 271° (*B.* 38, 2351 *C.* 1905 [2] 549; *B.* 39, 743 *C.* 1906 [1] 1012; *B.* 39, 4062 *C.* 1907 [1] 467).
- 12) **3,3'-Di[Acetylamido]azobenzol**. Sm. 272° (247°) (*Soc.* 69, 11; *A.* 229, 342). — IV, 1360.
- 13) **4,4'-Di[Acetylamido]azobenzol**. Sm. 281—282° (*Am.* 5, 283). — IV, 1362.
- 14) **Methyläther d. 4-Methylphenylamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol**. Sm. 103° (*B.* 34, 2317). — \*IV, 900.
- 15) **Äthyläther d. 4-Phenylamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol**. Sm. 137° (*B.* 21, 2330; *B.* 21, 2311). — IV, 676.
- 16) **1,4-Di[4-Nitrosophenyl]hexahydro-1,4-Diazin** (Dinitrosodiäthylen-diphenyldiamin) (*B.* 12, 1795; *D. R. P.* 74628). — II, 344; \*II, 159.
- 17) **3,6-Di[Phenylimido]-2,5-Diketo-hexahydro-1,4-Diazin** (*Soc.* 95, 551 *C.* 1909 [1] 1892).
- 18) **2,5-Diketo-1,4-Di[3-Amidophenyl]hexahydro-1,4-Diazin**. 2HCl (*J. pr.* [2] 76, 358 *C.* 1908 [1] 49).
- 19) **2,5-Diketo-1,4-Di[4-Amidophenyl]hexahydro-1,4-Diazin**. 2HCl (*J. pr.* [2] 76, 361 *C.* 1908 [1] 49).
- 20) **3,6-Di[ $\alpha$ -Oxybenzyl]-1,2-Dihydro-1,2,4,5-Tetrazin**. Sm. 193° (*B.* 30, 1890; *A.* 298, 25). — IV, 1290.
- 21)  **$\alpha\beta$ -Di[Phenylhydrazon]buttersäure**. Sm. 212° (209°) (*A.* 238, 195; 247, 206; *B.* 27, 1172; 32, 201; 34, 2740). — IV, 705; \*IV, 461.
- 22) **Methylester d.  $\alpha$ -Phenylazo- $\alpha$ -[4-Methylphenyl]hydrazonessigsäure**. Sm. 98° (*B.* 27, 1688). — IV, 1241.
- 23) **Äthylester d.  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazonessigsäure**. Sm. 117,5°. Ag (*B.* 25, 3183, 3202, 3455; 29, 2163; *J. pr.* [2] 65, 125 *C.* 1902 [1] 995; *Bl.* [3] 31, 83 *C.* 1904 [1] 580; *B.* 38, 2102 *C.* 1905 [2] 395; *C. r.* 145, 195 *C.* 1907 [2] 1061). — IV, 1228; \*IV, 893.
- 24) **3,4-Methylenäther d. 3,4-Dioxybenzylidendi[ $\beta$ -Amidocrotonsäure-nitril]**. Sm. 210° (*J. pr.* [2] 56, 134). — \*II, 1217.

- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>4</sub>** 25) Phenylamid d.  $\alpha$ -Oximido- $\beta$ -Phenylhydrazonbuttersäure. Sm. 168 bis 169°. + C<sub>2</sub>H<sub>5</sub>O (Sm. 181°) (B. 27, 1172). — IV, 707.
- 26) Phenylamid d.  $\beta$ -Oximido- $\alpha$ -Phenylhydrazonbuttersäure. Sm. 175° u. Zers. (B. 27, 1173). — IV, 707.
- 27) Äthylendiphenylhydrazid d. Oxalsäure (Oxalyläthylenphenylhydrazin) (A. 254, 124). — IV, 701.
- 28) Benzylidenhydrazid d.  $\beta$ -Phenylureidoessigsäure. Sm. 227° u. Zers. (J. pr. [2] 70, 248 C. 1904 [2] 1463).
- 29) Di[Benzylidenhydrazid] d. Fumarsäure. Sm. 220° u. Zers. (J. pr. [2] 52, 453).
- 30) Nitrosoderivat d. Verb. C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>. Sm. 260—264° u. Zers. (J. pr. [2] 36, 232). — II, 510.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>6</sub>** C 59,3 — H 4,9 — O 9,9 — N 25,9 — M. G. 324.
- 1)  $\alpha\beta$ -Disemicarbazon- $\alpha\beta$ -Diphenyläthan. Sm. 243—244° u. Zers. (B. 35, 346 C. 1902 [1] 584; A. 339, 256 C. 1905 [2] 46). — \*III, 222.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) Dimethyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 113° (A. 279, 337). — II, 995.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>Br<sub>2</sub>** 1) 3',5'-Dibrom-6,4'-Dioxy-2,3,5-Trimethyldiphenylmethan. Sm. 146° (B. 38, 3307 C. 1905 [2] 1588).
- 2) Dimethyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 198° u. Zers. (A. 277, 358). — II, 993.
- 3) Dimethyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 145° (147°, 178°) (A. 277, 358; 279, 341; A. 345, 330 C. 1906 [1] 1696; B. 42, 1207 C. 1909 [1] 1708). — II, 993.
- 4) Di[2-Brom-4-Methylphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 156° (B. 36, 2875 C. 1903 [2] 834).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>S** 1)  $\delta$ -Phenylsulfon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 111° (B. 38, 655 C. 1905 [1] 740).
- C<sub>16</sub>H<sub>16</sub>O<sub>3</sub>S<sub>2</sub>** 1)  $\alpha\alpha$ -Dimerkaptopropionphenylbenzyläthersäure. Sm. 72° (B. 36, 302 C. 1903 [1] 500).
- C<sub>16</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** C 67,6 — H 5,6 — O 16,9 — N 9,9 — M. G. 284.
- 1) 5-Nitro-4'-Acetylamido-2-Methyldiphenylmethan. Sm. 174° (B. 26, 1853). — II, 637.
- 2) 6,4'-Di[Acetylamido]-3-Oxybiphenyl. Sm. 269° (A. 303, 347). — \*II, 537.
- 3) N-Oxymethylidi[Benzoylamido]methan. Sm. 182,5° (A. 343, 225 C. 1906 [1] 923).
- 4) Dimethyläther d.  $\alpha$ -Imido- $\alpha$ -[4-Oxybenzoyl]amido- $\alpha$ -[4-Oxyphenyl]-methan. 2HCl, PtCl<sub>4</sub> (Soc. 85, 1540 C. 1905 [1] 167).
- 5) 2,4-Dimethylphenylamidomethyl-3-Nitrophenylketon. Sm. 153° (B. 30, 575). — \*III, 98.
- 6) N-2,4,6-Trimethylphenyl-syn-3-Nitrobenzaldoxim. Sm. 140,5—141° (B. 33, 3631). — \*III, 38.
- 7) N-2,4,6-Trimethylphenyl-syn-4-Nitrobenzaldoxim. Sm. 156,5—157° (B. 33, 3631). — \*III, 38.
- 8)  $\alpha^2$ -Methyläther d.  $\alpha$ -Acetyl- $\alpha$ -[2-Oxyphenyl]- $\beta$ -[2-Oxybenzyliden]-hydrazin. Sm. 120° (A. 365, 322 C. 1909 [1] 1866).
- 9)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4,6-Dioxy-3-Acetylphenyl]äthan. Sm. 233° (C. 1908 [2] 308).
- 10) 4-Oxy-5-Keto-2-Phenyl-3-[ $\alpha$ -Oxybenzyl]tetrahydropyrazol. Sm. 208° (B. 27, 3111). — IV, 709.
- 11) 4,5-Dioxy-2-Keto-1-Methyl-4,5-Diphenyltetrahydroimidazol. Sm. 150° u. Zers. (A. 368, 201 C. 1909 [2] 1465).
- 12) d- $\alpha$ -[ $\beta$ -Phenylureido]- $\beta$ -Phenylpropionsäure. Sm. 180—181° (B. 33, 2386; H. 33, 173 Anm.). — \*II, 836.
- 13) l- $\alpha$ -[ $\beta$ -Phenylureido]- $\beta$ -Phenylpropionsäure. Sm. 180—181° (H. 33, 173).
- 14) r- $\alpha$ -[ $\beta$ -Phenylureido]- $\beta$ -Phenylpropionsäure. Sm. 182° u. Zers. (B. 33, 2396). — \*II, 836.
- 15)  $\beta$ -[2-Phenylureidophenyl]propionsäure. Sm. 168° (B. 28, 3229). — \*II, 835.
- 16)  $\beta$ -[3-Phenylureidophenyl]propionsäure. Sm. 180° (B. 28, 3230). — \*II, 835.

- $C_{16}H_{16}O_3N_2$  17)  $\beta$ -[4-Phenylureidophenyl]propionsäure. Sm. 218° (B. 28, 3231). — \*II, 836.
- 18)  $\beta$ -Phenylamido- $\alpha$ -Benzylidenamido- $\alpha$ -Oxypropionsäure. Sm. 239° (B. 31, 2709). — \*III, 25.
- 19) Phenylamidoacetphenylamidoessigsäure. Sm. 129° (J. pr. [2] 40, 432; B. 22, 1803). — II, 430.
- 20) ?-Nitroso-4-Dimethylamidodiphenylmethan-2'-Carbonsäure. Sm. 133° (A. 300, 238). — \*II, 870.
- 21) 5-[4-Dimethylamidobenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 265° (C. 1907 [1] 109).
- 22)  $\alpha$ -[2-Oxybenzyliden]hydrazido- $\beta$ -Phenylpropionsäure. Sm. 134° (B. 29, 675). — \*III, 56.
- 23)  $\beta$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]äthan-4-Methyläther- $\beta$ -Carbonsäure. Sm. 154° (A. 337, 300 C. 1905 [1] 380).
- 24)  $\gamma$ -Phenylhydrazon- $\alpha$ -Furanyl- $\alpha$ -Buten- $\beta$ -Methylcarbonsäure ( $\beta$ -Furallävilinsäurephenylhydrazon). Sm. 168° (B. 26, 347). — IV, 733.
- 25) Äthylester d. 4-Benzoylamidophenylamidoameisensäure. Sm. 230° (B. 17, 2627). — IV, 595.
- 26) Äthylester d. 2-[2-Amidobenzoyl]amidobenzol-1-Carbonsäure. Sm. 105—106,8° (B. 40, 1619 C. 1907 [1] 1630).
- 27) Äthylester d.  $\alpha\beta$ -Diphenylharnstoff- $\alpha$ -Carbonsäure. Sm. 98°. 2 + 3HgO (B. 4, 247; J. pr. [2] 32, 266). — II, 382.
- 28) Äthylester d. 2-Phenylhydrazonmethylphenylkohlsäure. Sm. 101 bis 102° (B. 31, 2805). — \*IV, 492.
- 29) Äthylester d. Azobenzol-4-Oxyessigsäure. Sm. 70° (B. 34, 3937 C. 1902 [1] 117). — \*IV, 1035.
- 30) Äthylester d. 6'-Oxy-2-Methylazobenzol-3'-Carbonsäure. Sm. 105° (J. pr. [2] 78, 405 C. 1909 [1] 363).
- 31) Äthylester d. 6-Oxy-3-Methylazobenzol-4'-Carbonsäure. Sm. 96 bis 97° (A. 365, 310 C. 1909 [1] 1865).
- 32) Äthylester d.  $\alpha$ -Phenylimido- $\beta$ -[2-Pyrrolyl]propionsäure. Sm. 114 bis 115° (B. 23, 2156). — IV, 89.
- 33) Benzylester d. Benzoylamidomethylamidoameisensäure. Sm. 162° (J. pr. [2] 52, 267). — \*II, 733.
- 34) Acetat d. 4'-Acetylamido-4-Oxydiphenylamin. Sm. 141° (B. 42, 1081 C. 1909 [1] 1553).
- 35) Monacetat d.  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -(3,4-Dioxyphenyl)äthyliden]hydrazin. Sm. 130° (B. 41, 1621 C. 1908 [2] 68).
- 36)  $\beta^2$ -Acetat d.  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin- $\alpha^2$ -Methyläther. Sm. 112—113° (A. 365, 322 C. 1909 [1] 1866).
- 37) 4-Acetat d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,4-Dioxyphenyl]äthan. Sm. 127 bis 128° (C. 1908 [2] 307).
- 38) Monoacetat d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,5-Dioxyphenyl]äthan. Sm. 147° (B. 31, 1216). — \*IV, 503.
- 39) 4'-Acetat d. 3',4'-Dioxy-2-Methylazobenzol-3'-Methyläther. Sm. 87° (C. 1908 [1] 128).
- 40) 6-Acetat d. 5,6-Dioxy-3-Methylazobenzol-5-Methyläther. Sm. 114° (A. 365, 298 C. 1909 [1] 1864).
- 41) 6-Acetat d. 6,4'-Dioxy-3-Methylazobenzol-4'-Methyläther. Sm. 60 bis 61° (A. 365, 305 C. 1909 [1] 1865).
- 42) 4'-Acetat d. 4,4'-Dioxyazobenzol-4-Äthyläther. Sm. 119° (B. 31, 2120; C. 1897 [2] 549). — IV, 1406.
- 43) 2-Methylphenylamidoformiat d. 2-Methoxylbenzaldoxim. Sm. 106° (B. 26, 2094). — III, 77.
- 44) 4-Methylphenylamidoformiat d. 2-Methoxylbenzaldoxim. Sm. 191° (B. 26, 2094). — III, 77.
- 45) 2-Methylphenylamidoformiat d. anti-4-Methoxylbenzaldoxim. Sm. 127° (B. 26, 2090). — III, 87.
- 46) 4-Methylphenylamidoformiat d. anti-4-Methoxylbenzaldoxim. Sm. 126° (B. 26, 2092). — III, 87.
- 47) 2-Methylphenylamidoformiat d. syn-4-Methoxylbenzaldoxim. Sm. 81° (B. 26, 2090). — III, 88.
- 48) isom. 2-Methylphenylamidoformiat d. syn-4-Methoxylbenzaldoxim. Sm. 98° (B. 26, 2090). — III, 88.



- C<sub>16</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** 49) **4-Methylphenylamidoformiat** d. syn-4-Methoxylbenzaldoxim. Sm. 106° u. Zers. (B. 26, 2091). — III, 88.
- 50) **Amid d. 2-[p-Äthylamidooxybenzoyl]benzol-1-Carbonsäure** (D.R.P. 162034 C. 1905 [2] 729).
- 51) **Di[Phenylamid] d. Dimethyläther- $\alpha\alpha'$ -Dicarbonsäure** (Phenylamid d. Diglykolsäure). Sm. 152° (A. 273, 67). — II, 403.
- 52) **Phenylamid d.  $\alpha$ -Phenylamidoformoxypropionsäure**. Sm. 155 bis 156° (Bl. [3] 29, 124 C. 1903 [1] 564).
- 53) **Phenylamid d. Oxyessig-4-Acetylamidophenyläthersäure**. Sm. 204 bis 205° (J. pr. [2] 55, 117). — \*II, 407.
- 54) **2-Phenylamid d. Benzol-1-Carbonsäure-2-Amidoessigsäure-1-Methylester**. Sm. 140—142° (B. 33, 555). — \*II, 785.
- 55) **Phenylmonamid d. Phenylimidodiessigsäure**. Sm. 211—213° u. Zers. (G. 17, 234; B. 22, 1798; 23, 1990). — II, 431.
- 56) **Diphenylmonamid d. Amidobernsteinsäure** (Diphenylasparagin). Sm. 230° u. Zers. (G. 16, 14). — II, 414.
- 57) **Diphenylamid d. Äpfelsäure**. Sm. 197° (175°) (A. 96, 107; Ph. Ch. 17, 250; B. 23, 2040; C. 1899 [1] 467). — II, 419; \*II, 219.
- 58) **2-Nitrobenzyl-4-Methylphenylamid d. Essigsäure**. Sm. 65° (B. 19, 1610). — II, 525.
- 59)  **$\beta$ -Phenylamidoäthylmonamid d. Benzol-1,2-Dicarbonsäure?** Sm. 120—130° (B. 22, 2224). — II, 1800.
- 60) **?-Nitro-?-Dimethylphenylamid d. 1-Methylbenzol-4-Carbonsäure**. Sm. 187° (A. 205, 125; 210, 333). — II, 1341.
- 61) **2,4,6-Trimethylphenylamid d. 3-Nitrobenzol-1-Carbonsäure**. Sm. 205° (B. 10, 1711; J. 1884, 463). — II, 1234.
- 62) **?-Nitro-2,4,5-Trimethylphenylamid d. Benzolcarbonsäure** (J. 1847/48, 663). — II, 1167.
- 63) **3-Nitro-2,4,6-Trimethylphenylamid d. Benzolcarbonsäure**. Sm. 168,5° (B. 10, 1711). — II, 1167.
- 64)  **$\beta\beta$ -Diphenylmonohydrazid d. Oxalsäuremonoäthylester**. Sm. 131° (B. 25, 1553). — IV, 701.
- 65)  **$\alpha$ -[4-Methylphenyl]äthylidenhydrazid d. 2-Oxyphenylkohlsäure**. Sm. 185—186° (A. 317, 195). — \*III, 117.
- 66)  **$\alpha$ -[4-Methylphenyl]äthylidenhydrazid d. 3-Oxyphenylkohlsäure**. Sm. 182° (A. 317, 199). — \*III, 117.
- 67)  **$\alpha$ -[4-Methylphenyl]äthylidenhydrazid d. 4-Oxyphenylkohlsäure**. Sm. 208—209° (A. 317, 203). — \*III, 117.
- 68) **Verbindung** (aus d. Methyläther d. N-Methyl-4-Oxybenzaldoxim u. Phenylcarbonimid). Sm. 85° (A. 365, 209 C. 1909 [1] 1812).
- C<sub>16</sub>H<sub>16</sub>O<sub>3</sub>N<sub>4</sub>** C 61,5 — H 5,1 — O 15,4 — N 17,9 — M. G. 312.
- 1)  **$\alpha$ -[3-Nitrobenzyliden]amido- $\beta$ -Äthyl- $\alpha$ -Phenylharnstoff**. Sm. 153° (B. 36, 1377 C. 1903 [1] 1344). — \*II, 486.
- 2) **Methyläther d.  $\alpha$ -Phenylamidoformylimido- $\alpha$ -Phenylureido- $\alpha$ -Oxymethan**. Sm. 153° 3HCl (C. 1904 [2] 29).
- 3) **1-Benzoylamidoacetylhydrazon-4-Oximido-2-Methyl-1,4-Dihydrobenzol**. Zers. bei 209° (A. 343, 191 C. 1906 [1] 837).
- 4) **4-Benzoylamidoacetylhydrazon-1-Oximido-2-Methyl-1,4-Dihydrobenzol**. Sm. 212° u. Zers. (A. 343, 192 C. 1906 [1] 837).
- 5) **2,2'-Di[Acetylamido]azoxybenzol**. Sm. 185° (B. 39, 4065 C. 1907 [1] 468).
- 6) **3,3'-Di[Acetylamido]azoxybenzol**. Sm. 254° (Soc. 69, 8). — IV, 1337.
- 7) **4,4'-Di[Acetylamido]azoxybenzol**. Sm. 275—278° (Am. 5, 2; C. 1900 [1] 1015). — IV, 1338; \*IV, 997.
- 8) **4-Nitro-4'-Acetylamido-2,3'-Dimethylazobenzol**. Sm. 204° (D.R.P. 88013). — \*IV, 1019.
- 9) **Diamidohydrindinsäure**. Sm. 215—217° u. Zers. (A. 194, 96). — II, 1610.
- 10) **Äthylester d. 2-Oxy-1,2-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure**. Äthylsulfat (B. 40, 116 C. 1907 [1] 739).
- 11)  **$\alpha$ -Phenyl- $\beta$ -Acetylhydrazid d. Phenylnitrosamidoessigsäure**. Sm. 98° (A. 301, 83). — \*IV, 425.
- 12) **Amid d.  $\alpha$ -[4-Dimethylamidophenyl]imido- $\alpha$ -[4-Nitrophenyl]essigsäure**. Sm. 197° (D.R.P. 116089 C. 1900 [2] 1224). — \*IV, 391.

- $C_{16}H_{16}O_3Cl_2$  1)  $\delta$ -Acetat d. isom.  $\gamma\gamma$ -Dichlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 98° (B. 36, 2396 C. 1903 [2] 498).
- $C_{16}H_{16}O_3S$  1)  $\alpha$ -Phenylsulfon- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 115° (B. 35, 806 C. 1902 [1] 755). — \*III, 119.
- 2) Diformaldibenzylsulfon. Sm. 188° (B. 41, 3419 C. 1908 [2] 1810; B. 42, 3823 C. 1909 [2] 1861).
- 3) Diformal-p-Tolylbenzylsulfon. Sm. 128° (B. 42, 3824 C. 1909 [2] 1861).
- 4) Aldehyd d.  $\beta$ -[4-Methylphenyl]sulfon- $\beta$ -Phenylpropionsäure. Sm. 78° (Am. 31, 170 C. 1904 [1] 876). — \*III, 66.
- $C_{16}H_{16}O_4N_2$  C 64,0 — H 5,3 — O 21,3 — N 9,3 — M. G. 300.
- 1)  $\alpha\beta$ -Di[4-Nitro-2-Methylphenyl]äthan. Sm. 222—224° (Soc. 91, 2080 C. 1908 [1] 643).
- 2) 3,3'-Di[Acetylamido]-4,4'-Dioxybiphenyl. Sm. 210° (B. 21, 3532). — II, 989.
- 3) Methyläther d. 2-[Acetyl-4-Nitrobenzyl]amido-1-Oxybenzol. Sm. 78° (B. 32, 1254). — \*II, 388.
- 4) Dimethyläther d.  $\alpha$ -[4-Oxybenzoyl]- $\beta$ -[4-Oxyphenyl]harnstoff. Sm. 222° (R. 18, 421). — \*II, 908.
- 5) 4,4'-Dimethyläther d. syn- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan (Anisildioxim). Sm. 217°. Ni, Ferropyridinverbindung (B. 22, 377; B. 41, 1680 C. 1908 [2] 65). — III, 296.
- 6) 4,4'-Dimethyläther d. anti- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 195° (B. 22, 378; C. 1906 [2] 1003). — III, 296.
- 7) Dimethyläther d. 4-Oxybenzaldoximperoxyd. Sm. 126° u. Zers. (119,5°) (J. pr. [2] 73, 256 C. 1906 [1] 1243; C. 1906 [2] 233).
- 8) Äthyläther d. 4-[2-Nitrobenzyl]formylamido-1-Oxybenzol. Sm. 96° (J. pr. [2] 48, 556). — II, 719.
- 9) 4-Nitrobenzyläther d.  $\alpha$ -Äthylbenzhydroxamsäure. Sm. 55—56° (B. 25, 41). — II, 1198.
- 10) 4-Nitrobenzyläther d.  $\beta$ -Äthylbenzhydroxamsäure. Sm. 66—67° (B. 25, 42). — II, 1198.
- 11) s-Di[ $\alpha$ -Oxyphenylacetyl]hydrazin. Sm. 225° (B. 34, 2798).
- 12) Di[ $\alpha$ -(2,4-Dioxyphenyl)äthyliden]hydrazin. Sm. 307° (B. 41, 1620 C. 1908 [2] 68).
- 13) Di[4,6-Dioxy-3-Methylbenzyliden]hydrazin. Sm. 303° u. Zers. (A. 357, 341 C. 1908 [1] 355).
- 14) Di[6-Oxy-3-Oxymethylbenzyliden]hydrazin. Sm. 219° (B. 34, 2457). — \*III, 78.
- 15) 3,3'-Dimethyläther d. Di[3,4-Dioxybenzyliden]hydrazin. Sm. 176° (B. 39, 807 C. 1906 [1] 1246).
- 16) Dimethyläther d. s-Di[4-Oxybenzoyl]hydrazin. Sm. 224° (J. pr. [2] 74, 13 Anm. C. 1906 [2] 791).
- 17) Indiretin. Ag<sub>2</sub> (J. 1865, 584). — II, 1617.
- 18)  $\alpha$ -[ $\beta$ -Phenylureido]- $\beta$ -[4-Oxyphenyl]propionsäure +  $\frac{1}{2}H_2O$ . Sm. 104° (194° u. Zers.). Ba + 6H<sub>2</sub>O, Ag + H<sub>2</sub>O (B. 36, 3344 C. 1903 [2] 1175; C. r. 142, 49 C. 1906 [1] 347).
- 19)  $\alpha$ -Phenylhydrazon-3,4-Dimethoxylphenylelessigsäure. Sm. 179° (G. 20, 696). — IV, 717.
- 20) p-Diamido- $\alpha\beta$ -Diphenyläthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 280° (B. 14, 1802). — II, 1892.
- 21)  $\alpha\beta$ -Di[Phenylamido]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 205°. Na<sub>2</sub>, K<sub>2</sub>, Ca, Pb (B. 21, 1796; 26, 1763; 27, 1605; Bl. 48, 728; A. 279, 142). — II, 437; \*II, 231.
- 22)  $\alpha\beta$ -Di[Phenylamido]äthan-2,2'-Dicarbonsäure (Äthylendianthranilsäure). Sm. 213—214° (B. 28, 1687). — \*II, 781.
- 23)  $\alpha\beta$ -Di[Phenylamido]äthan-3,3'-Dicarbonsäure (Äthylendibenzamsäure). Sm. 222—225°. Cu + H<sub>2</sub>O (A. 226, 244). — II, 1259.
- 24)  $\alpha$ -[ $\beta$ -Phenylhydrazido]- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. K<sub>2</sub> (B. 28, 1453). — IV, 741.
- 25) Phenylhydrazon d. Maticosäurealdehyd. Sm. 163° (B. 35, 4359 C. 1903 [1] 331).
- 26) Monomethylester d. 4,4'-Diamidodiphenylmethan-3,3'-Dicarbonsäure. Sm. 178—179°. Ag (J. pr. [2] 63, 256).

- $C_{16}H_{16}O_4N_2$  27) Äthylester d. 2'-Nitro-2-Methyldiphenylamin-4'-Carbonsäure. Sm. 106° (B. 23, 3451). — II, 1286.
- 28) Äthylester d. 2'-Nitro-4-Methyldiphenylamin-4'-Carbonsäure. Sm. 115° (B. 23, 3453). — II, 1286.
- 29) Äthylester d. 3-[2-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 100° (B. 25, 3593). — II, 1259.
- 30) Äthylester d.  $\alpha$ -Phenyl-2-Nitrophenylamidoessigsäure. Sm. 69 bis 69,5° (B. 30, 2765). — \*II, 820.
- 31) Äthylester d.  $\alpha$ -Phenyl-3-Nitrophenylamidoessigsäure. Sm. 83 bis 84° (B. 30, 2766). — \*II, 820.
- 32) Äthylester d.  $\alpha$ -Phenyl-4-Nitrophenylamidoessigsäure. Sm. 120 bis 120,5 (B. 30, 2768). — \*II, 820.
- 33) Äthylester d. Phenylamidoameisensäure. Sm. 157,5° (B. 18, 2430). — II, 372.
- 34) Äthylester d. 4,6-Dioxy-2-Methylazobenzol-3-Carbonsäure. Sm. 142° (B. 37, 1418 C. 1904 [1] 1417).
- 35) Acetat d. 2,4-Di[Acetylamido]-1-Oxynaphtalin. Sm. 280° u. Zers. (B. 21, 1196). — II, 866.
- 36) Acetat d. 2,6-Di[Acetylamido]-1-Oxynaphtalin. Sm. 261° u. Zers. (B. 27, 2213). — \*II, 508.
- 37) Acetat d. 2,8-Di[Acetylamido]-1-Oxynaphtalin. Sm. 258° (B. 39, 3338 C. 1906 [2] 1617).
- 38) Acetat d. 4,8-Di[Acetylamido]-1-Oxynaphtalin. Sm. 258° (B. 39, 3333 C. 1906 [2] 1616).
- 39) Acetat d. 1,6-Di[Acetylamido]-2-Oxynaphtalin (B. 31, 2413). — \*II, 526.
- 40) Acetat d. 7,8-Di[Acetylamido]-2-Oxynaphtalin. Sm. 244—245° (B. 30, 1124). — \*II, 527.
- 41) Acetat d. ?-Di[Acetylamido]-2-Oxynaphtalin. Sm. 203° (B. 23, 2543). — II, 886.
- 42) Äthylcarbonat d. 2-Oxy-s-Diphenylharnstoff. Sm. 116—118° (Am. 23, 31). — \*II, 389.
- 43) Amid d. 4-Oxybenzoläthylenäther-1-Carbonsäure. Sm. 280° u. Zers. (A. 244, 70). — II, 1526.
- 44) Amid d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure (A. d. Diphenylweinsäure). Sm. bei 230°. HBr (B. 16, 2232). — II, 2022.
- 45) Diphenylamid d. d-Weinsäure (Tartranilid). Sm. 263—264° (255—256°) (A. 93, 352; 279, 138; B. 24, 2959; Am. 24, 53; C. 1899 [1] 467; Soc. 83, 1355 C. 1904 [1] 84). — II, 422; \*II, 222.
- 46) Di[4-Oxyphenylamid] d. Äthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 136—137° (G. 35 [2] 314 C. 1905 [2] 1332).
- 47) Di[2-Methoxyphenylamid] d. Oxalsäure. Sm. 246° (B. 39, 3973 C. 1907 [1] 155).
- 48) Di[4-Methoxyphenylamid] d. Oxalsäure. Sm. 254° (260°) (G. 25 [2] 534; C. 1897 [1] 49; B. 39, 3975 C. 1907 [1] 155). — \*II, 409.
- 49) 2-Nitrophenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Fl. (B. 34, 2058).
- 50) 3-Nitrophenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Sm. 81° (B. 34, 2062).
- 51) 4-Nitrophenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Sm. 108°? (B. 34, 2065).
- 52) 2-Nitrophenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 71°; Sd. 236—237°<sub>17</sub> (B. 34, 2058).
- 53) 3-Nitrophenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 119° (B. 34, 2062).
- 54) 4-Nitrophenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 182° (B. 34, 2065).
- 55) 4-Nitrophenylamid d.  $\beta$ -Oxyisobutterphenyläthersäure. Sm. 109° (B. 34, 2068).
- 56) Phenylhydrazon d. Verb.  $C_{10}H_{10}O_5$ . Sm. 249° (B. 36, 3231 C. 1903 [2] 941).
- $C_{16}H_{16}O_4N_4$  C 58,5 — H 4,9 — O 19,5 — N 17,1 — M. G. 328.
- 1) 1,4-Di[3-Nitrophenyl]hexahydro-1,4-Diazin. Sm. 220° (B. 40, 5014 C. 1908 [1] 472).



- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>N<sub>4</sub>** 2) 3,7-Di[Acetylamido]-4,6-Diketo-2,8-Dimethyl-3,4,6,7-Tetrahydro-1,3,7,9-Naphttetrazin. Sm. oberhalb 360° (C. 1909 [2] 2014).  
 3) 2,3-Di[Äthylidenhydrazido]naphtalin-2 $\alpha$ ,3 $\alpha$ -Dicarbonsäure. Sm. 180° u. Zers. (J. pr. [2] 76, 224 C. 1907 [2] 1338).  
 4) bim. 3-Nitrosophenylamid d. Essigsäure. Sm. 111° (Soc. 93, 683 C. 1908 [1] 2027).  
 5) bim. 4-Nitrosophenylamid d. Essigsäure. Sm. 180–181° (Soc. 93, 682 C. 1908 [1] 2027).  
 6) Verbindung (aus 5-Nitroso-2-Methylamidobenzol-1-Carbonsäure) (B. 42, 2756 C. 1909 [2] 818).
- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>N<sub>6</sub>** C 53,9 — H 4,5 — O 18,0 — N 23,6 — M. G. 356.  
 1)  $\alpha\delta$ -Di[4-Nitrophenylhydrazon]butan + H<sub>2</sub>O. Sm. 185° (wasserfrei) (B. 39, 3673 C. 1907 [1] 18).
- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>S** 1) Diäthyläther d. 4,4'-Dioxybiphenyl-2,2'-Sulfon. Sm. 208° (Soc. 91, 1309 C. 1907 [2] 1071).  
 2)  $\beta$ -Phenylsulfon- $\beta$ -[2-Methylphenyl]propionsäure. Sm. 164–165° (B. 40, 4793 C. 1908 [1] 233).  
 3)  $\beta$ -Phenylsulfon- $\beta$ -[3-Methylphenyl]propionsäure. Sm. 235–236° (B. 40, 4793 C. 1908 [1] 233).  
 4)  $\beta$ -Phenylsulfon- $\beta$ -[4-Methylphenyl]propionsäure. Sm. 210° (B. 40, 4794 C. 1908 [1] 233).  
 5)  $\beta$ -[4-Methylphenyl]sulfon- $\beta$ -Phenylpropionsäure. Sm. 197–198°. Na + 2H<sub>2</sub>O, Ca, Ba + 4H<sub>2</sub>O (Am. 31, 171 C. 1904 [1] 876).  
 6) 2,4,5-Trimethyldiphenylketon-2'-Sulfonsäure. Sm. 169°. NH<sub>4</sub>, Na + 1½H<sub>2</sub>O, K, Ba (B. 33, 3491). — \*III, 173.  
 7) 2,4,6-Trimethyldiphenylketon-2'-Sulfonsäure + 4H<sub>2</sub>O. Sm. 98° (184° wasserfrei). NH<sub>4</sub>, Na + H<sub>2</sub>O, K, Ba + 4H<sub>2</sub>O (B. 33, 3492). — \*III, 173.  
 8) 2,4,6-Trimethyldiphenylketon- $\beta$ -Sulfonsäure. Ba (B. 19, 2881; J. pr. [2] 35, 488). — III, 237.  
 9) Benzoat d.  $\alpha$ -Oxy- $\beta$ -Phenylsulfonpropan. Sm. 71–72° (J. pr. [2] 51, 289). — \*II, 714.  
 10) Benzoat d.  $\beta$ -Oxyäthyl-4-Methylphenylsulfon. Sm. 175–176° (J. pr. [2] 30, 357). — II, 1140.  
 11) 4-Benzolsulfonat d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Fl. (C. 1900 [1] 543). — \*II, 589.
- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>S<sub>2</sub>** 1) Cyklodi-o-Xylylendisulfon. Sm. oberhalb 320° (B. 36, 187 C. 1903 [1] 467).  
 2) 2,2-Diphenyl-R-Tetramethylen-1,3-Disulfon. Sm. 256–257° (B. 32, 1387). — \*III, 146.  
 3) Cyklo- $\alpha$ -o-Xylylendisulfon- $\alpha$ -Phenyläthan. Sm. 202° (B. 35, 1397 C. 1902 [1] 1096). — \*III, 98.
- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>S<sub>3</sub>** 1) Dithiopiperonalsulphhydrat. Sm. 113° (A. 345, 317 C. 1906 [1] 1695).
- C<sub>16</sub>H<sub>16</sub>O<sub>4</sub>Pb** 1) Diformiat d. Bleidi[4-Methylphenyl]dihydroxyd. Zers. bei 233° (B. 21, 3427). — IV, 1716.  
 2) Diacetat d. Bleidiphenyldihydroxyd + 2H<sub>2</sub>O. Sm. 195° wasserfrei (B. 20, 3333). — IV, 1715.
- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>N<sub>2</sub>** C 60,6 — H 5,1 — O 25,3 — N 8,9 — M. G. 316.  
 1) Nitropeucedaninamid (J. 1849, 477). — III, 641.  
 2) Di[Phenylamidomethyl]äther-2,2'-Dicarbonsäure (C. 1902 [1] 809).  
 3)  $\alpha$ -[ $\beta$ -1-Naphtylureido]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 236–237° (B. 38, 2364 C. 1905 [2] 460).  
 4) 1-Phenacetylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 216 bis 217° u. Zers. (B. 35, 4320 C. 1903 [1] 336). — \*IV, 358.  
 5) Äthylester d. 1-Naphtylazoacetessigsäure. Sm. 93–94° (G. 21 [1] 265). — IV, 1467.  
 6) Äthylester d. 2-Naphtylazoacetessigsäure. Sm. 198–200° u. Zers. K + 3H<sub>2</sub>O (G. 21 [1] 269). — IV, 1467.  
 7) 4-Äthoxylphenylamid d. Oxyessig-4-Nitrophenyläthersäure. Sm. 156–157° (D. R. P. 83538). — \*II, 408.  
 8) Verbindung (aus d. Verb. C<sub>31</sub>H<sub>20</sub>O<sub>8</sub>N<sub>4</sub>). Sm. 210° (J. pr. [2] 33, 29). — II, 1249.
- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>N<sub>4</sub>** C 55,8 — H 4,6 — O 23,3 — N 16,3 — M. G. 344.  
 1)  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -[2,4-Dinitrophenyl]butan. Sm. 227° u. Zers. (M. 23, 1005 C. 1903 [1] 292). — \*IV, 503.

- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>N<sub>4</sub>** 2) 5,5'-Dinitro-2,4,2',4'-Tetramethylazoxybenzol. Sm. 185—190° u. Zers. (Soc. 93, 1480 C. 1908 [2] 941).
- 3) 2',4'-Dinitro-4-Oxy-2-Methyl-5-Isopropylazobenzol. Sm. 179—180° (A. 357, 181 C. 1908 [1] 248).
- 4) 3,6'-Dinitro-4'-Oxy-2,5,2',5'-Tetramethylazobenzol. Sm. 226—227° (B. 37, 2593 C. 1904 [2] 660).
- 5) Phenylhydrazid d. 4,6-Dinitro-1,3,5-Trimethylbenzol-2-Carbonsäure. Sm. oberhalb 300° (B. 34, 1828). — \*IV, 428.
- 6) Verbindung (aus d. Nitril d. α-Oxy-2-Nitrophenylessigsäure). Sm. 180° u. Zers. 2HCl + H<sub>2</sub>O (B. 39, 2343 C. 1906 [2] 514; B. 41, 375 C. 1908 [1] 827).
- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>S** 1) Phenoxylmethyl-2,4-Dimethylphenylketon-?-Sulfonsäure. Sm. 138° (B. 35, 3564 C. 1902 [2] 1313).
- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>S<sub>2</sub>** 1) α-Phenylsulfon-γ-[4-Methylphenyl]-β-Ketopropan. Sm. 112° (J. pr. [2] 36, 427). — II, 825.
- 2) Äthylester d. α-[1-Naphtylthiosulfon]acetessigsäure. Sm. 82° (C. 1900 [2] 179). — \*II, 106.
- 3) Äthylester d. α-[2-Naphtylthiosulfon]acetessigsäure. Sm. 89—90° (C. 1900 [2] 178). — \*II, 106.
- C<sub>16</sub>H<sub>16</sub>O<sub>6</sub>N<sub>2</sub>** C 57,8 — H 4,8 — O 28,9 — N 8,4 — M. G. 332.
- 1) Dimethyläther d. α-Di[4-Nitro-2-Oxyphenyl]äthan. Sm. 178—180° (Soc. 91, 2081 C. 1908 [1] 643).
- 2) Diäthyläther d. 5,5'-Dinitro-2,2'-Dioxybiphenyl. Sm. 271° (Am. 39, 694 C. 1908 [2] 394).
- 3) Diäthyläther d. 3,3'-Dinitro-4,4'-Dioxybiphenyl. Sm. 192—193° (B. 22, 336). — II, 988.
- 4) Äthylenäther d. 4-Nitro-2-Oxy-1-Methylbenzol. Sm. 202° (B. 39, 3250 C. 1906 [2] 1413).
- 5) 4,4'-Diamidobiphenyl-3,3'-Di[Oxyessigsäure]. Na<sub>2</sub> (D.R.P. 55506). — \*II, 601.
- 6) 2,2'-Hydrazophenoxylessigsäure. Zers. bei 225—227°. K<sub>2</sub> + 3H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (J. pr. [2] 29, 172; D.R.P. 55506). — IV, 1505; \*IV, 1094.
- 7) Äthylenamid d. 2-Oxyphenylkohleensäure. Sm. 165,5° (A. 300, 145). — \*II, 549.
- 8) Di[4-Oxyphenylamid] d. αβ-Dioxyäthan-αβ-Dicarbonsäure. Sm. 282° u. Zers. (C. 1897 [1] 49). — \*II, 411.
- C<sub>16</sub>H<sub>16</sub>O<sub>6</sub>N<sub>4</sub>** C 53,3 — H 4,4 — O 26,7 — N 15,5 — M. G. 360.
- 1) 2,4,6-Trinitro-3-Methyl-5-Isopropylidiphenylamin. Sm. 155° (B. 29, 170). — \*II, 319.
- 2) 2,4,6-Trinitro-3,5,3',5'-Tetramethyldiphenylamin. Sm. 209° (R. 25, 373 C. 1907 [1] 464).
- 3) Diäthyläther d. 4,4'-Dinitro-2,2'-Dioxyazobenzol. Sm. 284—285° (J. pr. [2] 21, 323). — IV, 1405.
- 4) Diäthyläther d. ?-Dinitro-2,2'-Dioxyazobenzol. Sm. 190° (J. pr. [2] 21, 322). — IV, 1405.
- 5) Dihydrobenzo-1,1,2,2-Tetracetyl-3,4-Diisopyrazolon. Sm. oberhalb 250° (J. pr. [2] 51, 67). — IV, 1270.
- C<sub>16</sub>H<sub>16</sub>O<sub>6</sub>N<sub>6</sub>** C 49,5 — H 4,1 — O 24,7 — N 21,6 — M. G. 388.
- 1) Äthylenamid d. 5-Nitro-2-Amidobenzol-1-Carbonsäure. Sm. oberhalb 260° (J. pr. [2] 53, 217). — \*II, 793.
- C<sub>16</sub>H<sub>16</sub>O<sub>6</sub>Cl<sub>2</sub>** 1) Tetramethyläther d. Dichlorhexaoxybiphenyl. Sm. 220°. K<sub>2</sub>, Ba (B. 9, 929). — II, 1042.
- C<sub>16</sub>H<sub>16</sub>O<sub>6</sub>Br<sub>2</sub>** 1) Tetramethyläther d. Dibromhexaoxybiphenyl. Sm. 262° (B. 9, 930). — II, 1042.
- C<sub>16</sub>H<sub>16</sub>O<sub>6</sub>S<sub>2</sub>** 1) Distyroldisulfonsäure. Ba (B. 27, 1413). — \*II, 120.
- C<sub>16</sub>H<sub>16</sub>O<sub>7</sub>N<sub>2</sub>** C 55,2 — H 4,6 — O 32,2 — N 8,0 — M. G. 348.
- 1) bim. 2-Formylamidobenzol-1-Carbonsäure + H<sub>2</sub>O? Sm. 168° (J. pr. [2] 33, 23). — II, 1249.
- 2) 5-Acetat d. 5-Oxy-2,4,6-Triketo-5-[4-Oxybenzoyl]methylhexahydro-1,3-Diazin-5'-Äthyläther. Sm. 207° u. Zers. (B. 42, 1293 C. 1909 [1] 1549).
- C<sub>16</sub>H<sub>16</sub>O<sub>7</sub>N<sub>4</sub>** C 51,1 — H 4,2 — O 29,8 — N 14,9 — M. G. 376.
- 1) ?-Äthyläther d. 4'-Acetylamido-2,4-Dinitro-3,6-Dioxydiphenylamin. Sm. 206° (B. 24, 3829). — II, 949.

- $C_{16}H_{16}O_7N_4$  2) Phenylhydrazon d. Dinitrocantharidin. Zers. oberhalb  $250^\circ$  (B. 26, 141). — III, 624.
- 3) isom. Phenylhydrazon d. Dinitrocantharidin. Sm. noch nicht bei  $320^\circ$  (G. 23 [1] 123). — III, 624.
- 4) 4-Dimethylamidobenzaldehyd + 2,4,6-Trinitro-1-Methylbenzol. Sm.  $60^\circ$  (B. 37, 1745 C. 1904 [1] 1600).
- $C_{16}H_{16}O_8N$  1) Uraminsalicylsäure. Sm.  $169-170^\circ$  (C. 1909 [2] 846).
- $C_{16}H_{16}O_8N_2$  C 52,7 — H 4,4 — O 35,2 — N 7,7 — M. G. 364.
- 1) 2,5,2',5'-Tetramethyl-1,1'-Bipyrrol-3,4,3',4'-Tetracarbonsäure +  $H_2O$ . Sm. oberhalb  $290^\circ$  u. Zers. (B. 37, 2700 C. 1904 [2] 532).
- C 49,0 — H 4,1 — O 32,6 — N 14,3 — M. G. 392.
- $C_{16}H_{16}O_8N_4$  1) p-Tetranitro-4,4'-Di[Dimethylamido]biphenyl. Zers. oberhalb  $250^\circ$  (B. 19, 2125). — IV, 963.
- $C_{16}H_{16}O_8N_5$  C 45,7 — H 3,8 — O 30,5 — N 20,0 — M. G. 420.
- 1)  $\alpha\beta$ -Di[p-Dinitro-2-Methylphenylamido]äthan. Sm.  $78-79^\circ$  (Soc. 77, 1022). — \*II, 249.
- 2) isom.  $\alpha\beta$ -Di[p-Dinitro-2-Methylphenylamido]äthan. Sm.  $178-180^\circ$  (Soc. 77, 1022).
- 3)  $\alpha\beta$ -Di[p-Dinitro-3-Methylphenylamido]äthan. Sm.  $58,5^\circ$  (Soc. 77, 1022). — \*II, 260.
- C 42,9 — H 3,5 — O 28,6 — N 25,0 — M. G. 448.
- $C_{16}H_{16}O_8N_8$  1) Tetrapyruvintetraureid (A. ch. [5] 11, 373). — I, 1346.
- $C_{16}H_{16}O_8Br_4$  1) Tetrabromkolatannin (C. 1898 [1] 579). — \*III, 497.
- $C_{16}H_{16}NCl$  1) 4-Chlor-1-[2,4,6-Trimethylbenzyliden]amidobenzol. Sm.  $74^\circ$ . HCl (B. 34, 832). — \*III, 44.
- 2) Di-o-Xylenammoniumchlorid. +  $2HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$  (B. 24, 2403). — IV, 402.
- 3) Chlormethylat d.  $\gamma$ -Phenylimido- $\alpha$ -Phenylpropen. 2 +  $PtCl_4$  (A. 338, 134 Anm. C. 1905 [1] 455).
- 4) Chlorphenylat d. 3,3-Dimethylpseudoindol. +  $HgCl_2$  (M. 21, 176).
- $C_{16}H_{16}NBr$  1)  $\alpha$ -Brom- $\beta$ -[4-Dimethylamidophenyl]- $\alpha$ -Phenyläthen. Sm.  $88-89^\circ$  (M. 28, 600 C. 1907 [2] 1171).
- 2) Di-o-Xylenammoniumbromid. +  $Br_2$  (B. 24, 2402). — IV, 402.
- $C_{16}H_{16}NJ$  1) Di-o-Xylenammoniumjodid. +  $J_2$  (B. 24, 2403). — IV, 402.
- 2) Jodmethylat d. 5-Äthylakridin. Zers. bei  $230-235^\circ$  (B. 42, 1756 C. 1909 [2] 36).
- 3) Jodmethylat d. 1,3-Dimethyl- $\beta$ -Naphtochinolin (J. pr. [2] 35, 303). — IV, 419.
- $C_{16}H_{16}N_2Br_2$  1) 1,1-Dibromid d. 6-Methyl-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzodiazin (J. pr. [2] 73, 213 C. 1906 [1] 1261).
- $C_{16}H_{16}N_2J_2$  1) 1,1-Dijodid d. 6-Methyl-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzodiazin. HJ (J. pr. [2] 73, 214 C. 1906 [1] 1261).
- $C_{16}H_{16}N_2S$  1)  $\alpha$ -Phenyl- $\beta$ -[ $\gamma$ -Phenylallyl]thioharnstoff. Sm.  $116-118^\circ$  (B. 26, 1860). — II, 585.
- 2) Phenylimidophenylamidomethylallylsulfid. Sm.  $57-58^\circ$ . HCl, HBr (Soc. 57, 303). — II, 395.
- 3) 3-Thiocarbonyl-1,4,5-Trimethyl-2-[2-Naphtyl]-2,3-Dihdropyrazol. Sm.  $169^\circ$  (A. 320, 32 C. 1902 [1] 666). — \*IV, 338.
- 4) 2-Phenylimido-3-[4-Methylphenyl]tetrahydrothiazol. Sm.  $128^\circ$  (B. 15, 1315). — II, 499.
- 5) 2-Methylamido-4,5-Diphenyl-4,5-Dihydrothiazol. Sm.  $155^\circ$ . 2 +  $(2HCl, PtCl_4)$  (B. 28, 1900). — \*II, 661.
- 6) 2-Phenylamido-5-Benzyl-4,5-Dihydrothiazol. Sm.  $205^\circ$ .  $(2HCl, PtCl_4)$ , Pikrat (B. 26, 1860). — II, 585; \*II, 328.
- 7) 2-Phenylimido-3-Phenyltetrahydro-1,3-Thiazin. Sm.  $123^\circ$  (B. 21, 1872). — II, 396.
- 8) 4[oder 6]-Amido-3,5-Dimethyl-1-[3-Methylphenyl]benzthiazol. Sm.  $95^\circ$  (J. pr. [2] 65, 155 C. 1902 [1] 991). — \*IV, 681.
- 9) p-Amido-3,5-Dimethyl-1-[3-Methylphenyl]benzthiazol. Sm.  $89^\circ$  (J. pr. [2] 65, 160 C. 1902 [1] 992). — \*IV, 681.
- 10) 3,5-Dimethyl-1-[4-Amido-3-Methylphenyl]benzthiazol. Sm.  $107^\circ$ ; Sd.  $282-284^\circ_{18-14}$  (B. 22, 582; J. pr. [2] 65, 150 C. 1902 [1] 990). — II, 827; \*II, 488.



- C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>S** 11) 3,5-Dimethyl-1-[6-Amido-3-Methylphenyl]benzthiazol (Isodehydrothio-m-Xylidin). Sm. 121° (*J. pr.* [2] 65, 151 *C.* 1902 [1] 991). — \*IV, 680.  
 12) Dimethyldehydro-p-Toluidin. Sm. 196—197° (*Soc.* 55, 230; *B.* 22, 971). — II, 822.  
 13) 2-Thiocarbonyl-4-[2,4-Dimethylphenyl]tetrahydro-1,3-Benzdiazin. Sm. 222—223° (*B.* 32, 1264). — \*IV, 680.  
 14) 2-Thiocarbonyl-6-Methyl-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 255—262° (*Soc.* 95, 503 *C.* 1909 [1] 1891).  
 15) 2-Thiocarbonyl-6-Methyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 258—260° (255—262°) (*J. pr.* [2] 73, 224 *C.* 1906 [1] 1262; *Soc.* 95, 503 *C.* 1909 [1] 1891).  
 16) Phenylamid d. 2-Methyl-2,3-Dihydroindol-1-Thiocarbonsäure. Sm. 100—101° (*A.* 239, 246). — IV, 189.  
 17) Phenylamid d. 1,2,3,4-Tetrahydroisochinolin-2-Thiocarbonsäure. Sm. 140° (*B.* 26, 1212). — IV, 201.  
 18) Verbindung (aus 2-Amido-1,4-Dimethylbenzol). Sm. 144° (*B.* 22, 585). — II, 827.  
 19) Verbindung (aus d. Thioameisensäure-2-Methylphenylamid). Sm. 160° (*B.* 18, 2297). — II, 460.
- C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>S<sub>2</sub>** 1) Diphenyläther d.  $\alpha\delta$ -Diimido- $\alpha\delta$ -Dimerkaptobutan. HCl (*B.* 36, 3467 *C.* 1903 [2] 1244).  
 2) Di[ $\alpha$ -Imidobenzyläther] d.  $\alpha\beta$ -Dimerkaptoäthan. 2HBr (Sm. 233°) (*B.* 24, 783). — II, 1294.  
 3) Methyläther d. 5-Merkapto-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 99° (*J. pr.* [2] 60, 225). — \*IV, 537.  
 4) Äthyläther d. 5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 70° (*J. pr.* [2] 67, 240 *C.* 1903 [1] 1263). — \*IV, 483.  
 5) Di[Benzylamid] d. Dithiooxalsäure. Sm. 115° (*A.* 262, 357). — II, 529.  
 6) Di[4-Methylphenylamid] d. Dithiooxalsäure. Sm. 150° (*C.* 1902 [2] 122).
- C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>S<sub>3</sub>** 1) Dimethyläther d. Di[Phenylimidomerkaptomethyl]sulfid. Sm. 84 bis 85° (*B.* 36, 2285 *C.* 1903 [2] 561).  
 2) Sulfid d. Methylphenylamidodithioameisensäure. Sm. 150—151° (*B.* 36, 2281 *C.* 1903 [2] 560).
- C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>S<sub>4</sub>** 1) Dimethyläther d. Di[Phenylimidomerkaptomethyl]disulfid. Sm. 123° (*Bl.* [3] 27, 815 *C.* 1902 [2] 696; *B.* 36, 2264 *C.* 1903 [2] 562).  
 2) Disulfid d. Benzylamidodithioameisensäure (Dibenzylthiuramdisulfid). Sm. 71° (*B.* 35, 822 *C.* 1902 [1] 712).  
 3) Disulfid d. Methylphenylamidodithioameisensäure (Dimethyldiphenylthiuramdisulfid). Sm. 198° (*B.* 35, 820 *C.* 1902 [1] 712; *B.* 36, 2274 *C.* 1903 [2] 563).  
 4) 3,3'-Dimethylbiphenyl-4,4'-Di[Amidodithioameisensäure]. (NH<sub>4</sub>)<sub>2</sub> (*B.* 40, 2974 *C.* 1907 [2] 805).
- C<sub>16</sub>H<sub>16</sub>N<sub>3</sub>Cl** 1) Chlormethylat d. 2-Phenylhydrazidochinolin (*A.* 282, 379). — IV, 1160.
- C<sub>16</sub>H<sub>16</sub>N<sub>3</sub>Br** 1) 6-[4-Bromphenyl]diazooamido-1,2,3,4-Tetrahydronaphtalin. Sm. 134° (*Soc.* 81, 905 *C.* 1902 [2] 214). — \*IV, 1136.
- C<sub>16</sub>H<sub>16</sub>N<sub>3</sub>J** 1) Jodmethylat d. 2-Phenylhydrazidochinolin. Sm. 230° (*A.* 282, 379). — IV, 1160.
- C<sub>16</sub>H<sub>16</sub>N<sub>4</sub>Br<sub>2</sub>** 1)  $\alpha\delta$ -Di[4-Bromphenylhydrazon]butan. Sm. 140—145° (*B.* 34, 1497).
- C<sub>16</sub>H<sub>16</sub>N<sub>4</sub>S** 1) 4-Allylthioureidoazobenzol. Sm. 133—134° (*G.* 28 [1] 244). — IV, 1357.  
 2) 3,5-Diimido-2,4-Di[2-Methylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 135°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), Pikrat, + AgNO<sub>3</sub> (*B.* 23, 366). — IV, 1236; \*IV, 902.  
 3) 3,5-Diimido-2,4-Di[4-Methylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 127°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + 1½ H<sub>2</sub>O), Pikrat, + AgNO<sub>3</sub> + 1½ H<sub>2</sub>O (*B.* 23, 364). — IV, 1236; \*IV, 902.  
 4) 2,5-Di[4-Amidobenzyl]-1,3,4-Thiodiazol. Sm. 148° (*B.* 35, 3940 *C.* 1903 [1] 39).  
 5) Äthyläther d. 5-Phenylimido-3-Merkapto-4-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 214—215° (*B.* 35, 1713 *C.* 1902 [2] 29). — \*IV, 899.  
 6) Verbindung (aus uns-Methylphenylthioharnstoff). Sm. 94—95° (*B.* 25, 1589). — II, 391.

- C<sub>16</sub>H<sub>16</sub>N<sub>4</sub>S** 7) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>16</sub>N<sub>4</sub>S vom Sm. 132°). Sm. 203° (*B.* 39, 865 *C.* 1906 [1] 1413).
- C<sub>16</sub>H<sub>16</sub>N<sub>4</sub>S<sub>2</sub>** 1) 2-Thiocarbonyl-5-[2-Methylphenyl]hydrazido-3-[2-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 180—184° (*B.* 24, 4204). — *IV*, 803.  
2) 2-Thiocarbonyl-5-[4-Methylphenyl]hydrazido-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 155° (*B.* 24, 4197). — *IV*, 807.  
3) 3,6-Di[Methylphenylamido]-1,2,4,5-Dithiodiazin<sup>9</sup> Sm. 128°. 2HCl, 2HNO<sub>3</sub>, 2 Pikrat (*B.* 39, 1014 *C.* 1906 [1] 1413).
- C<sub>16</sub>H<sub>16</sub>N<sub>4</sub>Si** 1) Silikotetrapyrrol. Sm. 173,4° (*Soc.* 95, 507 *C.* 1909 [1] 1657; *Soc.* 95, 511 *C.* 1909 [1] 1658).
- C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>S<sub>2</sub>** 1) Cyklodi-o-Xylylendibromdisulfid. Sm. 110—112° (*B.* 36, 187 *C.* 1903 [1] 467).
- C<sub>16</sub>H<sub>17</sub>ON** C 80,3 — H 7,1 — O 6,7 — N 5,9 — M. G. 239.  
1) 2-Oxyphenyl-4-Isopropylbenzylidenamin. Sm. 183° u. Zers. (*A.* 245, 296). — *III*, 56.  
2) 2-Oxybenzyliden-2,4,5-Trimethylphenylamin. Sm. 71° (*Soc.* 95, 443 *C.* 1909 [1] 1654).  
3) Äthyläther d. α-[4-Oxyphenyl]imido-α-Phenyläthan. Sm. 88°; Sd. 210—212°<sub>72</sub> (D.R.P. 87897, 98840). — \**III*, 99.  
4) Äthyläther d. α-Benzylimido-α-Oxy-α-Phenylmethan. Sd. 186 bis 188°<sub>12</sub> (*Soc.* 83, 328 *C.* 1903 [1] 581, 876).  
5) α-Phenylamidopropylphenylketon (β-Phenylamido-α-Keto-α-Phenylbutan). Sm. 85—86°. HCl (*Bl.* [3] 15, 1101). — \**III*, 118.  
6) α-Phenylamidoisopropylphenylketon. Sm. 136—137°. HCl (*Bl.* [3] 17, 79). — \**III*, 120.  
7) α-Methylphenylamidoäthylphenylketon. Sm. 48° (*Bl.* [3] 17, 73). — \**III*, 113.  
8) α-[2-Methylphenyl]amidoäthylphenylketon. Sm. 89—90° (*Bl.* [3] 17, 73). — \**III*, 113.  
9) α-[4-Methylphenyl]amidoäthylphenylketon. Sm. 90—91°. HCl (*Bl.* [3] 17, 73). — \**III*, 113.  
10) α-Phenylamidoäthyl-4-Methylphenylketon. Sm. 104—105° (*C.* 1897 [2] 576). — \**III*, 120.  
11) 2,4-Dimethylphenylamidomethylphenylketon. Sm. 98°. HCl (*B.* 30, 575). — \**III*, 97.  
12) 4-Dimethylamido-3-Methyldiphenylketon. Sm. 67°; Sd. 350—360° (*A.* 206, 91). — *III*, 211; \**III*, 160.  
13) p-Amido-2,4,5-Trimethyldiphenylketon. Sm. 130°. (2HCl, PtCl<sub>4</sub>) (*B.* 17, 1805). — *III*, 236.  
14) Äthylphenylamidobenzoylmethan. Sm. 94—95° (*B.* 16, 25). — *III*, 126.  
15) γ-Benzoylamido-α-Phenylpropan. Sm. 57—58° (*B.* 27, 2310). — *II*, 1166.  
16) 3-Methyl-1-[β-Benzoylamidoäthyl]benzol (*B.* 33, 1080). — \**II*, 732.  
17) Phenylbenzimidopropyläther. Sd. 177—179°<sub>11</sub> (*Soc.* 81, 596 *C.* 1902 [1] 1055).  
18) N-[2-Methylphenyl]benzimidooäthyläther. Sd. 179—180°<sub>15</sub> (*Soc.* 81, 596 *C.* 1902 [1] 1056).  
19) N-[4-Methylphenyl]benzimidooäthyläther. Sd. 178°<sub>11</sub> (*Soc.* 81, 597 *C.* 1902 [1] 1056).  
20) γ-Oximido-α-Diphenylbutan. Sm. 86—87° (91°) (*Soc.* 71, 678; *Am.* 38, 531 *C.* 1908 [1] 227). — \**III*, 174.  
21) isom. γ-Oximido-α-α-Diphenylbutan. Sm. 128° (*Am.* 38, 531 *C.* 1908 [1] 227).  
22) α-Oximido-αβ-Diphenylbutan. Sm. 129—130° (*B.* 21, 1299). — *III*, 234.  
23) γ-Oximido-αβ-Diphenylbutan. Sm. 134° (*M.* 22, 661). — \**III*, 174.  
24) α-Oximido-αγ-Diphenylbutan. Sm. 93° (*Am.* 31, 655 *C.* 1904 [2] 446).  
25) β-Oximido-αγ-Diphenylbutan. Sm. 136,5° (*C.* 1900 [2] 476). — \**III*, 173.  
26) β-Oximido-αδ-Diphenylbutan. Sm. 120° (*M.* 22, 665). — \**III*, 172.  
27) α-Oximido-ββ-Diphenylbutan. Sm. 128—129° (*C. r.* 143, 1243 *C.* 1907 [1] 727).

- C<sub>16</sub>H<sub>17</sub>ON** 28)  $\beta$ -Oximido- $\alpha$ -Di[4-Methylphenyl]äthan. Sm. 126,5° (B. 39, 2296 C. 1906 [2] 523).
- 29)  $\alpha$ -Oximido- $\alpha$ - $\beta$ -Di[4-Methylphenyl]äthan. Sm. 128° (A. 279, 336). — III, 235.
- 30)  $\alpha$ -Oximido- $\beta$ -Phenyl- $\alpha$ -[2,5-Dimethylphenyl]äthan. Sm. 99° (B. 24, 3542). — III, 235.
- 31) anti- $\alpha$ -Oximido-4-Propyldiphenylmethan. Sm. 104° (B. 24, 4033). — III, 236.
- 32) syn- $\alpha$ -Oximido-4-Propyldiphenylmethan. Sm. 130° (B. 24, 4034). — III, 236.
- 33) anti- $\alpha$ -Oximido-4-Isopropyldiphenylmethan. Sm. 132° (B. 24, 4036). — III, 236.
- 34) syn- $\alpha$ -Oximido-4-Isopropyldiphenylmethan. Sm. 106° (B. 24, 4036). — III, 236.
- 35) N-Phenyl-4-Isopropylbenzaldoxim. Sm. 96—97° (C. 1905 [2] 764).
- 36) N-2,4,6-Trimethylphenyl-syn-Benzaldoxim. Sm. 101,5—102° (B. 33, 3630). — \*III, 35.
- 37)  $\gamma$ -Keto- $\gamma$ -[ $\beta$ -Isopropylpyrryl]- $\alpha$ -Phenylpropen (Isopropylpyrryleinnamylketon). Sm. 142—143° (B. 20, 853). — IV, 101.
- 38) Di-o-Xylenammoniumhydroxyd. Salze, siehe diese (B. 24, 2402). — IV, 402.
- 39) 9-Äthylamido-1-Oxy-9,10-Dihydroanthracen. Sm. 172° (B. 10, 610; A. 212, 18). — II, 1112.
- 40) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[5-Äthyl-2-Pyridyl]äthen. (2HCl, PtCl<sub>4</sub>) (B. 35, 2789 C. 1902 [2] 994). — \*IV, 239.
- 41) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[4,6-Dimethyl-2-Pyridyl]äthen. Sd. 230—235°, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 42, 1456 C. 1909 [1] 1936).
- 42) 2-Oxy-3,3-Dimethyl-1-Phenyl-2,3-Dihydroindol. Sm. 125°. +  $\frac{1}{4}$  C<sub>6</sub>H<sub>6</sub> (Sm. 110—115°) (M. 21, 173). — \*IV, 162.
- 43) Äthyläther d. 2-[4-Oxyphenyl]-1,3-Dihydroisindol. Sm. 204 bis 205° (B. 31, 592). — \*IV, 139.
- 44) 1-Benzoylhexahydrochinolin. Sm. 119—121° (B. 27, 1479). — IV, 139.
- 45) 4-Acetyl-3-Methyl-1,2,3,4-Tetrahydro- $\beta$ -Naphtochinolin. Sm. 86 bis 86,5° (B. 24, 2647). — IV, 379.
- 46) Aldehyd d. 4-Äthylbenzylamidobenzol-1-Carbonsäure. Fl. (C. 1899 [2] 927).
- 47) Amid d.  $\beta\gamma$ -Diphenylbuttersäure. Sm. 62° (Am. 33, 355 C. 1905 [1] 1392).
- 48) Amid d.  $\beta\beta$ -Diphenylisobuttersäure. Sm. 123° (C. 1908 [2] 1100).
- 49) Amid d.  $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 128—129° (B. 21, 1328; G. 26 [2] 225). — II, 1470; \*II, 871.
- 50) Phenylamid d.  $\beta$ -Phenylbuttersäure. Sm. 136—137° (C. 1908 [2] 1100).
- 51) Phenylamid d. 1-Propylbenzol-2-Carbonsäure. Sm. 108—109° (B. 32, 962). — \*II, 842.
- 52) Phenylamid d. 1-Propylbenzol-4-Carbonsäure. Sm. 138° (B. 24, 4034). — II, 1383.
- 53) Phenylamid d. 1-Isopropylbenzol-4-Carbonsäure. Sm. 159° (A. 70, 46; B. 24, 4037). — II, 1385.
- 54) Phenylamid d. 1,2,4-Trimethylbenzol-5-Carbonsäure. Sm. 178° (J. pr. [2] 41, 309). — II, 1390.
- 55) Phenylamid d. 1,3,5-Trimethylbenzol-2-Carbonsäure. Sm. 165° (J. pr. [2] 41, 308). — II, 1391.
- 56) Benzylamid d.  $\beta$ -Phenylpropionsäure. Sm. 85° (B. 37, 2704 C. 1904 [2] 518; J. pr. [2] 71, 325 C. 1905 [1] 1597).
- 57) Methylphenylamid d. 1,2-Dimethylbenzol-4-Carbonsäure. Sm. 78° (B. 24, 2115). — II, 1375.
- 58) Methylphenylamid d. 1,3-Dimethylbenzol-4-Carbonsäure. Sm. 54° (B. 24, 2114). — II, 1376.
- 59) Methylphenylamid d. 1,4-Dimethylbenzol-2-Carbonsäure. Sm. 74° (B. 24, 2116). — II, 1380.
- 60) 4-Methylphenylamid d. 1,3-Dimethylbenzol-4-Carbonsäure. Sm. 152° (B. 39, 4085 C. 1907 [1] 255).



- $C_{16}H_{17}ON$
- 61)  $\beta$ -Phenyläthylamid d. Phenylelessigsäure. Sm. 94—95° (B. 42, 2077 C. 1909 [2] 225; B. 42, 1977 C. 1909 [2] 454).
  - 62) Äthylbenzylamid d. Benzolcarbonsäure. Sd. 214—216°<sub>11</sub> (Soc. 83, 408 C. 1903 [1] 833).
  - 63) Äthyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 71—72° (Soc. 83, 408 C. 1903 [1] 833).
  - 64) Äthyl-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 38—40° (Soc. 83, 408 C. 1903 [1] 833).
  - 65) 2,4-Dimethylphenylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 165° (B. 24, 4050). — II, 1330.
  - 66) 2-Dimethylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 139° (A. 205, 124; 210, 332). — II, 1341.
  - 67) 2,4-Dimethylbenzylamid d. Benzolcarbonsäure. Sm. 98° (B. 22, 122). — II, 1167.
  - 68) 3,5-Dimethylbenzylamid d. Benzolcarbonsäure. Sm. 78° (B. 25, 3014). — II, 1167.
  - 69) Methyl-2,6-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 127° (M. 19, 643). — \*II, 732.
  - 70) 2,4,5-Trimethylphenylamid d. Benzolcarbonsäure. Sm. 167° (B. 21, 2553). — II, 1166.
  - 71) 2,4,6-Trimethylphenylamid d. Benzolcarbonsäure. Sm. 204° (200,5°) (B. 10, 1711; 33, 3637). — II, 1167.
  - 72) 2-Propylphenylamid d. Benzolcarbonsäure. Sm. 119° (G. 28 [2] 99; B. 32, 963). — \*II, 732.
  - 73) 4-Propylphenylamid d. Benzolcarbonsäure. Sm. 115° (B. 16, 108; B. 42, 3614 C. 1909 [2] 1847). — II, 1166.
  - 74) 4-Isopropylphenylamid d. Benzolcarbonsäure. Sm. 162° (114—115°?) (B. 16, 113; B. 40, 4360 C. 1908 [1] 33). — II, 1166.
  - 75)  $\alpha$ -Phenylpropylamid d. Benzolcarbonsäure. Sm. 115—116° (J. pr. [2] 77, 9 C. 1908 [1] 629).
  - 76)  $\gamma$ -Phenylpropylamid d. Benzolcarbonsäure. Sm. 57—58° (B. 27, 2310).
  - 77)  $\alpha\beta$ -Diphenyläthylamid d. Essigsäure. Sm. 148° (B. 22, 1412). — II, 636.
  - 78) Di[3-Methylphenyl]amid d. Essigsäure. Sm. 43°; Sd. 324°<sub>300</sub> (?) (B. 13, 1092). — II, 478.
  - 79) Di[4-Methylphenyl]amid d. Essigsäure. Sm. 85° (B. 6, 446). — II, 493.
  - 80) Phenyl-[2-Methylphenyl]methylanid d. Essigsäure. Sm. 124° (B. 24, 2806). — II, 637.
  - 81) Phenyl-[3-Methylphenyl]methylanid d. Essigsäure. Sm. 97° (B. 24, 2808). — II, 637.
  - 82) Phenyl-[4-Methylphenyl]methylanid d. Essigsäure. Sm. 131° (129,4 bis 131°) (B. 24, 2802; C. 1902 [2] 789). — II, 637.
  - 83) Phenyl-2,4-Dimethylphenylamid d. Essigsäure. Sm. 115° (B. 40, 4544 C. 1908 [1] 244).
  - 84) 2-Naphtylamid d. lab.  $\beta$ -Penten- $\gamma$ -Carbonsäure. Sm. 127° (C. 1907 [2] 292).
  - 85) 2-Naphtylamid d. stab.  $\beta$ -Penten- $\gamma$ -Carbonsäure. Sm. 96° (C. 1907 [2] 292).
- $C_{16}H_{17}ON_8$
- C 71,9 — H 6,4 — O 6,0 — N 15,7 — M. G. 267.
- 1)  $\beta$ -Semicarbazon- $\alpha\alpha$ -Diphenylpropan. Sm. 170° (165—166°) (B. 39, 2303 C. 1906 [2] 525; C. r. 143, 127 C. 1906 [2] 670).
  - 2)  $\alpha$ -Semicarbazon- $\alpha\beta$ -Diphenylpropan. Sm. 194° (C. r. 143, 127 C. 1906 [2] 670).
  - 3)  $\beta$ -Semicarbazon- $\alpha\gamma$ -Diphenylpropan. Sm. 145—146° (B. 34, 2076). — \*III, 171.
  - 4)  $\alpha$ -Semicarbazon- $\beta\beta$ -Diphenylpropan. Sm. 122° (C. r. 143, 1243 C. 1907 [1] 727).
  - 5)  $\alpha$ -Amido- $\alpha$ -[4-Methylbenzoyl]hydrazon- $\alpha$ -[4-Methylphenyl]methan (4-Methylbenzoyl-4-Methylbenzenylhydrazidin). Zers. bei 120°. 2HCl (B. 27, 3283; A. 298, 6, 11). — IV, 1139.
  - 6)  $\alpha$ -Nitroso- $\beta$ -[4-Methylbenzyliden]- $\alpha$ -[4-Methylbenzyl]hydrazin. Sm. 111° (J. pr. [2] 62, 104, 107). — \*IV, 545.

- C<sub>16</sub>H<sub>17</sub>ON<sub>3</sub>**
- 7) 1-Acetyl-4,4'-Dimethyldiazoamidobenzol. Sm. 104—105° u. Zers. (B. 24, 4160). — IV, 1568.
  - 8) 4'-Acetylamido-2,3'-Dimethylazobenzol. Sm. 185° (B. 17, 470; D.R.P. 88013). — IV, 1377; \*IV, 1019.
  - 9) 6-Acetylamido-3,4'-Dimethylazobenzol. Sm. 157° (B. 17, 80). — IV, 1378.
  - 10) 4'-Dimethylamido-4-Acetylazobenzol. Sm. 203—204° (C. 1909 [2] 524).
  - 11) 5-Amido-3,5-Di[2-Methylphenyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 109—110° (B. 22, 3155). — II, 1331.
  - 12) 5-Amido-3,5-Di[4-Methylphenyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 125°. HBr, (HBr, Br<sub>2</sub>) (B. 28, 2229). — \*II, 828.
  - 13) 6-Äthyläther d. 6-Oxy-5-Methyl-1-[3-Methylphenyl]-1,2,3-Benztriazol. Sm. 83—84° (A. 287, 197). — IV, 1550.
  - 14) 6-Äthyläther d. 6-Oxy-5-Methyl-1-[4-Methylphenyl]-1,2,3-Benztriazol. Sm. 131° (A. 287, 201). — IV, 1550.
  - 15) 3-Keto-4,6-Dimethyl-1-Äthyl-2-Phenyl-2,3-Dihydro-1,2,5-Benztriazol. Sm. 132° (A. 366, 392 C. 1909 [2] 289).
  - 16) 3-Keto-1,4,6-Trimethyl-2-[2-Methylphenyl]-2,3-Dihydro-1,2,5-Benztriazol. Sm. 132° (A. 366, 395 C. 1909 [2] 289).
  - 17) 3-Keto-1,4,6-Trimethyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,5-Benztriazol. Sm. 145° (A. 366, 395 C. 1909 [2] 289).
  - 18) 5-Acetylamido-2-Methyl-N-Äthyl-α[oder β]-Naphtimidazol + 1/2 H<sub>2</sub>O. Sm. 184—185°. (HCl, AuCl<sub>3</sub>), Pikrat (Soc. 83, 1188 C. 1903 [2] 1444).
  - 19) Amid d. α-[4-Dimethylamidophenyl]imido-α-Phenyllessigsäure. Sm. 170° u. Zers. (B. 35, 3345 C. 1902 [2] 1194). — \*IV, 390.
  - 20) Amid d. α-Äthylphenylhydrazonphenyllessigsäure. Sm. 111,5° (A. 227, 348). — IV, 694.
  - 21) Phenylamid d. β-Phenylhydrazonbuttersäure. Sm. 128° (B. 27, 1170). — IV, 690.
  - 22) Phenylamid d. 1-Phenyltetrahydropyrrol-2-Carbonsäure. Sm. 114° (A. 274, 327). — IV, 479.
  - 23) 4-Methylphenylamid d. α-Phenylhydrazonpropionsäure. Sm. 204° (Am. 16, 386). — IV, 689.
  - 24) α-Phenyläthylidenhydrazid d. 2-Methylphenylamidoameisensäure. Sm. 211—212° (B. 34, 4302 C. 1902 [1] 304; B. 38, 835 C. 1905 [1] 867). — \*III, 99.
  - 25) α-Phenyläthylidenhydrazid d. 4-Methylphenylamidoameisensäure. Sm. 192° (B. 38, 834 C. 1905 [1] 867).
  - 26) Verbindung (aus Di[4-Methylphenyl]diimidodimethylen). (2HCl, PtCl<sub>4</sub>) (A. 256, 301). — II, 510.
- C<sub>16</sub>H<sub>17</sub>ON<sub>5</sub>**
- 1) Äthyläther d. 3-Amido-5-[4-Oxyphenyl]amido-1-Phenyl-1,2,4-Triazol. Sm. 134°. HCl (A. 356, 195 C. 1907 [2] 1798).
  - 2) Äthyläther d. 5-Amido-3-[4-Oxyphenyl]amido-1-Phenyl-1,2,4-Triazol. HCl (A. 356, 196 C. 1907 [2] 1798).
  - 3) Amid d. α-Phenylazo-β-Phenylhydrazonbuttersäure. Sm. 186—187° (B. 32, 206). — \*IV, 462.
- C<sub>16</sub>H<sub>17</sub>OCl**
- 1) α-Chlor-β-Oxy-αα-Diphenyl-β-Methylpropan. Sd. 239° (J. pr. [2] 37, 366). — II, 1081.
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N**
- 1) α-Phenylimido-α-[2,6-Dioxy-3,4-Dimethylphenyl]äthan. Sm. 184° u. Zers. (Ar. 244, 462 C. 1907 [1] 38).
  - 2) γ-Hydroxylamido-α-Keto-αγ-Diphenylbutan (Dyponhydroxylamin). Sm. 109—110° (112°). Oxalat (C. 1903 [1] 521; A. 330, 229 C. 1904 [1] 944).
  - 3) Methyläther d. 4-Oxy-1-Acetylphenylamidomethylbenzol. Sm. 54° (A. 315, 141).
  - 4) Methyläther d. α-Acetylamido-4-Oxydiphenylmethan. Sm. 159° (B. 24, 3513). — II, 897.
  - 5) Methyläther d. 4-Dimethylamido-3'-Oxydiphenylketon. Sm. 67° (D.R.P. 65952). — \*III, 153.
  - 6) Äthyläther d. 4-Oxyphenylamidomethylphenylketon. Sm. 102° (B. 30, 576). — \*III, 97.

- $C_{16}H_{17}O_2N$  7) Äthyläther d. 4-[4-Methylphenyl]imido-6-Oxy-1-Keto-3-Methyl-1,4-Dihydrobenzol (Ä. d. Oxytoluchinon-p-Toluid). Sm. 76° (B. 27, 2710). — III, 361.
- 8) Äthyläther d. 4-Acetylamido-4'-Oxybiphenyl. Sm. 210° (B. 27, 2631). — \*II, 538.
- 9) Phenyläther d.  $\gamma$ -Benzoylamido- $\alpha$ -Oxypropan. Sm. 118° (B. 24, 2635). — II, 1161.
- 10) 4-Methylphenyläther d.  $\beta$ -Benzoylamido- $\alpha$ -Oxyäthan. Sm. 134° (B. 24, 193). — II, 1160.
- 11)  $\beta$ -Benzoylamido- $\alpha$ -Oxy- $\alpha$ -Phenylpropan. Sm. 136—138° (B. 30, 1524). — \*II, 738.
- 12) Diäthyläther d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sd. 182—184°<sub>16</sub> (Soc. 93, 102 C. 1908 [1] 1044).
- 13)  $\beta$ -Phenyläther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -[2,4-Dimethylphenyl]äthan. Sm. 122—123° (B. 35, 3564 C. 1902 [2] 1313).
- 14) 6-Methyläther d. 6-Oxy-2-[3-Oxyphenyl]-1,2,3,4-Tetrahydrochinolin. Sm. 110—111°. HCl (B. 20, 1923). — IV, 400.
- 15) 2,4,4-Trimethyl-3,4-Dihydrochino- $\beta$ -Methylcumarin. Sm. 268° (B. 32, 3702). — \*IV, 217.
- 16) 4-Dimethylamidodiphenylmethan-2'-Carbonsäure. Sm. 173° (174°). Ba (A. 300, 238; 307, 310; Bl. [3] 19, 830; [3] 25, 201). — \*II, 869.
- 17) Äthylester d.  $\alpha$ -Phenylamido- $\alpha$ -Phenylelessigsäure. Sm. 83—84° (89 bis 90°); Sd. 325—330°. HBr (J. 1878, 780; B. 30, 2305; 32, 3056). — II, 1324; \*II, 819.
- 18) Äthylester d. 4-Biphenylamidoessigsäure. Sm. 95° (B. 13, 1967). — II, 634.
- 19) Äthylester d.  $\beta$ -[1-Naphtyl]amidocrotonsäure. Sm. 45° (B. 21, 531). — II, 611.
- 20) Äthylester d.  $\beta$ -[2-Naphtyl]amidocrotonsäure. Sm. 66° (B. 21, 532). — II, 622.
- 21) Äthylester d. 2,6-Dimethyl-4-Phenylpyridin-3-Carbonsäure. Sd. 316°<sub>320</sub> (315—320°). (2HCl, PtCl<sub>4</sub>) (B. 17, 2912; C. 1899 [2] 440). — IV, 383.
- 22) 2-Naphtylester d. Hexahydropyridin-1-Carbonsäure. Sm. 107° (Bl. [3] 19, 82). — \*IV, 11.
- 23) Acetat d. d- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 159° (A. 337, 349 C. 1905 [1] 341).
- 24) Acetat d. l- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 159° (A. 337, 349 C. 1905 [1] 341).
- 25) Acetat d. r- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 152—153° (B. 29, 1215; A. 337, 348 C. 1905 [1] 341). — \*II, 662.
- 26) Acetat d. isom.  $\beta$ -Amido- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 196—197° (B. 29, 1214). — \*II, 660.
- 27) Acetat d. Dibenzylhydroxylamin. Sm. 173° (B. 19, 1627). — II, 536.
- 28) Benzoat d.  $\beta$ -Methylphenylamido- $\alpha$ -Oxyäthan. Sm. 47°; Sd. 220° (Bl. [4] 3, 374 C. 1908 [1] 1677).
- 29) Benzoat d. 2-Dimethylamido-4-Oxy-1-Methylbenzol. Sm. 46° (C. 1902 [2] 377).
- 30) Phenylamidoformiat d.  $\gamma$ -Oxypropylbenzol. Sm. 47—48° (B. 33, 2300 Anm.).
- 31) Phenylamidoformiat d.  $\alpha$ -Oxyisopropylbenzol. Sm. 113° (B. 36, 1863 Anm. C. 1903 [2] 286).
- 32) Phenylamidoformiat d. 2-[ $\beta$ -Oxyäthyl]-1-Methylbenzol. Sm. 67° (C. r. 141, 45 C. 1905 [2] 471).
- 33) Phenylamidoformiat d. 4-[ $\alpha$ -Oxyäthyl]-1-Methylbenzol. Sm. 95 bis 96° (B. 35, 2247 C. 1902 [2] 273; B. 36, 1636 C. 1903 [2] 26).
- 34) Phenylamidoformiat d. 4-[ $\beta$ -Oxyäthyl]-1-Methylbenzol. Sm. 112° (C. r. 141, 45 C. 1905 [2] 471; D.R.P. 164883 C. 1905 [2] 1752).
- 35) Phenylamidoformiat d. 5-Oxy-1,2,4-Trimethylbenzol. Sm. 110 bis 111° (B. 32, 19). — \*II, 449.
- 36) Phenylamidoformiat d. 2-Oxy-1,3,5-Trimethylbenzol. Sm. 140 bis 142° (B. 32, 19). — \*II, 456.
- 37) Amid d.  $\beta$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 192—193° (B. 14, 1688; A. 219, 45). — II, 1701.



- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N** 38) Phenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Sm. 93—94° (B. 34, 1840).
- 39) Phenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 93°; Sd. 210 bis 211°<sub>16</sub> (B. 34, 1840).
- 40) Methylphenylamid d.  $\alpha$ -Oxypropionphenyläthersäure. Sm. 57,5° (B. 34, 2126).
- 41) 2-Methylphenylamid d.  $\alpha$ -Oxypropionphenyläthersäure. Sm. 88 bis 90° (B. 34, 1844).
- 42) 3-Methylphenylamid d.  $\alpha$ -Oxypropionphenyläthersäure. Sm. 86,5°; Sd. 220°<sub>15</sub> (B. 34, 1847).
- 43) 4-Methylphenylamid d.  $\alpha$ -Oxypropionphenyläthersäure. Sm. 115° (B. 34, 1849).
- 44) 2,4,5-Trimethylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 188 bis 189° (Soc. 95, 444 C. 1909 [1] 1654).  
C 67,9 — H 6,0 — O 11,3 — N 14,8 — M. G. 283.
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>**
- 1) 2-Äthylamido-5-[2-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 80° (A. 286, 164). — IV, 609.
- 2) 2-Äthylamido-5-[3-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 118° (A. 286, 165). — IV, 610.
- 3) 2-Äthylamido-5-[4-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 143° (A. 286, 165). — IV, 610.
- 4) 2,4-Di[Acetylamido]diphenylamin. Sm. 188° (B. 28, 2970). — IV, 1123.
- 5) 2,4'-Di[Acetylamido]diphenylamin. Sm. 203° (B. 12, 1403). — IV, 1169.
- 6) 4,4'-Di[Acetylamido]diphenylamin. Sm. 239° (B. 11, 1099; A. 303, 365). — IV, 1169.
- 7) 2-Acetylamido-1-[4-Methylphenyl]nitrosamidomethylbenzol. Sm. 115—116° (J. pr. [2] 47, 356). — IV, 631.
- 8) 4-Methylnitrosamido-4'-Dimethylamidodiphenylketon. Sm. 182 bis 183° (B. 21, 2452; 22, 337; 24, 3198). — III, 185.
- 9)  $\alpha$ -[2-Methylphenylamido]acetyl- $\beta$ -Phenylharnstoff. Sm. 175° (C. 1899 [2] 420). — \*II, 258.
- 10)  $\alpha$ -[4-Methylphenylamido]acetyl- $\beta$ -Phenylharnstoff. Sm. 176° (C. 1899 [2] 420). — \*II, 282.
- 11)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oximido-2,4-Dimethylbenzyl]harnstoff. Sm. 138° (B. 22, 2448). — II, 1377.
- 12)  $\gamma$ -Phenylhydrazon- $\alpha$ -[4-Nitrophenyl]butan. Sm. 103° (J. pr. [2] 71, 45 C. 1905 [1] 457).
- 13)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Nitro-4-Methylphenyl]propan. Sm. 147 bis 149° (G. 21, 98). — IV, 773.
- 14)  $\beta$ -Phenylhydrazon- $\alpha$ -[3-Nitro-4-Methylphenyl]propan. Sm. 212 bis 213° (G. 21, 102). — IV, 773.
- 15)  $\alpha$ -Phenylhydrazon- $\alpha$ -[5-Acetylamido-2-Oxyphenyl]äthan. Sm. 207° (B. 34, 125). — \*IV, 503.
- 16)  $\alpha$ -Phenylhydrazon- $\beta$ -Oxy- $\alpha$ -[4-Acetylamidophenyl]äthan. Sm. 223° (B. 33, 2646). — \*IV, 503.
- 17) Methyläther d.  $\alpha$ -[4-Oxybenzoyl]amido- $\beta$ -Phenylhydrazonäthan. Sm. 126° (B. 27, 3100). — IV, 747.
- 18) Äthyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -Benzoylamido- $\alpha$ -Oxymethan. Sm. 136° (Am. 27, 268 C. 1902 [1] 1299). — \*IV, 433.
- 19)  $\alpha$ -Phenylamidoacetyl- $\beta$ -Acetyl- $\alpha$ -Phenylhydrazin. Sm. 141° (A. 301, 82). — IV, 666; \*IV, 425.
- 20) 4-[ $\alpha$ -Oxyisobutyryl]amidoazobenzol. Sm. 193° (B. 31, 2852). — IV, 1011.
- 21) 5-Keto-2-Amidooximidomethyl-2-Methyl-1-[2-Naphtyl]tetrahydropyrrol. Sm. 176° (B. 38, 1224 C. 1905 [1] 1257).
- 22) Diäthylamidochinoxazon. Sm. 216° (B. 25, 1066). — IV, 1180.
- 23) Methylester d. 2,4'-Dimethyldiazoamidobenzol-2-Carbonsäure. Sm. 85° (J. pr. [2] 63, 282). — \*IV, 1138.
- 24) Äthylester d.  $\beta$ -Phenylhydrazon- $\beta$ -[2-Pyridyl]propionsäure. Sm. 122°. Pikrat (B. 34, 4238 C. 1902 [1] 208). — \*IV, 529.
- 25) Äthylester d.  $\beta$ -Phenylhydrazon- $\beta$ -[4-Pyridyl]propionsäure (B. 34, 4249 C. 1902 [1] 209). — \*IV, 529.

- $C_{16}H_{17}O_2N_3$  26) Äthylester d. 4-Phenylazo-2,6-Dimethylpyridin-3-Carbonsäure. Sm. 78° (A. 366, 362 C. 1909 [2] 286).
- 27) Acetat d. 4-Dimethylamido-4'-Oxyazobenzol. Sm. 137° (Soc. 95, 1296 C. 1909 [2] 978).
- 28) Phenylamid d.  $\beta$ -Acetyl- $\alpha$ -Phenylhydrazidoessigsäure. Sm. 169,5° (A. 301, 63). — IV, 739; \*IV, 477.
- 29) Monophenyldiamid d. Phenylamidobernsteinsäure. Sm. 200° (A. 252, 167). — II, 437.
- 30) 4-Methylphenylamid d.  $\beta$ -Phenylureidoessigsäure. Sm. 229° (J. pr. [2] 70, 250 C. 1904 [2] 1463).
- 31) 4-Methylphenylamid d.  $\alpha$ -[4-Methylphenyl]harnstoff- $\beta$ -Carbon-säure (Di-p-Tolylbiuret). Sm. 216—224° (B. 21, 506). — II, 495.
- 32) 3-Amido-4-Methylphenylamid d. Benzoylamidoessigsäure. Sm. 205° (J. pr. [2] 52, 259). — IV, 609.
- 33) Di[Phenylamid] d. Imidodiessigsäure (Phenylamid d. Diglykolamid-säure). Sm. 140,5°.  $HNO_3$  (B. 8, 1155; D.R.P. 59121). — II, 363; \*II, 171.
- $C_{16}H_{17}O_3N_5$  C 61,7 — H 5,5 — O 10,3 — N 22,5 — M. G. 311.
- 1) 4,4'-Di[Acetylamido]diazooamidobenzol. Zers. bei 165° (Soc. 87, 930 C. 1905 [2] 321).
- 2) Diacetyl-2,4,3'-Triamidoazobenzol. Sm. 229—230° (B. 31, 189). — IV, 1363.
- $C_{16}H_{17}O_2Cl$  1) 2-Chlor-4,4'-Dioxy-3,5,3',5'-Tetramethylbiphenyl. Sm. 203° (B. 38, 236 C. 1905 [1] 613).
- 2)  $\alpha$ -Phenyläther- $\gamma$ -[4-Methylphenyl]äther d.  $\beta$ -Chlor- $\alpha\gamma$ -Dioxypropan. Sm. 60° (Soc. 79, 1226).
- $C_{16}H_{17}O_3N$  C 70,9 — H 6,3 — O 17,7 — N 5,2 — M. G. 271.
- 1) Äthyläther d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 91—92° (C. 1905 [2] 825).
- 2) Äthyläther d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 92° (A. 355, 277 C. 1907 [2] 1623).
- 3) 4<sup>3</sup>-Methyläther-1-Äthyläther d. 4[3,4-Dioxybenzyliden]amido-1-Oxybenzol + 3H<sub>2</sub>O (Vanillin-p-Phenetidin). Sm. 97° (102°) (C. 1897 [1] 1120; 1898 [1] 1251). — \*III, 73.
- 4) 1-Methyläther d. 4-[Acetyl-2-Oxybenzyl]amido-1-Oxybenzol. Sm. 98° (Ar. 240, 682 C. 1903 [1] 395).
- 5)  $\alpha\alpha$ -Dimethyläther d. syn- $\beta$ -Oximido- $\alpha\alpha$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 208° u. Zers. +  $\frac{1}{2}C_6H_6$  (A. 355, 278 C. 1907 [2] 1623).
- 6) 4,4'-Dimethyläther d.  $\alpha$ -Oximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 125° (120—121°) (A. 279, 340; Soc. 91, 542 C. 1907 [2] 66). — III, 227.
- 7) 4-Äthyläther- $\beta$ -Phenyläther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]-äthan. Sm. 116° (B. 35, 3565 C. 1902 [2] 1313).
- 8) 3-Nitrobenzylidenisophoron. Sm. 159—161° (A. 299, 226). — \*III, 143.
- 9) Äthyläther d. 4-Diacetylamido-1-Oxynaphtalin. Sm. 138° (J. pr. [2] 45, 549). — II, 865.
- 10) 1-Äthyläther d. 4-Amygdalylamido-1-Oxybenzol. Sm. 140,5° (B. 28 [2] 991).
- 11) 6-Phenylamido-3-Oxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 134—135° (B. 16, 902). — III, 369.
- 12) Cantharidinphenylimid. Sm. 129° (G. 21 [1] 466). — III, 623.
- 13) 4-Dimethylamido-2-Oxydiphenylmethan-2'-Carbonsäure. Sm. 204° (Bl. [3] 25, 203). — \*II, 996.
- 14)  $\alpha$ -[1-Naphtyl]acetylamidoisobuttersäure. Sm. 246° u. Zers. (B. 25, 2347). — II, 614.
- 15)  $\alpha$ -[2-Naphtyl]acetylamidoisobuttersäure. Sm. 188° (B. 25, 2349). — II, 622.
- 16) Phenylamidoformiat d. 3,4-Dioxy-1-Propylbenzol. Sm. 142° (C. r. 138, 425 C. 1904 [1] 798).
- 17)  $\alpha$ -Phenylamidoformiat d. 2-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-2-Methyl-äther. Sm. 106° (B. 36, 3588 C. 1903 [2] 1365).
- 18)  $\alpha$ -Phenylamidoformiat d. 3-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-3-Methyl-äther. Fl. (B. 36, 3591 C. 1903 [2] 1366).
- 19)  $\alpha$ -Phenylamidoformiat d. 4-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-4-Methyl-äther. Sm. 82—83° (B. 36, 3592 C. 1903 [2] 1366).

- C<sub>16</sub>H<sub>17</sub>O<sub>3</sub>N** 20)  $\beta$ -Phenylamidoformiat d. 4-Oxy-1-[ $\beta$ -Oxyäthyl]benzol-4-Methyläther. Sm. 123—124° (*C. r.* 141, 45 *C.* 1905 [2] 471; D.R.P. 164883 *C.* 1905 [2] 1752; *C.* 1907 [1] 1578).
- 21) 4-Äthoxyphenylamid d. Oxyessigphenyläthersäure. Sm. 130—131° (D.R.P. 82105). — \*II, 408.
- 22) 1-Naphtylamid d.  $\beta$ -Acetoxyisobuttersäure. Sm. 104° (*C.* 1909 [2] 687).
- 23) 2-Naphtylmonamid d. Butan- $\alpha\gamma$ -Dicarbonsäure. Sm. 115—119° (Gemisch) (*A.* 292, 213). — \*II, 339.
- 24) 2-Naphtylmonamid d. fum. Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 209° (*A.* 285, 232; 309, 334). — \*II, 339.
- 25) 2-Naphtylmonamid d. mal. Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 140° (*A.* 285, 234; 309, 334). — \*II, 339.
- 26) 1-Naphtylmonamid d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 154 bis 155° (*B.* 30, 616). — \*II, 336.
- 27) 2-Naphtylmonamid d.  $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 181° (156—157°) (*A.* 292, 187; *B.* 30, 617). — \*II, 339.
- 28) 2-Naphtylmonamid d. Bernsteinsäuremonoäthylester. Sm. 99 bis 100° (*A.* 347, 30 *C.* 1906 [2] 506).
- 29) 4-Äthoxyphenylimid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure. Sm. 137° (*B.* 36, 1005 *C.* 1903 [1] 1132).  
C 64,2 — H 5,7 — O 16,0 — N 14,0 — M. G. 299.
- C<sub>16</sub>H<sub>17</sub>O<sub>3</sub>N<sub>3</sub>** 1) 1,2,6[oder 1,2,7]-Tri[Acetylamido]naphtalin. Sm. 280° u. Zers. (*B.* 23, 2545). — IV, 1162.
- 2) 2'-Nitro-4-Oxy-2-Methyl-5-Isopropylazobenzol. Sm. 145° (*A.* 357, 178 *C.* 1908 [1] 248).
- 3) 1-Methylhydroxyd d. p-Nitro-1,5-Dimethyl-2-Phenylbenzimidazol. Sm. 165°. (2HCl, PtCl<sub>4</sub>) (*A.* 210, 371). — IV, 1013.
- 4) Äthylester d. 1-[4-Methylphenyl]hydroxylamidodiazobenzol-2-Carbonsäure. Sm. 122,5° u. Zers. (*Soc.* 95, 773 *C.* 1909 [2] 19).
- 5) Äthylester d. 1-[4-Methylphenyl]hydroxylamidodiazobenzol-3-Carbonsäure. Sm. 149—150° u. Zers. (*Soc.* 95, 773 *C.* 1909 [2] 19).
- 6) Äthylester d. 1-[4-Methylphenyl]hydroxylamidodiazobenzol-4-Carbonsäure. Sm. 144—145° u. Zers. (*Soc.* 95, 774 *C.* 1909 [2] 19).
- 7) Benzylester d.  $\beta$ -Phenylureidomethylamidoameisensäure. Sm. 204° (*J. pr.* [2] 70, 252 *C.* 1904 [2] 1464).
- 8) Phenylamidoformiat d.  $\alpha$ -[ $\beta$ -Oxyäthyl]- $\beta$ -Phenylharnstoff. Sm. 195° (*B.* 36, 1280 *C.* 1903 [1] 1215).
- 9)  $\alpha$ -Phenylamid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Carbonsäure- $\beta$ -Carbonsäure-äthylester. Sm. 123°. +  $\frac{1}{2}$  C<sub>2</sub>H<sub>6</sub>O (*B.* 34, 2335). — \*IV, 433.  
C 66,9 — H 5,9 — O 22,3 — N 4,9 — M. G. 287.
- C<sub>16</sub>H<sub>17</sub>O<sub>4</sub>N** 1) 5,5'-Dimethyläther d. 2'-Nitroso-2,5,5'-Trioxy-3,3'-Dimethylbi-phenyl (*B.* 31, 1335). — \*II, 577.
- 2) Dimethyläther d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 139° (*A.* 355, 285 *C.* 1907 [2] 1624).
- 3) Trimethyläther d. 5-Benzoylamido-1,2,4-Trioxybenzol. Sm. 138° (139,5°) (*B.* 39, 3682 *C.* 1907 [1] 37; *Ar.* 245, 278 *C.* 1907 [2] 807).
- 4) 4-Äthoxyphenylamidomethyl-3,4-Dioxyphenylketon. Sm. 105° (D.R.P. 71312). — \*III, 109.
- 5) Tetrahydropapaverolin. Sm. 255° u. Zers. HCl + 2H<sub>2</sub>O, HJ +  $\frac{1}{2}$ H<sub>2</sub>O (*M.* 19, 329; *Soc.* 95, 1619 *C.* 1909 [2] 2180). — \*IV, 264.
- 6) 2-Oxy-1-[4-Äthoxyphenylamido]methylbenzol-3-Carbonsäure. Sm. 161° (*C.* 1901 [1] 1394).
- 7) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Butyroxyl- $\beta$ -Phenylakrylsäure. Fl. (*Bl.* [3] 31, 337 *C.* 1904 [1] 1135).
- 8) Äthylester d. Oxyessig-1-Acetylamido-2-Naphtyläthersäure. Sm. 128° (*B.* 34, 3202). — \*II, 525.
- 9) Äthylester d. 4,5-Diketo-1-Allyl-2-Phenyltetrahydropyrrol-3-Carbonsäure. Zers. bei 146°. K, Allylaminsalz (*C.* 1907 [2] 1788).
- 10) 3-Äthylester d. 2-Methyl-5-Phenylpyrazol-1-Methylcarbonsäure-3-Carbonsäure. Sm. 131° (*B.* 19, 3160). — IV, 357.  
C 60,9 — H 5,4 — O 20,3 — N 13,3 — M. G. 315.
- C<sub>16</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>** 1) Äthyldi[2-Nitrobenzyl]amin. Sm. 56°. (2HCl, PtCl<sub>4</sub>) (*B.* 26, 2583). — II, 520.



- C<sub>16</sub>H<sub>17</sub>O<sub>4</sub>N<sub>8</sub>** 2) Äthylidi[4-Nitrobenzyl]amin. Sm. 68° (B. 30, 64). — \*II, 293.  
 3) Äthylester d. α-Oximido-β-[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-4-Pyrazolylden]buttersäure. Sm. 198° u. Zers. (Ag + AgNO<sub>3</sub>) (B. 38, 3028 C. 1905 [2] 1326).  
 4) Verbindung (aus Phenylhydrazin u. d. Verb. C<sub>10</sub>H<sub>10</sub>O<sub>5</sub>N<sub>2</sub>). Sm. 87° (G. 23 [2] 127). — II, 980.
- C<sub>16</sub>H<sub>17</sub>O<sub>4</sub>N<sub>5</sub>** C 56,0 — H 4,9 — O 18,7 — N 20,4 — M. G. 343.  
 1) 5,5'-Dinitro-2,2'-Dimethyl-1-Äthyl diazoamidobenzol. Sm. 125° (Soc. 67, 250). — IV, 1568.  
 2) 4,6-Dinitro-4'-Dimethylamido-2,5-Dimethylazobenzol. Sm. 220° (A. 339, 209 C. 1905 [1] 1381).  
 3) Tetraacetyl-3,5-Diimido-1-Phenyltetrahydro-1,2,4-Triazol. Sm. 157° (G. 31 [1] 480). — \*IV, 980.  
 4) α-[β-Nitroso-β-Phenylhydrazid] d. α-Phenylhydrazin-αβ-Dicarbon-säure-β-Äthylester. Sm. 121–122° (C. 1901 [1] 935). — \*IV, 934.
- C<sub>16</sub>H<sub>17</sub>O<sub>6</sub>N** C 63,4 — H 5,6 — O 26,4 — N 4,6 — M. G. 303.  
 1) 4-Äthoxyphenylamidomethyl-2,3,4-Trioxyphenylketon (p-Amido-phenetolacetylpyrogallol). Sm. 144° (J. r. 25, 281). — III, 139.  
 2) Inn. Anhydrid d. Phenylamidoakonitsäurediäthylester. Sm. 87 bis 88° (Soc. 65, 11). — II, 441.  
 3) Äthylester d. 1-Keto-5-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2[oder 4]-Carbonsäure. Sm. 119° (A. 303, 237). — \*II, 991.  
 4) β-Äthylester-2-Propylester d. β-Cyan-α-Keto-α-Phenyläthan-β,2-Di-carbonsäure. Sm. 69–70°. Ag (A. ch. [7] 1, 495). — II, 1962.  
 5) Diäthylester d. 5-Oxy-1-Phenylpyrrol-2,3-Dicarbon-säure. Sm. 181° (Soc. 65, 12). — IV, 96.
- C<sub>16</sub>H<sub>17</sub>O<sub>6</sub>N<sub>3</sub>** C 58,0 — H 5,1 — O 24,2 — N 12,7 — M. G. 331.  
 1) Trimethyläther d. α-[4-Nitrophenyl]-β-[3,4,5-Trioxybenzyliden]-hydrazin. Sm. 201–202° (203–204°) (B. 41, 924 C. 1908 [1] 1623; B. 42, 1124 C. 1909 [1] 1558).  
 2) Phenylhydrazon d. Nitrocantharidin. Sm. noch nicht bei 330° (B. 26, 141). — III, 624.
- C<sub>16</sub>H<sub>17</sub>O<sub>5</sub>N<sub>5</sub>** C 53,5 — H 4,7 — O 22,3 — N 19,5 — M. G. 359.  
 1) 4-[2,4-Dinitrophenyl]hydrazon-1-Oximido-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol. Zers. bei 249–250° (A. 357, 190 C. 1908 [1] 249).
- C<sub>16</sub>H<sub>17</sub>O<sub>6</sub>N** C 60,2 — H 5,3 — O 30,1 — N 4,4 — M. G. 319.  
 1) ζ-[1,2-Phtalyl]amidohexan-αα-Dicarbon-säure. Sm. 153° (B. 42, 4053 C. 1909 [2] 1924).  
 2) Säure (aus Corydinsäure). Sm. 212–215° (Soc. 81, 156 C. 1902 [1] 356, 596). — \*III, 650.  
 3) Diäthylester d. α-[4-Nitrophenyl]-αγ-Butadien-δδ-Dicarbon-säure. Sm. 104–105° (A. 253, 362). — II, 1876.  
 4) Verbindung (aus Phenylimidodiessigsäurediäthylester u. Oxalsäuredi-äthylester). Sm. 137° (Soc. 87, 448 C. 1905 [1] 1640).
- C<sub>16</sub>H<sub>17</sub>O<sub>6</sub>N<sub>3</sub>** C 55,3 — H 4,9 — O 27,7 — N 12,1 — M. G. 347.  
 1) Diäthyläther d. 4,6-Dinitro-2,5-Dioxydiphenylamin. Sm. 133° (A. 215, 157). — II, 949.  
 2) Di[2-Nitrophenyläther] d. Di[β-Oxyäthyl]amin. HCl (J. pr. [2] 24, 248). — II, 680.  
 3) Äthylester d. 4-Nitrophenylazomesityloxydoxalsäure. Sm. 134° (B. 40, 2409 C. 1907 [2] 320).
- C<sub>16</sub>H<sub>17</sub>O<sub>6</sub>N<sub>5</sub>** C 51,2 — H 4,5 — O 25,6 — N 18,7 — M. G. 375.  
 1) α-Isobutyl-α-Phenyl-β-[2,4,6-Trinitrophenyl]hydrazin. Sm. 105° (B. 30, 2820). — IV, 1498.
- C<sub>16</sub>H<sub>17</sub>O<sub>6</sub>Cl** 1) Tetramethyläther d. Chlorhexaoxybiphenyl. Sm. 141° (B. 31, 617). — \*II, 634.
- C<sub>16</sub>H<sub>17</sub>O<sub>6</sub>P** 1) Phosphorsäureverbindung d. β-Oxy-αγ-Diphenylpropan-β-Carbon-säure. Sm. 160° u. Zers. (B. 13, 2220; A. 219, 43). — II, 1701.
- C<sub>16</sub>H<sub>17</sub>O<sub>8</sub>N** C 54,7 — H 4,8 — O 36,5 — N 4,0 — M. G. 351.  
 1) Diäthylester d. α-[4-Nitrobenzoxyl]propen-βγ-Dicarbon-säure. Sm. 104° (A. 363, 352 C. 1909 [1] 154).
- C<sub>16</sub>H<sub>17</sub>O<sub>8</sub>Br<sub>3</sub>** 1) Tribromkolatannin (C. 1898 [1] 579). — \*III, 497.

- C<sub>16</sub>H<sub>17</sub>O<sub>9</sub>N** C 52,3 — H 4,6 — O 39,2 — N 3,8 — M. G. 367.  
 1) Tetracetat d. 3-Acetylamido-1,2,4,5-Tetraoxybenzol. Sm. 242° u. Zers. (B. 22, 1661). — II, 1032.
- C<sub>16</sub>H<sub>17</sub>O<sub>9</sub>N<sub>3</sub>** C 48,6 — H 4,3 — O 36,4 — N 10,6 — M. G. 395.  
 1) 2,4,6-Tri[Acetylamido]-5-Acetoxybenzol-1,3-Dicarbonsäure. Sm. 208° (B. 33, 1797). — \*II, 1118.
- C<sub>16</sub>H<sub>17</sub>NBr<sub>2</sub>** 1)  $\alpha$  $\beta$ -Dibrom- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -[2-Pyridyl]äthan. Sm. 159 bis 160° (B. 34, 1895). — \*IV, 228.  
 2)  $\alpha$  $\beta$ -Dibrom- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -[4-Pyridyl]äthan. Sm. 144 bis 146° (B. 39, 2834 C. 1906 [2] 1326).
- C<sub>16</sub>H<sub>17</sub>NS<sub>2</sub>** 1)  $\beta$  $\beta'$ -Diphenylisopropylamidodithioameisensäure. + C<sub>15</sub>H<sub>17</sub>N (Sm. 141—143°) (Am. 14, 226). — II, 638.  
 2) Methylester d. Dibenzylamidodithioameisensäure. Sm. 55° (C. r. 134, 715 C. 1902 [1] 977).
- C<sub>16</sub>H<sub>17</sub>N<sub>2</sub>Cl** 1) 1-Chlormethylat d. 1,5-Dimethyl-2-Phenylbenzimidazol + 2H<sub>2</sub>O. 2 + PtCl<sub>4</sub> (A. 210, 370). — IV, 1013.
- C<sub>16</sub>H<sub>17</sub>N<sub>2</sub>Cl<sub>3</sub>** 1)  $\beta$  $\beta$  $\beta$ -Trichlor- $\alpha$ -Di[2-Methylphenylamido]äthan. Sm. 80° (C. 1908 [1] 935; 1909 [2] 1420).  
 2)  $\beta$  $\beta$  $\beta$ -Trichlor- $\alpha$ -Di[4-Methylphenylamido]äthan. Sm. 114—115° (A. 173, 279; 302, 364; C. 1909 [2] 1419). — II, 511, \*II, 284.
- C<sub>16</sub>H<sub>17</sub>N<sub>2</sub>Br** 1)  $\beta$ -Brom- $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]amidoäthan. Sm. 166—167° (B. 33, 619). — \*II, 267.
- C<sub>16</sub>H<sub>17</sub>N<sub>2</sub>J** 1) 1-Jodmethylat d. 1,5-Dimethyl-2-Phenylbenzimidazol. + J<sub>2</sub> (Sm. 106°) (A. 210, 368). — IV, 1013.  
 2) Jodmethylat d. 3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 186° (B. 22, 2697). — IV, 875.
- C<sub>16</sub>H<sub>17</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) 4,6-Dichlor-4'-Dimethylamido-2,5-Dimethylazobenzol. Sm. 121° (A. 339, 214 C. 1905 [1] 1381).  
 2) Chlormethylat d. 3-Chlor-4,6-Dimethyl-2-[4-Methylphenyl]-2,1,5-Benztriazol. Sm. 231—232° (A. 366, 402 C. 1909 [2] 290).
- C<sub>16</sub>H<sub>17</sub>N<sub>3</sub>S** 1) Diäthylthionin. HJ (B. 20, 933; 22, 2066). — II, 811.  
 2)  $\beta$ -Allylphenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 108° (103°) (B. 22, 2237; 25, 3114). — IV, 679.  
 3)  $\alpha$ -Isopropylidenamido- $\alpha$  $\beta$ -Diphenylthioharnstoff. Sm. 160° (B. 27, 1514). — IV, 766.  
 4)  $\alpha$ -Benzylidenamido- $\beta$ -Methyl- $\alpha$ -Benzylthioharnstoff. Sm. 147° (B. 37, 2327 C. 1904 [2] 313).  
 5) Methyläther d.  $\alpha$ -[ $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazido]- $\alpha$ -Methylimido- $\alpha$ -Merkaptomethan. Sm. 136—137° (B. 37, 2332 C. 1904 [2] 314).  
 6) Amid d. 2-Methylphenylamido-2-Methylphenylimidothioessigsäure. Sm. 139° (C. 1901 [1] 68).  
 7) Amid d. 4-Methylphenylamido-4-Methylphenylimidothioessigsäure. Sm. 143—144° (C. 1901 [1] 69).  
 8) Phenylamid d. 1-Phenyltetrahydropyrazol-2-Thiocarbonsäure. Sm. 164—165° (A. 274, 328). — IV, 480.
- C<sub>16</sub>H<sub>17</sub>N<sub>3</sub>S<sub>2</sub>** 1) Methyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 114—115° (Am. 30, 179 C. 1903 [2] 872).  
 2) Methyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 93° (Am. 30, 174 C. 1903 [2] 871).  
 3) Methyläther d.  $\alpha$ -Phenylamidothioformylimido- $\alpha$ -Methylphenylamido- $\alpha$ -Merkaptomethan. Sm. 133—134° (Am. 30, 177 C. 1903 [2] 872).  
 4) Methyläther d.  $\alpha$ -[4-Methylphenylthioureido]- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 114—115° (Am. 30, 180 C. 1903 [2] 872).  
 5) Äthyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 91—93° (Am. 30, 181 C. 1903 [2] 873).  
 6) Dimethyläther d. Di[Phenylimidomerkaptomethyl]amin. Sm. 103 bis 104°. HJ (Am. 30, 177 C. 1903 [2] 872).
- C<sub>16</sub>H<sub>17</sub>N<sub>4</sub>Cl** 1) 2,4,2',4'-Tetramethyl-5-Diazoazobenzolchlorid (B. 21, 541). — IV, 1533.
- C<sub>16</sub>H<sub>17</sub>N<sub>4</sub>Br<sub>3</sub>** 1) 2,4,2',4'-Tetramethyl-5-Diazoazobenzoltribromid. Sm. 127—129° u. Zers. (B. 21, 542). — IV, 1533.

- C<sub>16</sub>H<sub>17</sub>ClJ<sub>2</sub>** 1) *p*-Jod-2-Methylphenyl-4-Äthylphenyljodoniumchlorid. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (A. 327, 296 C. 1903 [2] 352).  
 2) *p*-Joddi[2,4-Dimethylphenyl]jodoniumchlorid. Sm. 127—128° (B. 33, 847). — \*II, 43.  
 3) *p*-Joddi[3,5-Dimethylphenyl]jodoniumchlorid. Sm. 141° (B. 38, 1478 C. 1905 [1] 1379).
- C<sub>16</sub>H<sub>17</sub>BrJ<sub>2</sub>** 1) *p*-Jod-2-Methylphenyl-4-Äthylphenyljodoniumbromid. Sm. 120° (A. 327, 296 C. 1903 [2] 352).  
 2) *p*-Joddi[2,4-Dimethylphenyl]jodoniumbromid. Sm. 119° (B. 33, 847). — \*II, 43.  
 3) *p*-Joddi[3,5-Dimethylphenyl]jodoniumbromid. Sm. 149° (B. 38, 1478 C. 1905 [1] 1379).
- C<sub>16</sub>H<sub>18</sub>ON<sub>2</sub>** C 75,6 — H 7,1 — O 6,3 — N 11,0 — M. G. 254.  
 1) Di[4-Methylbenzyl]nitrosamin. Sm. 52° (49—50°) (J. pr. [2] 62, 102; C. r. 140, 1038 C. 1905 [1] 1540). — \*II, 316.  
 2) Phenyl-4-Isopropylbenzylnitrosamin. Sm. 94,5° (A. 245, 292). — II, 560.  
 3) 4-Äthylamido-3-[2-Oxybenzyliden]amido-1-Methylbenzol. Sm. 78° (B. 26, 202). — IV, 620.  
 4) 2-Äthylamido-5-[2-Oxybenzyliden]amido-1-Methylbenzol. Sm. 62° (A. 286, 165). — IV, 610.  
 5) Methyläther d. 4-[4-Oxybenzyliden]amido-1-Dimethylamidobenzol. Sm. 148° (139°). HCl, 2HCl (B. 18, 574; A. 241, 343; C. 1908 [1] 1540). — IV, 598.  
 6) Methyläther d. 2-[4-Dimethylamidobenzyliden]amido-1-Oxybenzol. Sm. 113—114° (B. 35, 3574 C. 1902 [2] 1384).  
 7) Methyläther d. 4-[4-Dimethylamidobenzyliden]amido-1-Oxybenzol. Sm. 138—140° (B. 35, 3574 C. 1902 [2] 1384).  
 8) Methyläther d. 2-Methylphenylimido-2-Methylphenylamidooxymethan. Sd. 225°<sub>32</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (C. 1899 [1] 829). — \*II, 253.  
 9) Methyläther d. 4-Methylphenylimido-4-Methylphenylamidooxymethan. Sd. 220°<sub>15</sub> (C. 1899 [1] 830). — \*II, 272.  
 10) Äthyläther d. Phenylimido-4-Methylphenylamidooxymethan. Sm. 265° (B. 42, 1958 C. 1909 [2] 272).  
 11) Äthyläther d.  $\alpha$ -Phenylamido- $\alpha$ -[4-Oxyphenyl]imidoäthan. Sm. 85° (D. R. P. 80568). — \*II, 402.  
 12) 4'-Acetylamido-2,3'-Dimethyldiphenylamin. Sm. 122,5° (B. 31, 1519). — \*IV, 404.  
 13) Methylphenyl-3-Acetylamidobenzylamin. Sm. 88° (J. pr. [2] 76, 507 C. 1908 [1] 862).  
 14) 2-Acetylamido-1-[4-Methylphenyl]amidomethylbenzol. Sm. 141° (J. pr. [2] 47, 354). — IV, 631.  
 15) 4-[4-Methylphenyl]amido-3-Acetylamido-1-Methylbenzol. Sm. 126° (B. 23, 3799). — IV, 613.  
 16) 2-Amido-1-[Acetyl-4-Methylphenylamido]methylbenzol. Sm. 99° (B. 23, 2191; J. pr. [2] 47, 349). — IV, 630.  
 17) 4-Amido-4'-Acetylamido-3,3'-Dimethylbiphenyl. Sm. 133—135° (103°) (B. 39, 3355 C. 1906 [2] 1642; Soc. 95, 717 C. 1909 [2] 18).  
 18)  $\alpha$ -Phenylamido- $\beta$ -Phenylacetylamidoäthan. Sm. 128° (B. 22, 1784; A. 332, 213 C. 1904 [2] 212). — II, 368.  
 19) 5-Benzoylamido-2-Äthylamido-1-Methylbenzol. Sm. 174° (A. 286, 166). — IV, 609.  
 20)  $\alpha$ -Benzoylamido- $\beta$ -Phenylamidopropan. Sm. 110—111°. (2HCl, PtCl<sub>4</sub>) (B. 28, 2935). — \*II, 733.  
 21) 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Äthyl-1,4-Dihydrobenzol. Sm. 83—84° (Bl. [3] 11, 1134).  
 22) 4-[4-Dimethylamidophenyl]imido-1-Keto-2,5-Dimethyl-1,4-Dihydrobenzol. Sm. 125—126° (Bl. [3] 11, 1134; A. ch. [7] 10, 58). — III, 363; \*III, 269.  
 23)  $\beta\gamma$ -Diphenylpropylharnstoff. Sm. 112° (B. 23, 2862). — II, 637.  
 24) Di[4-Methylphenyl]methylharnstoff. Sm. 152° (B. 24, 2799). — II, 638.  
 25)  $\alpha$ -Phenyl- $\beta$ -[2,4,5-Trimethylphenyl]harnstoff. Sm. 211—212° (B. 25, 1361). — II, 552.



- $C_{16}H_{18}ON_2$  26) 4-Methylamido-4'-Dimethylamidodiphenylketon. Sm. 203—204° (B. 24, 3198). — III, 185.
- 27)  $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]butan. Sm. 123—124° (B. 28, 502). — IV, 773.
- 28) 5-Oxy-6-Phenylhydrazonmethyl-1,2,4-Trimethylbenzol. Sm. 144° (B. 35, 4104 C. 1903 [1] 149). — \*IV, 495.
- 29) Methyläther d. 4-Oxybenzyliden-4-Methylbenzylhydrazin. Sm. 112° (J. pr. [2] 62, 109). — \*IV, 545.
- 30) Äthyläther d.  $\beta$ -Phenylhydrazon- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 76° (B. 38, 1368 C. 1905 [1] 1387).
- 31) 2,4-Dimethylphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxyäthan. Sm. 91—92° (B. 30, 1708). — IV, 755.
- 32) 3,4-Dimethylphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxyäthan. Sm. 68° (B. 30, 1707). — IV, 755.
- 33)  $\beta$ -Isobutyryl- $\alpha$ - $\alpha$ -Diphenylhydrazin. Sm. 171—172° (B. 25, 1552). — IV, 667.
- 34)  $\beta$ -Acetyl- $\alpha$ - $\alpha$ -Di[2-Methylphenyl]hydrazin. Sm. 191° (B. 25, 1078). — IV, 801.
- 35)  $\beta$ -Acetyl- $\alpha$ - $\alpha$ -Di[4-Methylphenyl]hydrazin. Sm. 176° (170°) (B. 25, 1080, 1555). — IV, 805.
- 36) Polythymochinonphenylhydrazon. Sm. 249° u. Zers. (B. 18, 3197). — IV, 795.
- 37) 2-Methylphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Fl. (A. 312, 289).
- 38) 3-Methylphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Fl. (A. 312, 289).
- 39) 4-Methylphenyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm. 90° (A. 312, 289). — \*II, 433.
- 40) 2,3,2',3'-Tetramethylazoxybenzol. Sm. 116—116,5° (A. 316, 288). — \*IV, 999.
- 41) 2,4,2',4'-Tetramethylazoxybenzol. Sm. 76—76,5° (B. 33, 3644; B. 40, 1913 C. 1907 [2] 229). — \*IV, 999.
- 42) 2,5,2',5'-Tetramethylazoxybenzol. Sm. 110—110,5° (111—111,5°) (B. 33, 115, 958; A. 316, 290). — \*IV, 999.
- 43) 2,6,2',6'-Tetramethylazoxybenzol. Sm. 88,5—89° (B. 33, 114 Anm.; A. 316, 265). — \*IV, 999.
- 44) 3,4,3',4'-Tetramethylazoxybenzol. Sm. 140—140,5° (A. 316, 286). — \*IV, 999.
- 45) 4-Oxy-2-Methyl-5-Isopropylazobenzol. Sm. 85—90° (G. 15, 53; B. 27, 959). — IV, 1425.
- 46) 4-Oxy-3-Methyl-6-Isopropylazobenzol. Sm. 80—85° (G. 15, 214). — IV, 1425.
- 47) Methyläther d. 4'-Oxy-2,4,5-Trimethylazobenzol. Sm. 89° (B. 32, 3097). — \*IV, 1039.
- 48) Äthyläther d. 4-Oxy-2,2'-Dimethylazobenzol. Sm. 64° (A. 287, 186). — IV, 1422.
- 49) Äthyläther d. 4-Oxy-2,3'-Dimethylazobenzol. Sm. 73° (A. 287, 188). — IV, 1422.
- 50) Äthyläther d. 4'-Oxy-2,3'-Dimethylazobenzol. Sm. 35—37° (B. 23, 3259, 3260; A. 287, 184). — IV, 1422.
- 51) Äthyläther d. 6'-Oxy-2,3'-Dimethylazobenzol. Sm. 82—83° (B. 23, 3264). — IV, 1422.
- 52) Äthyläther d. 4'-Oxy-2,4-Dimethylazobenzol. Sm. 97° (A. 287, 211). — IV, 1414.
- 53) Äthyläther d. 4-Oxy-2,4'-Dimethylazobenzol. Sm. 64° (A. 287, 189). — IV, 1422.
- 54) Äthyläther d. 4-Oxy-3,3'-Dimethylazobenzol. Sm. 46—47° (A. 287, 185). — IV, 1422.
- 55) Äthyläther d. 6-Oxy-3,3'-Dimethylazobenzol. Sm. 76° (B. 27, 2704). — IV, 1422.
- 56) Äthyläther d. 4-Oxy-3,4'-Dimethylazobenzol. Sm. 73—74°; Sd. 251°<sub>42</sub> (B. 23, 3261; A. 369, 33 Anm. C. 1909 [2] 1855). — IV, 1422.
- 57) Äthyläther d. 6-Oxy-3,4'-Dimethylazobenzol. Sm. 43°; Sd. 253 bis 254°<sub>83</sub> (B. 27, 2706; A. 369, 33 Anm. C. 1909 [2] 1855). — IV, 1422.

- $C_{18}H_{18}ON_2$  58) Butyläther d. 4-Oxyazobenzol. Sm. 67° (B. 41, 1157 C. 1908 [1] 1880).
- 59) 3-[ $\beta$ -Oxypropyl]-1,2-Diphenyl-1,2-Dihydro-R-Azimethylen. Sm. 116 bis 117° (J. pr. [2] 64, 162). — \*IV, 1089.
- 60) 5-[ $\alpha$ -Phenylacetylamidoäthyl]-2-Methylpyridin. Sm. 100° (B. 28, 1761). — IV, 826.
- 61) 1,3,5-Trimethyl-2-[2-Oxyphenyl]-2,3-Dihydrobenzimidazol. Sm. 185° (B. 35, 1264 C. 1902 [1] 1062). — \*IV, 407.
- 62) 1-Methylhydroxyd d. 1,5-Dimethyl-2-Phenylbenzimidazol. Sm. 144°. Chlorid + 2H<sub>2</sub>O, 2Chlorid + PtCl<sub>4</sub>, Jodid, Jodid + J<sub>2</sub>, Nitrat, Sulfat (A. 210, 370). — IV, 1013.
- 63) Methyläther d. 6-Oxy-2-[3-Amidophenyl]-1,2,3,4-Tetrahydrochinoxalin? Sm. 87° (B. 20, 1921). — IV, 995.
- 64) Äthyläther d. 3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 129° (124°) (J. pr. [2] 48, 560; [2] 52, 399). — IV, 637.
- 65) 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin. Sm. 184° (C. 1904 [1] 676).
- 66) Paricin +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 130°. (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (Berz. J. 27, 338; J. 1852, 536; 1879, 793; A. 166, 263). — III, 861.
- 67) Phylloporphyrin (siehe auch C<sub>33</sub>H<sub>34</sub>O<sub>2</sub>N<sub>4</sub>) (B. 34, 1008).
- 68) Nitril d.  $\beta$ -Oxy- $\alpha$ -[2-Cyanphenyl]- $\alpha$ -Hexenäthyläther- $\alpha$ -Carbonsäure. Sm. 72° (B. 30, 896). — \*II, 1137.
- 69) Nitril d. 6-Keto-2,2,4-Trimethyl-1-Benzyl-1,2,3,6-Tetrahydropyridin-5-Carbonsäure. Sm. 168—169° (B. 26 [2] 450). — IV, 76.
- 70) Amid d.  $\alpha$ -Äthylphenylamido- $\alpha$ -Phenylessigsäure. Sm. 135° (B. 35, 3358 C. 1902 [2] 1196).
- 71) Phenylamid d.  $\alpha$ -Phenylamidobuttersäure. Sm. 91—92° (B. 30, 2317). — \*II, 228.
- 72) Phenylamid d.  $\beta$ -Phenylamidobuttersäure. Sm. 93°. HCl (B. 13, 312; B. 36, 1266 C. 1903 [1] 1219). — II, 434.
- 73) Phenylamid d.  $\beta$ -Phenylamidoisobuttersäure. Sm. 155° (B. 30, 2318). — \*II, 228.
- 74) Phenylamid d.  $\eta$ -Phenylamidoisobuttersäure. Sm. 120° (122°) (B. 24, 1042; B. 36, 1270 C. 1903 [1] 1219).
- 75) Phenylamid d. Hexahydrochinolin-1-Carbonsäure (Hexahydrochinolylphenylharnstoff). Sm. 159—161° (B. 27, 1479). — IV, 139.
- 76) Benzylamid d. Benzylamidoessigsäure. HCl (B. 25, 2547; Ar. 240, 633 C. 1903 [1] 24). — II, 525.
- 77) 2-Methylphenylamid d. 2-Methylphenylamidoessigsäure. Sm. 91 bis 92° (94°) (B. 16, 205; 27, 3254). — II, 469; \*II, 258.
- 78) 4-Methylphenylamid d. 4-Methylphenylamidoessigsäure. Sm. 136° (B. 8, 1161). — II, 505.
- 79) Phenylhydrazid d. dl- $\beta$ -Phenylisobuttersäure. Sm. 116—117° (Soc. 85, 446 C. 1904 [1] 1445).
- 80)  $\alpha$ -Phenylhydrazid d. 1-Isopropylbenzol-4-Carbonsäure. Sm. 63 bis 64°. — IV, 670.
- 81)  $\beta$ -Phenylhydrazid d. 1-Isopropylbenzol-4-Carbonsäure. Sm. 198°. — IV, 670.
- 82) 2,4,5-Trimethylphenylhydrazid d. Benzolcarbonsäure. Sm. 164° (J. pr. [2] 71, 397 C. 1905 [2] 39).  
C 68,1 — H 6,4 — O 5,7 — N 19,8 — M. G. 282.
- 1) Benzyläther d.  $\beta$ -Oximido- $\alpha$ -Imido- $\beta$ -Amido- $\beta$ -[4-Methylphenyl]äthan. Sm. 165° (B. 24, 818). — II, 512.
- 2)  $\gamma\delta$ -Di[Phenylhydrazon]- $\beta$ -Oxybutan (Phenylosazon d.  $\alpha\beta$ -Dioxybuttersäurealdehyd). Sm. 171,5° (174°) (B. 35, 1908 C. 1902 [2] 22; B. 42, 1791 C. 1909 [2] 12).
- 3) Di[ $\beta$ -Phenylhydrazonäthyl]äther (Di-Phenylhydrazon d. Diglykolsäurealdehyd). Sm. 108° (A. 276, 65). — IV, 763.
- 4) 4-Amido-4'-Acetylamido-2,3'-Dimethylazobenzol. Sm. 185° (D.R.P. 88013). — \*IV, 1020.
- 5) 3-Acetylamido-4'-Dimethylamidoazobenzol. Sm. 184° (A. 234, 363). — IV, 1361; \*IV, 1013.
- 6) 4'-Dimethylamido-4-[ $\alpha$ -Oximidoäthyl]azobenzol. Sm. 242—243° (C. 1909 [2] 524).

 $C_{16}H_{18}ON_4$

- C<sub>16</sub>H<sub>18</sub>ON<sub>4</sub>** 7) 3,8-Di[Dimethylamido]diphenazonoxyd. Sm. 242° (B. 37, 30 C. 1904 [1] 524).
- 8) Nitril d. 4-Methoxylbenzylidendi[β-Amidocrotonsäure]. Sm. 188 bis 192° (J. pr. [2] 56, 131). — \*II, 1199.
- 9) Phenylhydrazid d. β-Phenylhydrazonpropan-α-Carbonsäure. Sm. 152—153° (Soc. 93, 948 C. 1908 [2] 229).
- 10) Phenylhydrazid d. γ-Phenylhydrazonpropan-α-Carbonsäure. Sm. 192° (182°) (Soc. 75, 15, 16; A. 339, 374 C. 1905 [2] 32; J. pr. [2] 76, 548 C. 1908 [1] 450; B. 42, 164 C. 1909 [1] 520; A. 363, 354 C. 1909 [1] 154). — \*IV, 453.
- 11) Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 139—140° (Soc. 69, 1284). — IV, 745.
- 12) isom. Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 128° (B. 29, 1361). — IV, 745.
- C<sub>16</sub>H<sub>18</sub>ON<sub>6</sub>** C 61,9 — H 5,8 — O 5,2 — N 27,1 — M. G. 310.
- 1) 4-[1,3,5-Trimethylpyrazolyl-4-]hydrazon-5-Keto-1-Phenyl-3-Methyl-4,5-Dihydropyrazol. Sm. 156° (B. 28, 718). — IV, 1111.
- C<sub>16</sub>H<sub>18</sub>OJ<sub>2</sub>** 1) p-Jod-2-Methylphenyl-4-Äthylphenyljodoniumhydroxyd. Salze, siehe (A. 327, 295 C. 1903 [2] 352).
- 2) p-Joddi[2,4-Dimethylphenyl]jodoniumhydroxyd. Salze, siehe (B. 33, 847). — \*II, 43.
- 3) p-Joddi[3,5-Dimethylphenyl]jodoniumhydroxyd. Salze, siehe (B. 38, 1477 C. 1905 [1] 1379).
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** C 71,1 — H 6,7 — O 11,8 — N 10,4 — M. G. 270.
- 1) 4-[4-Isopropylbenzyl]nitrosamido-1-Oxybenzol (A. 245, 299). — II, 719.
- 2) Dimethyläther d. α-[2-Oxyphenyl]imido-α-[2-Oxyphenyl]amido-äthan. Sm. 99° (D. R. P. 80568). — \*II, 388.
- 3) Dimethyläther d. α-[4-Oxyphenyl]imido-α-[4-Oxyphenyl]amido-äthan. Sm. 105° (D. R. P. 80568). — \*II, 402.
- 4) Monoäthyläther d. α-[4-Oxyphenyl]imido-α-[4-Oxyphenyl]amido-äthan. HCl (D. R. P. 80568). — \*II, 402.
- 5) α-Oxy-β-Phenyl-α-[2,4,6-Trimethylphenyl]harnstoff. Sm. 116° u. Zers. (B. 33, 3630). — \*II, 318.
- 6) Äthyläther d. α-Oxy-β-Phenyl-α-Benzylharnstoff. Sm. 74° (J. pr. [2] 56, 77). — \*II, 304.
- 7) 1,2-Di[Propionylamido]naphtalin. Sm. 191—192° (B. 23, 1880). — IV, 918.
- 8) Äthyläther d. 4-Acetylamido-4'-Oxydiphenylamin. Sm. 134° (B. 26, 693). — IV, 584.
- 9) Dioxim d. Dicyklopentadiënbenzochinon. Zers. bei 185° (A. 348, 48 C. 1906 [2] 770).
- 10) 3-Methyläther d. α-Äthyl-α-Phenyl-β-[3,4-Dioxybenzyliden]hydrazin. Sm. 83—86° (M. 26, 343 C. 1905 [1] 1144).
- 11) Dimethyläther d. Phenyl-4,5-Dioxy-2-Methylbenzylidenhydrazin. Sm. 118° (Soc. 89, 1651 C. 1907 [1] 406).
- 12) Dimethyläther d. Phenyl-4,6-Dioxy-2-Methylbenzylidenhydrazin. Sm. 100—101° (A. 357, 373 C. 1908 [1] 358).
- 13) 4-Methyläther d. α-Phenylhydrazon-α-[2,4-Dioxyphenyl]propan. Sm. 101° (B. 25, 1297). — IV, 772.
- 14) Dimethyläther d. α-Phenylhydrazon-α-[2,5-Dioxyphenyl]äthan. Sm. 99—100° (B. 38, 792 C. 1905 [1] 865).
- 15) Dimethyläther d. 2,2'-Di[Oxymethyl]azobenzol. Sm. 68,5° (C. r. 137, 522 C. 1903 [2] 1060).
- 16) Dimethyläther d. 6,6'-Dioxy-3,3'-Dimethylazobenzol. Sm. 178 bis 179° (B. 24, 1963). — IV, 1419.
- 17) Diäthyläther d. 2,2'-Dioxyazobenzol. Sm. 131°; Sd. 240° u. Zers. (B. 10, 1653; J. pr. [2] 18, 200). — IV, 1405.
- 18) Diäthyläther d. 2,4-Dioxyazobenzol. Sm. 70,5° (B. 20, 1123). — IV, 1442.
- 19) Diäthyläther d. 2,4'-Dioxyazobenzol. Sm. 77—78° (A. 287, 214). — IV, 1407.
- 20) Diäthyläther d. 2,6-Dioxyazobenzol. Sm. 90° (B. 20, 1147). — IV, 1442.



- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** 21) Diäthyläther d. 3,3'-Dioxyazobenzol. Sm. 91° (*J. pr.* [2] 29, 299). — IV, 1405.
- 22) Diäthyläther d. 3,4'-Dioxyazobenzol. Sm. 70—71° (*A.* 287, 215). — IV, 1407.
- 23) Diäthyläther d. 4,4'-Dioxyazobenzol. Sm. 160° (157°) (*D. R. P.* 48543; *Ar.* 229, 345; *B.* 10, 1652; *A.* 320, 132; *J. pr.* [2] 18, 199; [2] 19, 313; [2] 21, 320, 333; *B.* 36, 3163 *C.* 1903 [2] 947; *C.* 1905 [2] 1016). — IV, 1406; \*IV, 1032.
- 24) 4-Oxyphenylphenanthrophenazoniumhydroxyd. Chlorid, Nitrat (*B.* 41, 625 *C.* 1908 [1] 1265).
- 25) Dehydroindigo. 2HCl, + 2NaHSO<sub>3</sub> + 2(7)H<sub>2</sub>O, + 2KHSO<sub>3</sub> + 2H<sub>2</sub>O, + 2Anilinbisulfit (*B.* 42, 3649 *C.* 1909 [2] 1653).
- 26) Mesoporphyrin. Sm. noch nicht oberhalb 340°. HCl (*B.* 34, 998; *H.* 43, 11 *C.* 1904 [2] 1572).
- 27) α-[2-Methylphenyl]amido-4-Amido-3-Methylphenylessigsäure. Sm. 239—240°. Ag + 2AgNO<sub>3</sub> (*B.* 16, 925; *B.* 40, 4974 *C.* 1908 [1] 457; *B.* 41, 3027 *C.* 1908 [2] 1344). — II, 471.
- 28) Di[4-Methylphenylamido]essigsäure. Sm. 96° (*B.* 41, 3032 *C.* 1908 [2] 1345).
- 29) Phenyl-β-Phenylamidoäthylamidoessigsäure. Sm. 116° u. Zers. (*B.* 23, 2026). — II, 429.
- 30) Äthylester d. 2'-Amido-2-Methyldiphenylamin-4'-Carbonsäure. Sm. 115° (*B.* 23, 3452). — II, 1275.
- 31) Äthylester d. 2'-Amido-4-Methyldiphenylamin-4'-Carbonsäure. Sm. 145° (*B.* 23, 3454). — II, 1275.
- 32) Äthylester d. 4-Phenylamido-2,6-Dimethylpyridin-3-Carbonsäure + H<sub>2</sub>O. Sm. 80°; Sd. 164°<sub>15</sub>. HCl, (2HCl, PtCl<sub>4</sub>), HJ (*A.* 366, 352 *C.* 1909 [2] 285).
- 33) Äthylester d. 2-Methyl-2,3-Dihydro-peri-Naphtimidazol-2-Methylcarbonsäure. Sm. 97° (*A.* 365, 158 *C.* 1909 [1] 1823).
- 34) Acetat d. α-Phenyl-β-[6-Oxy-3,4-Dimethylphenyl]hydrazin. Sm. 84—85° (*A.* 365, 297 *C.* 1909 [1] 1864).
- 35) Acetat d. α-Phenyl-β-[2-Oxy-3,5-Dimethylphenyl]hydrazin. Sm. 103° (*A.* 365, 296 *C.* 1909 [1] 1864).
- 36) Acetat d. α-[2-Methylphenyl]-β-[6-Oxy-3-Methylphenyl]hydrazin. Sm. 89° (*A.* 365, 300 *C.* 1909 [1] 1865).
- 37) Acetat d. α-[3-Methylphenyl]-β-[6-Oxy-3-Methylphenyl]hydrazin. Sm. 92—95° (*A.* 365, 302 *C.* 1909 [1] 1865).
- 38) Acetat d. α-[4-Methylphenyl]-β-[6-Oxy-3-Methylphenyl]hydrazin. Sm. 102° (*A.* 365, 303 *C.* 1909 [1] 1865).
- 39) Propionat d. 6-Oxy-3-Methyl-s-Diphenylhydrazin. Sm. 100° (*A.* 364, 178 *C.* 1909 [1] 919).
- 40) Benzoat d. d-Ecgoninnitril. (2HCl, PtCl<sub>4</sub>), HBr, Pikrat (*B.* 26, 971). — III, 865.
- 41) Benzoat d. l-Ecgoninnitril. Sm. 105°. HCl, (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O) (*B.* 26, 966). — III, 865.
- 42) Phenylamidoformiat d. β-Methylphenylamido-α-Oxyäthan. Sm. 64 bis 65° (*Bl.* [4] 3, 374 *C.* 1908 [1] 1677).
- 43) bim. 2-Methylphenylamid d. Ameisensäure. Sm. 211° (*B.* 10, 1129; *A.* 279, 180).
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>4</sub>** C 64,4 — H 6,0 — O 10,7 — N 18,8 — M. G. 298.
- 1) αβ-Di[Methylnitrosamido]-αβ-Diphenyläthan. Sm. 266—267° (*J. pr.* [2] 73, 443 *C.* 1906 [2] 254).
- 2) αβ-Di[2-Methylphenylnitrosamido]äthan. Sm. 94—95° (*Soc.* 71, 425). — \*II, 249.
- 3) αβ-Di[3-Methylphenylnitrosamido]äthan. Sm. 112° (*Soc.* 71, 427). — \*II, 260.
- 4) αβ-Di[4-Methylphenylnitrosamido]äthan. Sm. 183° (*Soc.* 71, 428). — \*II, 266.
- 5) αβ-Di[4-Nitroso-2-Methylphenylamido]äthan. 2HCl (*Soc.* 71, 425). — \*II, 249.
- 6) 4,4'-Di[Äthylnitrosamido]biphenyl. Sm. 163° (*C.* 1903 [1] 1128; *B.* 35, 4184 *C.* 1903 [1] 143). — \*IV, 641.
- 7) αβ-Di[β-Phenylureido]äthan. Sm. 263° (*H.* 43, 274 *C.* 1905 [1] 274).

- C<sub>18</sub>H<sub>18</sub>O<sub>2</sub>N<sub>4</sub>** 8) **r-αβ-Diureido-αβ-Diphenyläthan.** Sm. oberhalb 360° (B. 28, 3178). — IV, 979.
- 9) **Dimethyläther d. αβ-Di[2-Oxyphenylamido]-αβ-Diimidoäthan** (Cyan-o-Anisidin). Sm. 205—207°. 2HCl (*J. pr.* [2] 61, 465). — \*II, 393.
- 10) **Dimethyläther d. αβ-Di[4-Oxyphenylamido]-αβ-Diimidoäthan** (Cyan-p-Anisidin). Sm. 207—209°. HCl (*J. pr.* [2] 61, 464). — \*II, 412.
- 11) **Äthylenäther d. Amidooximidomethylbenzol** (Äthylenäther d. Benzenylamidoxim). Sm. 155—156° (161°) (B. 19, 1485; 29, 1162). — II, 1200; \*II, 752.
- 12) **2,2'-Di[Acetylhydrazido]biphenyl.** Sm. 250—260° (B. 28, 2272). — IV, 1276.
- 13) **βγ-Di[4-Oxyphenylhydrazon]butan.** Sm. 178° (B. 33, 645; B. 42, 674 C. 1909 [1] 1018). — \*IV, 549.
- 14) **Di[Phenylhydrazon] d. Erythrit.** Sm. 166—167° (B. 20, 1090; Soc. 75, 8). — IV, 789.
- 15) **Di[Phenylhydrazon] d. d-Erythrose.** Sm. 164° (B. 32, 3676). — \*IV, 519.
- 16) **Di[Phenylhydrazon] d. l-Erythrose.** Sm. 163—164° (B. 32, 3670). — \*IV, 519.
- 17) **Di[Phenylhydrazon] d. d-l-Erythrose.** Sm. 164° (B. 34, 1367). — \*IV, 519.
- 18) **Di[Phenylhydrazon] d. d-Erythrose.** Sm. 174° (Bl. [3] 23, 683; C. 1900 [2] 33). — \*IV, 519.
- 19) **Di[Phenylhydrazon] d. Tetrose.** Sm. 166—168° (167°) (B. 25, 2554; Soc. 77, 131). — IV, 790.
- 20) **αβ-Di[Phenylamidoformyl]-αβ-Dimethylhydrazin.** Sm. 288° u. Zers. (B. 39, 3263 C. 1906 [2] 1245).
- 21) **4-Nitro-4'[P]-Diäthylamidoazobenzol.** Sm. 151° (B. 28, 843).
- 22) **5-Nitro-4'-Äthylamido-2,3'-Dimethylazobenzol.** Sm. 156° (Soc. 67, 249). — IV, 1377.
- 23) **Urasterin** (Bl. [3] 23, 874). — \*III, 492.
- 24) **Amid d. 3-Äthylidenamidobenzol-l-Carbonsäure** (A. 218, 186). — II, 1270.
- 25) **Äthylenamid d. 2-Amidobenzol-l-Carbonsäure.** Sm. 245° (*J. pr.* [2] 48, 92). — II, 1246.
- 26) **3-Amido-4-Methylphenylamid d. β-Phenylureidoessigsäure.** Sm. 193° (*J. pr.* [2] 70, 251 C. 1904 [2] 1463).
- 27) **4-Dimethylamidophenylamid d. Phenylnitrosamidoessigsäure.** Sm. 165° (B. 30, 1101; A. 301, 78). — \*IV, 386.
- 28) **Di[2-Amidophenylamid] d. Bernsteinsäure.** 2HCl (A. 327, 22 C. 1903 [1] 1336; A. 347, 47 C. 1906 [2] 507). — \*IV, 366.
- 29) **Di[4-Amidophenylamid] d. Äthan-αα-Dicarbonsäure.** 2 Pikrat (A. 347, 35 C. 1906 [2] 506).
- 30) **Di[2-Amido-4-Methylphenylamid] d. Oxalsäure.** Sm. oberhalb 300° u. Zers. 2HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + 5H<sub>2</sub>O (B. 15, 2691). — IV, 615.
- 31) **Di[3-Amido-4-Methylphenylamid] d. Oxalsäure.** Sm. 180° (D.R.P. 156177 C. 1904 [2] 1675).
- 32) **Di[Phenylhydrazid] d. Bernsteinsäure.** Sm. 201° u. Zers. (207°; 167°; 212—212,5°) (B. 21, 2462; 22, 2734; 30, 1795, 1796; G. 19, 117; Bl. [3] 21, 646; A. 280, 185; C. 1897 [2] 276; B. 35, 3690 C. 1902 [2] 1451). — IV, 703; \*IV, 459.
- 33) **α-Phenyl-β-Acetylhydrazid d. α-Phenylhydrazidoessigsäure.** Sm. 176° (A. 301, 84). — \*IV, 476.
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>8</sub>** C 54,2 — H 5,1 — O 9,0 — N 31,6 — M. G. 354.
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>S** 1) **Oxalylphenylamidoguanidin.** Pikrat (G. 29 [1] 104). — \*IV, 888.
- 1) **Dimethyldesylsulfidhydroxyd.** 2 Chlorid + PtCl<sub>4</sub>, Bromid, Pikrat (C. 1905 [1] 1218).
- 2) **Diäthyläther d. Di[? -Oxyphenyl]sulfid** (Thiophenetol). Sm. 55° (B. 27, 2543). — \*II, 575.
- 3) **α-Benzylsulfon-β-Phenylpropan.** Sm. 163° (B. 38, 652 C. 1905 [1] 739).
- 4) **Di[4-Äthylphenyl]sulfon.** Sm. 102° (98°) (Bl. [3] 11, 512; B. 26, 2944). — II, 826.

- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>S** 5) Di[2,4-Dimethylphenyl]sulfon (*B.* 11, 2069; 26, 2942). — II, 827.  
 6) Di[2,5-Dimethylphenyl]sulfon. Sm. 141—142° (*B.* 26, 2943; *C.* 1895 [1] 334). — II, 827.  
 7) Di[3,4-Dimethylphenyl]sulfon. Sm. 158—159° (*C.* 1895 [1] 334).  
 8) 2-Phenylsulfon-1,2,3,4-Tetrahydronaphtalin. Sm. 139° (*B.* 38, 654 *C.* 1905 [1] 740).
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>S<sub>2</sub>** 1) Dimethyläther d. Di[4-Oxybenzyl]disulfid. Sm. 101° (*B.* 24, 1445; *A.* 345, 323 *C.* 1906 [1] 1696). — II, 1110.  
 2) Dimethyläther d. Di[6-Oxy-3-Methylphenyl]disulfid. Sm. 64,5° (*B.* 32, 1149). — \*II, 580.  
 3) Diäthyläther d. Di[2-Oxyphenyl]disulfid. Sm. 89—90° (*B.* 32, 1148). — \*II, 562.  
 4) Diäthyläther d. Di[3-Oxyphenyl]disulfid. Sm. 42—43° (*B.* 25, 2983). — II, 934.  
 5) Diäthyläther d. Di[4-Oxyphenyl]disulfid. Sm. 48—49° (46—47°) (*B.* 32, 1149; *Bl.* [3] 33, 837 *C.* 1905 [2] 618; *C.* 1908 [2] 1351). — \*II, 575.  
 6) Benzyläther d.  $\alpha$ -Benzylsulfon- $\alpha$ -Merkaptoäthan. Sm. 151° (*B.* 25, 359). — II, 1053.  
 7) Di[2,5-Dimethylphenyl]disulfoxyd. Sm. 70—72° (*B.* 41, 3327 *C.* 1908 [2] 1682).  
 8) 2,4-Dimethylphenylester d. 1,3-Dimethylbenzol-2-Thiolsulfonsäure. Fl. (*A.* 146, 239). — II, 826.
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>As<sub>2</sub>** 1) Diäthyläther d. 4,4'-Dioxyarsenobenzol (*A.* 320, 300 *C.* 1902 [1] 920). — \*IV, 1187.
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>Hg** 1) Diäthyläther d. Quecksilberdi[2-Oxyphenyl]. Sm. 83° (*B.* 32, 763). — IV, 1709; \*IV, 1213.  
 2) Diäthyläther d. Quecksilberdi[4-Oxyphenyl]. Sm. 135° (*B.* 27, 258). — IV, 1709.
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>Se** 1) Diäthyläther d. Di[2-Oxyphenyl]selenid. Sm. 56° (*B.* 28, 611). — \*II, 576.
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>Se<sub>2</sub>** 1) Diäthyläther d. Di[4-Oxyphenyl]diselenid. Sm. 65° (*Bl.* [3] 35, 674 *C.* 1906 [2] 1120).
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>Te** 1) Diäthyläther d. Di[4-Oxyphenyl]tellurid. Sm. 64° (*A.* 315, 11).  
**C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** *C* 67,1 — *H* 6,3 — *O* 16,8 — *N* 9,8 — *M. G.* 286.  
 1) Dimethyläther d. Di[4-Oxybenzyl]nitrosamin. Sm. 80° (*A.* 241, 335). — II, 755.  
 2)  $\alpha$ ,4-Dimethyläther d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxybenzyl]harnstoff. Sm. 105° (*J. pr.* [2] 56, 81). — \*II, 438.  
 3) Dimethyläther d. 4-Amido-4'-Acetylamido-3,3'-Dioxybiphenyl + H<sub>2</sub>O. Sm. 67° (116° wasserfrei) (*J. C. CAIN*, Privatmitteilung).  
 4) Äthyläther d. 3,4-Di[Acetylamido]-1-Oxynaphtalin. Sm. 254° (*B.* 25, 3067). — II, 866.  
 5)  $\delta$ -Phenylhydrazon- $\alpha\beta\gamma$ -Trioxy- $\alpha$ -Phenylbutan. Sm. 154° (*B.* 25, 2560). — IV, 764.  
 6)  $\beta$ ,4-Dimethyläther d.  $\alpha$ -Phenylhydrazon- $\beta$ -Oxy- $\alpha$ -[2,4-Dioxyphenyl]-äthan. Sm. 60—61° (55—57°) (*B.* 32, 1026; *M.* 14, 41). — III, 139; \*III, 110.  
 7) 3,4-Dimethyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,3,4-Trioxyphenyl]-äthan. Sm. 171° (*Soc.* 89, 1655 *C.* 1907 [1] 407).  
 8) Dimethyläther d. 6,6'-Dioxy-3,3'-Dimethylazoxybenzol. Sm. 148 bis 149° (*B.* 24, 1962). — IV, 1343.  
 9) Diäthyläther d. 2,2'-Dioxyazoxybenzol. Sm. 102° (*J. pr.* [2] 18, 200). — IV, 1342.  
 10) Diäthyläther d. 4,4'-Dioxyazoxybenzol. Sm. 134° (137,4—137,9°) (*B.* 23, 1742; *B.* 37, 46 *C.* 1904 [1] 654; *Ar.* 229, 348). — IV, 1343; \*IV, 1001.  
 11) Phenylhydrazon d. Cantharidin. Sm. 237—238° (*G.* 19, 455; *M.* 18, 402). — III, 624; \*III, 461.  
 12) Hämatoporphyrin. HCl, Na + H<sub>2</sub>O, Zn + H<sub>2</sub>O, Ag<sub>2</sub> +  $\frac{1}{2}$ H<sub>2</sub>O (*B.* 17, 2272; 29, 2848; 30, 105; *A.* 290, 307; *H.* 15, 286; 27, 324; 28, 34; 30, 420, 423; 34, 1008; *M.* 9, 115; *C.* 1905 [1] 373). — IV, 1619.  
 13)  $\delta$ -[ $\beta$ -1-Naphtylureido]valeriansäure. Sm. 195—196° (*C.* 1907 [2] 1157).  
 14) Methylester d. Di[Phenylamido]oxyessigmethyläthersäure. Fl. 2HCl, (2HCl, PtCl<sub>4</sub>) (*A.* 306, 9; *B.* 28, 61). — \*II, 207.



- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub>** 15) Methylester d. 1-Phenylcyklohexan-3,4-Pyrazolon-5-Essigsäure. Sm. 230—231° u. Zers. (A. 360, 341 C. 1908 [2] 318).
- 16) Äthylester d. β-[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-4-Pyrazolylden]buttersäure. Sm. 98° (B. 38, 3027 C. 1905 [2] 1326).
- 17) Äthylester d. 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin-5-Äthyl-β-Carbonsäure. Sm. 145° (B. 22, 2620). — IV, 990.
- 18) Äthylester d. 2-Keto-4-[β-Phenyläthenyl]-6-Methyl-1,2,3,4-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 243—244° (G. 23 [1] 385). — II, 1693.
- 19) 6-Acetat d. α-Phenyl-β-[5,6-Dioxy-3-Methylphenyl]hydrazin-5-Methyläther. Sm. 102° (A. 365, 298 C. 1909 [1] 1864).
- 20) Monamid d. α-[1-Naphtylamido]äthan-αα-Dicarbonsäuremonäthylester. Sm. 159° (B. 19, 2969). — II, 615.
- 21) 3-Phenylamid d. 2,4-Dimethylpyrrol-3,5-Dicarbonsäure-5-Äthylester. Sm. 216° (A. 236, 327). — IV, 93.
- 22) 5-Phenylamid d. 2,4-Dimethylpyrrol-3,5-Dicarbonsäure-3-Äthylester. Sm. 180° (A. 236, 330). — IV, 93.
- 23) Phenylhydrazid d. αβ-Dioxy-γ-Phenylbuttersäure? Sm. 161—162° (B. 25, 2563). — IV, 709.
- 24) Verbindung (aus 2-Amidobenzol-1-Carbonsäure u. 4-Dimethylamidobenzaldehyd). Sm. 180—182° (B. 41, 2353 C. 1908 [2] 639).
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>N<sub>4</sub>** C 61,2 — H 5,7 — O 15,3 — N 17,8 — M. G. 314.
- 1) 4-[2-Nitrophenyl]hydrazon-1-Oximido-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol. Sm. 218—220° (A. 357, 187 C. 1908 [1] 249).
- 2) α-Phenylhydrazid d. α-Phenylhydrazin-αβ-Dicarbonsäure-β-Äthylester. Sm. 186° (C. 1901 [1] 935). — \*IV, 434.
- 3) Di[Phenylhydrazid] d. l-Äpfelsäure. Sm. 220—223° (214°) (A. 236, 195; C. 1900 [2] 1012; B. 22, 2734; R. 21, 315; Soc. 89, 1868 C. 1907 [1] 711). — IV, 712; \*IV, 465.
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>N<sub>6</sub>** C 56,1 — H 5,3 — O 14,0 — N 24,6 — M. G. 342.
- 1) 4,4'-Di[Äthylnitrosamido]azoxybenzol. Sm. 171° (A. 286, 158). — \*II, 153.
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>Br<sub>4</sub>** 1) Tetraäthylester d. αβγδ-Tetrabrom-ε-Keto-α-Phenylheptan-η-Carbonsäure. Sm. 152° (B. 38, 1120 C. 1905 [1] 1241).
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>S** 1) Dimethyläther d. Di[6-Oxy-3-Methylphenyl]sulfoxyd. Sm. 133 bis 134° (Soc. 93, 758 C. 1908 [2] 239).
- 2) Dimethyläther d. Di[2-Oxy-4-Methylphenyl]sulfoxyd? Sm. 83 bis 84° (Soc. 93, 756 C. 1908 [2] 238).
- 3) Diäthyläther d. 4,4'-Dioxydiphenylsulfoxyd. Sm. 115—116° (B. 27, 2544; Soc. 89, 706 C. 1906 [2] 112; B. 41, 3322 C. 1908 [2] 1681; Soc. 93, 1835 C. 1909 [1] 351). — \*II, 576.
- 4) 2-Methyl-5-Isopropylbiphenyl-2-Sulfonsäure. Sm. 109—115° (B. 40, 2371 C. 1907 [2] 335).
- 5) 2-Methyl-5-Isopropylphenylester d. Benzolsulfonsäure. Fl. (C. 1900 [1] 543). — \*II, 459.
- 6) 3-Methyl-6-Isopropylphenylester d. Benzolsulfonsäure. Sm. 55 bis 56° (B. 24, 417). — II, 767; \*II, 464.
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>S<sub>2</sub>** 1) Anhydrid d. 1,4-Dimethylbenzol-2-Sulfinsäure. Sm. 68—69° (B. 41, 3327 C. 1908 [2] 1682).
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>Hg<sub>2</sub>** 1) Anhydrid d. 4-Äthoxyphenylquecksilberhydroxyd. Sm. 202° (B. 27, 259). — IV, 1710.
- C<sub>16</sub>H<sub>18</sub>O<sub>4</sub>N<sub>2</sub>** C 63,6 — H 5,9 — O 21,2 — N 9,3 — M. G. 302.
- 1) Biliverdin (J. pr. [2] 59, 314; M. 20, 288). — \*III, 487.
- 2) Tetramethyläther d. 2,5,2',5'-Tetraoxyazobenzol. Sm. 140° (B. 17, 2124). — IV, 1446.
- 3) 2,4-Diäthyläther d. 2,4,2',4'-Tetraoxyazobenzol. Sm. 193,5° (B. 20, 1144). — IV, 1441.
- 4) 2',6'-Diäthyläther d. 2,4,2',6'-Tetraoxyazobenzol. Sm. 182,5° (B. 20, 1151). — IV, 1441.
- 5) 4,5-Dicyan-3,6-Dimethyl-1,2-Diäthyl-1,2-Dihydrobenzol-1,2-Dicarbonsäure (C. 1907 [1] 459).
- 6) Säure (aus Brucin) + 2H<sub>2</sub>O. Sm. 263—264° u. Zers. (2HCl, PtCl<sub>4</sub>) (B. 17, 2850; 18, 777, 1917; 20, 453; M. 7, 615). — III, 948.

- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>2</sub>** 7) Äthylester d. Phenylhydrazonmethronsäure. Sm. 133—134° (A. 250, 187). — IV, 716.
- 8) Äthylester d. 5-Keto-4-Acetyl-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Methylcarbonsäure. Sm. 79° (J. pr. [2] 65, 533 C. 1902 [2] 345). — \*IV, 358.
- 9) Diäthylester d. 1-Phenylpyrazol-4-Carbonsäure-3-Methylcarbonsäure. Sm. 89—90°; Sd. 230—235°<sub>15</sub> (A. 316, 33; A. 356, 37 C. 1907 [2] 1612; A. 356, 46 C. 1907 [2] 1613). — \*IV, 354.
- 10) Diäthylester d. 5-Methyl-1-Phenylpyrazol-3,4-Dicarbonsäure. Sm. 50,5° (51,5°) (B. 32, 2887; 33, 263). — \*IV, 353.
- 11) Diäthylester d. 1,4-Benzdiazin-2,3-Di[Methylcarbonsäure]. Sm. 58,2° (Bl. [3] 25, 712). — \*IV, 629.
- 12) α-Amid d. α-Cyan-δ-Keto-β-Phenylpentan-αγ-Dicarbonsäure-γ-Äthylester. Sm. 225—226° (C. 1907 [1] 333).
- 13) Phenylhydrazid d. αβγ-Trioxy-γ-Phenylbuttersäure. Sm. 167° u. Zers. (168—169° u. Zers.) (B. 25, 2559; A. 319, 206). — IV, 716.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>4</sub>** 1) αβ-Di[2-Nitro-4-Methylphenylamido]äthan. Sm. 195—196° (Soc. 77, 1022; B. 17, 779). — II, 487; \*II, 266.
- 2) 2,2'-Dinitro-4,4'-Di[Dimethylamido]biphenyl. Sm. 231° (229,5°) (C. 1901 [2] 1375; B. 37, 29 C. 1904 [1] 523). — \*IV, 641.
- 3) p-Dinitro-4,4'-Di[Dimethylamido]biphenyl. Sm. 188° (B. 14, 2164; 17, 118). — IV, 963.
- 4) α-Isobutyl-α-Phenyl-α-[2,4-Dinitrophenyl]hydrazin. Sm. 151° (B. 30, 2820). — IV, 1498.
- 5) ε-[2,4-Dinitrophenyl]imido-α-[1-Piperidyl]-αγ-Pentadien. HCl, (2HCl, PtCl<sub>4</sub>) (A. 341, 376 C. 1905 [2] 1435).
- 6) Ricinin (Ricidin) oder C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>4</sub>. Sm. 194° (193°). + 2HgCl<sub>2</sub> (C. 1895 [1] 853; 1900 [1] 612; B. 30, 2197; J. 1864, 457; 1870, 877). — III, 931; \*III, 690.
- 7) Di[Phenylhydrazid] d. d-Weinsäure. Sm. bei 240° u. Zers. (231°) (A. 236, 195; B. 22, 2734; Soc. 83, 1363 C. 1904 [1] 84; Soc. 89, 1858 C. 1907 [1] 712). — IV, 721.
- 8) Di[Phenylhydrazid] d. anti-Weinsäure. Sm. 245° (R. 21, 312 C. 1903 [1] 137). — \*IV, 469.
- 9) Di[Phenylhydrazid] d. Traubensäure. Sm. 220° (R. 21, 312 C. 1903 [1] 137). — \*IV, 469.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Monobenzoat d. 3,4-Dioxy-2-Keto-1-Dichlormethyl-1,4-Dimethylhexahydrobenzol. Sm. 182—183° (B. 41, 1812 C. 1908 [2] 166).
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Mono-2,4-Dibromphenylester d. Camphersäure. Sm. 173° (Soc. 75, 668). — \*II, 373.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>S** 1) Tetramethyläther d. Di[2,5-Dioxyphenyl]sulfid. Sm. 97—100° (Soc. 93, 759 C. 1908 [2] 239).
- 2) 3,6-Dioxy-5-Isopropyl-2-Methyldiphenylsulfon. Sm. 136° (B. 28, 1315). — \*II, 586.
- 3) Diäthyläther d. Di[4-Oxyphenyl]sulfon. Sm. 159° (163°; 263°?) (A. 172, 52; B. 27, 2544; Soc. 89, 707 C. 1906 [2] 112). — II, 840; \*II, 576.
- 4) Äthylester d. α-[1-Naphtyl]sulfonbuttersäure. Sm. 71—72° (J. pr. [2] 59, 325). — \*II, 509.
- 5) Äthylester d. α-[2-Naphtyl]sulfonbuttersäure. Sm. 63—64° (J. pr. [2] 59, 327). — \*II, 530.
- 6) Äthylester d. α-[1-Naphtyl]sulfonisobuttersäure. Sm. 90° (J. pr. [2] 59, 332). — \*II, 509.
- 7) Äthylester d. α-[2-Naphtyl]sulfonisobuttersäure. Sm. 63—64° (J. pr. [2] 59, 333). — \*II, 530.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>S<sub>2</sub>** 1) 3,3'-Dimethyläther d. Di[3,4-Dioxybenzyl]disulfid (Dithiovanillin). Sm. 129—130° (A. 345, 320 C. 1906 [1] 1695).
- 2) βγ-Diphenylsulfonbutan. Fl. (J. pr. [2] 51, 303). — \*II, 470.
- 3) αβ-Diphenylsulfon-β-Methylpropan. Fl. (J. pr. [2] 51, 297). — \*II, 470.
- 4) β-Phenylsulfon-β-Benzylsulfonpropan. Sm. 125—126° (B. 36, 304 C. 1903 [1] 500).

- $C_{16}H_{18}O_4S_2$  5)  $\alpha\alpha$ -Di[Benzylsulfon]äthan. Sm.  $130^\circ$  (B. 36, 298 C. 1903 [1] 499).  
 6)  $\alpha\beta$ -Di[2-Methylphenylsulfon]äthan. Sm.  $94-95^\circ$  (J. pr. [2] 54, 527). — \*II, 482.
- $C_{16}H_{18}O_4S_3$  7)  $\alpha\beta$ -Di[4-Methylphenylsulfon]äthan. Sm.  $200-201^\circ$  (J. pr. [2] 30, 354; [2] 40, 534). — II, 824.
- $C_{16}H_{18}O_4S_4$  8) Di[2,5-Dimethylphenyl]disulfon. Sm.  $109^\circ$  (Soc. 93, 1527 C. 1908 [2] 1428).
- $C_{16}H_{18}O_5N_2$  1) Di[ $\beta$ -Phenylsulfonäthyl]sulfid. Sm.  $123-124^\circ$  (J. pr. [2] 30, 348). — II, 782.  
 2) Anisaldehydhydrotrisulfid. Zers. bei  $18^\circ$  (C. 1908 [2] 588).
- $C_{16}H_{18}O_5S_4$  1) Äthylenester d. 1-Methylbenzol-4-Thiosulfonsäure. Sm.  $76-77^\circ$  (B. 20, 2088; 25, 1478). — II, 162.
- $C_{16}H_{18}O_5N_2$  C 60,4 — H 5,6 — O 25,2 — N 8,8 — M. G. 318.  
 1) Base (aus Cinchonin). HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (J. 1875, 771). — III, 840.  
 2) Diäthylester d. 5-Keto-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure-4-Methylcarbonsäure. Sm.  $128-130^\circ$  (B. 22, 888). — IV, 727.  
 3) Diäthylester d. 2-Keto-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Diazin-5,6-Dicarbonsäure (D. Benzuramidofumarsäure). Sm.  $176-177^\circ$  (G. 23 [1] 398). — II, 1955.  
 4)  $\alpha\beta$ -Imid d.  $\beta$ -Acetylphenylamidopropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\gamma$ -Äthylester. Sm.  $178^\circ$  (B. 35, 2082 C. 1902 [2] 207).  
 5) Verbindung (aus 1,3-Dioxybenzolmonoäthyläther)? Sm.  $176^\circ$  (M. 19, 554). — \*II, 568.
- $C_{16}H_{18}O_5N_6$  C 51,3 — H 4,8 — O 21,4 — N 22,5 — M. G. 374.  
 1) Phtalylsemicarbazonacetessigsäureäthylestersemicarbazon. Sm.  $243^\circ$  u. Zers. (B. 38, 1914 C. 1905 [2] 44).
- $C_{16}H_{18}O_5S$  1) Tetramethyläther d. Di[2,5-Dioxyphenyl]sulfoxyd. Sm.  $200^\circ$  (Soc. 93, 759 C. 1908 [2] 239).  
 2) 4,4'-Dioxybiphenyldiäthyläther- $\beta$ -Sulfonsäure. K (Soc. 91, 1309 C. 1907 [2] 1071).  
 3) 4-[4-Methylbenzol]sulfonat d. 4-Oxy-3,5-Di[Oxymethyl]-1-Methylbenzol. Sm.  $132,5^\circ$  (B. 42, 2546 C. 1909 [2] 523).
- $C_{16}H_{18}O_5S_2$  1) Di[ $\beta$ -Phenylsulfonäthyl]äther. Sm.  $69-70^\circ$  (J. pr. [2] 30, 202, 323; B. 26, 944). — II, 782.  
 2) polym. Diphenyldisulfondiäthyläther =  $(C_{16}H_{18}O_5S_2)_x$ . Sm.  $87,5$  bis  $88,5^\circ$  (J. pr. [2] 30, 321). — II, 782.
- $C_{16}H_{18}O_6N_2$  C 57,5 — H 5,4 — O 28,7 — N 8,4 — M. G. 334.  
 1) Bilixanthin (M. 20, 295). — \*III, 488.
- $C_{16}H_{18}O_6N_4$  C 53,0 — H 5,0 — O 26,5 — N 15,5 — M. G. 362.  
 1) Diäthylamidobenzol + 1,3,5-Trinitrobenzol. Sm.  $42-42,5^\circ$  (Soc. 83, 1342 C. 1904 [1] 100).  
 2) Diäthyläther d.  $\beta$ -Dinitro-s-Di[2-Oxyphenyl]hydrazin. Sm. 201 bis  $202^\circ$  (J. pr. [2] 21, 325). — IV, 1505.  
 3) Phenylamidoimid d.  $\beta$ -Dinitrocamphersäure. Sm.  $192^\circ$  u. Zers. (B. 25, 2567). — IV, 708.
- $C_{16}H_{18}O_6N_{12}$  C 40,5 — H 3,8 — O 20,3 — N 35,4 — M. G. 474.  
 1) Verbindung (aus Glykoloril u. Formaldehyd). Zers. bei  $175^\circ$  (A. 339, 9 C. 1905 [1] 1226).
- $C_{16}H_{18}O_6S_2$  1) Dimethyläther d.  $\alpha\beta$ -Di[2-Oxyphenylsulfon]äthan. Sm.  $175^\circ$  (J. pr. [2] 66, 141 C. 1902 [2] 796).  
 2) Diäthyläther d. Di[4-Oxyphenyl]disulfon. Sm.  $208^\circ$  u. Zers. (Soc. 93, 1527 C. 1908 [2] 1428).
- $C_{16}H_{18}O_8N_2$  C 52,4 — H 4,9 — O 35,0 — N 7,6 — M. G. 366.  
 1) Diacetat d. 2,3,4,5-Tetraoxy-1- $[\alpha\beta$ -Dioximidopropyl]benzolmethylendimethyläther. Sm.  $137-138^\circ$  (G. 22 [2] 502). — II, 1035.
- $C_{16}H_{18}O_8N_4$  C 48,7 — H 4,6 — O 32,5 — N 14,2 — M. G. 394.  
 1) Triacetylinsin. Sm.  $236^\circ$  (M. 29, 167 C. 1908 [2] 235).
- $C_{16}H_{18}O_8S_2$  1) 4,4'-Dioxybiphenyldiäthyläther- $\beta$ -Disulfonsäure. K<sub>2</sub> (Soc. 91, 1309 C. 1907 [2] 1071).
- $C_{16}H_{18}O_8S_3$  1) Diäthylester d. Diphenylsulfondisulfonsäure. Sm.  $81-82^\circ$  (B. 19, 3127). — II, 815.
- $C_{16}H_{18}O_9N_2$  C 50,3 — H 4,7 — O 37,7 — N 7,3 — M. G. 382.  
 1) Nitrocodeinsäure. Ba + 2H<sub>2</sub>O (B. 36, 3068 C. 1903 [2] 953; B. 42, 3504 C. 1909 [2] 1472).



- $C_{16}H_{18}O_{11}N_4$  C 43,4 — H 4,1 — O 39,8 — N 12,7 — M. G. 442.
- $C_{16}H_{18}NJ$  1) Jodäthylat d. 4-Benzylidenamido-1-Methylbenzol. Sm. 170° u. Zers. (B. 34, 836). — \*III, 23.
- $C_{16}H_{18}N_2Br_2$  1)  $\beta$ -Dibrom- $\alpha\beta$ -Di[Phenylamido]- $\beta$ -Methylpropan. Sm. 62° (J. 1887, 745). — II, 345.
- $C_{16}H_{18}N_2S$  1)  $\alpha$ -Methyl- $\alpha\beta$ -Dibenzylthioharnstoff (Benzylimidomethylbenzylamidomerkaptomethan). Sm. 73° (Soc. 75, 374). — \*II, 298.  
 2)  $\alpha$ -Methyl- $\beta\beta$ -Dibenzylthioharnstoff (Methylimidodibenzylamidomerkaptomethan). Sm. 110—111° (Soc. 75, 374). — \*II, 298.  
 3) Äthylphenylbenzylthioharnstoff. Sm. 91° (Soc. 61, 540). — II, 528.  
 4) isom. Äthylphenylbenzylthioharnstoff. Sm. 91° (Soc. 61, 540). — II, 528.  
 5) isom. Äthylphenylbenzylthioharnstoff. Sm. 94—95° (Soc. 61, 541). — II, 528.  
 6)  $\alpha$ -Propyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 104,3° (B. 21, 109). — II, 397.  
 7)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Phenylpropyl]thioharnstoff. Sm. 126—127° (J. pr. [2] 77, 9 C. 1908 [1] 629).  
 8)  $\alpha$ -Phenyl- $\beta$ -[ $\gamma$ -Phenylpropyl]thioharnstoff. Sm. 103° (95—96°) (B. 26, 2161; 27, 2310). — II, 550; \*II, 317.  
 9)  $\alpha$ -Phenyl- $\beta$ -[2,4,6-Trimethylphenyl]thioharnstoff. Sm. 193° (B. 15, 1014). — II, 555.  
 10)  $\alpha$ -Benzyl- $\beta$ -[2,4-Dimethylphenyl]thioharnstoff. Sm. 84—85° (Soc. 59, 558). — II, 544.  
 11)  $\alpha$ -Methyl- $\beta$ -Äthyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 49,5° (B. 20, 1632). — II, 397.  
 12)  $\alpha$ -Äthyl- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. 90° (B. 17, 2091). — II, 498.  
 13) 2-Methylphenylimido-2-Methylphenylamidodimethylsulfid. Sm. 60° (B. 15, 1316). — II, 465.  
 14) 4-Methylphenylimido-4-Methylphenylamidodimethylsulfid. Sm. 128°. HCl, H<sub>2</sub>SO<sub>4</sub> (B. 15, 1309). — II, 498.  
 15) Benzylimidobenzylamidodimethylsulfid. Fl. HCl, (2HCl, PtCl<sub>4</sub>), HJ (B. 19, 2348). — II, 528.
- $C_{16}H_{18}N_2Cl$  1) Phenylamid d. Hexahydrochinolin-1-Thiocarbonsäure (Hexahydrochinolyphenylthioharnstoff). Sm. 127,5° (B. 27, 1479). — IV, 139.  
 2) 1-Chlormethylat d.  $\beta$ -Amido-1,5-Dimethyl-2-Phenylbenzimidazol. 2 + PtCl<sub>4</sub> (A. 210, 372). — IV, 1184.
- $C_{16}H_{18}N_3J$  1) Jodmethylat d. 4,6-Dimethyl-2-[4-Methylphenyl]-2,1,5-Benztriazol. Sm. 225° (A. 366, 403 C. 1909 [2] 290).
- $C_{16}H_{18}N_4Cl_2$  1) Chlormethylat d. Verb.  $C_{15}H_{15}N_4Cl$ . HCl + 2H<sub>2</sub>O, (HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (B. 37, 557 C. 1904 [1] 893).
- $C_{16}H_{18}N_4S$  1)  $\alpha$ -Imido- $\alpha$ -[4-Methylphenyl]amido- $\alpha'$ -Merkapto- $\alpha'$ -[4-Methylphenyl]imidodimethylamin (p-Tolylguanido-p-Tolylthioharnstoff). Zers. bei 170—180° (A. 361, 310 C. 1908 [2] 881).  
 2) Di[Methylphenylamido]methylthioharnstoff. Sm. 90° (A. 361, 324 C. 1908 [2] 881).  
 3) 6-[ $\beta$ -Methylthioureido]-3,4'-Dimethylazobenzol. Sm. 154—155° (C. 1905 [1] 1104).
- $C_{16}H_{18}N_4S_2$  1)  $r$ - $\alpha\beta$ -Dithioureido- $\alpha\beta$ -Diphenyläthan. Sm. 192° u. Zers. (B. 28, 3178). — IV, 979.  
 2)  $\alpha\beta$ -Di[ $\beta$ -Phenylthioureido]äthan. Sm. 193° (A. 228, 234). — II, 393.  
 3) Äthyläther d. Imidophenylamidomerkaptomethan. Sm. 139° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>), HBr, Pikrat (B. 25, 59). — II, 391.
- $C_{16}H_{18}N_4S_3$  1) 6,6'-Dithioureido-3,3'-Dimethyldiphenylsulfid (Thiotolyldithioharnstoff). Sm. 120—121° (B. 20, 669). — II, 821.
- $C_{16}H_{18}ClJ$  1) 4-tert. Butyldiphenyljodoniumchlorid. Sm. 167°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (B. 34, 3675).  
 2) 2-Methylphenyl-4-Propylphenyljodoniumchlorid. Sm. 133° u. Zers. 2 + PtCl<sub>4</sub> (A. 327, 313 C. 1903 [2] 353).  
 3) Di[4-Äthylphenyl]jodoniumchlorid. Sm. 150°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> + 3H<sub>2</sub>O (A. 327, 290 C. 1903 [2] 352).

- C<sub>16</sub>H<sub>18</sub>ClJ** 4) 2,4'-Dimethyl-2'-Äthylidiphenyljodoniumchlorid. Sm. 177° (2+PtCl<sub>4</sub> (*J. pr.* [2] 69, 445 *C.* 1904 [2] 590).
- 5) Di[2,4-Dimethylphenyl]jodoniumchlorid. Sm. 169° (*B.* 33, 846). — \*II, 43.
- 6) Di[3,5-Dimethylphenyl]jodoniumchlorid. Sm. 186° (*B.* 38, 1477 *C.* 1905 [1] 1379).
- C<sub>16</sub>H<sub>18</sub>BrJ** 1) 4-tert. Butyldiphenyljodoniumbromid. Sm. 157° (*B.* 34, 3675).
- 2) 2-Methylphenyl-4-Propylphenyljodoniumbromid. Sm. 133° u. Zers. (*A.* 327, 313 *C.* 1903 [2] 353).
- 3) Di[4-Äthylphenyl]jodoniumbromid. Sm. 145° (*A.* 327, 290 *C.* 1903 [2] 352).
- 4) 2,4'-Dimethyl-2'-Äthylidiphenyljodoniumbromid. Sm. 175° (*J. pr.* [2] 69, 445 *C.* 1904 [2] 590).
- 5) Di[2,4-Dimethylphenyl]jodoniumbromid. Sm. 170° (*B.* 33, 846). — \*II, 43.
- 6) Di[3,5-Dimethylphenyl]jodoniumbromid. Sm. 198° (*B.* 38, 1477 *C.* 1905 [1] 1379).
- C<sub>16</sub>H<sub>18</sub>J<sub>2</sub>As<sub>2</sub>** 1) 2,4,2',4'-Tetramethyljodarsenobenzol. Sm. 89° (*A.* 320, 333 *C.* 1902 [1] 922). — \*IV, 1199.
- 2) 2,5,2',5'-Tetramethyljodarsenobenzol. Sm. 97° (*A.* 320, 337 *C.* 1902 [1] 923). — \*IV, 1201.
- C<sub>16</sub>H<sub>19</sub>ON** C 79,7 — H 7,9 — O 6,6 — N 5,8 — M. G. 241.
- 1) β-Dimethylamido-α-Oxy-αβ-Diphenyläthan. Sm. 108—110°. (2HCl, PtCl<sub>4</sub> +  $\frac{1}{2}$  H<sub>2</sub>O) (*B.* 20, 494). — II, 1080.
- 2) α-Oxy-4-Dimethylamido-αα-Diphenyläthan. Fl. (*B.* 40, 3902 *C.* 1907 [2] 1516).
- 3) β-Oxy-β-[4-Dimethylamidophenyl]-α-Phenyläthan. Sm. 59—60° (*B.* 38, 515 *C.* 1905 [1] 736).
- 4) 5-[2-Oxybenzyl]amido-1,2,4-Trimethylbenzol. Sm. 172—173° (*Ar.* 240, 688 *C.* 1903 [1] 395).
- 5) 4-[4-Isopropylbenzyl]amido-1-Oxybenzol. Sm. 107—108° u. Zers. (*A.* 245, 297). — II, 718.
- 6) Methyläther d. γ-Amido-α-[4-Oxyphenyl]-β-Phenylpropan. Fl. Zers. bei 253°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 23, 2864). — II, 899.
- 7) Methyläther d. α-Phenylamido-α-[6-Oxy-3-Methylphenyl]äthan. Sm. 78° (*B.* 40, 3473 *C.* 1907 [2] 1332).
- 8) Äthyläther d. β-Amido-α-Oxy-αα-Diphenyläthan. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*C.* 1905 [2] 825).
- 9) Äthyläther d. Äthyl-4-Oxydiphenylamin. Sd. 318—320° (*B.* 17, 2434). — II, 717.
- 10) Äthyläther d. 4-Oxybenzyl-2-Methylphenylamin. Sm. 53° (*A.* 315, 142).
- 11) Äthyläther d. Methylbenzyl-4-Oxyphenylamin. Sd. 215—217°<sub>25</sub> (*B.* 40, 1003 *C.* 1907 [1] 1251).
- 12) Isobutyläther d. 4-Oxydiphenylamin. Sm. 68° (*B.* 17, 2435). — II, 717.
- 13) Phenyläther d. Methyl-γ-Oxypropylphenylamin. Sd. 217°<sub>10</sub>. Pikrat (*B.* 42, 2045 *C.* 1909 [2] 451).
- 14) 2,4-Dimethylphenyläther d. β-Phenylamido-α-Oxyäthan. Fl. HCl (*B.* 29, 2402). — \*II, 443.
- 15) Phenylimidocampher. Sm. 109° (*Soc.* 95, 949 *C.* 1909 [2] 360).
- 16) α-Oxy-α-[4-Isopropylphenyl]-β-[1-Pyridyl]äthan. Sm. 80°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O), Pikrat (*B.* 34, 1893). — \*IV, 228.
- 17) 1-[2-Oxy-1-Naphtyl]methylhexahydropyridin. Sm. 92—93° (96°) (*D.R.P.* 89979; *A.* 344, 289 *C.* 1906 [1] 1612).
- 18) 1-[4-Oxy-1-Naphtyl]methylhexahydropyridin. Sm. 133—134° (135°) (*D.R.P.* 89979; *A.* 344, 289 *C.* 1906 [1] 1612).
- 19) 1-Naphtyläther d. 1-Oxymethylhexahydropyridin (α-Naphtylpiperidid). Sm. 135° (*C.* 1900 [2] 202). — \*IV, 18.
- 20) 2-Naphtyläther d. 1-Oxymethylhexahydropyridin (β-Naphtylpiperidid). Sm. 96° (*C.* 1900 [2] 202). — \*IV, 18.
- 21) Phenylamid d. α-Phenylisovaleriansäure. Sm. 121° (*C.* 1908 [2] 1100).
- 22) Phenylamid d. Dehydrocamphenylsäure. Sm. 102—103° (*B.* 41, 2750 *C.* 1908 [2] 1436).

- C<sub>16</sub>H<sub>19</sub>ON** 23) 1-Naphtylamid d. Pentan- $\alpha$ -Carbonsäure. Sm. 112° (*Soc.* 93, 1037 C. 1908 [2] 504).
- 24) Piperidid d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 203° u. Zers. (*A.* 361, 104 C. 1908 [2] 34).
- C<sub>16</sub>H<sub>19</sub>ON<sub>8</sub>** C 71,4 — H 7,1 — O 5,9 — N 15,6 — M. G. 269.
- 1) 4-Methylnitrosamido-4'-Dimethylamidodiphenylmethan. Sm. 96 bis 97° (*B.* 41, 2155 C. 1908 [2] 704).
- 2)  $\beta$ -Isopropylphenylamido- $\alpha$ -Phenylharnstoff. Sm. 230°. — IV, 674.
- 3)  $\beta$ -[2,4,5-Trimethylphenyl]amido- $\alpha$ -Phenylharnstoff. Sm. 218°. — IV, 813.
- 4) Methyläther d.  $\alpha$ -[4-Oxybenzyl]amido- $\beta$ -Phenylhydrazonäthan. Fl. HCl (*B.* 27, 3099). — IV, 747.
- 5) 4'-Dimethylamido-2'-Oxy-2,4-Dimethylazobenzol. Sm. 166—168° (*B.* 31, 494). — IV, 1414.
- 6) Methyläther d. 4-Dimethylamido-4'-Oxy-2-Methylazobenzol. Sm. 135—136°. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 3483). — \*IV, 1038.
- 7) 1-Methylhydroxyd d.  $\beta$ -Amido-1,5-Dimethyl-2-Phenylbenzimidazol<sup>9</sup> (2Chlorid + PtCl<sub>4</sub>) (*A.* 210, 371). — IV, 1184.
- 8) 10-Methylhydroxyd d. 2,8-Diamido-3,7-Dimethylakridin. Chlorid, Nitrat, Bichromat (*B.* 34, 4312 C. 1902 [1] 323). — \*IV, 843.
- 9) Amid d.  $\alpha$ -[4-Dimethylamidophenyl]amido- $\alpha$ -Phenylessigsäure. Sm. 154—155° (*B.* 35, 3344 C. 1902 [2] 1194). — \*IV, 389.
- 10) 4-Dimethylamidophenylamid d. Phenylamidoessigsäure. Sm. 132 bis 134° (*B.* 30, 1101; *A.* 301, 78). — \*IV, 386.
- 11) Piperidylmethylamid d. Chinolin-6-Carbonsäure. Sm. 98°. HCl (*A.* 361, 155 C. 1908 [2] 399).
- C<sub>16</sub>H<sub>19</sub>OJ** 1) 4-tert. Butyldiphenyljodoniumhydroxyd (*B.* 34, 3675).
- 2) 2,4'-Dimethyl-2'-Äthyldiphenyljodoniumhydroxyd. Salze, siehe (*J. pr.* [2] 69, 444 C. 1904 [2] 590).
- 3) Di[2,4-Dimethylphenyl]jodoniumhydroxyd. Salze, siehe (*B.* 33, 846). — \*II, 43.
- 4) Di[3,5-Dimethylphenyl]jodoniumhydroxyd. Salze, siehe (*B.* 38, 1476 C. 1905 [1] 1379).
- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>N** C 74,7 — H 7,4 — O 12,4 — N 5,4 — M. G. 257.
- 1) Di[ $\alpha$ -Oxy-4-Methylbenzyl]amin. Sm. 43—44° (*B.* 42, 2218 C. 1909 [2] 352).
- 2) Dimethyläther d. Di[4-Oxybenzyl]amin. Sm. 34°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*A.* 117, 240; 241, 333). — II, 755.
- 3) Diphenyläther d. Di[ $\beta$ -Oxyäthyl]amin. Fl. HCl, HBr, HNO<sub>3</sub> (*J. pr.* [2] 24, 243; *B.* 30, 810). — II, 653; \*II, 355.
- 4) 6-[Acetylphenylamido]-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 65,5—66,5° (*C.* 1906 [1] 34; *Soc.* 89, 203 C. 1906 [1] 1421).
- 5) 4-Phenylimido-6-Oxy-5-Acetyl-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 129—130° (*B.* 37, 3381 C. 1904 [2] 1219).
- 6) Methylammoniumbase (aus Methylphenylamidobenzoylmethan) (*B.* 13, 843).
- 7) 3-Oxyphenylimidocampher. Sm. 173,5° (*Soc.* 95, 954 C. 1909 [2] 360).
- 8) 4-Oxyphenylimidocampher. Sm. 233° (*Soc.* 95, 950 C. 1909 [2] 360).
- 9) 1-Benzoyl-5-Butyryl-1,2,3,4-Tetrahydropyridin. Sd. 230—235°<sub>15</sub> (*B.* 38, 3102 C. 1905 [2] 1260).
- 10) 1-Benzoyl-2-Ketodekahydrochinolin. Sm. 85° (*B.* 27, 1474). — II, 1129.
- 11) Benzoat d. 1-Oximido-3,3,5-Trimethyl-1,2,3,4-Tetrahydrobenzol (*B.* d. Phoronoxim). Sm. 99° (*A.* 297, 190). — \*II, 758.
- 12) Äthylester d.  $\alpha$ -[1-Naphtylamido]buttersäure. Sm. 80° (*B.* 25, 2322). — II, 614.
- 13) Äthylester d.  $\alpha$ -[2-Naphtyl]amidobuttersäure. Sm. 69°; Sd. 264°<sub>43</sub> (*B.* 25, 2324). — II, 622.
- 14) Äthylester d.  $\alpha$ -[1-Naphtyl]amidoisobuttersäure. Sm. 76,5°; Sd. 200 bis 220°<sub>15</sub> (*B.* 25, 2345). — II, 614.
- 15) Äthylester d.  $\alpha$ -[2-Naphtyl]amidoisobuttersäure. Sm. 58° (*B.* 25, 2348). — II, 622.



- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>N** 16) Benzoat d. Pulegenonoxim. Sm. 104—105° (A. 327, 133 C. 1903 [1] 1412).
- 17) 1-Naphtylamidoformiat d.  $\gamma$ -Oxypentan. Sm. 76—79° (C. 1909 [2] 1379).
- 18) 1-Naphtylamidoformiat d. d- $\alpha$ -Oxy- $\beta$ -Methylbutan. Sm. 82° (C. 1909 [2] 1379).
- 19) 1-Naphtylamidoformiat d.  $\beta$ -Oxy- $\beta$ -Methylbutan. Sm. 71—72° (C. 1909 [2] 1380).
- 20) 1-Naphtylamidoformiat d.  $\delta$ -Oxy- $\beta$ -Methylbutan. Sm. 67—68° (C. 1909 [2] 1379).
- 21) 1-Naphtylamid d.  $\alpha$ -Oxybutteräthyläthersäure. Sm. 79—80° (B. 25, 2925). — II, 611.
- 22) 1-Naphtylamid d.  $\alpha$ -Oxyisobutteräthyläthersäure. Sm. 74—76° (B. 25, 2929). — II, 611.
- 23) 2-Naphtylamid d.  $\alpha$ -Oxyisobutteräthyläthersäure. Sm. 50° (B. 25, 2930). — II, 620.
- 24) Phenylimid d.  $\zeta$ -Methyl- $\beta$ -Hepten- $\beta\gamma$ -Dicarbonsäure. Sm. 70° (Soc. 75, 917). — \*II, 218.
- 25) Phenylimid d. d-Camphersäure. Sm. 117° (116°) (A. 68, 35; 309, 344). — II, 419; \*II, 218.
- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>N<sub>8</sub>** C 67,4 — H 6,7 — O 11,2 — N 14,7 — M. G. 285.
- 1) Diäthyläther d. 4,4'-Dioxydiazamidobenzol. Sm. 89—91° (119°) (B. 25, 3064; C. 1905 [1] 1105). — IV, 1575.
- 2) Dimethyläther d. 4-Amido-5,6'-Dioxy-2,3'-Dimethylazobenzol. Sm. 156° u. Zers. (B. 22, 352). — IV, 1419; \*IV, 1040.
- 3) 3,9-Di[Dimethylamido]phenoxazoniumhydroxyd. Salze, siehe (A. 289, 119; B. 42, 1277 C. 1909 [1] 1753).
- 4) Äthylester d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 141° (A. 366, 361 C. 1909 [2] 286).
- 5) Acetat d. 5-Oxy-1-Phenyl-3-Hexahydrophenyl-1,2,4-Triazol. Sm. 107—108° (B. 36, 1097 C. 1903 [1] 1140). — \*IV, 781.
- 6) Nitrosoderivat d. Verb. C<sub>16</sub>H<sub>20</sub>ON<sub>2</sub>. Sm. 114° (B. 35, 3839 C. 1902 [2] 1462).
- 7) Verbindung (aus Benzenyldioxytetrazotsäure). Fl. (A. 297, 339).
- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>N<sub>6</sub>** C 67,4 — H 6,7 — O 11,2 — N 14,7 — M. G. 285.
- 1) 4'-Nitro-5-Dimethylamido-2,4-Dimethyldiazamidobenzol. Sm. 135 bis 140° u. Zers. (Soc. 91, 369 C. 1907 [1] 1404).
- 2) 4'-Nitro-2,6-Di[Methylamido]-3,5-Dimethylazobenzol. Sm. 218° (Soc. 89, 1057 C. 1906 [2] 950).
- 3) 3-Nitro-2',4'-Di[Dimethylamido]azobenzol. HCl + H<sub>2</sub>O (B. 41, 110 C. 1908 [1] 522).
- 4) Dimethyläther d. Di[2-Oxyphenylazo]äthylamin. Sm. 130° (B. 22, 940). — IV, 1575.
- 5) Dimethyläther d. Di[4-Oxyphenylazo]äthylamin. Sm. 114—115° (B. 22, 941). — IV, 1575.
- 6) 2,4-Dimethylphenylamidokaffeïn. Sm. 210—212° (B. 27, 3092). — III, 960.
- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>N<sub>7</sub>** C 56,3 — H 5,6 — O 9,4 — N 28,7 — M. G. 341.
- 1) 8-[4-Dimethylamidophenyl]azo-2,6-Diketo-1,3,7-Trimethylpurin (Kaffeïn-p-Azodimethylanilin) (Am. 23, 60). — \*IV, 1087.
- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>P** 1) Di[4-Äthylphenyl]phosphinsäure. Fl. Cu, Ag (A. 293, 321). — IV, 1674.
- C<sub>16</sub>H<sub>19</sub>O<sub>3</sub>N** C 70,3 — H 7,0 — O 17,6 — N 5,1 — M. G. 273.
- 1) 2,2'-Dimethyläther d.  $\beta$ -Amido- $\alpha$ -Oxy- $\alpha$ -Di[2-Oxyphenyl]äthan. Sm. 136°. (2HCl, PtCl<sub>4</sub>) (A. 337, 232 C. 1905 [1] 242).
- 2) 9-[1,2-Phthalyl]amido- $\beta$ -Ketooktan. Sm. 51° (B. 42, 4054 C. 1909 [2] 1924).
- 3) 9-Phenylimido- $\zeta$ -Keto- $\beta$ -Methyl- $\beta$ -Okten-9-Carbonsäure. Anilinsalz (Bl. [3] 21, 347). — \*II, 219.
- 4)  $\beta$ -[2-Benzoylamidohexahydrophenyl]akrylsäure? Sm. 153,5° (B. 27, 1472).
- 5) Anhydrid d. Oxycampherphenylaminsäure. Sm. 126° (B. 26, 1530). — II, 420.

- $C_{16}H_{19}O_3N$  6) Äthylester d.  $\gamma$ -Cyan- $\alpha$ -Keto- $\alpha$ -Phenylhexan- $\gamma$ -Carbonsäure. Sm. 48 bis 49° (*Bl.* [3] 17, 410 Anm.). — \*II, 1137.
- $C_{16}H_{19}O_8N_3$  C 63,8 — H 6,3 — O 15,9 — N 13,9 — M. G. 301.
- 1) 4,4'-Dimethyläther d.  $\beta$ -Amido- $\alpha$ -Oxy- $\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 134° (*J. pr.* [2] 77, 133 *C.* 1908 [1] 962).
- 2) Phenylnitrosamidoimid d. Camphersäure. Sm. 157° (*Soc.* 91, 1892 *C.* 1908 [1] 256).
- $C_{16}H_{19}O_4N$  C 66,4 — H 6,6 — O 22,1 — N 4,8 — M. G. 289.
- 1) 2,4,5-Trimethyläther d. Phenyl- $\alpha$ ,2,4,5-Tetraoxybenzylamin. HCl (*A.* 357, 373 *C.* 1908 [1] 358).
- 2) Phenylglykolylscolopolein (Homoscolopolamin). Fl. (HCl, AuCl<sub>3</sub>) (*C.* 1898 [1] 1198).
- 3)  $\beta$ -[3-Diacetylamido-4-Isopropylphenyl]akrylsäure. Sm. 236° (*B.* 19, 417). — II, 1434.
- 4) Säure (aus Hydroxybenzylursäure). Sm. 70—75°. Ca + 3H<sub>2</sub>O (*A.* 134, 324). — II, 1189.
- 5) Methylester d. Cocaylbenzoxylessigsäure. Fl. (HCl, AuCl<sub>3</sub>), HJ (*B.* 21, 3032, 3441). — III, 863.
- 6) Diäthylester d.  $\beta$ -Cyan- $\alpha$ -Phenylpropan- $\alpha\beta$ -Dicarbonsäure. Sd. 320 bis 330° (*B.* 24, 1877). — II, 1855.
- 7) Diäthylester d.  $\beta$ -Cyan- $\alpha$ -Phenylpropan- $\beta\gamma$ -Dicarbonsäure. Sd. 220 bis 228°<sub>20</sub> (*A. ch.* [6] 27, 261). — II, 1854.
- 8) Benzoat d.  $\alpha$ -Egonin +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 209° u. Zers. (wasserfrei) (*B.* 29, 2223). — III, 873.
- 9) Benzoat d. d-Egonin. HCl, HNO<sub>3</sub> (*B.* 23, 510, 927, 984; *D. R. P.* 55338). — III, 867; \*III, 645.
- 10) Benzoat d. l-Egonin + 4H<sub>2</sub>O. Sm. 86—87° (92°). (HCl, AuCl<sub>3</sub>) (*B.* 18, 1594; 21, 48, 3198; *M.* 6, 556; *A.* 271, 182). — III, 866; \*III, 645.
- 11) l-Phenylamid d. 2-Ketohexahydrobenzol 1,1-Dicarbonsäure-l-Äthylester. Sm. 108° (*A.* 317, 104).
- 12) 4-Äthoxylphenylmonamid d. 1,2,3,4-Tetrahydrobenzol-5,6-Dicarbonsäure. Sm. 145° (*B.* 36, 999 *C.* 1903 [1] 1131).
- 13) 4-Methylphenylimid d.  $\gamma$ -Acetoxyl- $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 131° (*B.* 29, 1546, 1624). — \*II, 281.
- $C_{16}H_{19}O_4N_3$  C 60,6 — H 6,0 — O 20,2 — N 13,2 — M. G. 317.
- 1) Phenylamidoimid d. p-Nitrocampfersäure. Sm. 157° (*B.* 25, 2567). — IV, 708.
- 2) Äthylester d. 5-Semicarbazon-3-Keto-1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 208° u. Zers. (*A.* 294, 281). — \*II, 1084.
- 3) Phenylnitramidoimid d. Camphersäure. Sm. 115—116° (*Soc.* 91, 1892 *C.* 1908 [1] 256).
- $C_{16}H_{19}O_4N_7$  C 51,5 — H 5,1 — O 17,1 — N 26,3 — M. G. 373.
- 1) 4,4'-Dinitro-5,5'-Di[Methylamido]-2,2'-Dimethyldiazoamidobenzol. Sm. 267,5°. + 2 Molec. Pyridin (*J. pr.* [2] 62, 510). — \*IV, 1133.
- $C_{16}H_{19}O_4Br$  1) Mono-4-Bromphenylester d. Camphersäure. Sm. 111° (*Soc.* 75, 668). — \*II, 373.
- $C_{16}H_{19}O_4P$  1) Äthylester d. Di[ $\alpha$ -Oxybenzyl]phosphinsäure (*Bl.* 50, 604). — IV, 1664.
- $C_{16}H_{19}O_6N$  C 62,9 — H 6,2 — O 26,2 — N 4,6 — M. G. 305.
- 1) Glykose- $\beta$ -Naphtylamid + H<sub>2</sub>O. Sm. 117° (*Soc.* 95, 1552 *C.* 1909 [2] 1990).
- 2) Methylester d.  $\beta$ -[4,5-Dioxy-2, $\beta$ -Acetylmethylamidoäthylphenyl]-akryl-4,5-Methylenäthersäure. Sm. 147° (*A.* 271, 390). — II, 1784.
- 3) Dimethylester d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\delta$ -Methyl- $\alpha$ -Penten- $\delta$ -Carbonsäure? Sm. 81° (*B.* 33, 3435). — \*II, 232.
- $C_{16}H_{19}O_6N_3$  C 57,7 — H 5,7 — O 24,0 — N 12,6 — M. G. 333.
- 1) l-Tryptophyl-d-Glutaminsäure. Sm. 173° (*H.* 58, 381 *C.* 1909 [1] 1247; *B.* 42, 2333 *C.* 1909 [2] 434).
- 2) Dimethylester d. 4-Semicarbazon-1-Phenyl-R-Pentamethylen-2,3 [oder 2,5]-Dicarbonsäure. Sm. 162—163° (*A.* 315, 241). — \*II, 1138.
- $C_{16}H_{19}O_6P$  1)  $\beta$ -Phenoxyl- $\beta$ -[4-Methylphenoxyl]isopropylphosphorige Säure. Sm. 106—107° (*Soc.* 79, 1226).
- $C_{16}H_{19}O_6N$  C 59,8 — H 5,9 — O 29,9 — N 4,4 — M. G. 321.
- 1) Acetylhydrocotarninessigsäure. Sm. 201° (202°). Ca, Ag (*B.* 20, 2431; 33, 389; *B.* 38, 2876 *C.* 1905 [2] 1103). — III, 917; \*III, 681.

- C<sub>16</sub>H<sub>19</sub>O<sub>6</sub>N** 2) Diäthylester d.  $\alpha$ -Phenylamidoformoxylpropen- $\beta\gamma$ -Dicarbonsäure. Sm. 103—104° (A. 363, 350 C. 1909 [1] 154).
- 3) Mono[3-Nitrophenyl]ester d. Camphersäure. Sm. 115° (150°) (Soc. 75, 667; C. 1900 [2] 550). — \*II, 378.
- 4) Verbindung (aus Triacetsäurelaktone). Sm. 193° (Soc. 91, 256 C. 1907 [1] 1204).
- C<sub>16</sub>H<sub>19</sub>O<sub>6</sub>N<sub>5</sub>** C 50,9 — H 5,0 — O 25,5 — N 18,6 — M. G. 377.
- 1) 1,3,5-Trinitrobenzol + 1,3-Di[Dimethylamido]benzol. Sm. 121° (R. 7, 3). — IV, 571.
- C<sub>16</sub>H<sub>19</sub>O<sub>7</sub>N** C 57,0 — H 5,6 — O 33,2 — N 4,2 — M. G. 337.
- 1) 2,6-Diacetat d. 3-Diacetylamido-2,4,6-Trioxy-1-Methylbenzol-4-Methyläther. Sm. 178° (M. 21, 427). — \*II, 621.
- C<sub>16</sub>H<sub>19</sub>O<sub>7</sub>N<sub>5</sub>** C 48,9 — H 4,8 — O 28,5 — N 17,8 — M. G. 393.
- 1) 2,5,6-Trinitro-3-Oxy-4-Isopropyl-1-Methylbenzol + Phenylhydrazin. Sm. 145° u. Zers. (G. 30 [2] 369). — \*IV, 421.
- C<sub>16</sub>H<sub>19</sub>O<sub>8</sub>N<sub>3</sub>** C 50,4 — H 5,0 — O 34,6 — N 11,0 — M. G. 381.
- 1) Verbindung (aus Cyanessigsäuremethylester u. Acetylcyanessigsäuremethylester). Sm. 135° (Bl. [3] 31, 530 C. 1904 [1] 1554).
- C<sub>16</sub>H<sub>19</sub>O<sub>9</sub>N** C 52,0 — H 5,1 — O 39,0 — N 3,8 — M. G. 369.
- 1) Diäthylester d. Mono[3-Nitro-4-Methylbenzoyl]weinsäure. Sm. 104 bis 105° (Soc. 83, 172 C. 1903 [1] 389, 628).
- C<sub>16</sub>H<sub>19</sub>O<sub>10</sub>N** C 49,9 — H 4,9 — O 41,6 — N 3,6 — M. G. 385.
- 1) Äthylester d. 6-Nitro-3,4-Dioxy-1-Diacetoxymethylbenzol-3,4-Dimethyläther-2-Carbonsäure. Sm. 98° (M. 29, 741 C. 1908 [2] 1592).
- 2) Triäthylester d. 5-Nitro-2,6-Dioxybenzol-4-Methylcarbonsäure-1,3-Dicarbonsäure. Sm. 98—99° (Soc. 77, 1201). — \*II, 1215.
- C<sub>16</sub>H<sub>19</sub>O<sub>10</sub>Cl<sub>2</sub>** 1) Tetracetat d. Chloralose. Sm. 145° (Bl. [3] 11, 38). — \*I, 574.
- 2) Tetracetat d. Parachloralose. Sm. 106°; Sd. 250°<sub>25</sub> (Bl. [3] 11, 40). — \*I, 574.
- 3) Tetracetat d.  $\beta$ -Galaktochloal. Sm. 125° (C. 1896 [2] 83).
- C<sub>16</sub>H<sub>19</sub>O<sub>18</sub>N<sub>7</sub>** C 32,2 — H 3,2 — O 48,2 — N 16,4 — M. G. 597.
- 1) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>21</sub>O<sub>11</sub>N<sub>12</sub>S<sub>3</sub>). Na<sub>2</sub> (A. 315, 265).
- C<sub>16</sub>H<sub>19</sub>N<sub>2</sub>Cl** 1) Chlormethylat d.  $\alpha$ -Phenylimido- $\alpha$ -Methylphenylamidoäthan (J. 1865, 416). — II, 347.
- C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>J<sub>2</sub>** 1) Bisjodmethylat d. 3-[3-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 153° (J. pr. [2] 48, 567). — IV, 873.
- C<sub>16</sub>H<sub>19</sub>N<sub>3</sub>S** 1)  $\beta$ -Isopropylphenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 116° (A. 252, 281). — IV, 680.
- 2)  $\alpha$ -Methylphenylamido- $\beta$ -Äthyl- $\beta$ -Phenylthioharnstoff. Sm. 83—84° (B. 27, 867). — IV, 680.
- 3)  $\alpha$ -Phenyl- $\beta$ -[6-Dimethylamido-3-Methylphenyl]thioharnstoff. Sm. 153—154° (B. 28, 3043). — IV, 615.
- 4)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -[2,4-Dimethylphenyl]thioharnstoff. Sm. 170° (B. 32, 1084). — \*IV, 534.
- 5)  $\alpha$ -Amido- $\alpha$ -[4-Methylphenyl]- $\beta$ -[2,4-Dimethylphenyl]thioharnstoff. Sm. 152° (B. 32, 1084; 34, 320). — \*IV, 534.
- 6) Tetramethylindaminsulfid (A. 251, 73; B. 22, 2067; D. R. P. 45839). — II, 801; \*II, 475.
- 7) Tetramethyldiamidothioldiphenylamin (Leukomethylenblau). (2HCl, ZnCl<sub>2</sub>) (A. 230, 147; 251, 79; B. 16, 2728; 17, 102). — II, 807; \*II, 477.
- C<sub>16</sub>H<sub>19</sub>N<sub>4</sub>Cl** 1) 5-Chlormethylat d. 3-Amido-7-Dimethylamido-2-Methyl-5,10-Naphtdiazin. 2 + ZnCl<sub>2</sub> (D. R. P. 69188, 101487). — \*IV, 955.
- 2) Chlormethylat d. Verb. C<sub>16</sub>H<sub>19</sub>N<sub>4</sub>. HCl + 2H<sub>2</sub>O + HgCl<sub>2</sub> (B. 37, 553 C. 1904 [1] 893).
- C<sub>16</sub>H<sub>19</sub>N<sub>5</sub>S** 1) Triamidodiäthylthionin. (2HCl, ZnCl<sub>2</sub> +  $\frac{3}{4}$ CH<sub>4</sub>O) (J. pr. [2] 76, 481 C. 1908 [1] 859).
- C<sub>16</sub>H<sub>19</sub>ClSi** 1) Äthylidibenzylchlorsilikan (C. 1905 [1] 930).
- C<sub>16</sub>H<sub>19</sub>JS** 1) Äthylidibenzylsulfonjodid. + HgJ<sub>2</sub> (Soc. 91, 1399 C. 1907 [2] 1322).
- C<sub>16</sub>H<sub>20</sub>ON<sub>2</sub>** C 75,0 — H 7,8 — O 6,2 — N 10,9 — M. G. 256.
- 1) Di[2-Dimethylamidophenyl]äther. Sm. 119°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 21, 2056; 34, 25). — II, 657.
- 2) Di[4-Amido-3,5-Dimethylphenyl]äther. Sm. 156,5—157° (A. 316, 305).
- 3) Methyläther d. 4-Dimethylamidophenyl-4-Oxybenzylamin. Sm. 104° (A. 241, 343). — IV, 584.



- $C_{16}H_{20}ON_2$
- 4) Äthyläther d. 4'-Amido-4-Oxy-2,2'-Dimethyldiphenylamin. Sm. 95—96°; Sd. 270—275°<sub>50</sub> (A. 287, 207). — \*IV, 403.
  - 5) Äthyläther d. 4-Amido-4'-Oxy-2,3'-Dimethyldiphenylamin. Sm. 99 bis 100° (A. 287, 199). — \*IV, 404.
  - 6) Äthyläther d. 4'-Amido-4-Oxy-2,3'-Dimethyldiphenylamin. Sm. 86°; Sd. 285—295°<sub>70</sub>. H<sub>2</sub>SO<sub>4</sub> (A. 287, 204). — \*IV, 403.
  - 7) Äthyläther d. 4-Amido-5-Oxy-2,4'-Dimethyldiphenylamin. Sm. 108 bis 109° (B. 27, 2707). — \*II, 437.
  - 8) Äthyläther d. 6'-Amido-3'-Oxy-2,4'-Dimethyldiphenylamin. Sm. 78° (A. 287, 190). — \*II, 427.
  - 9) Äthyläther d. 4-Amido-4'-Oxy-3,3'-Dimethyldiphenylamin. Sm. 86° (A. 287, 193). — \*IV, 404.
  - 10) Äthyläther d. 2-Amido-5-Oxy-3,4'-Dimethyldiphenylamin? Sm. 175—177° (A. 287, 209).
  - 11) Äthyläther d. 6'-Amido-3'-Oxy-3,4'-Dimethyldiphenylamin. Sm. 91—91,5° (A. 287, 196). — \*II, 427.
  - 12) Äthyläther d. 6-Amido-3-Oxy-4,4'-Dimethyldiphenylamin. Sm. 76° (A. 287, 201). — \*IV, 427.
  - 13) Äthyläther d. 4,4'-Diamido-5-Oxy-2,2'-Dimethylbiphenyl? 2HCl (B. 27, 2704). — \*II, 540.
  - 14) Äthyläther d. 4,4'-Diamido-5-Oxy-2,3'-Dimethylbiphenyl. Sm. 75° (B. 23, 3264; D.R.P. 42006). — IV, 983; \*IV, 656.
  - 15) Äthyläther d. 4,6'-Diamido-5-Oxy-2,3'-Dimethylbiphenyl? Sd. 237 bis 243°<sub>35</sub> (B. 27, 2713; A. 369, 22 C. 1909 [2] 1854). — \*II, 540.
  - 16) Monophenylhydrazon d. Campherchinon. Sm. 169—170° (170 bis 171°; 187—189°) (A. 274, 87; 281, 347; Soc. 81, 869 C. 1902 [2] 450). — IV, 796; \*IV, 527.
  - 17) Phenylhydrazoncampher. Enolform. Sm. 180°; Ketoform. Sm. 155°; Keto-Enol-Mischform. Sm. 165° (B. 32, 1996; C. 1902 [2] 210; Soc. 81, 1514 C. 1903 [1] 162; Soc. 87, 1298 C. 1905 [2] 327, 1253). — \*IV, 527.
  - 18) Phenylhydrazon d. Oxyketon C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> (aus Campherchinon). Sm. 169 bis 170° (B. 35, 3838 C. 1902 [2] 1462). — \*IV, 527.
  - 19) Äthyläther d. 4-Oxy-2,2'-Dimethyl-s-Diphenylhydrazin. Sm. 80° (B. 36, 3854 C. 1904 [1] 90).
  - 20) Äthyläther d. 4'-Oxy-2,3'-Dimethyl-s-Diphenylhydrazin. Sm. 78° (B. 23, 3260). — IV, 1506.
  - 21) Äthyläther d. 6'-Oxy-2,3'-Dimethyl-s-Diphenylhydrazin. Sm. 138° (B. 23, 3264). — IV, 1506.
  - 22) Äthyläther d. 4-Oxy-3,4'-Dimethyl-s-Diphenylhydrazin. Sm. 87° (B. 23, 3261). — IV, 1506.
  - 23) Äthyläther d. 6-Oxy-3,4'-Dimethyl-s-Diphenylhydrazin. Sm. 55° (153°?) (B. 23, 3265; B. 36, 3856 C. 1904 [1] 90). — IV, 1506.
  - 24) 6-Oxy-4-Phenyl-2-Hexyl-1,3-Diazin. Sm. 167°. Ag (B. 28, 477). — IV, 985.
  - 25) Phenylamid d. α-Camphersäuremononitril. Sm. 197° (Bl. [3] 15, 986).
  - 26) Isoamylidenhydrazid d. α-Phenyl-αγ-Butadien-δ-Carbonsäure. Sm. 158° (A. 367, 27 C. 1909 [2] 526).
  - 27) Verbindung (aus 1,2-Diamidobenzol u. d. Oxyketon C<sub>10</sub>H<sub>14</sub>O<sub>2</sub>). Sm. 122 bis 123° (B. 35, 3839 C. 1902 [2] 1462). — \*IV, 368.  
C 67,6 — H 7,0 — O 5,6 — N 19,7 — M. G. 284.
- $C_{16}H_{20}ON_4$
- 1) β-Acetyl-αα-Di[2-Amidobenzyl]hydrazin. Sm. 153—154° (B. 33, 2708). — \*IV, 779.
  - 2) 5,5'-Diamido-2,4,2',4'-Tetramethylazoxybenzol (D.R.P. 44554). — \*IV, 999.
  - 3) 3,3'-Di[Dimethylamido]azoxybenzol. Sm. 88—89°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2H<sub>2</sub>SO<sub>4</sub>, Bioxalat, Pikrat, Ferrocyanid (B. 30, 2932). — IV, 1338.
  - 4) 4,4'-Di[Dimethylamido]azoxybenzol. Sm. 243° (239°). (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (B. 8, 619; 21, 2611; 27, 607, 608; 29, 1481; 31, 295; 32, 2154, 2343; Bl. [3] 13, 1069; B. 35, 905 C. 1902 [1] 856; J. pr. [2] 76, 300 C. 1908 [1] 36). — IV, 1338; \*IV, 997.
  - 5) Methylhydroxyd d. 3-Amido-7-Dimethylamido-2-Methyl-5,10-Naphtdiazin. Nitrat (A. 327, 123 C. 1903 [1] 1221). — \*IV, 403.

- C<sub>15</sub>H<sub>20</sub>ON<sub>4</sub>** 6) Phenylamid d. 5-Methyl-2,4-Diäthyl-1,3-Diazin-6-Amidoameisen-säure (Carbanilidokyanäthin). Sm. 184° (*J. pr.* [2] 30, 118). — IV, 1133.
- 7) 4-Dimethylamidophenylamid d.  $\alpha$ -Phenylhydrazidoessigsäure. Sm. 134—135° (*B.* 30, 1101; *A.* 301, 76). — \*IV, 476.
- 8) Methylhydroxyd d. Verb. C<sub>15</sub>H<sub>16</sub>N<sub>4</sub>. Chlorid, Nitrat (*B.* 37, 553 *C.* 1904 [1] 893).
- C<sub>16</sub>H<sub>20</sub>OCl<sub>12</sub>** 1) Cetylchloral. Fl. Hydrat, Äthylalkoholat (*J. pr.* [2] 43, 150). — I, 957.
- C<sub>16</sub>H<sub>20</sub>OSi** 1) Äthylidibenzylsiliciumhydroxyd. Sd. 207—212°<sub>25</sub> (*Soc.* 93, 449 *C.* 1908 [1] 1687).
- C<sub>16</sub>H<sub>20</sub>O<sub>2</sub>N<sub>2</sub>** C 70,6 — H 7,3 — O 11,8 — N 10,3 — M. G. 272.
- 1) Dioxydimethylanilin. Sm. 90,4° (*B.* 12, 681; 19, 1573). — II, 657.
- 2)  $\beta\gamma$ -Dioxy- $\beta\gamma$ -Di[2-Amidophenyl]butan. Sm. 169—170° (*B.* 30, 1131). — \*II, 674.
- 3)  $\alpha\delta$ -Di[Phenylamido]- $\beta\gamma$ -Dioxybutan. 2HCl (*B.* 17, 1095). — II, 427.
- 4) Dimethyläther d.  $\alpha\beta$ -Diamido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 151°. 2HCl, 2Pikrat + H<sub>2</sub>O (*J. pr.* [2] 77, 131 *C.* 1908 [1] 962).
- 5) Dimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Amidophenyl]äthan. Sm. 203 bis 204° (*A.* 325, 48 *Ann. C.* 1903 [1] 462).
- 6) Dimethyläther d. 4,4'-Diamido-5,5'-Dioxy-2,2'-Dimethylbiphenyl. Sm. 156—157° (*B.* 24, 1965). — IV, 982.
- 7) Diäthyläther d. 4,4'-Diamido-3,3'-Dioxybiphenyl. Sm. 117°. 2HCl, (2HCl, 2SnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (*J. pr.* [2] 19, 383). — II, 990; \*II, 602.
- 8) Diäthyläther d. 4-Amido-3,4'-Dioxydiphenylamin. Sm. 84,5°. HCl (*A.* 287, 216). — \*II, 414.
- 9) Äthylenäther d. 4-Amido-2-Oxy-1-Methylbenzol. Sm. 129° (*B.* 39, 3251 *C.* 1906 [2] 1413).
- 10) 1,4-Di[ $\gamma$ -Keto- $\alpha$ -Methylbutylidenamido]benzol (p-Phenylendiimido-methylpropylketon). Sm. 175° (*A.* 274, 367). — IV, 598.
- 11) 3-[3-Acetylamidophenyl]amido-5-Oxy-1,1-Dimethyl-1,2-Dihydrobenzol. Sm. 210,5—211,5° (*Soc.* 89, 390 *C.* 1906 [1] 1698).
- 12) 3-[4-Acetylamidophenyl]amido-5-Oxy-1,1-Dimethyl-1,2-Dihydrobenzol. Sm. 255—256° (*Soc.* 89, 395 *C.* 1906 [1] 1698).
- 13) Phenylnitrosamidocampher. Sm. 81—83° (*Soc.* 95, 950 *C.* 1909 [1] 360).
- 14) Diäthyläther d. s-Di[2-Oxyphenyl]hydrazin. Sm. 89° (*J. pr.* [2] 18, 203). — IV, 1505.
- 15) Diäthyläther d. s-Di[3-Oxyphenyl]hydrazin. Sm. 85° (*J. pr.* [2] 29, 300). — IV, 1505.
- 16) Diäthyläther d. s-Di[4-Oxyphenyl]hydrazin. Sm. 118—119° (*Ar.* 229, 351). — \*IV, 1094.
- 17)  $\gamma\delta$ -Dioxy- $\gamma\delta$ -Di[2-Pyridyl]hexan. Sm. 135—136°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (*B.* 24, 2532). — IV, 985.
- 18)  $\gamma$ -Phtalylamido- $\alpha$ -Piperidylpropan. Sm. 50°. Pikrat (*B.* 42, 2051 *C.* 1909 [2] 452).
- 19) 4,6-Diketo-5,5-Diäthyl-2-[ $\beta$ -Phenyläthenyl]hexahydro-1,3-Diazin. Sm. 241° (*Soc.* 91, 270 *C.* 1907 [1] 1270).
- 20) Phenylhydrazonketopinsäure. Sm. 146° (*Soc.* 69, 1401).
- 21) Phenylamidoimid d. Camphersäure. Sm. 118—119° (*B.* 25, 2566; 25 [2] 665; *Bl.* [3] 9, 27). — IV, 709.
- C<sub>16</sub>H<sub>20</sub>O<sub>2</sub>N<sub>6</sub>** C 58,5 — H 6,1 — O 9,7 — N 25,6 — M. G. 328.
- 1)  $\alpha\beta$ -Di[Ureidophenylamido]äthan (Äthylenbisphenylsemicarbazid). Sm. 237,5° (*A.* 310, 158). — \*IV, 432.
- C<sub>16</sub>H<sub>20</sub>O<sub>2</sub>Sn** 1) Diäthyläther d. Zinnidiphenyldihydroxyd. Sm. 124° u. Zers. (*A.* 194, 172). — IV, 1714.
- C<sub>16</sub>H<sub>20</sub>O<sub>3</sub>N<sub>2</sub>** C 66,7 — H 6,9 — O 16,7 — N 9,7 — M. G. 288.
- 1) 4-Diacetylamido-6-Isopropyl-1,3-Dimethylbenzoxazol. Sm. 92—94° (*G.* 20, 421). — II, 774.
- 2) 4-Diacetylamido-3-Isopropyl-1,6-Dimethylbenzoxazol. Sm. 123 bis 125° (*G.* 21 [2] 156). — II, 768.
- 3) Phenylhydrazid d. Camphansäure. Sm. 193° (*B.* 26, 1531). — IV, 715.
- 4) Verbindung (aus 4,4'-Di[Dimethylamido]diphenylmethan). Sm. 238 bis 239° (*B.* 40, 1448 *C.* 1907 [1] 1416).

- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>N<sub>2</sub>** C 63,2 — H 6,6 — O 21,0 — N 9,2 — M. G. 304.
- 1) 1,4-Di[Diacetylamidomethyl]benzol. Sm. 194° (B. 28, 2993). — IV, 644.
  - 2) Tetramethyläther d. p-Diamido-1,4,1',4'-Tetraoxybiphenyl. Sm. 210°. 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 17, 2126). — II, 1037.
  - 3) Tetramethyläther d. s-Di[2,5-Dioxyphenyl]hydrazin (B. 17, 2126). — IV, 1506.
  - 4) Cantharidinphenylhydrazonhydrat. Sm. 194° (B. 25, 1469, 2960; M. 18, 402). — III, 623.
  - 5) Phenylhydrazon d. Pinoylameisensäure. Sm. 192,5° u. Zers. (B. 29, 1915). — IV, 715.
  - 6) Diäthylester d. β-Cyan-β-Phenylamidopropan-αγ-Dicarbonsäure. Sm. 29° (B. 35, 2081 C. 1902 [2] 207).
  - 7) αβ-Äthylimid d. β-Phenylamidopropan-αβγ-Tricarbonsäure-γ-Äthylester. Sm. 68° (B. 35, 2082 C. 1902 [2] 207).
  - 8) Phenylhydrazid d. Cantharidinsäure. Sm. 100° (B. 25, 2960; M. 18, 402; 21, 978). — III, 623; \*III, 461.
- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>N<sub>4</sub>** C 57,8 — H 6,0 — O 19,3 — N 16,9 — M. G. 332.
- 1) 1,3-Dinitrobenzol + 1,3-Di[Dimethylamido]benzol. Sm. 58° (R. 7, 3). — IV, 571.
  - 2) Amid d. Antipyrilurethanessigsäure. Sm. 181° (Bl. [3] 35, 126 C. 1906 [1] 1016).
- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>Br<sub>2</sub>** 1) 1,2-Phenyleneester d. α-Bromisovaleriansäure. Sd. 220—225°<sub>20</sub> (B. 40, 2787 C. 1907 [2] 533).
- 2) 1,3-Phenyleneester d. α-Bromisovaleriansäure. Sd. 222—228°<sub>15</sub> (B. 40, 2797 C. 1907 [2] 534).
  - 3) 1,4-Phenyleneester d. α-Bromisovaleriansäure. Sm. 53° (B. 40, 2800 C. 1907 [2] 534).
- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>S** 1) Benzolsulfonat d. Oxycampher (aus Campherchinon). Sm. 95—96° (B. 30, 669). — \*III, 362.
- 2) Benzolsulfonat d. isom. Oxycampher (aus Oxycampheräthyläther). Sm. 111—113° (B. 35, 3818 C. 1902 [2] 1459).
  - 3) Phenylester d. Camphersulfonsäure. Fl. (Bl. [3] 19, 125).
- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>Se** 1) Diäthyläther d. Di[p-Oxyphenyl]selendihydroxyd. Sm. 145° (B. 28, 612). — \*II, 576.
- C<sub>16</sub>H<sub>20</sub>O<sub>4</sub>Te** 1) Diäthyläther d. Di[p-Oxyphenyl]telluridihydroxyd. Chlorid, Bromid, Nitrat (B. 30, 2831). — \*II, 577.
- C<sub>16</sub>H<sub>20</sub>O<sub>5</sub>N<sub>2</sub>** C 60,0 — H 6,2 — O 25,0 — N 8,8 — M. G. 320.
- 1) 2-Naphtylhydrazon d. d-Galaktose. Sm. 189—190° (B. 35, 1842 C. 1902 [2] 109; B. 35, 3083 C. 1902 [2] 1099; B. 35, 4446 C. 1903 [1] 392). — \*IV, 616.
  - 2) isom. 2-Naphtylhydrazon d. d-Galaktose. Sm. 167° (B. 35, 3083 C. 1902 [2] 1099). — \*IV, 616.
  - 3) 2-Naphtylhydrazon d. d-Glykose. Sm. 178—179° (B. 35, 1842 C. 1902 [2] 109; B. 35, 4446 C. 1903 [1] 392). — \*IV, 616.
  - 4) isom. 2-Naphtylhydrazon d. d-Glykose. Sm. 95° (95,5°) (B. 35, 3084 C. 1902 [2] 1099; B. 37, 3854 C. 1904 [2] 1711).
  - 5) isom. 2-Naphtylhydrazon d. d-Glykose. Sm. 125° (B. 35, 3084 C. 1902 [2] 1099).
  - 6) isom. 2-Naphtylhydrazon d. d-Glykose. Sm. 158—159° (B. 35, 3084 C. 1902 [2] 1099).
  - 7) 2-Naphtylhydrazon d. Lävulose. Sm. 161—162° (B. 35, 4445 C. 1903 [1] 392). — \*IV, 616.
  - 8) 2-Naphtylhydrazon d. d-Mannose. Sm. 186—187° u. Zers. (B. 36, 3202 C. 1903 [2] 1055).
  - 9) αβ-Imid d. β-[4-Äthoxyphenyl]amidopropan-αβγ-Tricarbonsäure-γ-Äthylester. Sm. 133—134° (B. 38, 3187 C. 1905 [2] 1322).
- C<sub>16</sub>H<sub>20</sub>O<sub>5</sub>Br<sub>2</sub>** 1) Diäthylester d. α-[3,6-Dibrom-4-Oxy-2,5-Dimethylphenyl]äthan-ββ-Dicarbonsäure. Sm. 92—93° (B. 34, 4289 C. 1902 [1] 310). — \*II, 1128.
- C<sub>16</sub>H<sub>20</sub>O<sub>6</sub>N<sub>2</sub>** C 57,1 — H 5,9 — O 28,6 — N 8,3 — M. G. 336.
- 1) Dilaktam d. δε-Diimidooktan-γγζζ-Tetracarbonsäure-γζ-Diäthylester. Sm. 156° (A. 332, 127 C. 1904 [2] 189).



- $C_{16}H_{20}O_6N_2$  2) Diäthylester d. 1,4-Phenylendimalonaminsäure. Sm. 164° (A. 347, 28 C. 1906 [2] 506).
- 3) Diäthylester d. 4,6-Di[Acetylamido]benzol-1,3-Dicarbonsäure. Sm. 230,4°. 2HCl (C. 1909 [2] 1234).
- 4) Diäthylester d. 2,5-Di[Acetylamido]benzol-1,4-Dicarbonsäure. Sm. 219° (C. 1907 [2] 543).
- 5) Diäthylester d. 6-Oxy-2-Keto-4-Phenylhexahydro-1,3-Diazin-5,6-Dicarbonsäure (D. d. Benzuramidoäpfelsäure). Sm. 183° (G. 23 [1] 396). — II, 1954.
- $C_{16}H_{20}O_6N_6$  C 49,0 — H 5,1 — O 24,5 — N 21,4 — M. G. 392.
- 1) Phtalyldikreatin. Sm. 212° (C. 1907 [1] 462).
- $C_{16}H_{20}O_8N$  1) Verbindung (aus Acetessigsäureäthylester, Glykose u.  $NH_3$ ) =  $(C_{16}H_{20}O_8N)_x$ . Sm. 189—190° (G. 19, 217). — I, 593.
- $C_{16}H_{20}O_8N_2$  C 52,2 — H 5,4 — O 34,7 — N 7,6 — M. G. 368.
- 1) Diäthylester d. Diacetyldiamidodihydrochinondicarbonsäure. Sm. 236° (B. 21, 1764). — II, 2004.
- 2) Tetraäthylester d.  $\alpha\beta$ -Dicyanäthan- $\alpha\alpha\beta\beta$ -Tetracarbonsäure +  $1\frac{1}{2}H_2O$ . Sm. 56—57° (C. 1905 [1] 1141).
- $C_{16}H_{20}O_8N_8$  C 42,5 — H 4,4 — O 28,3 — N 24,8 — M. G. 452.
- 1) Vernin +  $3H_2O$ .  $Ag_2$  (H. 9, 420; 10, 80, 326; J. pr. [2] 32, 433; B. 29, 2653). — III, 951; \*III, 699.
- $C_{16}H_{20}O_8S_2$  1) Tetraäthylester d. 3,4-Dithiocarbonyl-R-Tetramethylen-1,1,2,2-Tetracarbonsäure. Sm. 179—180° (B. 21, 349; 34, 1045). — I, 900.
- $C_{16}H_{20}O_8S_3$  1) Tetraäthylester d. 2,5-Dithiocarbonyltetrahydrothiophen-3,3,4,4-Tetracarbonsäure. Sm. 139° (B. 33, 2042; 34, 1043).
- $C_{16}H_{20}O_9N_6$  C 43,6 — H 4,5 — O 32,7 — N 19,1 — M. G. 440.
- 1) Verbindung (aus Malonyldiäthylharnstoff). Sm. 180° u. Zers. (B. 30, 1820). — \*I, 767.
- $C_{16}H_{20}O_{15}N_2$  C 40,0 — H 4,2 — O 50,0 — N 5,8 — M. G. 480.
- 1) Dimalodiaspartsäure.  $Pb + (PbOH)_8$  (A. 307, 242).
- $C_{16}H_{20}NCl$  1) Dimethyldibenzylammoniumchlorid. 2 +  $PtCl_4$ , +  $AuCl_3$  (Am. 9, 80; Ar. 247, 355 C. 1909 [2] 1440; Ar. 247, 362 C. 1909 [2] 1440; Ar. 247, 382 C. 1909 [2] 1441). — II, 520.
- 2) 2-[ $\alpha$ -Chloräthyl]-1,3,5-Trimethylbenzol + Pyridin. Sm. 107—108°. +  $HgCl_2$ , 2 +  $PtCl_4$ , +  $AuCl_3$ , +  $CdJ_2$  (B. 36, 1642 C. 1903 [2] 27). — \*IV, 90.
- $C_{16}H_{20}NBr$  1) 1-Methyläthylphenylbenzylammoniumbromid. Sm. 155—156° (Soc. 85, 231 C. 1904 [1] 938).
- 2) i-Methyläthylphenylbenzylammoniumbromid. Sm. 155—156° (158 bis 159°) (Soc. 85, 231 C. 1904 [1] 938; B. 39, 4439 C. 1907 [1] 335).
- $C_{16}H_{20}NJ$  1) Dimethyldibenzylammoniumjodid. Sm. 186—187,5° (191°) (Soc. 83, 1413 C. 1904 [1] 438; Ar. 247, 355 C. 1909 [2] 1440).
- 2) d-Methyläthylphenylbenzylammoniumjodid. Sm. 146—147° (Soc. 83, 1419 C. 1904 [1] 439; Soc. 85, 227 C. 1904 [1] 652, 938; B. 39, 4438 C. 1907 [1] 335).
- 3) l-Methyläthylphenylbenzylammoniumjodid. Sm. 146—147° (149 bis 150°) (Soc. 85, 228 C. 1904 [1] 652, 938; C. 1908 [1] 1384).
- 4) i-Methyläthylphenylbenzylammoniumjodid. Sm. 145—146° (140,5°) (Soc. 83, 1419 C. 1904 [1] 439; Soc. 85, 224 C. 1904 [1] 652, 938; A. 334, 238 C. 1904 [2] 900; B. 42, 1563 C. 1909 [1] 1989).
- $C_{16}H_{20}N_2Cl_2$  1) Diphenochinon-NN'-Tetramethyldiimoniumchlorid. 2 +  $PtCl_4$  +  $2H_2O$  (B. 37, 3769 C. 1904 [2] 1547).
- $C_{16}H_{20}N_2Br_2$  1) 4,4'-Di[Dimethylamido]biphenyldibromid. Sm. 90° u. Zers. + Br<sub>2</sub> (A. 346, 215 C. 1906 [1] 1882).
- $C_{16}H_{20}N_2Br_6$  1) Perbromid d. Biphenochinontetramethyldiimoniumdibromid. Sm. 158° u. Zers. (A. 346, 196 C. 1906 [1] 1880).
- $C_{16}H_{20}N_2J_2$  1) Diphenochinon-NN'-Tetramethyldiimoniumjodid. + J<sub>2</sub> (B. 37, 3769 C. 1904 [2] 1547).
- $C_{16}H_{20}N_2S$  1) Di[2-Dimethylamidophenyl]sulfid. Sm. 125° (123,5°). 2HCl, (2HCl,  $PtCl_4$ ), Rhodanid, Pikrat (B. 17, 586; 20, 1641; 23, 554; A. 274, 214; 310, 150). — II, 804; \*II, 476.
- 2) Di[4-Dimethylamidophenyl]sulfid. Sm. 178°. 2HCl (C. 1898 [1] 1029). — \*II, 476.

- $C_{16}H_{20}N_2S_2$  1) Di[4-Dimethylamidophenyl]disulfid. Sm. 118°. 2 +  $PtCl_4$  (B. 10, 403; 19, 1571; J. pr. [2] 41, 208). — II, 816.
- $C_{16}H_{20}N_2As_2$  1) Di[4-Dimethylamidophenyl]diarsenid. Sm. 202° (A. 270, 144). — IV, 1686.
- $C_{16}H_{20}N_2Hg$  1) Quecksilberdi[4-Äthylamidophenyl]. Sm. 166° (G. 23 [2] 547). — IV, 1706.
- 2) Quecksilberdi[4-Dimethylamidophenyl]. Sm. 169° (B. 21, 1501; A. 260, 7; G. 23 [2] 522; 24 [2] 462). — IV, 1706.
- $C_{16}H_{20}N_2Se$  1) Di[4-Dimethylamidophenyl]selenid. Sm. 124°.  $H_2SO_4$ , Pikrat (B. 24, 765). — II, 819.
- $C_{16}H_{20}N_4S$  1) Verbindung (aus Methylengrün). Sm. 143—145° (J. pr. [2] 73, 19 C. 1906 [1] 840).
- $C_{16}H_{20}ClP$  1) Diäthylidiphenylphosphoniumchlorid. 2 +  $PtCl_4$  (A. 207, 215). — IV, 1658.
- 2) Methyläthylphenyl-4-Methylphenylphosphoniumchlorid. 2 +  $PtCl_4$  (A. 315, 61). — \*IV, 1180.
- 3) Dimethylbenzyl-4-Methylphenylphosphoniumchlorid. 2 +  $PtCl_4$  (B. 15, 2016). — IV, 1672.
- $C_{16}H_{20}ClAs$  1) Diäthylidiphenylarsoniumchlorid. 2 +  $PtCl_4$  (A. 201, 236). — IV, 1688.
- 2) Methyläthylphenyl-4-Methylphenylarsoniumchlorid. 2 +  $PtCl_4$  (A. 321, 159 C. 1902 [2] 43). — \*IV, 1194.
- $C_{16}H_{20}JP$  1) Diäthylidiphenylphosphoniumjodid. Sm. 204° (A. 207, 214). — IV, 1658.
- 2) Methyläthylphenyl-4-Methylphenylphosphoniumjodid. Sm. 138° (A. 315, 61). — \*IV, 1180.
- $C_{16}H_{20}JAs$  1) Diäthylidiphenylarsoniumjodid. Sm. 184° (A. 201, 236). — IV, 1688.
- 2) Methyläthylphenyl-4-Methylphenylarsoniumjodid. Sm. 150—151° (145°) (A. 321, 158 C. 1902 [2] 43). — \*IV, 1194.
- $C_{16}H_{21}ON$  1) d-Methyläthylphenylbenzylammoniumhydroxyd. d-Camphersulfonat, d-Bromcamphersulfonat (Soc. 83, 1419 C. 1904 [1] 439; Soc. 85, 226 C. 1904 [1] 652, 938; Soc. 89, 286 C. 1906 [1] 1542; B. 39, 4439 C. 1907 [1] 335).
- 2) l-Methyläthylphenylbenzylammoniumhydroxyd. l-Camphersulfonat (Soc. 85, 226 C. 1904 [1] 652, 938; C. 1908 [1] 1384).
- 3) i-Methyläthylphenylbenzylammoniumhydroxyd. Methylsulfat (B. 42, 1565 C. 1909 [1] 1989).
- 4)  $\alpha$ -Methylphenylamido- $\gamma$ -Keto- $\eta$ -Methyl- $\alpha$ -Oktadien. Sd. 214—217°<sub>17</sub> (C. 1899 [1] 683). — \*II, 237.
- 5) 5-Keto-6-Phenylamidomethylen-1,1,3-Trimethylhexahydrobenzol (C. 1901 [1] 1024).
- 6) l-Oximido-5-Methyl-3-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 124° (A. 303, 243). — \*III, 140.
- 7) 9-Acetylamidooktohydroanthracen. Sm. 183° (C. r. 141, 1029 C. 1906 [1] 367).
- 8) Benzoylisophorylamin. Sm. 122° (A. 297, 192). — \*IV, 57.
- 9) Phenylamidocampher. Sm. 80° (Soc. 95, 950 C. 1909 [2] 360).
- 10) l-Acetyl-3,5-Diisopropylindol. Sm. 185—186° (B. 21, 3436). — IV, 234.
- 11) l-Benzoyldekahydrochinolin. Sm. 96°; Sd. 352—354°<sub>714</sub> (B. 23, 1150; 27, 1469). — IV, 56.
- 12) Methyläther d. 5-Oxy-5,10-Diphenyl-5,10-Dihydroakridin. Sm. 184° (B. 40, 2521 C. 1907 [2] 254).
- 13) 4-Acetyl-3-Methyl-1,2,3,4,7,8,9,10-Oktahydro- $\beta$ -Naphtochinolin. Sm. 92° (B. 24, 2664). — IV, 234.
- 14) Nitril d.  $\beta$ -Oxy- $\alpha$ -Okten-2-Methylphenyläther- $\alpha$ -Carbonsäure. Sd. 195—196°<sub>15</sub> (C. r. 142, 451 C. 1906 [1] 1095; Bl. [3] 35, 532 C. 1906 [2] 760).
- 15) Phenylamid d. 1,1,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 157—157,5° (D.R.P. 175 587 C. 1906 [2] 1695).
- 16) Phenylamid d. 1,1,5-Trimethyl-1,2,3,4-Tetrahydrobenzol-6-Carbonsäure. Sm. 162° (B. 41, 2066 C. 1908 [2] 321).
- 17) Phenylamid d. 1,3,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 178° (B. 41, 2066 C. 1908 [2] 321).

- C<sub>16</sub>H<sub>21</sub>ON** 18) Phenylamid d. isom. 1,3,3-Trimethyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 143—145° (*B.* 41, 2066 *C.* 1908 [2] 321).
- 19) Phenylamid d. 2,2,6-Trimethyl-1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sm. 157—158° (*B.* 41, 2066 *C.* 1908 [2] 321).
- 20) Phenylamid d. Pulegensäure. Sm. 123° (124°) (*Bl.* [3] 27, 310 *C.* 1902 [1] 1223; *A.* 227, 128 *C.* 1903 [1] 1412).
- 21) 2-Methylphenylamid d. Isolauronolsäure. Sm. 114° (*C.* 1899 [2] 831). — \*II, 252.
- 22) 4-Methylphenylamid d. Isolauronolsäure. Sm. 114° (*C.* 1899 [2] 831). — \*II, 271.
- C<sub>16</sub>H<sub>21</sub>ON<sub>3</sub>** C 70,8 — H 7,7 — O 5,9 — N 15,5 — M. G. 271.
- 1) Semicarbazol d. Muskon. Sm. 133—134° (*C.* 1906 [1] 1498).
- 2) Phenylhydrazon d. Oximidocampher. Sm. 138° (130°) (*A.* 274, 78; *Soc.* 85, 909 *C.* 1904 [2] 597). — IV, 796.
- 3) isom. Phenylhydrazon d. Oximidocampher. Sm. 151° (*Soc.* 95, 956 *C.* 1909 [2] 360).
- 4) isom. Phenylhydrazon d. Oximidocampher. Sm. 195° (*Soc.* 95, 955 *C.* 1909 [2] 361).
- 5) 3-Keto-1,5-Dimethyl-2-Phenyl-4-[1-Hexahydropyridyl]-2,3-Dihydropyrazol. Sm. 144° (145°). HCl, (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (*D. R. P.* 145603 *C.* 1903 [2] 1225; *B.* 38, 4046 *C.* 1906 [1] 469).
- C<sub>16</sub>H<sub>21</sub>OBr<sub>2</sub>** 1) Verbindung (aus 1,1'-Dioxy-3,3,3',3'-Tetramethyl-1,2,3,4,1',2',3',4'-Oktohydrobiphenyl). Sm. 250° u. Zers. (*Soc.* 91, 76 *C.* 1907 [1] 1039).
- C<sub>16</sub>H<sub>21</sub>O<sub>2</sub>N** C 74,1 — H 8,1 — O 12,3 — N 5,4 — M. G. 259.
- 1) 4-Oxyphenylamidocampher. Sm. 171° (*Soc.* 95, 951 *C.* 1909 [2] 360).
- 2) Homohydroapoatropin. Fl. (2HCl, PdCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> + xH<sub>2</sub>O (*G.* 12, 287). — III, 785.
- 3) Phenylacetopöin. Fl. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Pikrat (*B.* 15, 1026; *A.* 217, 98; *Soc.* 95, 1028 *C.* 1909 [2] 544). — III, 787.
- 4) Piperovatin (Pellitorin). Sm. 123° u. Zers. (*Soc.* 67, 98; *C.* 1896 [1] 208). — III, 926.
- 5) Benzoyl-N-Methylgranatolin. Sm. 34°. HCl (*B.* 26, 2742; *B.* 38, 1990 *C.* 1905 [2] 127). — IV, 53.
- 6) isom. Benzoyl-N-Methylgranatolin. HCl (*B.* 38, 1990 *C.* 1905 [2] 127).
- 7) Lakton d. Cyandihydroalantolsäure (Hydroalantolaktonitril). Sm. 132° (*A.* 293, 355). — \*II, 1116.
- 8) Methylester d. α-Cyandi[1,2,3,4-Tetrahydro-5-Phenyl]essigsäure. Sm. 170—171° (*Soc.* 93, 1957 *C.* 1909 [1] 288).
- 9) Äthylester d. α-[1-Piperidyl]-β-Phenylakrylsäure. Sd. 220—221°<sub>11</sub> (*Soc.* 73, 726). — \*IV, 17.
- 10) Äthylester d. β-[1-Piperidyl]-β-Phenylakrylsäure. Sd. 225—228°<sub>23</sub> (*C. r.* 143, 597 *C.* 1907 [1] 25; *Bl.* [3] 35, 1192 *C.* 1907 [1] 562).
- 11) Benzoat d. α-Methyltropin. HCl (*A.* 326, 10 *C.* 1903 [1] 778).
- 12) Benzoat d. Pseudomethyltropin. HCl (*A.* 326, 18 *C.* 1903 [1] 778).
- 13) Phenylamidoformiat d. 2-[α-Oxyäthyl]-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 69° (*A.* 324, 93 *C.* 1902 [2] 1202).
- 14) Phenylamidoformiat d. Camphenilol. Sm. 99,5° (*A.* 366, 74 *C.* 1909 [2] 214).
- 15) Phenylamidoformiat d. α-Nopinol. Sm. 131—132° (*C.* 1907 [2] 983; *A.* 356, 237 *C.* 1907 [2] 1792).
- 16) Phenylamidoformiat d. β-Nopinol. Sm. 95—96° (*C.* 1907 [2] 983; *A.* 356, 237 *C.* 1907 [2] 1792).
- 17) Phenylamidoformiat d. Santenol. Sm. 61—62° (*B.* 40, 4923 *C.* 1908 [1] 462).
- 18) Phenylamidoformiat d. Alkohol C<sub>9</sub>H<sub>16</sub>O (aus Pinen). Sm. 96° (*Soc.* 93, 292 *C.* 1908 [1] 1628).
- 19) Oktylimid d. Benzol-1,2-Dicarbonsäure. Sm. 48—49°; Sd. 216°<sub>20</sub> (*A.* 298, 145). — \*II, 1053.
- 20) Phenylimid d. cis-β-Methylheptan-εζ-Dicarbonsäure. Sm. 116° (*C.* 1899 [2] 255; 1900 [2] 370).
- 21) Phenylimid d. trans-β-Methylheptan-εζ-Dicarbonsäure. Sm. 118° (*C.* 1900 [2] 370).



- $C_{16}H_{21}O_2N$  22) Phenylimid d.  $\beta_6$ -Dimethylhexan- $\gamma\delta$ -Dicarbonsäure. Sm. 95—96° (A. 292, 173). — \*II, 216.
- 23) 4-Methylphenylimid d. Heptan- $\gamma\delta$ -Dicarbonsäure. Sm. 76—82° (A. 292, 209). — \*II, 279.
- $C_{16}H_{21}O_2N_3$  C 66,9 — H 7,3 — O 11,1 — N 14,6 — M. G. 287.
- 1) Limonennitrolnitrosanilin.  $\alpha$ -d-Derivat, Sm. 142° u. Zers.;  $\alpha$ -i-Derivat, Sm. 147° u. Zers.;  $\beta$ -d-Derivat, Sm. 136° u. Zers.;  $\beta$ -i-Derivat, Sm. 129° u. Zers. (A. 270, 183, 185). — III, 525.
  - 2) Diäthyläther d. 2,4-Diamido-3,6-Dioxydiphenylamin. Sm. 77°. 2HCl (B. 24, 3825). — II, 950.
  - 3) Furalcamphorylpseudosemicarbazon. Zers. bei 222° (Soc. 87, 732 C. 1905 [2] 242).
  - 4) Dimethylhydroxyd d. 3-[3-Amidophenyl]-3,4-Dihydro-1,3-Benzdi-azin. Sm. 185° (J. pr. [2] 48, 567). — IV, 873.
  - 5) Äthylester d.  $\alpha$ -Cyan- $\beta$ -[2,4-Di(Dimethylamido)phenyl]akrylsäure. Sm. 110—112° (B. 41, 101 C. 1908 [1] 520).
- $C_{16}H_{21}O_3N$  C 69,8 — H 7,6 — O 17,4 — N 5,1 — M. G. 275.
- 1) Oxytoluyltropoïn (Homoatropin; Phenylglykolytropoïn). Sm. 95,5 bis 98,5°. HCl, (HCl,  $AuCl_3$ ), HBr, Pikrat (B. 13, 107, 1086, 1340; D.R.P. 95853; A. 217, 82). — III, 788; \*III, 606.
  - 2) Mandelsäurepseudotropin (Pseudohomoatropin). (2HCl,  $PtCl_4$ ),  $H_2SO_4$  (B. 25, 931). — III, 795.
  - 3) mal.  $\beta$ -[2-Benzoylamidohexahydrophenyl]propionsäure. Sm. 196°. Ph, Ag (B. 27, 1470). — II, 1128.
  - 4) fum.  $\beta$ -[2-Benzoylamidohexahydrophenyl]propionsäure. Sm. 205°. Ag (B. 27, 1475). — II, 1129.
  - 5) Äthylester d. 2-Benzoylamidohexahydrobenzol-1-Carbonsäure. Sm. 131° (A. 295, 202). — \*II, 748.
  - 6) Äthylester d. 3-Benzoylamidohexahydrobenzol-1-Carbonsäure. Sm. 105—111° (A. 319, 331 C. 1902 [1] 350).
  - 7) Eugenolester d. Hexahydropyridin-1-Carbonsäure. Sm. 93,5—94°; Sd. 239°<sub>18</sub> (Bl. [3] 27, 453 C. 1902 [2] 66). — \*IV, 11.
  - 8) Benzoat d. 1-Oxy-4-Keto-2,2,6,6-Tetramethylhexahydropyridin (Benzoyltriacetonhydroxylamin). Sm. 117° (B. 30, 2737). — \*I, 555.
  - 9) Phenylmonamid d. d-cis-Camphersäure (Campherphenylaminsäure). Sm. 203—204°. Ag (A. 68, 36; 309, 341; C. 1907 [1] 246). — II, 419; \*II, 218.
  - 10) Phenylmonamid d. d-trans-Camphersäure. Sm. 196° (B. 26 [2] 87; C. r. 116, 121). — \*II, 218.
  - 11) Phenylmonamid d. l-Isocamphersäure. Sm. 183—183,5° (A. 309, 342). — \*II, 218.
  - 12) Phenylmonamid d. Pseudocamphersäure. Sm. 208° (Soc. 73, 41). — \*II, 219.
  - 13) Monopiperidid d.  $\beta$ -Phenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 120° (C. 1899 [1] 730; A. 320, 93). — \*IV, 13.
  - 14)  $\alpha$ -Piperidid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Methylester. Sm. 97° (A. 354, 145 C. 1907 [2] 694).
  - 15)  $\beta$ -Piperidid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure- $\alpha$ -Methylester. Sm. 109° (A. 354, 144 C. 1907 [2] 694).
  - 16) Mono-2-Propylpiperidid d. Benzol-1,2-Dicarbonsäure (Conylenphtalamidsäure). Sm. 105°. Cu (A. 227, 200). — IV, 34.
- $C_{16}H_{21}O_3N_3$  C 63,4 — H 6,9 — O 15,8 — N 13,9 — M. G. 303.
- 1) Santoninsemicarbazon. Sm. 232° u. Zers. (G. 31 [2] 310).
- $C_{16}H_{21}O_4N$  C 66,0 — H 7,2 — O 22,0 — N 4,8 — M. G. 291.
- 1) Hydrobenzylursäure (A. 134, 303, 311). — II, 1189.
  - 2) Cineolphenylaminsäure. Fl. Ag (A. 271, 23). — II, 420.
  - 3) Oxycampherphenylaminsäure. Sm. 151° (B. 26, 1530). — II, 420.
  - 4) Äthylester d.  $\gamma$ -Phenylamidoformoxyl- $\delta$ -Methyl- $\alpha$ -Penten- $\delta$ -Carbon-säure. Sm. 66° (Bl. [3] 35, 365 C. 1906 [2] 319).
  - 5) Diäthylester d.  $\beta$ -[2-Methylphenyl]imidopropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 78° (B. 38, 3189 C. 1905 [2] 1323).
  - 6) Diäthylester d.  $\beta$ -[3-Methylphenyl]imidopropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 59° (B. 38, 3189 C. 1905 [2] 1323).

- C<sub>16</sub>H<sub>21</sub>O<sub>4</sub>N** 7) Diäthylester d.  $\beta$ -[4-Methylphenyl]imidopropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 52° (B. 38, 3189 C. 1905 [2] 1323).  
 8) Diäthylester d.  $\alpha$ -[4-Methylphenyl]amidopropen- $\beta\gamma$ -Dicarbonsäure. Sm. 115—116° (A. 363, 359 C. 1909 [1] 154).  
 9) Diäthylester d. 1-Phenyltetrahydropyrrol-2,5-Dicarbonsäure. Sd. 227—228°<sub>30</sub> (Soc. 95, 276 C. 1909 [1] 1485).  
 10) Acetat d. 5-Diacetylamido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 75,5° (B. 28, 1661). — \*II, 460.  
 11) Acetat d. 6-Diacetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 91° (88—90°) (B. 28, 1663; G. 25 [2] 388). — \*II, 466.
- C<sub>16</sub>H<sub>21</sub>O<sub>4</sub>N<sub>3</sub>** C 60,2 — H 6,6 — O 20,0 — N 13,2 — M. G. 319.  
 1) Verbindung (aus d. Verb. C<sub>10</sub>H<sub>15</sub>O<sub>6</sub>N<sub>3</sub> aus Terpinennitrosit). Sm. 145° (B. 38, 2021 C. 1905 [2] 326).
- C<sub>16</sub>H<sub>21</sub>O<sub>5</sub>N** C 62,5 — H 6,8 — O 26,1 — N 4,6 — M. G. 307.  
 1) Hydroxybenzylursäure. Sm. 60—70°. Ca + 3H<sub>2</sub>O (A. 134, 324). — II, 1189.  
 2) Diäthylester d. Benzol-1-Carbonsäure-2-Propionylamidoessigsäure. Sm. 64—66° (B. 35, 1686 C. 1902 [1] 1362).  
 3)  $\gamma$ -Diäthylamid d.  $\beta$ -Phenylpropen- $\alpha\alpha\gamma$ -Tricarbonsäure. Sm. 147° u. Zers. (C. 1899 [1] 730).  
 4) Phenylmonamid d. Homocamphoronsäure. Sm. 98—100° u. Zers. (Soc. 75, 999). — \*II, 222.  
 5) 4-Methylphenylmonamid d.  $\gamma$ -Acetoxylopentan- $\beta\delta$ -Dicarbonsäure. Sm. 129—130° (C. 1898 [2] 886). — \*II, 280.  
 6) 4-Methylphenylmonamid d. isom.  $\gamma$ -Acetoxylopentan- $\beta\delta$ -Dicarbonsäure. Sm. 181,5—182° (C. 1898 [2] 886). — \*II, 280.  
 7) 4-Methylphenylmonamid d.  $\gamma$ -Acetoxy- $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 156—157° (B. 29, 1547). — \*II, 280.
- C<sub>16</sub>H<sub>21</sub>O<sub>5</sub>N<sub>3</sub>** C 57,3 — H 6,3 — O 23,9 — N 12,5 — M. G. 335.  
 1) 2,4-Dinitrophenyläther d. d-Menthonoxim. Sm. 72° (B. 27, 1657). — III, 479.  
 2) 2,4-Dinitrophenyläther d. l-Menthonoxim. Sm. 112° (B. 27, 1657). — III, 479.  
 3) Methylester d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidopropionsäure. Sm. 180—181° (J. pr. [2] 70, 123 C. 1904 [2] 1037).
- C<sub>16</sub>H<sub>21</sub>O<sub>6</sub>N<sub>5</sub>** C 52,9 — H 5,8 — O 22,0 — N 19,3 — M. G. 363.  
 1) Penta[Acetylamido]benzol (B. 21, 1547). — IV, 1317.
- C<sub>16</sub>H<sub>21</sub>O<sub>6</sub>N** C 59,4 — H 6,5 — O 39,7 — N 4,3 — M. G. 323.  
 1) Dihydroacetylhydrocotarninessigsäure. Sm. 176° (B. 38, 2875 C. 1905 [2] 1103).  
 2) Diäthylester d.  $\alpha$ -[2-Nitrophenyl]butan- $\beta\beta$ -Dicarbonsäure (B. 20, 440). — II, 1857.  
 3) Diäthylester d.  $\alpha$ -[4-Nitrophenyl]butan- $\beta\beta$ -Dicarbonsäure. Sm. 52° (B. 20, 440). — II, 1857.  
 4) Triäthylester d. Phenylamidoessigsäure-2,N-Dicarbonsäure. Sm. 48° (50°); Sd. oberhalb 360° (D.R.P. 126962 C. 1902 [1] 83; D.R.P. 127648 C. 1902 [1] 337).  
 5) l-Monacetat d. 4-Diacetylamido-1,3,5-Trioxybenzol-3,5-Diäthyläther. Sm. 81—83° (M. 18, 363). — \*II, 618.  
 6) 3-Monacetat d. 2-Diacetylamido-1,3,5-Trioxybenzol-1,5-Diäthyläther. Sm. 110—112° (M. 18, 361). — \*II, 618.
- C<sub>16</sub>H<sub>21</sub>O<sub>6</sub>N<sub>3</sub>** C 54,7 — H 6,0 — O 27,4 — N 11,9 — M. G. 351.  
 1) 4,6-Dinitro-2-Diacetylamido-5-Pseudobutyl-1,3-Dimethylbenzol. Sm. 154° (B. 33, 2564). — \*II, 320.
- C<sub>16</sub>H<sub>21</sub>O<sub>7</sub>N** C 56,6 — H 6,2 — O 33,0 — N 4,1 — M. G. 339.  
 1) Oxim d. Methylglyko-o-Cumarketon. Sm. 173° (B. 18, 1966). — III, 162.  
 2) Diäthylester d. N-Äthoxycarbonylbenzol-1-Carbonsäure-2-Amidoessigsäure. Sm. 48—50° (B. 35, 1686 C. 1902 [1] 1362).  
 3) Diäthylester d. Tropinondioxalsäure. Sm. 176° u. Zers. (B. 30, 2714). — \*III, 612.
- C<sub>16</sub>H<sub>21</sub>O<sub>8</sub>N** C 54,1 — H 5,9 — O 36,0 — N 3,9 — M. G. 355.  
 1) Oxim d. Glykoferulaaldehyd. Sm. 163° (B. 18, 3484). — III, 107.

- C<sub>16</sub>H<sub>21</sub>O<sub>8</sub>Cl<sub>3</sub>** 1) Tetraäthylester d. 1-Trichlormethyl-R-Trimethylen-2,2,3,3-Tetracarbonsäure. Sm. 48° (*J. pr.* [2] 75, 486 *C.* 1907 [2] 451).  
**C<sub>16</sub>H<sub>21</sub>O<sub>10</sub>N** C 49,6 — H 5,4 — O 41,3 — N 3,6 — M. G. 387.  
 1) Nitril d. d-Pentaacetylgalaktensäure. Sm. 135° (*B.* 30, 3103). — \*I, 819.  
 2) Nitril d. Pentaacetylglykensäure. Sm. 80–81° (*B.* 26, 732). — I, 1482.  
**C<sub>16</sub>H<sub>21</sub>O<sub>10</sub>Br** 1) Pentaacetat d. Inositbromhydrin. Sm. 240° (*Soc.* 91, 1783 *C.* 1908 [1] 268).  
**C<sub>16</sub>H<sub>21</sub>N<sub>2</sub>Cl** 1) Phenylhydrazinverbindung d. Carvolhydrochlorid. Sm. 137° (*B.* 20, 489). — II, 769.  
**C<sub>16</sub>H<sub>21</sub>N<sub>2</sub>Br** 1) 4-Bromphenylhydrazon d. d-Campher. Sm. 101° (*B.* 28, 2191). — IV, 796.  
 2) Verbindung (aus d-Hydrobromcarvoxim). Sm. 119° (*B.* 20, 2072). — III, 525.  
**C<sub>16</sub>H<sub>21</sub>N<sub>5</sub>S** 1) Triamidoleukodiäthylthionin. 2HCl + 5H<sub>2</sub>O, 3HCl + 3CH<sub>4</sub>O (*J. pr.* [2] 76, 480 *C.* 1908 [1] 859).  
**C<sub>16</sub>H<sub>22</sub>ON<sub>2</sub>** C 74,4 — H 8,5 — O 6,2 — N 10,8 — M. G. 258.  
 1) Dipentinnitrolanilin. α-Derivat. Sm. 125–126°; β-Derivat. Sm. 149° (*A.* 252, 126). — III, 529.  
 2) Limonennitrolanilin. α-Derivat. Sm. 112–113°, HCl; β-Derivat. Sm. 153–154°, HCl (*A.* 252, 118; 270, 181, 187). — III, 525.  
 3) d-4-Phenylhydrazon-5-Methyl-2-[α-Oxyisopropyl]-1,2,3,4-Tetrahydrobenzol. Sm. 134–135° (*B.* 39, 681 *C.* 1906 [1] 1019).  
 4) Phenylhydrazon d. Oxycampher (aus Campherchinon). Sm. 137,5° (*B.* 30, 668). — IV, 796.  
 5) Phenylhydrazon d. isom. Oxycampher (aus Oxycampheräthyläther). Sm. 111–113° (*B.* 35, 3817 *C.* 1902 [2] 1459). — \*IV, 527.  
 6) 9-Nitroso-4-Methyl-1-Isopropylhexahydrocarbazol. Sm. 140–141° (*A.* 359, 73 *C.* 1908 [1] 1551).  
 7) Benzoylbenzoacetodinitril? Sm. 250° (*J. pr.* [2] 47, 119). — II, 1216.  
 8) Phenylamid d. Dekahydrochinolin-1-Carbonsäure (α-Phenyl-β-Dekahydrochinolylharnstoff). Sm. 148° (*B.* 23, 1149). — IV, 55.  
 9) Benzylamid d. 2,2,5,5-Tetramethyl-2,5-Dihydropyrrol-3-Carbonsäure. Sm. 71° (*B.* 33, 923). — \*IV, 64.  
**C<sub>16</sub>H<sub>22</sub>O<sub>2</sub>N<sub>2</sub>** C 70,1 — H 8,0 — O 11,7 — N 10,2 — M. G. 274.  
 1) Pinolnitrolanilin. Sm. 174–175°. HCl (*A.* 253, 266). — III, 508.  
 2) p-Dipiperidyl-1,4-Benzochinon. Sm. 178° (*M.* 9, 506). — IV, 23.  
 3) α-Amidophenylacetyl tropein. Fl. 2HBr, Dipikrat (*Soc.* 95, 1026 *C.* 1909 [2] 543).  
 4) Diphenochinon-NN'-Tetramethyldiimoniumhydrat. Salze (*B.* 37, 3768 *C.* 1904 [2] 1547).  
 5) Phenylhydrazoncamphonsäure. Na + H<sub>2</sub>O (*Soc.* 77, 456). — \*IV, 454.  
 6) Phenylhydrazon d. Thujaketonsäure (aus Thujamenthon). Sm. 144 bis 146° (*A.* 323, 361 *C.* 1902 [2] 1206). — \*IV, 460.  
 7) Phenylhydrazon d. Isothujaketonsäure (aus Isothujon). Sm. 144 bis 146° (*A.* 323, 338 *C.* 1902 [2] 1204). — \*IV, 460.  
 8) Phenylhydrazon d. Säure C<sub>10</sub>H<sub>16</sub>O<sub>8</sub> (aus Campherchinon). Sm. 123 bis 124° (*B.* 30, 3159). — IV, 693; \*I, 261.  
 9) Dilaktam d. 6-Amido-2-Methyl-1,2,3,4-Tetrahydrobenzol-5-Carbonsäure. Sm. oberhalb 300° (*J. pr.* [2] 79, 113 *C.* 1909 [1] 855).  
 10) Äthylester d. 2-Phenylhydrazon-1-Methylhexahydrobenzol-1-Carbonsäure. Sm. 82° (*A.* 317, 107).  
 11) β-Piperidyläthylester d. β-[2-Amidophenyl]akrylsäure. Sm. 75°. HCl (*D. R. P.* 187593 *C.* 1907 [2] 1131).  
 12) β-Piperidyläthylester d. β-[3-Amidophenyl]akrylsäure. Sm. 94°. HCl (*D. R. P.* 187593 *C.* 1907 [2] 1131).  
 13) β-Piperidyläthylester d. β-[4-Amidophenyl]akrylsäure. Sm. 126°. HCl (*D. R. P.* 187593 *C.* 1907 [2] 1131).  
 14) 4-Amidophenylamid d. Oktan-α,9-Dicarbonsäure. Sm. 150–151° (*A.* 347, 46 *C.* 1906 [2] 507).  
 15) 1,2-Phenylenamid d. Oktan-α,9-Dicarbonsäure. Sm. 134–135° (*A.* 347, 43 *C.* 1906 [2] 507).



- C<sub>16</sub>H<sub>22</sub>O<sub>2</sub>N<sub>2</sub>** 16) Verbindung (aus 4-Amido-1-Methoxybenzol).  $\alpha$ -Modif. Sm. 122°, HCl;  $\beta$ -Modif. Sm. 170°, HCl (C. 1897 [2] 39).
- C<sub>16</sub>H<sub>22</sub>O<sub>2</sub>S** 1)  $\alpha$ -Phenylsulfondihydrocamphen. Sm. 75° (B. 38, 654 C. 1905 [1] 739).  
2)  $\beta$ -Phenylsulfondihydrocamphen. Sm. 73° (B. 38, 653 C. 1905 [1] 739).  
3) Benzylsulfondihydrosabinen. Fl. (B. 38, 653 C. 1905 [1] 739).  
C 66,2 — H 7,6 — O 16,5 — N 9,7 — M. G. 290.
- C<sub>16</sub>H<sub>22</sub>O<sub>3</sub>N<sub>2</sub>** 1)  $\alpha$ -Oxy- $\beta$ -2-Pyridylpropionyltropein. Fl. 2HCl, 2(HCl, AuCl<sub>3</sub> + 1½H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> (Soc. 95, 1024 C. 1909 [2] 543).  
2)  $\epsilon$ -[ $\gamma$ -Phenoxypropyl]cyanamidopentan- $\alpha$ -Carbonsäure. Sm. 131° (B. 42, 2047 C. 1909 [2] 451).  
3) Methylester d.  $\beta$ -[3-Diäthylamidoacetylamidophenyl]akrylsäure. HCl (A. 311, 167). — \*II, 856.  
4) Methylester d.  $\beta$ -[4-Diäthylamidoacetylamidophenyl]akrylsäure. Fl. HCl (A. 311, 168). — \*II, 856.  
5) Äthylester d.  $\alpha$ -1-Nitroso-2-Methylcamphenpyrrol-3-Carbonsäure. Sm. 126—127° (A. 313, 49). — \*IV, 154.  
6) 4-Amidophenylmonamid d. Camphersäure (Soc. 91, 1897 C. 1908 [1] 256).
- C<sub>16</sub>H<sub>22</sub>O<sub>3</sub>N<sub>3</sub>** 1) Verbindung (aus Dimethylamidobenzol) (B. 13, 2141). — II, 329.  
**C<sub>16</sub>H<sub>22</sub>O<sub>3</sub>N<sub>4</sub>** C 60,4 — H 6,9 — O 15,1 — N 17,6 — M. G. 318.  
1) Furylidencamphorylsemicarbazidoxim. Sm. 225° u. Zers. (Soc. 91, 873 C. 1907 [2] 250).  
2) Isopropylidenhydrazid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 145° (J. pr. [2] 70, 209 C. 1904 [2] 1460).
- C<sub>16</sub>H<sub>22</sub>O<sub>3</sub>Si** 1) Triäthyläther d. 1-Naphtylsiliciumtrihydroxyd. Sd. 308—320°, 744 u. Zers. (B. 41, 2951 C. 1908 [2] 1348; B. 41, 3395 C. 1908 [2] 719; B. 42, 3089 C. 1909 [2] 1249).  
2) Triäthyläther d. 2-Naphtylsiliciumtrihydroxyd. Sd. 270—273° (B. 41, 2952 C. 1908 [2] 1348).  
C 62,7 — H 7,2 — O 20,9 — N 9,1 — M. G. 306.
- C<sub>16</sub>H<sub>22</sub>O<sub>4</sub>N<sub>2</sub>** 1) Acetat d. 3,5-Di[Äthylacetylamido]-1-Oxybenzol. Sm. 80—85° (92 bis 95°) (M. 14, 407). — II, 724.  
2) 2,6-Triacetyldiamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 238 bis 240° (G. 20, 425). — II, 773.  
3) Diäthylester d.  $\gamma$ -Phenylhydrazonbutan- $\alpha\beta$ -Dicarbonsäure. Sm. 84 bis 85° (80°) (Soc. 71, 331; B. 17, 2051). — IV, 714.  
4) Diäthylester d.  $\alpha$ -Phenylhydrazon- $\beta$ -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 90—91° (B. 31, 199). — \*IV, 466.  
5) Phenylmonohydrazid d. Cineolsäure. Sm. 110° (A. 271, 24). — IV, 715.  
C 57,5 — H 6,6 — O 19,1 — N 16,8 — M. G. 334.
- C<sub>16</sub>H<sub>22</sub>O<sub>4</sub>N<sub>4</sub>** 1) 2,4-Dinitrophenyldipiperidyl. Sm. 72—76°. (2HCl, PtCl<sub>4</sub>) (B. 24, 2107). — IV, 492.
- C<sub>16</sub>H<sub>22</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Diisoamyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinon. Sm. 53° (Am. 18, 9). — III, 351.
- C<sub>16</sub>H<sub>22</sub>O<sub>4</sub>S** 1) 2-[2,5-Dioxyphenyl]sulfoncamphan. Sm. 186—187° (B. 39, 2349 C. 1906 [2] 519).
- C<sub>16</sub>H<sub>22</sub>O<sub>5</sub>N<sub>2</sub>** C 59,6 — H 6,8 — O 24,8 — N 8,7 — M. G. 322.  
1) Propyl-3,5-Dinitro-6-Pseudobutyl-2,4-Dimethylphenylketon. Sm. 128° (B. 31, 1349). — \*III, 127.  
2) Phenylhydrazin + Formylglutakonsäureäthylester. Sm. 70° (A. 356, 36 C. 1907 [2] 1612).  
3) Diäthylester d.  $\beta$ -Oxy- $\alpha$ -Phenylhydrazonäthanäthyläther- $\alpha\beta$ -Dicarbonsäure. Sm. 52—54° (B. 24, 4211). — IV, 722.  
4)  $\beta$ -Amid d.  $\beta$ -Phenylamidopropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\alpha\gamma$ -Diäthylester. Sm. 126° (B. 35, 2082 C. 1902 [2] 207).  
C 56,8 — H 6,5 — O 28,4 — N 8,3 — M. G. 338.
- C<sub>16</sub>H<sub>22</sub>O<sub>6</sub>N<sub>2</sub>** 1) Biliprasin (A. 132, 339). — III, 664.  
2) Diäthylester d. 2,5-Di[Acetylrimido]hexahydrobenzol-1,4-Dicarbonsäure. Sm. 215—216° (C. 1907 [2] 544).
- C<sub>16</sub>H<sub>22</sub>O<sub>6</sub>N<sub>4</sub>** C 52,5 — H 6,0 — O 26,2 — N 15,3 — M. G. 366.  
1) Tetrapeptid (aus Glykokoll, Alanin u. Tyrosin) (B. 40, 3550 C. 1907 [2] 1636).

- $C_{16}H_{22}O_6N_4$  2)  $\alpha$ -[ $\alpha$ -Amidoacetyl-amido- $\beta$ -(4-Oxyphenyl)propionylamidoacetyl]-amidopropionsäure. Zers. bei 225° (*B.* 41, 2869 *C.* 1908 [2] 1251).
- 3)  $\alpha$ -[ $\alpha$ -Amidoacetylamidopropionylamidoacetyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure. Zers. bei 229° (*B.* 41, 858 *C.* 1908 [1] 1456).
- 4) Diäthylester d. 2,2'-Diketo-6,6'-Dimethyl-1,2,3,4,1',2',3',4'-Oktohydro-4,4'-Bi-1,3-Diazin-5,5'-Dicarbonsäure. Sm. 139° (*G.* 23 [1] 393). — \*I, 736.
- $C_{16}H_{22}O_7N_4$  C 50,3 — H 5,7 — O 29,3 — N 14,7 — M. G. 382.
- $C_{16}H_{22}O_8N_2$  1) Verbindung (aus Isopuron). Sm. 159° u. Zers. (*B.* 34, 274). — \*IV, 911.  
C 51,9 — H 5,9 — O 34,6 — N 7,6 — M. G. 370.
- 1) Dimethylester d. Bisnitroso-Methyl- $\beta$ -Keto-R-Pentamethylen-carbonsäure. Sm. 94° u. Zers. (*B.* 33, 604).
- 2) Diäthylester d. Bisnitroso- $\beta$ -Ketopentamethylen-carbonsäure. Zers. bei 114° (*B.* 33, 591).
- $C_{16}H_{22}O_8N_4$  C 48,2 — H 5,5 — O 32,2 — N 14,1 — M. G. 398.
- 1) Tetraäthylalloxanthin. Sm. 162° u. Zers. (*B.* 30, 1821). — \*I, 787.
- $C_{16}H_{22}O_8Cl_2$  1) P-Dichlor-6-Isopropyl-3-Methylphenylglykuronsäure. Sm. 125–126° (118°). Ba (*H.* 16, 515; *B.* 31, 2583). — II, 771; \*II, 464.
- $C_{16}H_{22}O_8S_2$  1) Diäthylester d. 1,3-Phenylendi[ $\alpha$ -Sulfonpropionsäure]. Fl. (*J. pr.* [2] 68, 328 *C.* 1903 [2] 1171).
- 2) Tetraäthylester d.  $\beta\gamma$ -Dithiocarbonylbutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Sm. 103° (*B.* 34, 1048).
- $C_{16}H_{22}O_9N_2$  C 49,8 — H 5,7 — O 37,3 — N 7,2 — M. G. 386.
- 1) Nitril d. d-Pentaacetyl-glykosaminsäure. Sm. 118–119° (*B.* 35, 4017 *C.* 1903 [1] 391).
- $C_{16}H_{22}O_{10}N_4$  C 40,2 — H 4,6 — O 43,5 — N 11,7 — M. G. 478.
- 1) Tetraspartsäure. Cu<sub>2</sub>, Ag<sub>2</sub> (*J.* 1876, 777; *B.* 30, 2452; *A.* 303, 197; 307, 242; 319, 68). — I, 1211; \*I, 667.
- $C_{16}H_{22}NCl$  1) Verbindung (aus Chlorfenchenehydrochlorid). Sm. 120° (*Soc.* 73, 705).
- $C_{16}H_{22}NBr$  1) Triäthyl-1-Naphtylammoniumbromid (*Soc.* 41, 180). — II, 599.
- $C_{16}H_{22}NJ$  1) Triäthyl-1-Naphtylammoniumjodid. Sm. 98–100° (*B.* 21, 3130). — II, 599.
- 2) Triäthyl-2-Naphtylammoniumjodid. Sm. 174° (*Bl.* [3] 27, 885 *C.* 1902 [2] 991).
- $C_{16}H_{22}N_2S$  1)  $\alpha$ -Phenyl- $\beta$ -Camphenylthioharnstoff. Sm. 154° (*A.* 366, 78 *C.* 1909 [2] 214).
- 2) Phenylamid d. Dekahydrochinolin-1-Thiocarbonsäure ( $\alpha$ -Phenyl- $\beta$ -Dekahydrochinolylthioharnstoff). Sm. 134,5° (*B.* 23, 1149). — IV, 55.
- $C_{16}H_{22}N_4S_2$  1) 2,6-Di[ $\beta$ -Phenylthioureido]-1,4-Dimethylbenzol. Sm. 112,5° (*A.* 228, 252). — IV, 643.
- 2) Di[2-Amido-5-Dimethylamidophenyl]disulfid. Fl. Pikrat (*A.* 251, 34; *D.R.P.* 45839). — II, 817; \*II, 481.
- $C_{16}H_{22}JP$  1) Triäthyl-1-Naphtylphosphoniumjodid. Sm. 209° (*B.* 11, 1502). — IV, 1681.
- $C_{16}H_{22}ON$  C 78,4 — H 9,4 — O 6,5 — N 5,7 — M. G. 245.
- 1) 3-Acetyl-amido-4-Benzyl-1-Methylhexahydrobenzol. Sm. 168° (*B.* 29, 2961). — \*II, 239.
- 2) 5-Benzoylamido-1,1,3-Trimethylhexahydrobenzol. Sm. 122° (*A.* 297, 192).
- 3) 3-Benzoylamidomethyl-1,1,2-Trimethyl-R-Pentamethylen (Benzoyl-dihydroisolaurenamin). Sm. 51° (*Bl.* [3] 23, 110). — \*II, 729.
- 4) 1-[ $\alpha$ -Oximido-benzyl]-1-Methyl-3-Isopropyl-R-Pentamethylen. Sm. 96,5° (*C. r.* 148, 1400 *C.* 1909 [2] 126).
- 5) 4-Keto-2,2,6,6-Tetramethyl-1-Benzylhexahydropyridin (Benzyl-triacetonamin). Fl. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 28 [2] 161). — \*II, 301.
- 6) Phenylamid d. 1-Isopropylhexahydrobenzol-4-Carbonsäure. Sm. 204–205° (*J. pr.* [2] 57, 101). — \*II, 709.
- 7) Phenylamid d. Campholsäure. Sm. 91° (*Bl.* [3] 11, 611). — \*II, 179.
- 8) Phenylamid d. Fencholsäure. Sm. 79–80° (*A.* 369, 76 *C.* 1909 [2] 2002).
- 9) Phenylamid d. Isofencholsäure. Sm. 100–101° (*A.* 369, 97 *C.* 1909 [2] 2004).
- 10) Camphelylamid d. Benzolcarbonsäure. Sm. 96–97° (*G.* 23 [2] 503). — II, 1162.

- C<sub>16</sub>H<sub>23</sub>ON<sub>3</sub>** C 70,3 — H 8,4 — O 5,9 — N 15,4 — M. G. 273.
- 1) 4-Diäthylamido-3-Keto-1,5-Dimethyl-2-[4-Methylphenyl]-2,3-Dihydropyrazol. Sm. 85° (D.R.P. 92536). — \*IV, 759.
  - 2) 5-Diäthylamido-3-Keto-2,4-Dimethyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 123° (D.R.P. 208593 C. 1909 [1] 1283).
- C<sub>16</sub>H<sub>23</sub>O<sub>2</sub>N** C 73,6 — H 8,8 — O 12,2 — N 5,4 — M. G. 261.
- 1) 1-Benzoyl-2,2,6,6-Tetramethylhexahydropyridin. Sm. 41—42°; Sd. 260—270°<sub>25</sub> (R. 24, 414 C. 1905 [2] 1186).
  - 2) Äthylester d. β-[2,3,4,6-Tetramethylphenyl]amidocrotonsäure. Sm. 101° (B. 21, 1656). — II, 562.
  - 3) Äthylester d. α-2-Methylcamphenpyrrol-3-Carbonsäure. Sm. 198°; Sd. 330° (A. 313, 47). — \*IV, 154.
  - 4) Äthylester d. β-2-Methylcamphenpyrrol-3-Carbonsäure. Sm. 124 bis 125° (A. 313, 50). — \*IV, 155.
  - 5) 6-Isopropyl-3-Methylphenylester d. Hexahydropyridin-1-Carbonsäure. Sd. 204—206° (Bl. [3] 27, 453 C. 1902 [2] 66). — \*IV, 11.
  - 6) Benzoat d. 4-Oxy-1,2,2,6-Tetramethylhexahydropyridin. Sd. oberhalb 250° (C. 1900 [1] 1082). — \*IV, 33.
  - 7) Benzoat d. 4-Oxy-2,2,6,6-Tetramethylhexahydropyridin. Sm. 97° (D.R.P. 90069). — \*IV, 35.
  - 8) 2-Methylbenzoat d. 4-Oxy-2,2,6-Trimethylhexahydropyridin. Sm. 51° (D.R.P. 97672 C. 1898 [2] 693). — \*IV, 33.
  - 9) 4-Methylbenzoat d. 4-Oxy-2,2,6-Trimethylhexahydropyridin. Sm. 49° (D.R.P. 97672 C. 1898 [2] 693). — \*IV, 33.
  - 10) Cinnamylat d. α-Dimethylamido-β-Oxy-β-Methylbutan. HCl (D.R.P. 169787 C. 1906 [1] 1683).
  - 11) Phenylamidoformiat d. α-Oxyisopropylhexahydrobenzol. Sm. 86 bis 87° (Soc. 87, 669 C. 1905 [2] 241).
  - 12) Phenylamidoformiat d. 1-Oxy-1-Propylhexahydrobenzol. Sm. 82° (C. 1907 [1] 1696).
  - 13) Phenylamidoformiat d. 4-Oxy-4-Äthyl-1-Methylhexahydrobenzol. Sm. 123° (C. r. 142, 439 C. 1906 [1] 1096).
  - 14) Phenylamidoformiat d. 2-Oxy-1,1,4-Trimethylhexahydrobenzol. Sm. 84—85° (u. 92°) (A. 329, 88 C. 1903 [2] 1071).
  - 15) Phenylamidoformiat d. Dihydropulegenol. Sm. 81—82° (A. 327, 135 C. 1903 [1] 1412).
  - 16) Phenylamidoformiat d. 2-Oxy-1-Methyl-3-Isopropyl-R-Pentamethylen. Sm. 82° (B. 37, 237 C. 1904 [1] 726).
  - 17) Verbindung + ½ H<sub>2</sub>O (aus d. Verb. C<sub>18</sub>H<sub>22</sub>ONCl). Sm. 175° (B. 41, 467 C. 1908 [1] 1052).
- C<sub>16</sub>H<sub>23</sub>O<sub>3</sub>N<sub>3</sub>** C 66,4 — H 8,0 — O 11,1 — N 14,5 — M. G. 289.
- 1) 4-Nitrophenyldipiperidyl. Fl. (B. 24, 2106). — IV, 492.
- C<sub>16</sub>H<sub>23</sub>O<sub>3</sub>N** C 69,3 — H 8,3 — O 17,3 — N 5,1 — M. G. 277.
- 1) Methyläther d. 9-[4-Oxybenzoyl]amido-δ-Ketooktan. Sm. 80° (B. 38, 3098 C. 1905 [2] 1259).
  - 2) Diäthyläther d. N-Benzoyl-ββ-Dioxyäthylallylamin. Fl. (Ar. 246, 310 C. 1908 [2] 229).
  - 3) 6,7-Methylenäther-8-Methyläther d. 6,7,8-Trioxo-2-Methyl-1-Isobutyl-1,2,3,4-Tetrahydroisochinolin (Isobutylhydrocotarnin). Sm. 46 bis 47°. HCl, (2HCl, PtCl<sub>4</sub>), HBr (B. 39, 2228 C. 1906 [2] 440).
  - 4) Methylamidopipitzahöinsäure (Methylamidoperezon). Sm. 112—114° (B. 18, 940). — II, 1673.
  - 5) Cyandihydroalantolsäure (Hydroalantsäurenitril). Na, Ca, Ba, Ag (A. 293, 356). — \*II, 1116.
  - 6) Äthylester d. d-Cyancampher-α-Propionsäure. Sm. 49° (C. r. 140, 1433 C. 1905 [2] 135).
  - 7) Äthylester d. l-Cyancampher-α-Propionsäure. Sm. 74,5° (C. r. 140, 1433 C. 1905 [2] 135).
  - 8) Isoamylester d. α-Oximido-2,4,6-Trimethylphenylessigsäure. Fl. (B. 29, 837). — \*II, 973.
  - 9) 2-Methoxyphenylester d. d-2-Propylhexahydropyridin-1-Carbonsäure. Sd. 277° (Bl. [3] 19, 189). — \*IV, 30.
  - 10) Phenylglykolat d. 1-[γ-Oxypropyl]hexahydropyridin. (HCl, AuCl<sub>3</sub>) (B. 15, 1143). — IV, 19.



- C<sub>16</sub>H<sub>23</sub>O<sub>3</sub>N** 11)  $\beta$ -Phenylamid d. Oktan- $\alpha\beta$ -Dicarbonsäure. Sm. 122° (*Soc.* 89, 1470 *C.* 1906 [2] 1563).  
 12) Phenylmonamid d. cis-Oktan- $\delta\epsilon$ -Dicarbonsäure. Sm. 101—102° (*Soc.* 77, 666). — \*II, 215.  
 13) Phenylmonamid d. trans-Oktan- $\delta\epsilon$ -Dicarbonsäure. Sm. 184—185° (*Soc.* 77, 665). — \*II, 215.  
 14) Phenylmonamid d. cis- $\beta$ -Methylheptan- $\gamma\delta$ -Dicarbonsäure. Fl. (*Soc.* 77, 667). — \*II, 216.  
 15) Phenylmonamid d. trans- $\beta$ -Methylheptan- $\gamma\delta$ -Dicarbonsäure. Sm. 147—149° (*Soc.* 77, 667). — \*II, 216.  
 16) Phenylmonamid d. cis- $\beta$ -Methylheptan- $\delta\zeta$ -Dicarbonsäure. Sm. 164° (*C.* 1900 [2] 369).  
 17) Phenylmonamid d. trans- $\beta$ -Methylheptan- $\delta\zeta$ -Dicarbonsäure. Sm. 196° (*C.* 1900 [2] 369).  
 18) Phenylmonamid d. cis- $\beta\epsilon$ -Dimethylhexan- $\gamma\delta$ -Dicarbonsäure. Sm. 179—180° (184—185°) (*A.* 292, 173; *Soc.* 77, 664). — \*II, 216.  
 19) Phenylmonamid d. trans- $\beta\epsilon$ -Dimethylhexan- $\gamma\delta$ -Dicarbonsäure. Sm. 201—202° (*Soc.* 77, 663). — \*II, 216.  
 20) 4-Methylphenylmonamid d. mal. Heptan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 179—180° (*A.* 292, 208; *C.* 1902 [2] 107). — \*II, 279.  
 21) 4-Methylphenylmonamid d.  $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 157—158° (*C.* 1900 [2] 529). — \*II, 279.
- C<sub>16</sub>H<sub>23</sub>O<sub>3</sub>N<sub>3</sub>** C 62,9 — H 7,5 — O 15,7 — N 13,8 — M. G. 305.  
 1) 3,4,5-Tri[Acetylamido]-1-Pseudobutylbenzol. Sm. 220° (*J. pr.* [2] 48, 103). — IV, 1134.
- C<sub>16</sub>H<sub>23</sub>O<sub>4</sub>N** C 65,5 — H 7,8 — O 21,8 — N 4,8 — M. G. 293.  
 1) Methylester d.  $\alpha$ -Santonsäureoxim. Sm. 158—159° (*B.* 32, 1414). — \*II, 1045.  
 2) Methylester d.  $\beta$ -Santonsäureoxim + H<sub>2</sub>O. Sm. 193—194° (*B.* 32, 1414). — \*II, 1045.  
 3) Methylester d. Metasantonsäureoxim. Sm. 171° (*G.* 25 [2] 469; 29 [2] 233). — \*II, 1045.  
 4) Diäthylester d. 2,6-Dimethyl-4-Propylpyridin-3,5-Dicarbonsäure. Sd. 308°<sub>714,5</sub>. (2HCl, PtCl<sub>4</sub>) (*A.* 246, 36). — IV, 170.  
 5) Isoamylester d. Acetyl-4-Äthoxyphenylamidoameisensäure. Sm. 47—48° (*D. R. P.* 69328). — \*II, 404.
- C<sub>16</sub>H<sub>23</sub>O<sub>4</sub>N<sub>3</sub>** Ptomain (aus Käse) = (C<sub>16</sub>H<sub>23</sub>O<sub>4</sub>N<sub>3</sub>)<sub>x</sub> (*Bl.* [3] 11, 287).  
**C<sub>16</sub>H<sub>23</sub>O<sub>4</sub>N<sub>3</sub>** C 59,8 — H 7,2 — O 19,9 — N 13,1 — M. G. 321.  
 1) i- $\alpha$ -[ $\alpha$ -Phenylureidopropionyl]amidoisocaprinsäure. Sm. 214—218° (corr.) (*A.* 340, 155 *C.* 1905 [2] 306).  
 2) isom. i- $\alpha$ -[ $\alpha$ -Phenylureidopropionyl]amidoisocaprinsäure. Sm. 185 bis 189° (corr.) (*A.* 340, 156 *C.* 1905 [2] 306).  
 3) Semicarbazon d. Santonsäure. Sm. 183—185° (*G.* 33 [1] 198 *C.* 1903 [2] 45).
- C<sub>16</sub>H<sub>23</sub>O<sub>4</sub>Br** 1) Acetat d. 5-Brom-6-Oxy-2,4-Diketo-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Sm. 66—68° (*M.* 10, 744). — II, 1025.
- C<sub>16</sub>H<sub>23</sub>O<sub>5</sub>N<sub>3</sub>** C 57,0 — H 6,8 — O 23,7 — N 12,5 — M. G. 337.  
 1)  $\beta$ -[ $\alpha$ -Phenylureidoisocapronyl]amido- $\alpha$ -Oxypropionsäure. Sm. 176 bis 177° (*A.* 340, 175 *C.* 1905 [2] 309).  
 2) isom.  $\beta$ -[ $\alpha$ -Phenylureidoisocapronyl]amido- $\alpha$ -Oxypropionsäure. Sm. 192—193° (*A.* 340, 176 *C.* 1905 [2] 309).
- C<sub>16</sub>H<sub>23</sub>O<sub>8</sub>N** C 53,8 — H 6,4 — O 35,8 — N 3,9 — M. G. 357.  
 1) Bakankosin + H<sub>2</sub>O. Sm. 157° (*C. r.* 147, 750 *C.* 1908 [2] 1929; *Ar.* 247, 59 *C.* 1909 [1] 857).
- C<sub>16</sub>H<sub>23</sub>O<sub>9</sub>N<sub>5</sub>** C 44,7 — H 5,4 — O 33,6 — N 16,3 — M. G. 429.  
 1) Verbindung (aus Diacetylaceton) (*B.* 28, 1822). — \*I, 541.
- C<sub>16</sub>H<sub>23</sub>O<sub>10</sub>N** C 49,3 — H 5,9 — O 41,1 — N 3,6 — M. G. 389.  
 1) Pentaacetylglykosamin. Sm. 183,5° (*R.* 18, 84). — \*I, 573.  
 2) isom. Pentaacetylglykosamin. Sm. 133° (*R.* 18, 84). — \*I, 573.
- C<sub>16</sub>H<sub>23</sub>O<sub>10</sub>Cl** 1) Dulcitantacetochlorhydrin. Sm. 160° u. Zers. (*A. ch.* [4] 27, 154). — I, 418.
- C<sub>16</sub>H<sub>23</sub>O<sub>15</sub>N** C 43,9 — H 5,3 — O 47,6 — N 3,2 — M. G. 437.  
 1) Verbindung (aus Chondroitin). Ba + 5H<sub>2</sub>O (*A.* 351, 348 *C.* 1907 [1] 1590).

- C<sub>16</sub>H<sub>23</sub>N<sub>3</sub>S** 1) **Methylgranatylphenylthioharnstoff.** Sm. 132—133° (*G.* 29 [2] 120). — \*IV, 309.  
2) **Methylpseudogranatylphenylthioharnstoff.** Sm. 176° (*G.* 29 [2] 122). — \*IV, 309.
- C<sub>16</sub>H<sub>24</sub>ON<sub>2</sub>** C 73,8 — H 9,2 — O 6,1 — N 10,8 — M. G. 260.  
1)  **$\alpha$ -Cyklogeraniolennitrobenzylamin.** Sm. 106° (*C.* 1902 [1] 1295; *A.* 324, 103 *C.* 1902 [2] 1200).  
2) **6-Oxy-4-Methyl-5-Äthyl-2-Camphryl-1,3-Diazin.** Sm. 107° (Pinner, Imidoäther 290). — IV, 890.  
3) **Phenylhydrazid d. Campholsäure.** Sm. 171° (*Bl.* [3] 11, 612). — IV, 667.  
C 69,6 — H 8,7 — O 11,6 — N 10,1 — M. G. 276.  
1) **Terpineolnitrolanilid.** Sm. 155—156° (*A.* 277, 121). — III, 482.  
2)  **$\beta$ -Benzoyl- $\alpha$ -Diisobutylharnstoff.** Sm. 123—123,5° (*Am.* 42, 16 *C.* 1909 [2] 1128).  
3) **Base (aus 1-Äthylpyrrol).** Sm. 165—170° (*B.* 11, 1811). — IV, 66.  
4) **Phenylhydrazon d. d-Ketoterpin.** Sm. 150—160° u. Zers. (*B.* 31, 3216). — \*IV, 526.  
5)  **$\epsilon$ -Phenylhydrazon- $\beta$ -Isopropylhexan- $\alpha$ -Carbonsäure.** Sm. 102° (*B.* 29, 32; *B.* 40, 2961 *C.* 1907 [2] 596). — IV, 692.  
6)  **$\gamma$ -Diäthylamidopropylester d.  $\beta$ -[4-Amidophenyl]akrylsäure.** Fl. HCl (*D. R. P.* 187593 *C.* 1907 [2] 1131).  
7) **4-Dimethylamidobenzoat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridin.** Sm. 38—40° (45°). HCl (*D. R. P.* 172568 *C.* 1906 [2] 473; *D. R. P.* 180291 *C.* 1907 [1] 1365).  
8) **2-Äthylamidobenzoat d. 1-[ $\beta$ -Oxyäthyl]hexahydropyridin.** HCl (*D. R. P.* 172447 *C.* 1906 [2] 473).
- C<sub>16</sub>H<sub>24</sub>O<sub>2</sub>N<sub>6</sub>** C 57,8 — H 7,2 — O 9,6 — N 25,3 — M. G. 332.  
1) **1,3-Di[ $\gamma$ -Semicarbazonbutyl]benzol.** Sm. 184° u. Zers. (*C.* 1905 [1] 343).  
2) **1,4-Di[ $\gamma$ -Semicarbazonbutyl]benzol.** Sm. 209° (*C.* 1905 [1] 342).
- C<sub>16</sub>H<sub>24</sub>O<sub>2</sub>S** 1) **3-Phenylsulfon-4-Isopropyl-1-Methylhexahydrobenzol.** Fl. (*B.* 38, 655 *C.* 1905 [1] 740).  
2) **2-Diacetyl-2-Oktylthiophen.** Fl. (*B.* 19, 646). — III, 768.
- C<sub>16</sub>H<sub>24</sub>O<sub>2</sub>S<sub>2</sub>** 1) **Diisoamyläther d. 2,5-Dimerkapto-1,4-Benzochinon.** Sm. 170 bis 172° (*A.* 336, 156 *C.* 1904 [2] 1300).
- C<sub>16</sub>H<sub>24</sub>O<sub>3</sub>N<sub>2</sub>** C 65,7 — H 8,2 — O 16,4 — N 9,6 — M. G. 292.  
1) **Diäthyläther d.  $\alpha$ -[ $\beta$ -Dioxyäthyl]- $\alpha$ -Allyl- $\beta$ -Phenylharnstoff.** Fl. (*Ar.* 246, 310 *C.* 1908 [2] 229).  
2) **4-Methyläther d.  $\epsilon$ -Oximido- $\alpha$ -[4-Oxybenzoyl]amidooktan.** Sm. 123° (*B.* 38, 3099 *C.* 1905 [2] 1259).  
3) **Äthyläther d. 3,5-Di[Äthylacetylamido]-1-Oxybenzol.** Sm. 65 bis 67° (*M.* 14, 411). — II, 724.  
4) **Äthylester d. 1-Diäthylamidoacetylmethylbenzol-3-Carbonsäure.** Fl. Pikrat (*A.* 343, 297 *C.* 1906 [1] 928).
- C<sub>16</sub>H<sub>24</sub>O<sub>3</sub>S** 1) **1-Menthylester d. Benzolsulfonsäure.** Sm. 80° (*Soe.* 89, 333 *C.* 1906 [1] 1552).
- C<sub>16</sub>H<sub>24</sub>O<sub>4</sub>N<sub>2</sub>** C 62,3 — H 7,8 — O 20,8 — N 9,1 — M. G. 308.  
1) **4-Äthyläther-6-Butyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]-benzol.** Sm. 193° (*C.* 1905 [1] 815).  
2) **4-Äthyläther-6-Isobutyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]-benzol.** Sm. 195° (*C.* 1905 [1] 815).  
3) **4,6-Dipropyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol.** Sm. 206° (*C.* 1905 [1] 815).  
4) **4,6-Diisopropyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol.** Sm. 235° (*C.* 1905 [1] 815).  
5) **4-Propyläther-6-Isopropyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol.** Sm. 220° (*C.* 1905 [1] 815).  
6) **Säure (aus d. Phenylamidoimid d. Camphersäure).** Sm. 91—92° (*B.* 25, 2566). — IV, 708.  
7) **Diäthylester d.  $\beta$ -Dicyan- $\gamma$ -Methylheptan- $\beta$ -Dicarbonsäure.** Sd. 232—233°<sub>20</sub> (*B.* 28, 2943). — \*I, 687.  
8) **4-Nitrobenzoat d.  $\alpha$ -Diäthylamido- $\beta$ -Oxy- $\beta$ -Methylbutan.** Fl. HJ (*D. R. P.* 179627 *C.* 1907 [1] 1364).

- $C_{10}H_{24}O_4N_2$  9) Di[Diäthylamidoformiat] d. 1,3-Dioxybenzol. Sm. 35–36°; Sd. 236 bis 237°<sub>11</sub> (270°<sub>36,5</sub>) (A. 317, 200; Bl. [3] 31, 691 C. 1904 [2] 198).
- $C_{16}H_{24}O_4Cl_2$  1) 1,4-Diisocamyläther d. 3,6-Dichlor-1,2,4,5-Tetraoxybenzol. Sm. 128° (Am. 18, 10). — \*II, 629.
- $C_{16}H_{24}O_4Br_2$  1) Bromderivat d. Säure  $C_{16}H_{24}O_4$  (aus Mesityloxyd) + 2H<sub>2</sub>O. Sm. 171° u. Zers. (C. 1899 [1] 251).
- $C_{16}H_{24}O_4S$  1) Verbindung (aus Sylvestren) (B. 38, 656 C. 1905 [1] 740).  
2) Verbindung (aus Terpinen) (B. 38, 656 C. 1905 [1] 740).  
3) Verbindung (aus Terpinolen). Fl. (B. 38, 656 C. 1905 [1] 740).
- $C_{16}H_{24}O_5S_2$  1)  $\epsilon$ -Keto- $\alpha\gamma$ -Diäthylsulfon- $\alpha$ -Phenylhexan (B. 37, 509 C. 1904 [1] 884).
- $C_{16}H_{24}O_6N_2$  1) C 56,5 — H 7,1 — O 28,2 — N 8,2 — M. G. 340.  
2) Verbindung (aus Äthoxyloxalessigsäurediäthylester u. Phenylhydrazin). Sm. 111° (B. 24, 4210). — IV, 722.  
2) Verbindung (aus Harn) (H. 31, 524). — \*III, 13.  
C 51,6 — H 6,4 — O 34,4 — N 7,5 — M. G. 372.
- $C_{16}H_{24}O_6N_2$  1) Tetraäthylester d.  $\beta\gamma$ -Diimidobutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Na<sub>2</sub> (B. 31, 192). — \*I, 450.  
2) Tetraäthylester d. s-Diäthenylhydrazin- $\beta\beta\beta'\beta'$ -Tetracarbonsäure. Sm. 82°. Na<sub>2</sub> (Soc. 67, 1010). — \*I, 676.  
C 42,1 — H 5,2 — O 28,1 — N 24,6 — M. G. 456.
- $C_{16}H_{24}O_8N_8$  1) N-Anhydrid d. Hepta[Amidoacetyl]amidoessigsäure (Oktoglycyl) (B. 37, 1300 C. 1904 [1] 1337).  
2) Disemicarbazon d. Verb.  $C_{14}H_{18}O_8N_8$  (C. 1902 [1] 28).
- $C_{16}H_{24}O_9Cl_2$  1) Diisobutylester d. d- $\alpha\beta$ -Di[Chloracetoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 210–215°<sub>13</sub> (Bl. [3] 13, 1057). — \*I, 397.  
2) Tetracetat d. Dichlortetraoxyoktan. Sm. 217° (C. 1899 [2] 90). — \*I, 149.
- $C_{16}H_{24}O_8Br_2$  1) Tetraäthylester d.  $\alpha\delta$ -Dibrombutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Sm. 83° (Soc. 77, 107).
- $C_{16}H_{24}O_{11}N_6$  1) Diaspartiddiaspartdiamid (G. 30 [1] 11).
- $C_{16}H_{24}O_{12}N_8$  1) C 36,9 — H 4,6 — O 36,9 — N 21,6 — M. G. 520.  
2) Verbindung (aus d. Diaspartiddiaspartdiamid). Cu (G. 30 [1] 12).
- $C_{16}H_{24}O_{13}N_4$  1) C 40,0 — H 5,0 — O 43,3 — N 11,7 — M. G. 480.  
2) Tetraäthylester d.  $\beta\beta'$ -Dinitrodiäthylnitrosamin- $\beta\beta\beta'\beta'$ -Tetracarbonsäure (G. 38 [1] 359 C. 1908 [1] 2021).
- $C_{16}H_{24}NCl$  1) Ammoniumbase (aus Coniin u. 1,2-Di[Chlormethyl]benzol). 2 + PtCl<sub>4</sub> (C. 1899 [1] 1246). — \*IV, 139.
- $C_{16}H_{24}NBr$  1) Ammoniumbase (aus Coniin u. 1,2-Di[Brommethyl]benzol) (C. 1899 [1] 1246). — \*IV, 139.
- $C_{16}H_{24}N_2Br_7$  1) Perbromid (aus N-Dibromid d. 1,2-Dibrom-4-Dimethylamido-1,2-Dihydrobenzol). Sm. 105° (Am. 34, 276 C. 1905 [2] 1582).
- $C_{16}H_{24}N_2S$  1) s-Phenylcamphelylthioharnstoff. Sm. 105–106° (G. 23 [2] 504). — \*II, 196.  
2) Phenylamid d. 3,4-Diäthylhexahydropyridin-1-Thiocarbonsäure. Sm. 87–88° (B. 38, 3053 C. 1905 [2] 1349).
- $C_{16}H_{24}N_4S$  1) Phenylhydrazon d. Diacetonallylthioharnstoff. Sm. 122° (B. 32, 3159). — \*IV, 501.
- $C_{16}H_{25}ON$  1) C 77,7 — H 10,1 — O 6,5 — N 5,7 — M. G. 247.  
2) 5-Oxy-6-Phenylamidomethyl-1,1,3-Trimethylhexahydrobenzol. Sm. 68–70°; Sd. 221°<sub>15</sub> (C. 1901 [1] 1025).  
2)  $\alpha$ -Oximido- $\alpha$ -[4-Oktylphenyl]äthan. Sm. 42–43° (B. 31, 939). — \*III, 127.  
3) 1-[4-Oxy-2-Methyl-5-Isopropyl]hexahydropyridin. Sm. 149,5° (A. 344, 288 C. 1906 [1] 1612).  
4) 1-[4-Oxy-3-Methyl-6-Isopropyl]hexahydropyridin. Sm. 183° (A. 344, 288 C. 1906 [1] 1612).  
5) Phenyläther d. 1-[ $\epsilon$ -Oxyamyl]hexahydropyridin. Sd. 172°. HCl (D.R.P. 184968 C. 1907 [2] 861).  
6) Carvakrylpiperidid. Sm. 182° (C. 1900 [2] 202). — \*IV, 17.  
7) o-Thymotinpiperidid. Sm. 141° (H. 44, 254 C. 1905 [1] 1108; B. 37, 4458 C. 1905 [1] 236).  
8) p-Thymotinpiperidid. Sm. 149,5° (C. 1900 [2] 202). — \*IV, 17.



- C<sub>16</sub>H<sub>25</sub>ON** 9) Phenylamid d. Nonan- $\alpha$ -Carbonsäure. Sm. 61° (Soc. 93, 1037 C. 1908 [2] 503).  
 10) Phenylamid d.  $\beta\zeta$ -Dimethylheptan- $\gamma$ -Carbonsäure. Sm. 105° (A. 318, 160).  
 11) Phenylamid d.  $\beta\zeta$ -Dimethylheptan- $\delta$ -Carbonsäure. Sm. 111° (Soc. 73, 62). — \*II, 178.  
 12) 4-Methylphenylamid d. Oktan- $\alpha$ -Carbonsäure. Sm. 81° (Soc. 93, 1037 C. 1908 [2] 503).  
 13) 4-Oktylphenylamid d. Essigsäure. Sm. 93° (B. 18, 135). — II, 566.  
 14) Isobutyl-4-Isobutylphenylamid d. Essigsäure. Sm. 73–74°; Sd. oberhalb 300° (A. 211, 241; B. 14, 1473, 2187). — II, 557.
- C<sub>16</sub>H<sub>25</sub>ON<sub>3</sub>** C 69,8 — H 9,1 — O 5,8 — N 15,3 — M. G. 275.  
 1)  $\beta$ -Phenylamido- $\alpha$ -Camphelylharnstoff. Sm. 67–69° (G. 23 [2] 518). — IV, 673.  
 2) Semicarbazon d. Cedron. Sm. 242–243° (B. 40, 3525 C. 1907 [2] 1694).
- C<sub>16</sub>H<sub>25</sub>O<sub>2</sub>N** 3) Semicarbazon d. d-Santalal. Sm. 230° (B. 40, 1127 C. 1907 [1] 1327). C 73,0 — H 9,5 — O 12,2 — N 5,3 — M. G. 263.  
 1) Oxim d. bim. Dimethyleyklohexenon. Sm. 197° (B. 32, 424). — \*I, 525.  
 2) Lakton d. Amidomethyl-dihydroalantolsäure? Sm. 171° u. Zers. (2HCl, PtCl<sub>4</sub>) (A. 293, 358). — \*II, 1116.  
 3) Äthylester d. 2-Methyl-2,3-Dihydrocamphenpyrrol-3-Carbonsäure. Sd. 293–295°. HCl (A. 313, 54). — \*IV, 113.  
 4) norm. Nonylester d. Phenylamidoameisensäure. Sm. 62–64° (59°) (J. pr. [2] 62, 532; C. r. 138, 149 C. 1904 [1] 577). — \*II, 179.  
 5) Isovalerianat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Phenylpropan. HCl (D. R. P. 169787 C. 1906 [1] 1683).  
 6) Benzoeat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Dimethylpentan. HCl (D. R. P. 169746 C. 1906 [1] 1585).  
 7) Benzoeat d.  $\beta$ -Propylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Fl. HCl (D. R. P. 181287 C. 1907 [1] 1650).  
 8) Benzoeat d.  $\beta$ -Methyläthylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. Sd. 177°<sub>15</sub> (M. 28, 499 C. 1907 [2] 1229).  
 9) Benzoeat d.  $\alpha$ -Diäthylamido- $\gamma$ -Oxypentan. HCl (Bl. [4] 3, 547 C. 1908 [1] 2086).  
 10) Phenylamidoformiat d.  $\delta$ -Oxy- $\beta\zeta$ -Dimethylheptan. Sm. 154° (B. 41, 2941 C. 1908 [2] 1516).  
 11) Phenylamid d.  $\alpha$ -Oxynonan- $\alpha$ -Carbonsäure. Sm. 79° (Bl. [4] 1, 350 C. 1907 [2] 34).  
 12) 4-Äthoxyphenylamid d. Heptan- $\gamma$ -Carbonsäure. Sm. 147° (D. R. P. 163034 C. 1905 [2] 1206).  
 13) Piperidid d. Camphocarbonsäure. Sm. 101° (A. 361, 160 C. 1908 [2] 399).
- C<sub>16</sub>H<sub>25</sub>O<sub>3</sub>N** C 68,8 — H 9,0 — O 17,2 — N 5,0 — M. G. 279.  
 1) Anhydroacetessigäthylesteramidocampher. Sm. 58° (A. 313, 46). — \*III, 361.  
 2) Verbindung (aus Cyancampher u. Epichlorhydrin). Sm. 128–129° (Bl. [3] 31, 371 C. 1904 [1] 1263).
- C<sub>16</sub>H<sub>25</sub>O<sub>3</sub>Cl** 1) Isoamylester d. Chlorecamphocarbonsäure. Sd. 182–183°<sub>12</sub> (B. 35, 4117 C. 1903 [1] 82).
- C<sub>16</sub>H<sub>25</sub>O<sub>3</sub>Br** 1) Äthylester d. Bromdihydro- $\alpha$ -Citrylidenacetessigsäure. Sm. 93° (SEHLER, Dissert., Heidelberg 1897).  
 2) Isoamylester d. o-Bromcamphocarbonsäure. Sd. 193,5–194,5°<sub>13</sub> (B. 36, 1723 C. 1903 [2] 37).
- C<sub>16</sub>H<sub>25</sub>O<sub>3</sub>J** 1) Äthyläther d. 5-Jod-6-Oxy-2,3-Diketo-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Sm. 51–52° (M. 10, 748). — II, 1026.  
 2) Isoamylester d. o-Jodcamphocarbonsäure. Fl. (B. 36, 1724 C. 1903 [2] 37).
- C<sub>16</sub>H<sub>25</sub>O<sub>4</sub>N** C 65,1 — H 8,5 — O 21,7 — N 4,7 — M. G. 295.  
 1) Diäthylester d. m-Propyldihydrolutidindicarbonsäure. Sm. 118° (A. 246, 34). — IV, 95.

- C<sub>16</sub>H<sub>25</sub>O<sub>4</sub>N** 2) Diäthylester d. Isopropyldihydrolutidindicarbonsäure. Sm. 97° (A. 231, 47). — IV, 95.
- C<sub>16</sub>H<sub>25</sub>O<sub>4</sub>Cl** 1) Äthylester d.  $\alpha$ -Chlortetrahydrocarvonylacetessigsäure. Fl. Na (B. 32, 89; B. 36, 236 C. 1903 [1] 515). — \*II, 462.
- 2) Äthylester d.  $\beta$ -Chlortetrahydrocarvonylacetessigsäure. Sm. 146° (B. 20, 489; B. 32, 89; B. 36, 235 C. 1903 [1] 514). — II, 768; \*II, 462.
- C<sub>16</sub>H<sub>25</sub>O<sub>5</sub>N** 1) Tetramethyläther d. Glykoseanilid. Sm. 135° (Soc. 93, 103 C. 1908 [1] 1044; Soc. 93, 1435 C. 1908 [2] 936).
- C<sub>16</sub>H<sub>25</sub>O<sub>5</sub>N<sub>3</sub>** 1)  $\epsilon$ -[4-Nitrophenyl]hydrazon- $\beta$ - $\zeta$ -Dimethylheptan- $\alpha$ -Carbonsäure. Sm. 130° (Soc. 93, 37 C. 1908 [1] 840).
- C<sub>16</sub>H<sub>25</sub>O<sub>6</sub>N** C 58,7 — H 7,6 — O 29,3 — N 4,3 — M. G. 327.
- 1) Sinapin. Salze, siehe diese u. (HCl, HgCl<sub>2</sub>), H<sub>2</sub>SO<sub>4</sub> + 2(5)H<sub>2</sub>O, HNO<sub>3</sub> + 2H<sub>2</sub>O, CHNS (A. 84, 10; 199, 163; Am. 6, 52; C. 1897 [1] 821; B. 30, 2328). — III, 931; \*III, 690.
- 2) Nitrohederasäure (J. 1878, 960). — I, 733.
- 3) Triäthylester d.  $\epsilon$ -Cyanhexan- $\alpha\alpha\epsilon$ -Tricarbonsäure. Sd. oberhalb 170°<sub>15</sub> (B. 29, 730). — \*I, 688.
- 4) Triäthylester d.  $\gamma$ -Cyan- $\beta$ -Methylpentan- $\beta\gamma\epsilon$ -Tricarbonsäure. Sd. 210°<sub>20</sub> (C. 1903 [1] 923; Soc. 85, 134 C. 1904 [1] 727).
- 5) Triäthylester d.  $\epsilon$ -Cyan- $\beta$ -Methylpentan- $\beta\gamma\epsilon$ -Tricarbonsäure. Sd. 230—240°<sub>40</sub> (Soc. 81, 58 C. 1902 [1] 409).
- 6) Triäthylester d.  $\gamma$ -Cyan- $\beta\beta$ -Dimethylbutan- $\alpha\gamma\delta$ -Tricarbonsäure. Sd. 223—227°<sub>25</sub> (Soc. 75, 900).
- C<sub>16</sub>H<sub>25</sub>O<sub>7</sub>N** C 56,0 — H 7,3 — O 32,6 — N 4,1 — M. G. 343.
- 1) Triäthylester d. 3-Oximido-1-Methyl-2-Äthyl-R-Tetramethylen-1,2,4-Tricarbonsäure. Fl. (B. 33, 3752).
- C<sub>16</sub>H<sub>25</sub>O<sub>7</sub>N<sub>5</sub>** C 48,1 — H 6,3 — O 28,1 — N 17,5 — M. G. 399.
- 1) Verbindung (aus 4-Oximido-2-Hydroxylamido-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol). Sm. 183,5° (B. 40, 2249 C. 1907 [2] 591).
- C<sub>16</sub>H<sub>25</sub>O<sub>8</sub>N<sub>3</sub>** C 59,6 — H 6,5 — O 33,1 — N 10,8 — M. G. 387.
- 1) Diisocamyläther d. 3,5-Dinitro-2,2-Dioxychinolnitrolsäure? Na (Am. 29, 111 C. 1903 [1] 708).
- C<sub>16</sub>H<sub>25</sub>O<sub>8</sub>Cl** 1) Tetraäthylester d.  $\alpha$ -Chlorbutan- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Fl. (B. 17, 2786). — I, 860.
- C<sub>16</sub>H<sub>25</sub>O<sub>10</sub>N** C 48,1 — H 6,3 — O 40,1 — N 3,5 — M. G. 391.
- 1) Pentaacetat d.  $\zeta$ -Amido- $\alpha\beta\gamma\delta\epsilon$ -Pentaoxyhexan (P. d. Glykamin). HCl (C. r. 134, 292 C. 1902 [1] 565).
- C<sub>16</sub>H<sub>25</sub>O<sub>13</sub>N<sub>3</sub>** C 42,5 — H 5,5 — O 42,5 — N 9,5 — M. G. 451.
- 1) Tetraäthylester d.  $\beta\beta'$ -Dinitrodiäthylamin- $\beta\beta\beta'\beta'$ -Tetracarbonsäure. Sm. 46° (G. 38 [1] 357 C. 1908 [1] 2021).
- C<sub>16</sub>H<sub>25</sub>N<sub>2</sub>P** 1) Phenyl-di[1-Piperidyl]phosphin. Sm. 78° (B. 31, 1041). — IV, 1682.
- C<sub>16</sub>H<sub>25</sub>N<sub>3</sub>S** 1) 3-[ $\beta$ -Phenylthioureido]-1,2,2,5,5-Pentamethyltetrahydropyrrol. Sm. 146° (A. 322, 111 C. 1902 [2] 127). — \*IV, 301.
- C<sub>16</sub>H<sub>25</sub>N<sub>3</sub>S<sub>2</sub>** 1) Dimethyldipropylphenyldithiobiuret. Sm. 80,5—81° (B. 26, 1686; B. 37, 4323 C. 1905 [1] 165). — II, 400.
- 2)  $\alpha$ -Dimethyldipropylphenylpseudodithiobiuret. Sm. 64,6—65° (B. 37, 4323 C. 1905 [1] 165).
- 3)  $\beta$ -Dimethyldipropylphenylpseudodithiobiuret. Sm. 48,6—48,8° (B. 37, 4323 C. 1905 [1] 165).
- C<sub>16</sub>H<sub>25</sub>N<sub>4</sub>J** 1) Butyljodid + 2-Molec. Phenylhydrazin. Sm. 126° (C. 1899 [2] 378). — \*IV, 423.
- C<sub>16</sub>H<sub>26</sub>ON<sub>2</sub>** C 73,3 — H 9,9 — O 6,1 — N 10,7 — M. G. 262.
- 1) s-Phenyl-nonylharnstoff. Sm. 63° (B. 24, 3359). — II, 378.
- C<sub>16</sub>H<sub>26</sub>O<sub>2</sub>N<sub>2</sub>** C 69,1 — H 9,3 — O 11,5 — N 10,1 — M. G. 278.
- 1) Bilaktam d. 2-Amido-1-Methylhexahydrobenzol-2-Carbonsäure. Sm. oberhalb 300° (B. 41, 2937 C. 1908 [2] 1515).
- 2) Bilaktam d. 4-Amido-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. oberhalb 300° (B. 41, 2934 C. 1908 [2] 1515).
- 3) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Dimethylamidomethylbutan. HCl (C. 1905 [2] 1551; D. R. P. 173 631 C. 1906 [2] 933).
- 4) 4-Amidobenzoat d.  $\alpha$ -Diäthylamido- $\beta$ -Oxy- $\beta$ -Methylbutan. Fl. (D. R. P. 179 627 C. 1907 [1] 1364).

- C<sub>16</sub>H<sub>26</sub>O<sub>2</sub>N<sub>2</sub>** 5) Phenylamidoformiat d.  $\alpha$ -Diäthylamido- $\gamma$ -Oxypentan. HCl (*Bl.* [4] 3, 547 *C.* 1908 [1] 2086).
- 6) Äthylamid d. Äthylcamphoformenamincarbonsäure. Sm. 148° (*C.* 1901 [2] 545).
- 7) Camphorylamid d. Hexahydropyridin-1-Carbonsäure (Camphorylpiperidylharnstoff). Sm. 181° (186°) (*Soc.* 87, 119 *C.* 1905 [1] 820, 1017).
- C<sub>16</sub>H<sub>26</sub>O<sub>2</sub>N<sub>4</sub>** C 62,7 — H 8,5 — O 10,5 — N 18,3 — M. G. 306.
- 1) Verbindung (aus  $\gamma$ -Oximidopentan u. Diazobenzol). Sm. 55° (*B.* 39, 881 *C.* 1906 [1] 1243).
- C<sub>16</sub>H<sub>26</sub>O<sub>2</sub>S<sub>2</sub>** 1) 2,5-Diisocamyläther d. 2,5-Dimerkapto-1,4-Dioxybenzol. Sm. 68 bis 70° (*A.* 336, 157 *C.* 1904 [2] 1300).
- C<sub>16</sub>H<sub>26</sub>O<sub>3</sub>S** 1) 2-Heptyl-1,3,5-Trimethylbenzol-4-Sulfonsäure. Mg (*B.* 37, 1721 *C.* 1904 [1] 1489).
- 2) Pentaäthylbenzolsulfonsäure. NH<sub>4</sub> + H<sub>2</sub>O, Na + 4H<sub>2</sub>O, K + 2H<sub>2</sub>O. Ba + 9H<sub>2</sub>O (*B.* 21, 2815). — II, 160.
- C<sub>16</sub>H<sub>26</sub>O<sub>4</sub>N<sub>2</sub>** C 61,9 — H 8,4 — O 20,7 — N 9,0 — M. G. 310.
- 1) Amylphenylhydrazon d. Arabinose. Sm. 120° (*R.* 15, 226). — \*IV, 519.
- 2) d- $\beta$ -[ $\alpha$ -Methylbutyl]- $\beta$ -Phenylhydrazon d. d-Arabinose. Sm. 115° (*B.* 38, 871 *C.* 1905 [1] 814).
- 3) d- $\beta$ -[ $\alpha$ -Methylbutyl]- $\beta$ -Phenylhydrazon d. l-Arabinose. Sm. 127° (*B.* 38, 871 *C.* 1905 [1] 814).
- 4) Diäthylester d. Hexahydro-1,4-Diazin-1,4-Dicrotonsäure. Sm. 140° (*J. pr.* [2] 53, 24). — \*I, 664.
- C<sub>16</sub>H<sub>26</sub>O<sub>4</sub>N<sub>4</sub>** C 56,8 — H 7,7 — O 18,9 — N 16,6 — M. G. 338.
- 1) 2,2'-Bis[4,6-Diketo-5,5-Diäthylhexahydro-1,3-Diazin] + 2H<sub>2</sub>O. Sm. 340° (wasserfrei) (*B.* 40, 4903 *C.* 1908 [1] 454; *A.* 359, 174 *C.* 1908 [1] 1538).
- C<sub>16</sub>H<sub>26</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Bromdihydroderivat d. Säure C<sub>16</sub>H<sub>24</sub>O<sub>2</sub> (aus Mesityloxyd). Sm. 169° u. Zers. (*C.* 1899 [1] 251).
- C<sub>16</sub>H<sub>26</sub>O<sub>4</sub>Br<sub>4</sub>** 1) Verbindung (Säure) (*Z.* 1865, 564).
- C<sub>16</sub>H<sub>26</sub>O<sub>6</sub>S<sub>3</sub>** 1)  $\beta\gamma\gamma$ -Tri[Äthylsulfon]- $\alpha$ -Phenylbutan. Sm. 154° (*B.* 34, 1401). — \*III, 119.
- C<sub>16</sub>H<sub>26</sub>O<sub>9</sub>N<sub>3</sub>** C 40,5 — H 5,5 — O 30,4 — N 23,6 — M. G. 474.
- 1) Hepta[Amidoacetyl]amidoessigsäure. HCl (*B.* 37, 1300 *C.* 1904 [1] 1337).
- C<sub>16</sub>H<sub>26</sub>O<sub>11</sub>Hg<sub>4</sub>** 1) Verbindung (aus Methyläthylketon u. Merkuriacetat).  $\frac{1}{2}$  Pikrat (*B.* 36, 3704 *C.* 1903 [2] 1239).
- C<sub>16</sub>H<sub>26</sub>O<sub>16</sub>S** 1) Stärkeschwefelsäure (*A.* 55, 13). — I, 1087.
- C<sub>16</sub>H<sub>26</sub>NCl** 1) Chlorisobutylat d. 2-Isobutyl-1,3-Dihydroisindol. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*B.* 31, 426). — \*IV, 139.
- C<sub>16</sub>H<sub>26</sub>NBr** 1) Bromisobutylat d. 2-Isobutyl-1,3-Dihydroisindol. Sm. 273° (*B.* 31, 426). — \*IV, 139.
- C<sub>16</sub>H<sub>26</sub>NJ** 1) Jodmethylat d. d-2-Propyl-1-Benzylhexahydropyridin (*J. d. N-Benzylconiin*). Sm. 187° (*B.* 37, 3636 *C.* 1904 [2] 1510).
- 2) isom. Jodmethylat d. d-2-Propyl-1-Benzylhexahydropyridin. Sm. 215° (*B.* 37, 3636 *C.* 1904 [2] 1510).
- C<sub>16</sub>H<sub>26</sub>N<sub>2</sub>S** 1) s-Phenylnonylthioharnstoff. Sm. 58–60° (*B.* 24, 3359). — II, 392.
- C<sub>16</sub>H<sub>27</sub>ON<sub>3</sub>** C 69,3 — H 9,7 — O 5,8 — N 15,2 — M. G. 277.
- 1) Semicarbazon d. Santalal. Sm. 212° (*Bl.* [3] 23, 221).
- 2) Semicarbazon d. Verb. C<sub>16</sub>H<sub>24</sub>O. Sm. 234° u. Zers. (*A.* 369, 57 *C.* 1909 [2] 2000).
- C<sub>16</sub>H<sub>27</sub>O<sub>2</sub>N** C 72,5 — H 10,2 — O 12,0 — N 5,3 — M. G. 265.
- 1) Verbindung (aus l-Fenchylamin) (*A.* 269, 365). — IV, 58.
- C<sub>16</sub>H<sub>27</sub>O<sub>2</sub>N<sub>9</sub>** C 50,9 — H 7,2 — O 8,5 — N 33,4 — M. G. 377.
- 1) Protamin (aus Lachssperma). (2HCl, PtCl<sub>4</sub> +  $\frac{1}{2}$ H<sub>2</sub>O) (*C.* 1908 [2] 1937).
- C<sub>16</sub>H<sub>27</sub>O<sub>3</sub>Br** 1) Brompalmitolsäure. Sm. 31° (*A.* 143, 31). — I, 535.
- C<sub>16</sub>H<sub>27</sub>O<sub>3</sub>N** C 63,3 — H 9,6 — O 17,1 — N 5,0 — M. G. 281.
- 1) Äthylester d. 1-Oximido-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-4-Carbonsäure. Sm. 109–111° (*A.* 288, 343). — \*I, 268.
- C<sub>16</sub>H<sub>27</sub>O<sub>3</sub>N<sub>3</sub>** C 62,1 — H 8,7 — O 15,5 — N 13,6 — M. G. 309.
- 1) Semicarbazon d. Cedrenketosäure. Sm. 245° (*B.* 40, 3524 *C.* 1907 [2] 1694).



- $C_{16}H_{27}O_4N$  C 64,6 — H 9,1 — O 21,6 — N 4,7 — M. G. 297.  
 1) Diäthylamidocamphoformolcarbonsäure. Diäthylaminsalz (*Am.* 34, 247 *C.* 1905 [2] 1490).
- $C_{16}H_{27}O_5N$  C 61,4 — H 8,6 — O 25,6 — N 4,4 — M. G. 313.  
 1) Diäthylester d.  $\delta$ -Diäthylamido- $\delta$ -Oxy- $\alpha\gamma$ -Butadienäthyläther- $\alpha\gamma$ -Dicarbonsäure. Fl. (*A.* 285, 99). — \*I, 793.
- $C_{16}H_{27}O_6Cl$  1) Triäthylester d.  $\gamma$ -Chlor- $\beta\beta$ -Dimethylpentan- $\alpha\gamma\delta$ -Tricarbonsäure. Fl. (*Soc.* 79, 790).
- $C_{16}H_{27}O_8N$  C 53,2 — H 7,5 — O 35,4 — N 3,9 — M. G. 361.  
 1) Tetraäthylester d. Diäthylamin- $\alpha\beta\alpha'\beta'$ -Tetracarbonsäure. Sd. 215 bis 217°<sub>15</sub> (*C.* 1909 [2] 1988).
- $C_{16}H_{27}O_8N_3$  C 49,3 — H 6,9 — O 32,9 — N 10,8 — M. G. 389.  
 1) Verbindung (aus Guanidin u. Dicarboxylglutakonsäureäthylester). Sm. 163° u. Zers. (*Soc.* 67, 1008).
- $C_{16}H_{27}O_8N_7$  C 43,1 — H 6,1 — O 28,8 — N 22,0 — M. G. 445.  
 1) Äthylester d. Hexa[Amidoacetyl]amidoessigsäure. Zers. bei 187 bis 190° (*C.* 1903 [2] 344).
- $C_{16}H_{28}ON_2$  C 72,7 — H 10,6 — O 6,1 — N 10,6 — M. G. 264.  
 1) Piperidid d. Bornylamidoameisensäure. Sm. 153° (*Soc.* 85, 1190 *C.* 1904 [2] 1125).  
 2) Piperidid d. Camphylamidoameisensäure (s-Camphylpiperidylharnstoff). Sm. 118° (*Soc.* 87, 737 *C.* 1905 [2] 243).
- $C_{16}H_{28}O_2N_2$  C 68,6 — H 10,0 — O 11,4 — N 10,0 — M. G. 280.  
 1) Tropinpinakon. Sm. 188°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 31, 1672). — \*III, 613; \*IV, 561.  
 2) Lupaninmethylhydroxyd. Fl. Salze, siehe (*A.* 230, 379). — III, 891; \*III, 662.
- $C_{16}H_{28}O_2N_6$  C 57,1 — H 8,3 — O 9,5 — N 25,0 — M. G. 336.  
 1) 3,3'-Disemicarbazon-1,1'-Dimethyldodekahydrobiphenyl. Sm. 248 bis 250° u. Zers. (*B.* 32, 1322).
- $C_{16}H_{28}O_2N_9$  1) Protamin. (2HCl, PtCl<sub>4</sub>) (*C.* 1896 [2] 101).
- $C_{16}H_{28}O_2Br_2$  1) Dibromhypogäsäure (*A.* 143, 29). — I, 525.
- $C_{16}H_{28}O_2Br_4$  1) Tetrabrompalmitinsäure (*A.* 143, 29). — I, 488.
- $C_{16}H_{28}O_2J_2$  1) Säure (aus Palmitolsäure). Sm. 51° (*B.* 27, 3400). — \*I, 206.
- $C_{16}H_{28}O_2S_2$  1) Diisocamyläther d. 2,5-Dimerkapto-1,4-Diketo-hexahydrobenzol. Sm. 150—152° (*A.* 336, 156 *C.* 1904 [2] 1300).
- $C_{16}H_{28}O_3N_2$  C 64,8 — H 9,5 — O 16,2 — N 9,5 — M. G. 296.  
 1) Säure (aus d. Dilaktam  $C_{16}H_{26}O_3N_2$ ). Cu (*B.* 41, 2935 *C.* 1908 [2] 1515).  
 2) Verbindung (aus Daldan u. NH<sub>3</sub>). 2HCl (*J.* 1880, 524). — I, 964.
- $C_{16}H_{28}O_4N_2$  C 61,5 — H 9,0 — O 20,5 — N 9,0 — M. G. 312.  
 1) Diäthylester d. Äthylendi[ $\beta$ -Amido- $\alpha$ -Methylcrotonsäure]. Sm. 103 bis 104° (*Soc.* 63, 1310). — \*I, 664.
- $C_{16}H_{28}O_5N_2$  C 58,5 — H 8,5 — O 24,4 — N 8,5 — M. G. 328.  
 1) d- $\alpha$ -[1- $\beta$ -Menthylureido]propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 161° (*C.* 1908 [2] 2007).  
 2) Verbindung (aus Äthanoxyd u. Phenylhydrazin). Sd. 230—240°<sub>10</sub> (*M.* 15, 671). — IV, 660.
- $C_{16}H_{28}O_7N_6$  C 46,2 — H 6,7 — O 26,9 — N 20,2 — M. G. 416.  
 1)  $\alpha$ -Amidoisocapronyltetra[Amidoacetyl]amidoessigsäure. Sm. 240° (*B.* 39, 460 *C.* 1906 [1] 1001).
- $C_{16}H_{28}O_{12}N_6$  C 38,7 — H 5,6 — O 38,7 — N 16,9 — M. G. 496.  
 1) Verbindung (aus Diaspartiddiaspartdiamid) (*G.* 30 [1] 11).
- $C_{16}H_{28}NJ$  1) Jodmethylat d.  $\gamma$ -[4-Dimethylamidophenyl]- $\beta\delta$ -Dimethylpentan. Sm. 171° (*B.* 40, 4367 *C.* 1908 [1] 34).
- $C_{16}H_{28}N_2J_2$  1) Jodmethylat d. Jodisopartein. Sm. 177—178°. HJ (*C. r.* 147, 865 *C.* 1909 [1] 28; *C. r.* 147, 1318 *C.* 1909 [1] 447).
- $C_{16}H_{29}ON$  C 76,5 — H 11,5 — O 6,4 — N 5,6 — M. G. 251.  
 1) Tetrabutyräldin. (2HCl, PtCl<sub>4</sub>) (*A.* 157, 354). — I, 944.  
 2) Amid d. Hydnocarpussäure. Sm. 112—113° (*Soc.* 87, 890 *C.* 1905 [2] 339).
- $C_{16}H_{29}ON_3$  C 68,8 — H 10,4 — O 5,7 — N 15,1 — M. G. 279.  
 1)  $\beta$ -Semicarbazon- $\alpha\gamma$ -Di[Hexahydrophenyl]propan. Sm. 142—145° (*C.* 1907 [2] 53; *A.* 353, 300 *C.* 1907 [2] 236).

- C<sub>16</sub>H<sub>29</sub>O<sub>2</sub>N** C 71,9 — H 10,9 — O 12,0 — N 5,2 — M. G. 267.  
 1)  $\alpha$ -Nitro- $\alpha$ -Hexadekin (B. 33, 3587).  
 2) Äthylcarpain. Sm. 91°. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HJ. — III, 804.  
 3) Bornylester d. Diäthylamidoessigsäure. Sd. 160°<sub>20</sub>. Citrat (Ar. 240, 650 C. 1903 [1] 399).
- C<sub>16</sub>H<sub>29</sub>O<sub>2</sub>Br** 1) Bromhypogäsäure (A. 143, 26). — I, 524.  
 2) Säure (aus Palmitinsäure). Ba (B. 25, 485).
- C<sub>16</sub>H<sub>29</sub>O<sub>3</sub>Br<sub>3</sub>** 1) Tribrompalmitinsäure. Sm. 39° (A. 143, 27). — I, 488.
- C<sub>16</sub>H<sub>29</sub>O<sub>8</sub>N<sub>3</sub>** C 61,7 — H 9,3 — O 15,4 — N 13,5 — M. G. 311.  
 1) Semicarbazon d. Propionylcampholsäureäthylester. Sm. 180,5° (C. r. 144, 299 C. 1907 [1] 1126).
- C<sub>16</sub>H<sub>29</sub>N<sub>2</sub>Cl** 1) Chlormethylat d. Isosparteïn. HCl (Bl. [4] 5, 38 C. 1909 [1] 766).
- C<sub>16</sub>H<sub>29</sub>N<sub>2</sub>Br** 1) Brommethylat d. Isosparteïn. HBr (Bl. [4] 5, 39 C. 1909 [1] 766).
- C<sub>16</sub>H<sub>29</sub>N<sub>2</sub>J** 1)  $\alpha$ -Jodmethylat d. Sparteïn. Sm. 222–225° (234°). HJ (A. 235, 375; M. 16, 603; Bl. [3] 29, 1140 C. 1904 [1] 293; Ar. 242, 515 C. 1904 [2] 1412; C. r. 140, 1602 C. 1905 [2] 262; C. r. 140, 1645 C. 1905 [2] 337; Bl. [3] 33, 1237 C. 1906 [1] 245; Bl. [3] 33, 1245 C. 1906 [1] 245; Bl. [3] 33, 1252 C. 1906 [1] 245). — III, 932; \*III, 691.  
 2)  $\beta$ -Jodmethylat d. Sparteïn. HJ (C. r. 140, 1602 C. 1905 [2] 262; C. r. 140, 1645 C. 1905 [2] 337; Bl. [3] 33, 1237 C. 1906 [1] 245; Bl. [3] 33, 1246 C. 1906 [1] 245; Bl. [3] 33, 1252 C. 1906 [1] 245; Bl. [4] 3, 675 C. 1908 [2] 176).  
 3) Jodmethylat d. Isosparteïn. Sm. 232°. HJ + H<sub>2</sub>O (C. r. 145, 1184 C. 1908 [1] 472; C. r. 145, 1344 C. 1908 [1] 651; Bl. [4] 3, 693 C. 1908 [2] 177).  
 4) Jodisoamylat d. s-Isoamylphenylhydrazin (C. r. 137, 330 C. 1903 [2] 716; Bl. [3] 29, 974 C. 1903 [2] 1115).  
 C 72,2 — H 11,3 — O 6,0 — N 10,5 — M. G. 266.
- C<sub>16</sub>H<sub>30</sub>ON<sub>2</sub>** 1) Methylhydroxyd d. Isosparteïn. HCl, HBr, HJ, H<sub>2</sub>SO<sub>4</sub> + 9H<sub>2</sub>O, 2Pikrat (C. r. 145, 1344 C. 1908 [1] 651; Bl. [4] 5, 37 C. 1909 [1] 766; Bl. [4] 5, 40 C. 1909 [1] 766).  
 2) Piperidid d. l-Menthylamidoameisensäure. Sm. 169° (Soc. 91, 305 C. 1907 [1] 1331).  
 C 68,1 — H 10,6 — O 11,3 — N 9,9 — M. G. 282.
- C<sub>16</sub>H<sub>30</sub>O<sub>2</sub>N<sub>2</sub>** 1) s-Diacetoncamphelylharnstoff. Sm. 115° (G. 23 [2] 518). — \*I, 736.  
 2) 3,5-Diketo-2,6-Dihexylhexahydro-1,4-Diazin (Imid d. Imidocaprylsäure). HCl (A. 177, 139). — I, 1205.  
 3) Bis-Epipiperidinhydrin. Sm. 109°; Sd. bei 350°. (2HCl, PtCl<sub>4</sub>) (M. 15, 123). — IV, 19.
- C<sub>16</sub>H<sub>30</sub>O<sub>2</sub>Br<sub>2</sub>** 1)  $\alpha\beta$ -Dibrompentadekan- $\alpha$ -Carbonsäure. Sm. 66° (C. 1905 [1] 805).  
 2) Dibrompalmitinsäure (aus Gaidinsäure) (A. 143, 39). — I, 488.  
 3) Dibrompalmitinsäure (aus Hypogäsäure). Sm. 29° (A. 143, 24). — I, 488.
- C<sub>16</sub>H<sub>30</sub>O<sub>3</sub>S** 1)  $\alpha$ -Hexadekin- $\alpha$ -Sulfonsäure. Fl. Ba (B. 33, 3588).
- C<sub>16</sub>H<sub>30</sub>O<sub>5</sub>N<sub>4</sub>** C 53,6 — H 8,4 — O 22,3 — N 15,6 — M. G. 358.  
 1) i- $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amidoisocapronylamidoacetylamidoessigsäure (i-Dileucylglycylglycin). Sm. 250° u. Zers. (B. 37, 2506 C. 1904 [2] 426).  
 C 55,5 — H 8,7 — O 27,7 — N 8,1 — M. G. 346.
- C<sub>16</sub>H<sub>30</sub>O<sub>6</sub>N<sub>2</sub>** 1) Äthylester d. bim.  $\alpha$ -Nitrosopentan- $\alpha$ -Carbonsäure (B. 42, 1898 C. 1909 [2] 222).  
 C 37,7 — H 5,9 — O 34,5 — N 21,9 — M. G. 510.
- C<sub>16</sub>H<sub>30</sub>O<sub>11</sub>N<sub>8</sub>** 1) Diaspartiddiasparttetramid (G. 30 [1] 10).
- C<sub>16</sub>H<sub>30</sub>N<sub>3</sub>J** 1) Jodmethylat d.  $\delta$ -Amido-5-Isopropyl-2,4-Diisobutyl-1,3-Diazin (J. pr. [2] 37, 409). — IV, 1135.
- C<sub>16</sub>H<sub>30</sub>N<sub>4</sub>S<sub>2</sub>** 1) Verbindung (aus Acetaldehyd, Piperidin u. Rubeanwasserstoff). Sm. 90° (C. 1899 [2] 1025). — \*IV, 18.
- C<sub>16</sub>H<sub>31</sub>ON** C 75,9 — H 12,2 — O 6,3 — N 5,5 — M. G. 253.  
 1) Pentadekylisocyanat. Sm. 8–14° (Am. 22, 27). — \*I, 719.  
 2) Oxim d. Muskon. Sm. 46° (J. pr. [2] 73, 491 C. 1906 [2] 126).  
 3) Nitril d.  $\alpha$ -Oxypentadekan- $\alpha$ -Carbonsäure. Sm. 52,5–53,5° (Soc. 87, 1896 C. 1906 [1] 652).  
 4) Amid d.  $\alpha$ -Pentadekan- $\alpha$ -Carbonsäure (C. 1905 [1] 805).

- $C_{16}H_{31}ON_3$  C 68,3 — H 11,0 — O 5,7 — N 14,9 — M. G. 281.  
 1) Semicarbazon d. Muskon. Sm. 133—134° (D. R. P. 180719 C. 1907 [2] 109).  
 2) Azid d. Palmitinsäure. Sm. 49° (J. pr. [2] 64, 430 C. 1902 [1] 24).
- $C_{16}H_{31}OCl$  1) Chlorid d. Palmitinsäure. Sm. 12°; Sd. 192,5°<sub>15</sub> (B. 9, 1932; 17, 1379). — I, 460.
- $C_{16}H_{31}O_2N$  C 71,4 — H 11,5 — O 11,9 — N 5,2 — M. G. 269.  
 1) Menthylester d. Diäthylamidoessigsäure. Sd. 160—162°<sub>20</sub>. HCl (Ar. 240, 646 C. 1903 [1] 399).
- $C_{16}H_{31}O_2Cl$  1)  $\beta$ -Chloräthylester d. Myristinsäure. Sm. 34°; Sd. 115° (B. 36, 4341 C. 1904 [1] 433).
- $C_{16}H_{31}O_2Br$  1)  $\alpha$ -Brompalmitinsäure. Sm. 51,5—52° (B. 24, 938; 25, 484; Soc. 87, 1895 C. 1906 [1] 652). — I, 488.  
 2)  $\beta$ -Bromäthylester d. Myristinsäure. Sm. 48°; Sd. 134° (B. 36, 4341 C. 1904 [1] 433).
- $C_{16}H_{31}O_2J$  1)  $\alpha$ -Jodpentadekan- $\alpha$ -Carbonsäure. Sm. 57° (C. 1905 [1] 805; D. R. P. 180622 C. 1907 [1] 773).
- $C_{16}H_{31}O_3N$  C 67,4 — H 10,9 — O 16,8 — N 4,9 — M. G. 285.  
 1) Isovalerat d.  $\alpha$ -Methylisovalerylamido- $\beta$ -Oxy- $\beta$ -Methylbutan. Sd. 162°<sub>26</sub> (D. R. P. 181175 C. 1907 [1] 1002).
- $C_{16}H_{31}O_3N_3$  C 61,4 — H 9,9 — O 15,3 — N 13,4 — M. G. 313.  
 1)  $\alpha$ -Semicarbazonpropionat d.  $\zeta$ -Oxydodekan. Sm. 93—94° (Bl. [3] 35, 648 C. 1906 [2] 1115).
- $C_{16}H_{31}O_3N_9$  C 48,4 — H 7,8 — O 12,1 — N 31,7 — M. G. 397.  
 1) Protamin (Salmin, siehe auch  $C_{30}H_{57}O_6N_{17}$ . (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 7, 376, 1714; H. 22, 179; 25, 169; C. 1896 [2] 103). — III, 926.
- $C_{16}H_{31}O_4N$  C 63,8 — H 10,3 — O 21,3 — N 4,6 — M. G. 301.  
 1) Imidocaprylsäure. Sm. 210—215° u. Zers. Ca (A. 177, 136). — I, 1205.
- $C_{16}H_{31}O_4N_3$  C 58,4 — H 9,4 — O 19,4 — N 12,7 — M. G. 329.  
 1) Äthylester d.  $\alpha$ -[ $\alpha$ -Amidoisocapronylamidoacetyl]amidoisocapronsäure. HNO<sub>3</sub> (B. 38, 2923 C. 1905 [2] 1330).
- $C_{16}H_{31}NS$  1) Pentadekylsenföhl. Fl. (Am. 22, 25).
- $C_{16}H_{32}ON_2$  C 71,6 — H 11,9 — O 6,0 — N 10,5 — M. G. 268.  
 1) Di[ $\gamma$ -1-Piperidylpropyl]äther. Sd. 336—339°<sub>761</sub>. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 39, 2882 C. 1906 [2] 1270).
- $C_{16}H_{32}ON_8$  C 54,5 — H 9,1 — O 4,5 — N 31,8 — M. G. 352.  
 1) Azoxyverbindung (aus 3-Phenyl-2-m-Nitrophenyl-2,3-Dihydro-1,2,4-Naphhtisotriazin) (Soc. 59, 700). — IV, 1395.
- $C_{16}H_{32}OS$  1) Thiolpalmitinsäure. Sm. 71° (C. r. 136, 555 C. 1903 [1] 816).
- $C_{16}H_{32}O_2N_2$  C 67,6 — H 11,3 — O 11,3 — N 9,8 — M. G. 284.  
 1)  $\alpha$ -Oktanoyl- $\beta$ -Heptylharnstoff. Sm. 101—102° (B. 15, 760; 17, 1409). — I, 1304.
- $C_{16}H_{34}O_2S_2$  1) Äthylester d.  $\beta\beta$ -Dimerkaptobutterdiisoamyläthersäure. Fl. (B. 34, 2658).
- $C_{16}H_{32}O_3S$  1)  $\alpha$ -Hexadeken- $\eta$ -Sulfonsäure (Cetensulfonsäure). Sm. 18°. K (B. 7, 125). — I, 125.
- $C_{16}H_{32}O_5S_2$  1)  $\delta\delta$ -Diamylsulfon- $\beta$ -Keto- $\gamma$ -Methylpentan. Fl. (B. 35, 502 C. 1902 [1] 637).
- $C_{16}H_{32}O_6S_2$  1) Äthylester d.  $\beta\beta$ -Di[Isoamylsulfon]buttersäure. Fl. (B. 34, 2658).
- $C_{16}H_{32}O_8S_4$  1) cyclisches Duplo-2,2-Dimethylhexamethylen-1,3-Disulfon. Sm. 270° (B. 41, 4255 C. 1909 [1] 275).
- $C_{16}H_{32}NJ$  1) Dimethylbutylbornylammoniumjodid. Sm. 178° (Soc. 75, 951). — \*IV, 59.
- $C_{16}H_{32}N_2Cl_2$  1) R-Bistrimethylendipiperidoniumchlorid. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (B. 29, 2390; B. 35, 3053 C. 1902 [2] 1127; B. 39, 1432 C. 1906 [1] 1667). — IV, 10; \*IV, 299.
- $C_{16}H_{32}N_2Br_2$  1) R-Bistrimethylendipiperidoniumbromid (B. 29, 2390; B. 35, 3053 C. 1902 [2] 1127; B. 39, 1430 C. 1906 [1] 1667). — IV, 10; \*IV, 299.
- $C_{16}H_{33}ON$  C 75,3 — H 12,9 — O 6,3 — N 5,5 — M. G. 255.  
 1)  $\alpha$ -Oximidohexadekan. Sm. 88° (Soc. 87, 1892 C. 1906 [1] 652).  
 2) Laurinimidoisobutyläther. HCl (Sm. 65—66° (B. 26, 2840). — \*I, 841.  
 3) Amid d. Palmitinsäure. Sm. 104—105° (101,5°); Sd. 235—236°<sub>2</sub> (152 bis 153°) (J. 1859, 367; B. 15, 1730; 24, 991; 26, 2840; 29, 1324; J. pr. [2] 52, 60; J. pr. [2] 64, 435 C. 1902 [1] 24). — I, 1249; \*I, 705.



- $C_{16}H_{33}ON_8$  C 67,8 — H 11,7 — O 5,6 — N 14,8 — M. G. 283.  
 1)  $\alpha$ -Semicarbazonpentadekan. Sm. 106,5° (Soc. 87, 1896 C. 1906 [1] 652).
- $C_{16}H_{33}OCl$  1) Chlorcetylalkohol. Sd. 300° (A. 126, 201). — I, 248.
- $C_{16}H_{33}OJ$  1)  $\eta$ -Jod- $\zeta$ -Oxy- $\beta\zeta\eta\lambda$ -Tetramethyldodekan. Fl. (C. 1909 [1] 831).
- $C_{16}H_{33}O_2N$  C 70,8 — H 12,1 — O 11,8 — N 5,2 — M. G. 271.  
 1) Palmitinhydroxamsäure. Sm. 99° (C. 1908 [2] 1019).  
 2)  $\alpha$ -Amidopalmitinsäure (B. 24, 941). — I, 1205.  
 3) Nitrit d. Cetylalkohol (G. 24 [2] 25).  
 4) Amid d.  $\alpha$ -Oxypentadekan- $\alpha$ -Carbonsäure. Sm. 149,5° (Soc. 87, 1897 C. 1906 [1] 652).
- $C_{16}H_{33}O_2B$  1) Cetylborat. Sm. 58° (A. Spl. 5, 198). — I, 345.
- $C_{16}H_{33}O_3N$  C 66,9 — H 11,5 — O 16,7 — N 4,9 — M. G. 287.  
 1) Nitrat d. Oxyhexadekan (Salpetersäurecetyler) (Z. 1871, 469). — I, 325.
- $C_{16}H_{33}NS_2$  1) Pentadekylamidodithioameisensäure. Pentadekylaminsalz (Am. 22, 24). — \*I, 717.
- $C_{16}H_{34}ON_2$  C 71,1 — H 12,6 — O 5,9 — N 10,4 — M. G. 270.  
 1) Pentadekylharnstoff. Sm. 109° (B. 30, 901). — \*I, 730.  
 2) Triisoamylharnstoff. Sd. 260° (B. 12, 1331). — I, 1300.  
 3) Palmitinamidoxim. Sm. 101,5–102° (B. 26, 2845). — \*I, 838.  
 4) Hydrazid d. Palmitinsäure. Sm. 111°. HCl (J. pr. [2] 64, 422 C. 1902 [1] 24).
- $C_{16}H_{34}O_2N_2$  C 67,1 — H 11,9 — O 11,2 — N 9,8 — M. G. 286.  
 1) R-Bis(trimethylendipiperidoniumhydroxyd. Salze, siehe (B. 29, 2390; B. 35, 3053 C. 1902 [2] 1127; B. 39, 1430 C. 1906 [1] 1667). — IV, 10.
- $C_{16}H_{34}O_3N_4$  C 61,1 — H 10,8 — O 10,2 — N 17,8 — M. G. 314.  
 1)  $\alpha\alpha$ -Di[ $\beta\beta$ -Dipropylureido]äthan. Sm. 113° (R. 8, 237). — I, 1313.  
 2)  $\alpha\alpha$ -Di[ $\beta\beta$ -Diisopropylureido]äthan. Sm. 147° (R. 8, 237). — I, 1313.
- $C_{16}H_{34}O_4S$  1) Cetylschwefelsäure. K (A. 19, 293; J. 1856, 579; 1857, 445; C. 1897 [1] 1037). — I, 333; \*I, 123.
- $C_{16}H_{34}O_5S_2$  1) Glykoseisoamylmerkaptal (Gemisch?). Sm. 138–142° (B. 27, 678). — \*I, 572.
- $C_{16}H_{34}O_5S_4$  1)  $\gamma\gamma\zeta\zeta$ -Tetra[Äthylsulfon]- $\beta$ -Methylheptan. Sm. 129–131° (B. 33, 2992).
- $C_{16}H_{34}N_2Cl_2$  1) Di[Chlormethylat] d. Di[Dimethylamido]phellandren. 2 + PtCl<sub>4</sub> (A. 324, 276 C. 1902 [2] 1254).
- $C_{16}H_{34}N_2J_2$  1) Di[Jodmethylat] d. Di[Dimethylamido]phellandren. Sm. 91–94° (A. 324, 280 C. 1902 [2] 1254).  
 2) Di[Jodmethylat] d. isom. Di[Dimethylamido]phellandren. Sm. 192° u. Zers. (A. 324, 275 C. 1902 [2] 1254).
- $C_{16}H_{35}O_2N$  C 70,3 — H 12,8 — O 11,7 — N 5,1 — M. G. 273.  
 1) Di[ $\beta$ -Oxy- $\beta\delta$ -Dimethylhexyl]amin. Sd. 206–207°<sub>46</sub>. HCl (D.R.P. 189481 C. 1907 [2] 2004).
- $C_{16}H_{35}O_4N$  C 64,6 — H 11,8 — O 18,8 — N 4,7 — M. G. 297.  
 1) Tetraäthyläther d. Äthyldi[ $\gamma\gamma$ -Dioxypropyl]amin. Sd. 159°<sub>13</sub>. (2HCl, PtCl<sub>4</sub>) (B. 38, 4163 C. 1906 [1] 447).
- $C_{16}H_{35}O_4P$  1) Kieselsäuretetraisobutylester. Sd. 256–260° (J. 1874, 349). — I, 346.
- $C_{16}H_{35}O_6P$  1) Säure (aus Isobutyraldehyd). Sm. 140–142°. Ba + 2H<sub>2</sub>O (A. ch. [6] 23, 343). — I, 1504.
- $C_{16}H_{36}O_4Si$  1) Kieselsäuretetraisobutylester. Sd. 256–260° (J. 1874, 349). — I, 346.
- $C_{16}H_{36}O_6P_2$  1) Unterphosphorsäuretetraisobutylester. Fl. (A. 232, 14). — I, 339.
- $C_{16}H_{36}NJ$  1) Tetrabutylammoniumjodid (A. 165, 114). — I, 1132.
- $C_{16}H_{36}ClAs$  1) Tetrabutylarsoniumchlorid. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (A. 341, 205 C. 1905 [2] 814).
- $C_{16}H_{36}JP$  1) Tetraisobutylphosphoniumjodid (B. 6, 297). — I, 1503.
- $C_{16}H_{36}JAs$  1) Tetrabutylarsoniumjodid. Zers. bei 145–150°. + HgJ<sub>2</sub> (A. 341, 204 C. 1905 [2] 814).  
 2) Dipropyldiisomylarsoniumjodid (Am. 40, 123 C. 1908 [2] 853).
- $C_{16}H_{40}O_{12}Si_4$  1) polym. Diäthylkieselsäure. Sd. 270–290° (A. ch. [5] 7, 472). — I, 346.

### $C_{16}$ -Gruppe mit vier Elementen.

- $C_{16}H_4O_2N_2Cl_4$  1) 2,4,2',4'-Tetrachlordehydroindigo. 2 KHSO<sub>3</sub> + 5H<sub>2</sub>O, + 2 Anilinbisulfid (B. 42, 3663 C. 1909 [2] 1657).
- $C_{16}H_4O_2N_2Br_4$  1) 2,4,2',4'-Tetrabromdehydroindigo. + 2NaHSO<sub>3</sub> + 5H<sub>2</sub>O, 2KHSO<sub>3</sub> + 5H<sub>2</sub>O, 2Anilinbisulfid (B. 42, 3661 C. 1909 [2] 1656).

- $C_{16}H_5ON_2Br_7$  1)  $\beta$ -Heptabrom-2-Oxy-1-Phenylazonaphtalin. Sm. 210—215° (*G.* 30 [2] 172). — \*IV, 1044.
- $C_{16}H_6O_2N_2Cl_4$  1) Tetrachlorindigo (*B.* 17, 753; D.R.P. 32238). — II, 1620; \*II, 947.  
2) Tetrachlorindin (*J. pr.* [1] 22, 263). — II, 1616.
- $C_{16}H_6O_2N_2Br_2$  1) 2,2'-Dibromdehydroindigo. Sm. 270° u. Zers. + 2NaHSO<sub>4</sub> + 2H<sub>2</sub>O, + 2KHSO<sub>4</sub> + 2H<sub>2</sub>O, + 2Anilinbisulfit (*B.* 42, 3652 *C.* 1909 [2] 1654).
- $C_{16}H_6O_2N_2Br_4$  1) 4,5,6,7-Tetrabrom-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]benzimidazol. Sm. 270° u. Zers. (*C.* 1902 [2] 942). — \*IV, 597.  
2) Tetrabromindin (*J. pr.* [1] 22, 263; [1] 25, 453). — II, 1616.
- $C_{16}H_6O_2N_2S_2$  1) 1,5-Dirhodan-9,10-Anthrachinon (D.R.P. 206054 *C.* 1909 [1] 703).
- $C_{16}H_7ON_2Br_5$  1)  $\beta$ -Pentabrom-2-Oxy-1-Phenylazonaphtalin. Sm. 250° (*G.* 30 [2] 173). — \*IV, 1044.
- $C_{16}H_7O_2NCl_4$  1) 5,6,7,8-Tetrachlor-2-Phenylamido-1,4-Naphtochinon. Sm. 240° (*B.* 19, 1169). — III, 378.
- $C_{16}H_7O_2N_2Br_8$  1) Tribromindigo (D.R.P. 209078 *C.* 1909 [1] 1627).
- $C_{16}H_7O_3N_2Cl_3$  1) Verbindung (aus 2,3,7,8-Tetrachlor-5,6-Dioxy-1,4-Diketo-1,4-Dihydronaphtalin u. 1,2-Diamidobenzol). Sm. noch nicht bei 250° (*A.* 286, 53). — IV, 1059.
- $C_{16}H_7O_3N_3Br_4$  1) Tetrabromimasatin (*J. pr.* [1] 25, 468). — II, 1608.
- $C_{16}H_8ONCl_5$  1) 2,4,5,6,7-Pentachlor-3-[2-Methylphenyl]amido-1-Ketoinden. Sm. 243° (*A.* 272, 257). — III, 169; \*III, 136.
- $C_{16}H_8ON_2Cl_2$  1) 5,5-Dichlor-6-Keto-5,6-Dihydro- $\alpha\beta$ -Naphtophenazin. Sm. 196 bis 197° (*A.* 295, 20). — IV, 1057.
- $C_{16}H_8ON_2Br_4$  1) 2-Oxy-1-[ $\beta$ -Tetrabromphenyl]azonaphtalin. Sm. 205—207° (*Soc.* 91, 1572 *C.* 1907 [2] 1787).
- $C_{16}H_8O_2NCl$  1)  $\beta$ -Chlorketonaphtophenoxazin. Sm. 194—195° (*B.* 28, 355). — IV, 460.
- $C_{16}H_8O_2N_2Cl_2$  1) 2,2'-Dichlorindigo (D.R.P. 128727; *B.* 37, 1866 *C.* 1904 [1] 1600; *B.* 42, 769 *C.* 1909 [1] 1097).  
2) 3,3'-Dichlorindigo. Subl. (*A.* 284, 156; D.R.P. 30329, 33064). — II, 1620; \*II, 947.  
3) 4,4'-Dichlorindigo (D.R.P. 112400).  
4) isom. Dichlorindigo (D.R.P. 139838 *C.* 1903 [1] 748).  
5) Dichlorindin (*J. pr.* [1] 22, 263). — II, 1616.
- $C_{16}H_8O_2N_2Br_2$  1) 4,6-Dibrom-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]benzimidazol. Sm. noch nicht bei 370° (*C.* 1902 [2] 941). — \*IV, 597.  
2) 2,2'-Dibromindigo (*B.* 36, 3303; *B.* 37, 1868 *C.* 1904 [1] 1601; *B.* 42, 766 *C.* 1909 [1] 1097; *M.* 30, 249 *C.* 1909 [1] 1097).  
3) 3,3'-Dibromindigo. Subl. (*B.* 12, 1315; 17, 968; *A.* 284, 155; D.R.P. 128575 *C.* 1902 [1] 551; D.R.P. 149940 *C.* 1904 [1] 1046). — II, 1620.  
4) Verbindung (aus Indigotin) (*C.* 1902 [1] 936).
- $C_{16}H_8O_3N_3Br_3$  1) 2-Nitro-4-[2,4,6-Tribromphenyl]azo-1-Oxynaphtalin. Sm. 216° (*Soc.* 95, 1436 *C.* 1909 [2] 1248).  
2) 4-Nitro-2-[2,4,6-Tribromphenyl]azo-1-Oxynaphtalin. Sm. 213 bis 214° (*Soc.* 95, 1436 *C.* 1909 [2] 1248).
- $C_{16}H_8O_3N_4Cl_4$  1) 4-[2,5-Dichlorphenyl]amido-5-Keto-1-[2,5-Dichlorphenyl]-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 236° u. Zers. (*B.* 38, 3511 *C.* 1905 [2] 1627).
- $C_{16}H_8O_4NCl_3$  1) 3,7,8-Trichlor-2-Phenylamido-5,6-Dioxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 224° (*A.* 286, 48). — III, 387.
- $C_{16}H_8O_4NBr_3$  1) Phenylimid d. 3,5,6-Tribrom-4-Acetoxybenzol-1,2-Dicarbon-säure. Sm. 224—225° (*A.* 361, 245 *C.* 1908 [2] 412).
- $C_{16}H_8O_4N_2Cl_4$  1) Tetrachlorisatyd (*J. pr.* [1] 22, 262; [1] 25, 442). — II, 1615.
- $C_{16}H_8O_4N_2Br_4$  1) Tetrabromisatyd (*J. pr.* [1] 22, 262). — II, 1615.
- $C_{16}H_8O_6N_2Cl_2$  1) 5,8-Dichlor- $\beta$ -Dinitro-1,2-Dimethyl-9,10-Anthrachinon. Sm. 226° (*Soc.* 95, 1315 *C.* 1909 [2] 986).
- $C_{16}H_9ONCl_2$  1) Chlorid d. 2-Chlor-3-Phenylchinolin-4-Carbonsäure. Sm. 163° (*B.* 41, 486 *C.* 1908 [1] 1065).
- $C_{16}H_9ONS$  1) Phenonaphtazthion. Sm. 176° (*A.* 322, 55 *C.* 1902 [2] 224). — \*IV, 278.  
2) Thioxanthon-1,2[oder 2,3]-Chinolin. Sm. 167°. HCl (*B.* 42, 3058 *C.* 1909 [2] 1457).
- $C_{16}H_9ON_2Cl$  1) 5-Chlor-6-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 199—200° (*A.* 295, 21). — \*IV, 710.

- $C_{16}H_9ON_2Cl$  2) 6-Chlor-5-Oxy- $\alpha\beta$ -Naphtophenazin (A. 286, 56). — IV, 1057; \*IV, 711.
- $C_{16}H_9ON_2Cl_3$  1) 1-[2,4,6-Trichlorphenyl]azo-2-Oxynaphtalin. Sm. 145—146° (Soc. 87, 395 C. 1905 [1] 1595).
- $C_{16}H_9ON_2Br$  1) 6-Brom-5-Oxy- $\alpha\beta$ -Naphtophenazin. Zers. bei 230°. Na + 2H<sub>2</sub>O, Ag (B. 34, 1053). — \*IV, 711.
- $C_{16}H_9ON_2Br_3$  1) 4-[2,4,6-Tribromphenyl]azo-1-Oxynaphtalin. Sm. 202° (Soc. 93, 1020 C. 1908 [2] 410).
- 2) 1-[2,4,6-Tribromphenyl]azo-2-Oxynaphtalin. Sm. 173—174° (169°) (B. 36, 2073 C. 1903 [2] 358; Soc. 83, 808 C. 1903 [2] 195, 426). — \*IV, 1044.
- $C_{16}H_9ON_3Br_2$  1) Acetyldibromindophenazin (B. 29, 202). — IV, 1189.
- $C_{16}H_9O_2NCl_2$  1) 7,8-Dichlor- $\beta$ -Phenylamido-1,4-Naphtochinon. Sm. 254—255° (B. 21, 3270). — III, 378.
- 2)  $\beta$ -Dichlor- $\beta$ -Phenylamido-1,4-Naphtochinon. Sm. 228° (B. 19, 3178). — III, 378.
- $C_{16}H_9O_2NBr_2$  1)  $\beta$ -Brom-2-[4-Bromphenyl]amido-1,4-Naphtochinon. Sm. 238 bis 240° (B. 14, 1901). — III, 379.
- 2) 2,6-Dibrom-4-[4-Oxy-1-Naphtyl]imido-1-Keto-1,4-Dihydrobenzol (Oxynaphtodibromdiphenazon). Zers. bei 201°. Na (A. 289, 104). — IV, 599.
- $C_{16}H_9O_2NS$  1) 1-[1,3-Diketo-2,3-Dihydroindenyl-2-]benzthiazol. Sm. oberhalb 320° (B. 21, 2630). — III, 278.
- 2) Thionaphten-2-Indolindigo. Sm. noch nicht bei 300° (B. 41, 776 C. 1908 [1] 1463; M. 29, 377 C. 1908 [2] 516).
- 3) 3-Thionaphten-2-Indolindigo. Sm. 247—250° (M. 29, 375 C. 1908 [2] 516).
- 4) 2-Thionaphten-3-Indolindigo (Thioindigoscharlach R) (D. R. P. 182260 C. 1907 [2] 867; C. 1907 [2] 1665; M. 29, 376 C. 1908 [2] 516).
- $C_{16}H_9O_2N_2Cl$  1) Chlorindigo (C. 1900 [2] 701; D. R. P. 139838 C. 1903 [1] 748; D. R. P. 163280 C. 1905 [2] 1144).
- 2) isom. Chlorindigo (D. R. P. 193971 C. 1908 [1] 1015).
- $C_{16}H_9O_2N_2Br$  1) Bromindigo (D. R. P. 128575 C. 1902 [1] 551; D. R. P. 144249 C. 1903 [2] 779; D. R. P. 149899, 149940, 149983 C. 1904 [1] 1046).
- 2) Bromindirubin (B. 14, 1745). — II, 1622.
- $C_{16}H_9O_2N_2Br_3$  1) 2-Oxy-1-[3,4,6(oder 4,5,6)-Tribrom-2-Oxyphenyl]azonaphtalin. Sm. 212—216° (Soc. 91, 1572 C. 1907 [2] 1787).
- $C_{16}H_9O_2N_3Br_2$  1) Nitril d.  $\alpha$ -Nitro- $\alpha\beta$ -Di[4-Bromphenyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 130—134° (B. 41, 4125 C. 1909 [1] 167).
- $C_{16}H_9O_3N_2Cl$  1) 3-Chlor-2-Phenylnitrosamido-1,4-Naphtochinon.  $\alpha$ -Modif. Sm. 126°;  $\beta$ -Modif. Sm. 155° (B. 15, 486; 16, 895; 18, 3075). — III, 377.
- $C_{16}H_9O_3N_2Br_3$  1) Acetat d. 5,6,8-Tribrom-7-Oxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 171° (A. 361, 239 C. 1908 [2] 412).
- $C_{16}H_9O_3N_3Cl_2$  1) Dichlorimasatin (J. pr. [1] 25, 467). — II, 1608.
- $C_{16}H_9O_3N_3Br_2$  1) Dibromimasatin (Z. 1865, 593). — II, 1608.
- $C_{16}H_9O_4NCl_2$  1) 5,8-Dichlor- $\beta$ -Nitro-1,3-Dimethyl-9,10-Anthrachinon (Soc. 95, 1317 C. 1909 [2] 987).
- 2) 5,8-Dichlor- $\beta$ -Nitro-1,4-Dimethyl-9,10-Anthrachinon. Sm. 243° (Soc. 95, 1318 C. 1909 [2] 987).
- $C_{16}H_9O_4N_2Cl$  1) 3-Chlor-2-[3-Nitrophenyl]amido-1,4-Naphtochinon. Sm. 245° (B. 15, 485). — III, 377.
- 2) 3-Chlor-2-[4-Nitrophenyl]amido-1,4-Naphtochinon. Sm. 282° (B. 15, 485; 16, 895). — III, 377.
- $C_{16}H_9O_4N_2Br$  1) 3-Nitro-1,2-Naphtochinon-4-Bromphenylimid. Sm. 245—246° (B. 17, 1136). — III, 392.
- $C_{16}H_9O_4N_3Cl_2$  1)  $\beta$ -Dichlor-1-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 179° (B. 36, 3270 C. 1903 [2] 1127).
- $C_{16}H_9O_4N_3Cl_4$  1) Tetrachlorisamsäure. Ag (J. pr. [1] 35, 120). — II, 1609.
- $C_{16}H_9O_6N_4Cl$  1)  $\beta$ -Chlor- $\beta$ -Trinitro-2-Phenylamidonaphtalin. Sm. 230° (B. 23, 957). — II, 602.
- $C_{16}H_9O_8ClS$  1) 2[oder 3]-Chlor-3[oder 2]-Oxy-1,4-Naphtochinonphenyläther-7-Sulfonsäure. Sm. 121° u. Zers. Ba + 2C<sub>6</sub>H<sub>6</sub>O, Pb, Ag + C<sub>6</sub>H<sub>6</sub>O (J. pr. [2] 37, 186). — III, 389.



- C<sub>16</sub>H<sub>10</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) 1-[2,4-Dichlorphenyl]azo-2-Oxynaphtalin. Sm. 190° (*Soc.* 83, 813 *C.* 1903 [2] 426). — \*IV, 1043.  
2) 1-[2,5-Dichlorphenyl]azo-2-Oxynaphtalin. Sm. 184° (*B.* 38, 3508 *C.* 1905 [2] 1626).  
3) 3,4-Dichlor-2-Phenylimido-5-Keto-1-Phenyl-2,5-Dihydropyrrol (Dichlormaleindianil). Sm. 186—187° (*B.* 28, 58; *A.* 279, 132, 139; 295, 34). — \*II, 216.
- C<sub>16</sub>H<sub>10</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) 1[ $\beta$ ]-[2,4-Dibromphenyl]azo-2-Oxynaphtalin. Sm. 197° (*B.* 30, 78).  
2)  $\beta$ -Dibrom-1-Oxy-2-Phenylazonaphtalin. Sm. 215—219° (*B.* 17, 3031). — IV, 1429.  
3)  $\beta$ -Dibrom-6-Benzoylamidochinolin. Sm. 159° (*J. pr.* [2] 53, 126). — IV, 913.  
4) Nitril d.  $\alpha$ -Oxy- $\alpha\beta$ -Di[4-Bromphenyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 162° (*B.* 41, 4126 *C.* 1909 [1] 167).
- C<sub>16</sub>H<sub>10</sub>ON<sub>2</sub>Cl** 1) Acetyl- $\alpha$ -Chlorindophenazin. Sm. 208—209° (*B.* 35, 4332 *C.* 1903 [1] 292). — \*IV, 849.  
2) Acetyl-m-Chlorisatohydrophenazin. Sm. 215° (*B.* 28, 2530). — IV, 1189.
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>NCl** 1) 3-Chlor-2-Phenylamido-1,4-Naphtochinon. Sm. 202° (*B.* 15, 485; 21, 893, 1039; *A.* 210, 189). — III, 377.  
2) 5-Chlor-8-Phenylamido-1,4-Naphtochinon? Sm. 183—185° (*B.* 19, 1156). — III, 372.  
3) 3-Chlor-4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 253° (250—252°) (*B.* 19, 2499; 33, 2413). — III, 383; \*III, 278.  
4)  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[2-Chlorphenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 182°. Na + 3H<sub>2</sub>O (*B.* 40, 1211 *C.* 1907 [1] 1258).  
5)  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[3-Chlorphenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 148°. Na + 3H<sub>2</sub>O (*B.* 40, 1212 *C.* 1907 [1] 1258).  
6)  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[4-Chlorphenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 181—182°. Na + 4H<sub>2</sub>O (*B.* 40, 1212 *C.* 1907 [1] 1258).  
7) 6-Chlor-2-Phenylchinolin-4-Carbonsäure. Sm. 243° (*B.* 41, 3891 *C.* 1909 [1] 298).  
8) 7-Chlor-2-Phenylchinolin-4-Carbonsäure. Sm. 244—246° u. Zers. (*B.* 41, 3890 *C.* 1909 [1] 298).  
9) 2-Chlor-3-Phenylchinolin-4-Carbonsäure. Sm. 226°. Ag (*B.* 41, 486 *C.* 1908 [1] 1066).  
10) Nitril d.  $\alpha$ -[4-Chlorphenyl]- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 165° (*J. pr.* [2] 61, 190). — \*II, 1095.  
11) Chlorid d. 2-Oxy-3-Phenylchinolin-4-Carbonsäure. Sm. 234° (*B.* 41, 484 *C.* 1908 [1] 1065).
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>NBr** 1) 3-Brom-2-Phenylamido-1,4-Naphtochinon. Sm. 194° (*J. r.* 16, 420; *Soc.* 57, 399; *B.* 27, 2758; 32, 2099). — III, 378; \*III, 277.  
2)  $\beta$ -Brom- $\beta$ -Phenylamido-1,4-Naphtochinon. Sm. 165—166° (*B.* 14, 1902; 21, 389). — III, 378.  
3) 2-[4-Bromphenyl]amido-1,4-Naphtochinon. Sm. 266—269° (*B.* 14, 1902). — III, 375.  
4) 4-[4-Bromphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 252° (*B.* 27, 243). — III, 393.  
5) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[ $\beta$ -Brom-3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 179° (*B.* 34, 3083).  
6) Nitril d. 4-Brom-3-Phenyl-3,4-Dihydro-2,1-Benzpyron-4-Carbonsäure. Zers. bei 165° (*B.* 40, 1204 *C.* 1907 [1] 1257).
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>NJ<sub>3</sub>** 1) 5-Jod-3-Nitrophenyl-1-Naphtyljodoniumjodid. Sm. 89° u. Zers. (*B.* 34, 3413).
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) 2-Oxy-1-[6-Chlor-4-Brom-2-Oxyphenyl]azonaphtalin. Sm. 205° (*Soc.* 91, 1566 *C.* 1907 [2] 1786).  
2) 3,6-Dichlor-2,5-Diketo-1,4-Diphenyl-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 247° (*J. pr.* [2] 41, 84). — II, 430.
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) 2-Oxy-1-[3,5-Dibrom-2-Oxyphenylazo]naphtalin. Sm. 214—215° (*Soc.* 83, 804 *C.* 1903 [2] 195, 425). — \*IV, 1047.
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>J<sub>2</sub>** 1) Nitril d. Di[4-Jodbenzoyl]amidoessigsäure. Sm. 215—216° (*Am.* 36, 299 *C.* 1906 [2] 1420).
- C<sub>16</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) 5,5'-Diamidothioindigo (D.R.P. 198645 *C.* 1908 [1] 2119).  
2) 6,6'-Diamidothioindigo (D.R.P. 198644 *C.* 1908 [1] 2119).

- $C_{16}H_{10}O_2N_2S_3$  1) Dibenzoat d. 2,5-Dimerkapto-1,3,4-Thiodiazol. Sm. 184—185° (B. 27, 2519). — II, 1291.
- $C_{16}H_{10}O_2N_4S_2$  1) Disulfid d. 5-Merkapto-2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 78—79° (B. 27, 2516). — IV, 683.
- $C_{16}H_{10}O_3NCl$  1) 1-Chloracetylamido-9,10-Anthrachinon (D. R. P. 213960 C. 1909 [2] 1286).
- 2) 4-Chlor-1-Acetylamido-9,10-Anthrachinon. Sm. 203—204° (D. R. P. 199758 C. 1908 [2] 461).
- 3) 1-Chlor-2-Acetylamido-9,10-Anthrachinon. Sm. 240—241° (D. R. P. 199758 C. 1908 [2] 462).
- 4) Chlorisaphensäure. Sm. 220° (B. 26, 2485). — II, 1898.
- $C_{16}H_{10}O_3NBr$  1) Bromisaphensäure. Sm. oberhalb 310° (B. 26, 2484). — II, 1898.
- $C_{16}H_{10}O_3NBr_3$  1) Acetat d. 4,6,7-Tribrom-5-Oxy-3-Keto-2-Phenyl-1,3-Dihydroisindol. Sm. 225—226° (A. 350, 262 C. 1907 [1] 811).
- $C_{16}H_{10}O_3N_2Br_2$  1) 5,5-Dibrom-2,4,6-Triketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 160°. +  $C_6H_6$  (Soc. 91, 1347 C. 1907 [2] 1066; C. 1909 [1] 1856).
- $C_{16}H_{10}O_3N_2S$  1)  $\alpha\beta$ -Naphthophenazin-1-Sulfonsäure. K (B. 27, 2366). — IV, 1052.
- 2)  $\alpha\beta$ -Naphthophenazin- $\beta$ -Sulfonsäure. Sm. oberhalb 290°. Na + 2H<sub>2</sub>O (B. 20, 2661). — IV, 1052.
- $C_{16}H_{10}O_3N_2S_2$  1) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[2-Nitrobenzyliden]tetrahydrothiazol. Sm. 238° (M. 24, 512 C. 1903 [2] 837).
- 2) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[3-Nitrobenzyliden]tetrahydrothiazol. Sm. 240° (M. 25, 160 C. 1904 [1] 894).
- 3) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[4-Nitrobenzyliden]tetrahydrothiazol. Sm. 240° (M. 25, 162 C. 1904 [1] 894).
- $C_{16}H_{10}O_3N_3Cl$  1) 1-[2-Chlor-4-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 279° (B. 41, 1097 C. 1903 [1] 1770).
- $C_{16}H_{10}O_3N_4Cl_4$  1) Tetrachlorisamid (J. pr. [1] 35, 119). — II, 1609.
- $C_{16}H_{10}O_4NCl$  1) 4-Chloracetylamido-1-Oxy-9,10-Anthrachinon (D. R. P. 213960 C. 1909 [2] 1287).
- $C_{16}H_{10}O_4N_2Cl_2$  1) Dichlorisatyd. Zers. bei 220—240° (J. pr. [1] 22, 261; [1] 24, 6; [1] 25, 442). — II, 1615.
- $C_{16}H_{10}O_4N_2Cl_4$  1) 3,4,5,6-Tetrachlor-2-[oder 3']-Nitroso-4'-Dimethylamidodiphenylketon-2-Carbonsäure + H<sub>2</sub>O. Sm. 129—130° (145° wasserfrei) (Bl. [3] 25, 745).
- $C_{16}H_{10}O_4N_2Br_6$  1)  $\alpha\beta$ -Di[ $\beta$ -Tribromphenylamido]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 230° u. Zers. Na<sub>2</sub>, K<sub>2</sub>, Ba (B. 21, 1800). — II, 438.
- $C_{16}H_{10}O_4N_2J_2$  1) Phenylhydrazid d. 6,8-Dijod-4-Keto-3,4-Dihydro-1,2-Benzpyron-3-Carbonsäure. Sm. 238° (A. 368, 37 C. 1909 [2] 1442).
- $C_{16}H_{10}O_4N_3Cl$  1)  $\beta$ -Chlor-2-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 206° (B. 36, 3270 C. 1903 [2] 1127).
- 2) 2-[4-Chlor-2,6-Dinitrophenyl]amidonaphtalin. Sm. 201° (D. R. P. 194951 C. 1908 [1] 1115).
- $C_{16}H_{10}O_4N_4S_2$  1) Di[4-Nitrobenzyliden]dithioxamid. Sm. 269° (B. 24, 1028). — III, 35.
- $C_{16}H_{10}O_5N_2Cl_4$  1) 3,4,5,6-Tetrachlor-2'[oder 3']-Nitro-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 147° (Bl. [3] 25, 746).
- $C_{16}H_{10}O_5N_2S$  1) Indigosulfonsäure (Phönicinschwefelsäure). K + H<sub>2</sub>O (Berx. J. 4, 189, 190; 7, 262; Gm. 6, 462; A. 48, 340; C. 1906 [2] 1533). — II, 1621.
- $C_{16}H_{10}O_5N_2S$  1) 3-Phenylazo-2-Oxy-1,4-Naphtochinon-3'-Sulfonsäure. Na (B. 30, 2129). — IV, 1481.
- $C_{16}H_{10}O_5N_3Cl$  1) Chlortrinitrobenzol + Naphtalin. Sm. 95—96° (B. 8, 378). — II, 182.
- $C_{16}H_{10}O_5N_4Cl_2$  1) 2,4-Dichlor-1,3,5-Trinitrobenzol + 1-Amidonaphtalin. Sm. 126 bis 127° (Soc. 89, 591 C. 1906 [2] 32).
- $C_{16}H_{10}O_5NCl$  1) Verbindung (aus 4-Pseudonitro-1,2,3-Trioxy-9,10-Anthrachinon). Zers. bei 110° (M. 22, 727). — \*III, 311.
- $C_{16}H_{10}O_5N_2S_2$  1) Indigo-3,3'-Disulfonsäure (Cörolinschwefelsäure). Na<sub>2</sub>, K<sub>2</sub>, Ba (A. 22, 73; D. R. P. 63218; B. 11, 1365; 24, 1477; 33, 2467; 34, 1862; Berx. J. 4, 189, 190; 7, 262; 14, 316; C. 1899 [2] 1052; M. 24, 14 C. 1903 [1] 776). — II, 1621; \*II, 947.
- 2) Indigo-4,4'-Disulfonsäure. Na<sub>2</sub> (B. 34, 1862).
- 3) isom. Indigodisulfonsäure (D. R. P. 143141 C. 1903 [2] 272).
- 4) isom. Indigodisulfonsäure. K<sub>2</sub> (C. 1906 [2] 1533).

- C<sub>16</sub>H<sub>10</sub>O<sub>8</sub>N<sub>2</sub>S<sub>2</sub>** 5) Indindisulfonsäure. K<sub>2</sub> + 5H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Ag<sub>2</sub> (A. 120, 23). — II, 1616.
- C<sub>16</sub>H<sub>10</sub>O<sub>8</sub>N<sub>4</sub>S<sub>2</sub>** 1) 2-[3-Nitrophenyl]-1,2,3-Naphttriazol-4,9-Disulfonsäure (D.R.P. 174548 C. 1907 [1] 1003).
- C<sub>16</sub>H<sub>10</sub>O<sub>11</sub>N<sub>2</sub>S** 1) ?-Dinitro-2,6-Dioxy-9,10-Anthrachinon-2,6-Dimethyläther-?-Sulfonsäure (D.R.P. 143858 C. 1903 [2] 404).
- 2) ?-Dinitro-2,7-Dioxy-9,10-Anthrachinon-2,7-Dimethyläther-?-Sulfonsäure (D.R.P. 143858 C. 1903 [2] 404).
- C<sub>16</sub>H<sub>10</sub>O<sub>11</sub>N<sub>2</sub>S<sub>3</sub>** 1) Indigotrisulfonsäure. (NH<sub>4</sub>)<sub>3</sub>, Na<sub>3</sub>, K<sub>3</sub>, Ba<sub>3</sub> (C. 1899 [2] 1052). — \*II, 947.
- 2) isom. Indigotrisulfonsäure. K<sub>3</sub> (C. 1906 [2] 1533).
- C<sub>16</sub>H<sub>10</sub>O<sub>12</sub>N<sub>6</sub>Br<sub>2</sub>** 1) Di[α-(?-Brom-6,?-Dinitro-2,4-Dioxyphenyl)äthyliden]hydrazin. Sm. 320° (B. 41, 1625 C. 1908 [2] 69).
- C<sub>16</sub>H<sub>10</sub>O<sub>14</sub>N<sub>2</sub>S<sub>4</sub>** 1) Indigotetrasulfonsäure. Na<sub>4</sub> + 10H<sub>2</sub>O, Ba<sub>2</sub> + 6H<sub>2</sub>O (Bl. [3] 7, 619; C. 1906 [2] 1533). — II, 1622.
- C<sub>16</sub>H<sub>10</sub>O<sub>16</sub>N<sub>2</sub>S<sub>2</sub>** 1) ?-Dinitro-1,3,5,7-Tetraoxy-9,10-Anthrachinondimethyläther-?-Disulfonsäure (D.R.P. 139425 C. 1903 [1] 746).
- C<sub>16</sub>H<sub>11</sub>ONCl<sub>2</sub>** 1) 2,4-Dichlor-1-Phenylamido-3-Oxynaphtalin. Sm. 62° (B. 21, 3546; A. 300, 190). — III, 171; \*III, 137.
- C<sub>16</sub>H<sub>11</sub>ONBr<sub>2</sub>** 1) Nitril d. α-Phenyl-β-[?-Dibrom-4-Oxyphenyl]akrylmethyläthersäure. Sm. 186° (B. 34, 3088).
- 2) Verbindung (aus d. Nitril d. α-[4-Bromphenyl]-β-[4-Methoxyphenyl]-akrylsäure). Sm. 186° (A. 250, 162). — II, 1707.
- C<sub>16</sub>H<sub>11</sub>ONS** 1) α-Naphtophenazthioniumhydroxyd. Pikrat (A. 322, 44 C. 1902 [2] 223). — \*IV, 272.
- 2) β-Naphtophenazthioniumhydroxyd. Pikrat (A. 322, 48 C. 1902 [2] 223). — \*IV, 272.
- 3) Benzoat d. 8-Merkaptochinolin. Sm. 110° (B. 41, 939 C. 1908 [1] 1704).
- C<sub>16</sub>H<sub>11</sub>ONS<sub>2</sub>** 1) 2-Thiocarbonyl-4-Keto-3-Phenyl-4-Benzylidentetrahydrothiazol. Sm. 186° (M. 24, 505 C. 1903 [2] 836).
- C<sub>16</sub>H<sub>11</sub>ON<sub>2</sub>Cl** 1) 2-Oxy-1-[2-Chlorphenylazo]naphtalin. Sm. 163° (C. 1902 [2] 938). — \*IV, 1043.
- 2) 2-Oxy-1-[3-Chlorphenylazo]naphtalin. Sm. 158° (C. 1902 [2] 938). — \*IV, 1043.
- 3) 2-Oxy-1-[4-Chlorphenylazo]naphtalin. Sm. 162,5° (160°) (Soc. 53, 676; Soc. 93, 1020 C. 1908 [2] 410). — IV, 1429.
- 4) 3-Chlor-5-Keto-4-Benzyliden-1-Phenyl-4,5-Dihydropyrazol. Sm. 108–109° (B. 31, 3008). — \*IV, 633.
- 5) 5-Amido-12,7-Naphtophenoxazoniumchlorid. 2 + PtCl<sub>4</sub> (B. 40, 2088 C. 1907 [2] 152).
- 6) Nitril d. α[oder β]-Chlor-β-Oxy-β-Phenyl-α-[2-Cyanphenyl]propionsäure. Sm. 270° (B. 27, 833). — II, 1974.
- 7) Amid d. 2-Chlor-3-Phenylchinolin-4-Carbonsäure. Sm. 302° (B. 41, 486 C. 1908 [1] 1065).
- 8) Phenylamid d. 2-Chlorchinolin-4-Carbonsäure. Sm. 202° (B. 39, 1903 C. 1906 [2] 130).
- 9) Verbindung (aus 6-Acetylamido-1,2-Naphtochinon u. 2-Amido-1-Oxybenzol). 2 + PtCl<sub>4</sub> (B. 40, 1964 C. 1907 [2] 76).
- C<sub>16</sub>H<sub>11</sub>ON<sub>2</sub>Br** 1) 5-Brom-4-Oxy-1-Phenylazonaphtalin. Sm. 197° (Soc. 63, 1058). — IV, 1429.
- 2) ?-Brom-4-Oxy-1-Phenylazonaphtalin. Sm. 196° (Soc. 81, 174 C. 1902 [1] 354). — \*IV, 1043.
- 3) 2-Oxy-1-[2-Bromphenylazo]naphtalin. Sm. 165° (Soc. 81, 1206 C. 1902 [2] 894). — \*IV, 1044.
- 4) 2-Oxy-1-[3-Bromphenylazo]naphtalin. Sm. 172° (Soc. 81, 1206 C. 1902 [2] 894). — \*IV, 1044.
- 5) 2-Oxy-1-[4-Bromphenylazo]naphtalin. Sm. 167–168° (172–173°) (G. 13, 439; B. 17, 3032; 28, 1222; Soc. 81, 1205 C. 1902 [2] 894). — IV, 1429; \*IV, 1043.
- 6) 4-Oxy-1-[2-Bromphenylazo]naphtalin. Sm. 183° (Soc. 81, 175 C. 1902 [1] 354). — \*IV, 1043.
- 7) 4-Oxy-1-[3-Bromphenylazo]naphtalin. Sm. 211° (Soc. 81, 176 C. 1902 [1] 354). — \*IV, 1043.



- $C_{16}H_{11}ON_2Br$  8) 4-Oxy-1-[4-Bromphenylazo]naphtalin. Sm. 237—238° (226°) (*G.* 14, 271; *B.* 28, 1896; *Soc.* 81, 176 *C.* 1902 [1] 354). — *IV*, 1429; \**IV*, 1043.
- 9) ?-Brom-6-Oxy-2,4-Diphenyl-1,3-Diazin. Sm. 297—298° (*Soc.* 77, 244). — \**IV*, 698.
- 10) Bromderivat d. Verb.  $C_{16}H_{12}ON_2$ . Sm. 200° (*B.* 32, 2208). — \**II*, 924.
- $C_{16}H_{11}ON_3S$  1) 4-Thionylamido-1-Phenylazonaphtalin. Sm. 136° (*B.* 28, 2197). — *IV*, 1392.
- $C_{16}H_{11}ON_6Cl$  1) Chlorderivat d. Anhydro-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol (*C.* 1897 [1] 593).
- $C_{16}H_{11}O_2NCl_2$  1) 5,8-Dichlor-2-Dimethylamido-9,10-Anthrachinon. Sm. 188° (*Bl.* [3] 23, 692). — \**III*, 298.
- $C_{16}H_{11}O_2NBr_2$  1) 4-[3,5-Dibrom-4-Oxyphenyl]amido-1-Oxynaphtalin. Zers. bei 152° (*A.* 289, 108). — \**II*, 507.
- 2) 5,8-Dibrom-2-Dimethylamido-9,10-Anthrachinon. Sm. 218° (*C. r.* 142, 1275 *C.* 1906 [2] 247).
- 3) 2,3-Dibrom-4,5-Diketo-2,3-Diphenyltetrahydropyrrrol. Sm. 175° u. Zers. (*Soc.* 95, 1605 *C.* 1909 [2] 2172).
- $C_{16}H_{11}O_2NS$  1) 2,4-Diketo-3-Phenyl-5-Benzylidentetrahydrothiazol. Sm. 208 bis 209° (*Soc.* 95, 120 *C.* 1909 [1] 1340).
- $C_{16}H_{11}O_2NS_2$  1) 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-Phenyltetrahydrothiazol. Sm. 172° (*M.* 25, 165 *C.* 1904 [1] 894).
- 2) 2-Thiocarbonyl-4-Keto-3-[2-Oxyphenyl]-5-Benzylidentetrahydrothiazol. Sm. 211° (*M.* 26, 1200 *C.* 1905 [2] 1674).
- $C_{16}H_{11}O_2N_2Cl$  1) 2-Oxy-1-[4-Chlor-2-Oxyphenylazo]naphtalin. Sm. 265° (*Soc.* 83, 813 *C.* 1903 [2] 426).
- 2) 3-Chlor-2,4-Dioxy-1-Phenylazonaphtalin. Sm. bei 190° (*A.* 300, 194). — *IV*, 1450.
- 3) 5-Chlor-2,6-Dioxy-1-Phenylazonaphtalin. Sm. 198° (*B.* 40, 3978 *C.* 1907 [2] 2057; *B.* 41, 422 *C.* 1908 [1] 1049).
- 4) 7-Chlor-8-[4-Methylphenyl]imido-6-Oxy-5-Keto-5,8-Dihydrochinolin. Sm. 178—180° (*A.* 290, 369). — *IV*, 279.
- 5) Lakton d.  $\alpha$ -Chlor- $\gamma$ -Phenylimido- $\beta$ -Phenylamido- $\gamma$ -Oxyceroton-säure. Sm. 188° (*B.* 38, 2594 *C.* 1905 [2] 758).
- 6) Lakton d.  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamido- $\gamma$ -Oxyceroton-säure. Sm. 187° (*B.* 38, 2594 *C.* 1905 [2] 759).
- 7) Phenylimid d.  $\alpha$ -Chlor- $\alpha$ -Phenylamidomaleinsäure. Sm. 190° (*B.* 28, 58; *A.* 295, 36; *B.* 38, 2594 *C.* 1905 [2] 759). — \**II*, 231.
- $C_{16}H_{11}O_2N_2Cl_3$  1)  $\beta$ -Chlor- $\gamma$ -[3-Chlorphenyl]imido- $\alpha$ -[3-Chlorphenyl]amidoceroton-säure. Zers. bei 155°. Ag (*E.* COLLET, Dissert. Berlin 1903).
- 2)  $\beta$ -Chlor- $\gamma$ -[4-Chlorphenyl]imido- $\alpha$ -[4-Chlorphenyl]amidoceroton-säure. Zers. 173—174°. Na<sub>2</sub>, Ag (*E.* COLLET, Dissert., Berlin 1903).
- $C_{16}H_{11}O_2N_2Br$  1) 3-Brom-2-[3-Amidophenyl]amido-1,4-Naphtochinon. Sm. 194 bis 195° (*B.* 34, 1052). — \**IV*, 377.
- 2) 3-Brom-2-[4-Amidophenyl]amido-1,4-Naphtochinon. Sm. noch nicht bei 350° (*B.* 34, 1052). — \**IV*, 396.
- 3) ?-Brom-1-Phenylazo-2,4-Dioxynaphtalin. Sm. 196—198° (*B.* 17, 1813). — *IV*, 1449.
- 4) 4,5-Diketo-2-Brommethylen-1,3-Diphenyltetrahydroimidazol (Bromvinylidenoxanilid). Sm. 189° (*B.* 30, 2793, 2879; 33, 617). — \**II*, 209.
- 5) Phenyläther d. 5-Brom-4-Oxy-3-Keto-2-Phenyl-2,3-Dihydro-1,2-Diazin. Sm. 115° (*B.* 34, 1013). — \**IV*, 550.
- 6) Lakton d.  $\alpha$ -Brom- $\gamma$ -Phenylimido- $\beta$ -Phenylamido- $\gamma$ -Oxyceroton-säure. Sm. 180° (*B.* 38, 2592 *C.* 1905 [2] 758).
- 7) Lakton d.  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamido- $\gamma$ -Oxyceroton-säure. Sm. 188° (*B.* 38, 2592 *C.* 1905 [2] 758).
- 8) Phenylimid d.  $\alpha$ -Brom- $\beta$ -Phenylamidomaleinsäure. Sm. 182 bis 193° (192°) (*Am.* 9, 190; *B.* 38, 2593 *C.* 1905 [2] 758). — *II*, 441.
- $C_{16}H_{11}O_2N_3Cl_2$  1)  $\alpha\beta$ -Dichlor- $\gamma$ -Azoanilcerotonsäure. Zers. bei 200° (*O.* LANGHAMMER, Dissert., Berlin 1905).
- $C_{16}H_{11}O_2N_3Br_2$  1)  $\alpha\beta$ -Dibrom- $\gamma$ -Azoanilcerotonsäure. Sm. 200° u. Zers. (*O.* LANGHAMMER, Dissert., Berlin 1905).

- $C_{16}H_{11}O_2N_3S$  1) 1,4-Anhydrid d. 4-[1-Naphtylsulfon]amido-1-Diazobenzol. Zers. bei 164—167° (*Soc.* 87, 924 *C.* 1905 [2] 320).  
 2) 1,4-Anhydrid d. 4-[2-Naphtylsulfon]amido-1-Diazobenzol. Zers. bei 130° (*Soc.* 87, 925 *C.* 1905 [2] 320).  
 3) 1,4-Anhydrid d. 4-Phenylsulfonamido-1-Diazonaphtalin (*Soc.* 87, 929 *C.* 1905 [2] 321).  
 4) 1,8-Anhydrid d. 8-Phenylsulfonamido-1-Diazonaphtalin (*Soc.* 89, 10 *C.* 1906 [1] 937).
- $C_{16}H_{11}O_2N_3S_2$  1) Oxalyldiphenyldithiobiuret. Sm. 215° (*J. pr.* [2] 32, 16). — II, 411.
- $C_{16}H_{11}O_2N_3S_3$  1) 3,4-Methylenäther d. 5-[3,4-Dioxybenzyliden]sulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 183—184° u. Zers. (*J. pr.* [2] 60, 201). — \*IV, 446.
- $C_{16}H_{11}O_2N_4Cl$  1) 2-Nitro-1-[1-Chlor-2-Naphtyl]amidodiazobenzol. Zers. bei 194° (*Soc.* 81, 1380 *C.* 1902 [2] 1189). — \*IV, 1136.  
 2) 3-Nitro-1-[1-Chlor-2-Naphtyl]amidodiazobenzol. Sm. 137—142° (*Soc.* 81, 1380 *C.* 1902 [2] 1189). — \*IV, 1136.  
 3) 4-Nitro-1-[1-Chlor-2-Naphtyl]amidodiazobenzol. Sm. 197—198° u. Zers. (*Soc.* 81, 99 *C.* 1902 [1] 186, 416). — \*IV, 1136.
- $C_{16}H_{11}O_2N_4Br$  1) 4-Brom-2-[2-Nitrophenyl]azo-1-Amidonaphtalin. Sm. 219—220° (*Soc.* 85, 752 *C.* 1904 [2] 448).  
 2) 4-Brom-2-[3-Nitrophenyl]azo-1-Amidonaphtalin. Sm. 246° (*Soc.* 85, 752 *C.* 1904 [2] 448).  
 3) 4-Brom-2-[4-Nitrophenyl]azo-1-Amidonaphtalin. Sm. 201—202° (*Soc.* 85, 751 *C.* 1904 [2] 448).
- $C_{16}H_{11}O_3NCl_2$  1) 2-Dichlordimethylamidooxy-9,10-Anthrachinon. Sm. 185° (*Bl.* [3] 29, 62 *C.* 1903 [1] 456).  
 2) Diphenyläther d. 3,4-Dichlor-5,5-Dioxy-2-Keto-2,5-Dihydropyrrol (Dichlormaleinimiddiphenyläther). Sm. 170° (*A.* 295, 81). — \*II, 364.
- $C_{16}H_{11}O_3NCl_4$  1) 3,4,5,6-Tetrachlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 211° (*C.* 1899 [2] 372; *Bl.* [3] 25, 599). — \*II, 1001.
- $C_{16}H_{11}O_3NBr_2$  1) Äthyläther d. 2,7-Dibrom-10-Nitro-3-Oxyphenanthren. Sm. 203° (*Soc.* 89, 1531 *C.* 1906 [2] 1765).  
 2) Bromverb. d. Benzoylimidocumarin (*G.* 19, 54). — II, 1633.
- $C_{16}H_{11}O_3NJ_2$  1) 5-Jod-3-Nitrophenyl-1-Naphtyljodoniumhydroxyd. Salze, siehe (*B.* 34, 3413).
- $C_{16}H_{11}O_3NS$  1) 2,4-Diketo-3-Phenyl-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 238—239° (*Soc.* 95, 120 *C.* 1909 [1] 1340).  
 2) 1,2-Phenonaphtocarbazol-N-Sulfonsäure. Na, Ba (*J. pr.* [2] 77, 408 *C.* 1908 [1] 2177).  
 3) 1,2-Phenonaphtocarbazol-2-Sulfonsäure (*J. pr.* [2] 77, 411 *C.* 1908 [1] 2177).
- $C_{16}H_{11}O_3N_3S$  1) 2-Phenylimido-4-Keto-5-[3-Nitrobenzyliden]tetrahydrothiazol. Sm. noch nicht bei 290° (*C.* 1903 [1] 1258). — \*IV, 620.  
 2) 1-Phenylnaphttriazol-1'-Sulfonsäure (Phenylazimidonaphtalinsulfonsäure). K (*B.* 27, 2375). — IV, 1170.
- $C_{16}H_{11}O_3N_4Br$  1) 2-Brom-4-Phenylazo-5-Keto-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 258° (*B.* 39, 2025 *C.* 1906 [2] 433).
- $C_{16}H_{11}O_3Cl_2Br$  1) 3',6'-Dichlor-5-Brom-2,4-Dimethyldiphenylketon-2'-Carbonsäure (*Soc.* 95, 1316 *C.* 1909 [2] 986).
- $C_{16}H_{11}O_4N_2Cl$  1) 1-Chlor-2,4-Dinitrobenzol + Naphtalin. Sm. 78° (*B.* 11, 603). — II, 182.
- $C_{16}H_{11}O_4N_2Br$  1) 2-Brom-8-Nitro-1-Dimethylamido-9,10-Anthrachinon. Sm. 198° (*D.R.P.* 146691 *C.* 1903 [2] 1352).
- $C_{16}H_{11}O_4N_3Cl_2$  1) 4,6-Dichlor-1,3-Dinitrobenzol + 1-Amidonaphtalin. Sm. 95° (*Soc.* 89, 589 *C.* 1906 [2] 31).  
 2) 4,6-Dichlor-1,3-Dinitrobenzol + 2-Amidonaphtalin. Sm. 67—68° (*Soc.* 89, 591 *C.* 1906 [2] 31).  
 3) Dichlorisamsäure (*J. pr.* [1] 35, 118). — II, 1609.  
 4) Diacetat d. 6,7-Dichlor-4,5-Dioxy-1-Phenyl-1,2,3-Benzotriazol. Sm. 187° (*A.* 313, 278). — \*IV, 792.
- $C_{16}H_{11}O_4N_3Br_2$  1) Dibromisamsäure. K (*Z.* 1865, 594). — II, 1609.
- $C_{16}H_{11}O_4N_3S_2$  1) 2-Nitro-1-[1-Naphtylthiosulfon]diazobenzol (*J. pr.* [2] 62, 418). — \*IV, 1106.

- $C_{16}H_{11}O_4N_3S_2$  2) 3-Nitro-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 56—57° (*J. pr.* [2] 62, 416). — \*IV, 1106.
- 3) 4-Nitro-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 58° (*J. pr.* [2] 62, 413). — \*IV, 1107.
- 4) 3-Nitro-1-[2-Naphtylthiosulfon]diazobenzol. Zers. bei 56—57° (*J. pr.* [2] 62, 417). — \*IV, 1106.
- 5) 4-Nitro-1-[2-Naphtylthiosulfon]diazobenzol. Sm. 127° u. Zers. (*J. pr.* [2] 62, 413). — \*IV, 1107.
- $C_{16}H_{11}O_4N_4Cl$  1) 1-Amido-2-[5-Chlor-2,4-Dinitrophenyl]amidonaphtalin. Sm. 232° (*B.* 37, 3888 *C.* 1904 [2] 1654).
- $C_{16}H_{11}O_5NS$  1) 1-Keto-4-Phenylimido-2-Oxy-1,4-Dihydronaphtalin-6-Sulfonsäure. *K* (*B.* 27, 3053). — III, 397.
- 2) 1-Keto-4-Phenylimido-2-Oxy-1,4-Dihydronaphtalin-7-Sulfonsäure. *K* (*B.* 27, 3054). — III, 397.
- 3) 4-Phenylimido-2-Oxy-1-Ketonaphtalin-4'-Sulfonsäure. *Na* (*B.* 27, 27).
- 4) 2-Phenylamido-1,4-Naphtochinon-7-Sulfonsäure. *Ba*, Anilinsalz (*B.* 32, 239). — \*III, 280.
- 5) 4-Nitro-1-Naphtylester d. Benzolsulfonsäure. Sm. 117° (*C.* 1900 [1] 543).
- $C_{16}H_{11}O_5N_3S$  1) Verbindung (aus Piperonal). Sm. 207° (*Soc.* 87, 1835 *C.* 1906 [1] 554).
- $C_{16}H_{11}O_6NS$  1) 2-Acetylamido-9,10-Anthrachinon-7-Sulfonsäure. *Na* + 2½H<sub>2</sub>O (*A.* 351, 159 *C.* 1907 [1] 1127).
- $C_{16}H_{11}O_6N_3S$  1) 2-Nitrophenolazonaphtionsäure. *Na* (*Am.* 2, 243). — IV, 1415.
- 2) 2-Oxy-1-[2-Nitrophenylazo]naphtalin-1'-Sulfonsäure. *Na* + H<sub>2</sub>O (*B.* 39, 85 *C.* 1906 [1] 666).
- 3) 2-Oxy-1-[4-Nitrophenylazo]naphtalin-1'-Sulfonsäure. *Na* (*B.* 22, 848). — IV, 1432.
- $C_{16}H_{11}O_6N_4Cl$  1) 1-Amidonaphtalin + 2-Chlor-1,3,5-Trinitronaphtalin. Sintert bei 110,5—111,5° (*B.* 33, 109; *Soc.* 89, 589 *C.* 1906 [2] 31).
- $C_{16}H_{11}O_8NS_2$  1) 4-Phenylamido-1,2-Naphtochinon-3,6-Disulfonsäure. *Na*<sub>2</sub> + 4H<sub>2</sub>O (*B.* 38, 3379 *C.* 1905 [2] 1492).
- $C_{16}H_{11}O_8N_5S$  1) 4-[4-Nitrophenyl]hydrazon-5-Keto-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure-1'-Sulfonsäure. *Na* + H<sub>2</sub>O, *Ba*, Ag<sub>2</sub> (*B.* 29, 2018; *A.* 299, 100). — IV, 730.
- $C_{16}H_{11}O_9N_3S_2$  1) 2-Oxy-?-[3-Nitrophenyl]azonaphtalin-?-Disulfonsäure. *Na*<sub>2</sub> (*J.* 1881, 489). — IV, 1433.
- $C_{16}H_{11}O_{10}N_5S_2$  1) 2-[2,4-Dinitrophenyl]amidonaphtalin-5,7-Disulfonsäure (*D.R.P.* 214658 *C.* 1909 [2] 1514).
- $C_{16}H_{11}O_{13}N_7S$  1) O-Propyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 151—152° (*Soc.* 81, 439 *C.* 1902 [1] 989).
- 2) O-Isopropyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 147° (*Soc.* 85, 648 *C.* 1904 [2] 310).
- $C_{16}H_{11}ClBrJ$  1) 3-Bromphenyl-1-Naphtyljodoniumchlorid. Sm. 159°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*J. pr.* [2] 69, 332 *C.* 1904 [2] 36).
- $C_{16}H_{12}ONCl$  1) 2-Chlor-3-Benzylamido-1-Ketoinden. Zers. bei 182° (*B.* 33, 2423). — \*III, 136.
- 2) Chinolin + Benzoylchlorid. Sd. 105°<sub>12</sub> (*B.* 39, 2138 *C.* 1906 [2] 347).
- 3) Methyläther d. 4-Chlor-1-Oxy-3-Phenylisochinolin. Sm. 76° (*B.* 19, 2357; *B.* 37, 1686 *C.* 1904 [1] 1523). — IV, 432.
- 4) Methyläther d. 1-Chlor-4-Oxy-3-Phenylisochinolin. Sm. 103,5° (*B.* 37, 1690 *C.* 1904 [1] 1524).
- 5) 3-Chlor-1-Keto-4-Benzyl-1,2-Dihydroisochinolin. Sm. 234° (*B.* 21, 2683). — IV, 437.
- 6) 1-Chlor-3-Keto-4-Benzyl-3,4-Dihydroisochinolin. Sm. 195° (*B.* 21, 2683). — IV, 437.
- 7) Nitril d. α-[4-Chlorphenyl]-β-[4-Methoxyphenyl]akrylsäure. Sm. 127,5° (*J. pr.* [2] 61, 189). — \*II, 1002.
- 8) Nitril d. β-Keto-γ-[4-Chlorphenyl]-α-Phenylpropan-γ-Carbonsäure. Sm. 127° (*J. pr.* [2] 67, 390 *C.* 1903 [1] 1357).
- $C_{16}H_{12}ONCl_3$  1) 3-[γγγ-Trichlor-β-Oxypropyl]-β-Naphtochinolin (β-Naphtochinaldin-chloral). Sm. 185° (*B.* 22, 266). — IV, 420.



- $C_{16}H_{12}ONCl_3$  2) 3- $[\gamma\gamma\gamma$ -Trichlor- $\beta$ -Oxypropyl]akridin (3-Methylakridinchloral) (B. 20, 1543). — IV, 420.
- $C_{16}H_{12}ONBr$  1) 2-Brom-3-Benzylamido-1-Ketoinden. Sm. 153° (B. 33, 2428). — \*III, 136.  
2) Phenyläther d. 3-Brom-8-Oxymethylchinolin. Sm. 102—103° (B. 38, 1286 C. 1905 [1] 1411).  
3) Nitril d.  $\alpha$ -[4-Bromphenyl]- $\beta$ -[4-Oxyphenyl]akrylmethyläthersäure. Sm. 135° (A. 250, 162). — II, 1707.  
4) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[3-Brom-4-Oxyphenyl]akrylmethyläthersäure. Sm. 102° (B. 34, 3089).
- $C_{16}H_{12}ON_2S$  1) 2-Phenylimido-4-Keto-5-Benzylidentetrahydrothiazol. Sm. 251 bis 252° (201°). Ag. +  $C_2H_5ONa$  (C. 1899 [2] 805; 1903 [1] 1257). — \*II, 954; \*IV, 620.
- $C_{16}H_{12}ON_2S_2$  1) 3-Phenylamido-2-Thiocarbonyl-4-Keto-5-Benzylidentetrahydrothiazol. Sm. 195° (M. 27, 1215 C. 1907 [1] 971).
- $C_{16}H_{12}ON_2S_3$  1) Benzoat d. 5-Merkapto-2-Thiocarbonyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiadiazol. Sm. 100° (J. pr. [2] 60, 207). — \*IV, 535.
- $C_{16}H_{12}ON_3Cl$  1) 5,9-Diamidonaphtphenazoniumehlorid (B. 38, 3606 C. 1905 [2] 1734).
- $C_{16}H_{12}ON_3Br$  1) 4-Nitroso-3-Methyl-5-Phenyl-1-[4-Bromphenyl]pyrazol. Sm. 130° (B. 40, 675 C. 1907 [1] 969).
- $C_{16}H_{12}ON_4Br_2$  1) 5-Keto-4-[4-Bromphenyl]azo-3-Methyl-1-[4-Bromphenyl]-4,5-Dihydropyrazol. Sm. 227° (229—230°). +  $Br_2$ , Na (B. 39, 2022 C. 1906 [2] 433; J. pr. [2] 74, 306 C. 1906 [2] 1820).
- $C_{16}H_{12}ON_4S$  1) Nitrosoderivat d. Verb.  $C_{16}H_{13}N_3S$ . Sm. 231° (J. pr. [2] 79, 70 C. 1909 [1] 744).
- $C_{16}H_{12}OBrJ$  1) 3-Bromphenyl-1-Naphtyljodoniumhydroxyd. Salze, siehe (J. pr. [2] 69, 332 C. 1904 [2] 36).
- $C_{16}H_{12}OBr_2S$  1) 1-Brom-2-Keto-1-[ $\alpha$ -Brombenzyl]-4-Methyl-1,2-Dihydrobenzthiofuran. Sm. 116° (B. 42, 542 C. 1909 [1] 759).
- $C_{16}H_{12}O_2NCl$  1) ?-Chlor-?-Phenylamido-1,4-Dioxynaphtalin. Sm. 170—171° u. Zers. (A. 210, 190). — II, 983.  
2) 4-Chlor-1-Dimethylamido-9,10-Anthrachinon. Sm. 168—170° (172°) (D. R. P. 136777 C. 1902 [2] 1374; D. R. P. 146691 C. 1903 [2] 1353).  
3) 2-Chlormethylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 140° (B. 21, 580). — II, 1805.
- $C_{16}H_{12}O_2NCl_3$  1) Chlorid d. 3,6-Dichlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure (Bl. [3] 25, 509). — \*II, 1001.
- $C_{16}H_{12}O_2NBr$  1) 4-Brom-1-Methylamido-2-Methyl-9,10-Anthrachinon (D. R. P. 164791 C. 1905 [2] 1758).  
2) 4-Brom-1-Dimethylamido-9,10-Anthrachinon. Sm. 178° (D. R. P. 146691 C. 1903 [2] 1352).
- $C_{16}H_{12}O_2N_2Cl_3$  1) Verbindung (aus Diphenyläthanamidin) (B. 18, 2427; 19, 2341). — II, 346.
- $C_{16}H_{12}O_2N_2Cl_4$  1) Di[Phenylamid] d. Tetrachlorbernsteinsäure? Sm. 245° (G. 32 [2] 21 C. 1902 [2] 893).
- $C_{16}H_{12}O_2N_2Br_2$  1) 4,8-Dibrom-1,5-Di[Methylamido]-9,10-Anthrachinon (D. R. P. 164791 C. 1905 [2] 1758).  
2) 4,5-Dibrom-1,8-Di[Methylamido]-9,10-Anthrachinon (D. R. P. 164791 C. 1905 [2] 1758).  
3)  $\alpha\beta$ -Dibrom- $\gamma$ -Diphenylhydrazoncrotonsäure. Zers. bei 164°. Na (B. F. HALVORSEN, Dissert. Freiburg (Schweiz) 1901).  
4) isom.  $\alpha\beta$ -Dibrom- $\gamma$ -Diphenylhydrazoncrotonsäure. Zers. bei 112° (B. F. HALVORSEN, Dissert. Freiburg (Schweiz) 1901).  
5) Diphenylamid d. Dibrommaleinsäure. Sm. 138—140° (Am. 9, 189). — II, 417.
- $C_{16}H_{12}O_2N_2J_2$  1) Diphenylamid d. Dijodfumarsäure. Zers. bei 230° (B. 26, 848). — II, 416.
- $C_{16}H_{12}O_2N_2S$  1) 1-Phenylsulfondiazonaphtalin. Sm. 95° (B. 30, 315). — IV, 1540.  
2) 2-Phenylsulfondiazonaphtalin. Zers. bei 96° (B. 35, 270 C. 1902 [1] 526). — \*IV, 1118.
- $C_{16}H_{12}O_2N_2S_2$  1) Dimethyläther d. 3,3'-Dioxybiphenyl-4,4'-Disenöl. Sm. 192 bis 194° (J. pr. [2] 59, 595). — \*II, 601.  
2) Dithioisatyd (Disulfisatyd) (J. pr. [1] 24, 16; [1] 25, 438). — II, 1616.

- $C_{16}H_{12}O_2N_2S_2$  3) 1-Phenylthiosulfondiazonaphtalin. Sm. 90—91° u. Zers. (*J. pr.* [2] 62, 398). — \*IV, 1118.
- 4) 2-Phenylthiosulfondiazonaphtalin. Zers. bei 81° (*J. pr.* [2] 62, 400; *B.* 35, 269 *C.* 1902 [1] 526). — \*IV, 1119.
- 5) 1-Naphtylthiosulfondiazobenzol. Sm. 95—96° u. Zers. (*J. pr.* [2] 62, 387). — \*IV, 1103.
- 6) 2-Naphtylthiosulfondiazobenzol. Zers. bei 79—80° (*J. pr.* [2] 62, 387). — \*IV, 1103.
- 7) 3-Phenylamido-2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]tetrahydrothiazol. Sm. 170—173° (*M.* 27, 1216 *C.* 1907 [1] 971).
- 8) Di[2-Oxybenzyliden]dithioxamid (*B.* 24, 1028). — III, 74.
- $C_{16}H_{12}O_2N_3Br$  1) Acetat d.  $\beta$ -Brom-3-Phenylhydrazon-2-Oxypseudindol (Phenylhydrazon d. Acetylbromisatin). Sm. 224° (*B.* 28, 546). — IV, 695.
- $C_{16}H_{12}O_2N_4Br_2$  1) Di[4-Bromphenyl]acetylendiurein. Zers. bei 360° (*B.* 41, 1763 *C.* 1908 [2] 422).
- $C_{16}H_{12}O_3NCl$  1) Acetat d. 4-Chlor-2-[2-Oxy-4-Methylphenyl]benzopseudooxazol. Sm. 135° (*B.* 39, 1936 *C.* 1906 [2] 114).
- $C_{16}H_{12}O_3NBr$  1) 3-Brom-4-Äthoxyphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 195—196° (*B.* 30, 1173). — \*II, 1056.
- $C_{16}H_{12}O_3N_2S$  1) Thioisatyd (Sulfisatyd) (*J. pr.* [1] 25, 444). — II, 1615.
- $C_{16}H_{12}O_3N_2S_2$  1) 2-Merkapto-1-Phenylazonaphtalin-1'-Sulfonsäure. Na (*J. pr.* [2] 41, 220). — IV, 1432.
- $C_{16}H_{12}O_3N_4Cl_2$  1) Dichlorisamid (*J. pr.* [1] 35, 119). — II, 1609.
- $C_{16}H_{12}O_3N_4Br_2$  1) Dibromisamid (*Z.* 1865, 594). — II, 1609.
- $C_{16}H_{12}O_4N_2Cl_2$  1) 3,6-Dichlor-3'-Nitroso-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 165° (*Bl.* [3] 23, 380). — \*II, 1002.
- $C_{16}H_{12}O_4N_2Br_2$  1) 3,6-Dibrom-2'[oder 3']-Nitroso-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 165° (*C. r.* 142, 1275 *C.* 1906 [2] 247).
- $C_{16}H_{12}O_4N_2Br_4$  1) Di[ $\alpha$ -(3,5-Dibrom-2,4-Dioxyphenyl)äthyliden]hydrazin. Sm. oberhalb 340° (*B.* 41, 1622 *C.* 1908 [2] 68).
- $C_{16}H_{12}O_4N_2S$  1) 4-Nitro-1-Phenylsulfonamidonaphtalin (4-Nitro-1-Naphtylamid d. Benzolsulfonsäure). Sm. 158° (*Soc.* 87, 928 *C.* 1905 [2] 320).
- 2) 5-Nitro-1-Phenylsulfonamidonaphtalin. Sm. 183° (*Soc.* 89, 8 *C.* 1906 [1] 937).
- 3) 8-Nitro-1-Phenylsulfonamidonaphtalin. Sm. 194° (*Soc.* 89, 8 *C.* 1906 [1] 937).
- 4) 1-Nitro-2-Phenylsulfonamidonaphtalin (1-Nitro-2-Naphtylamid d. Benzolsulfonsäure). Sm. 156° (*D.R.P.* 164130 *C.* 1905 [2] 1477).
- 5) 2-Oxy-1-Phenylazonaphtalin-1'-Sulfonsäure. Ba + 5H<sub>2</sub>O (*B.* 11, 2197). — IV, 1431.
- 6) 2-Oxy-1-Phenylazonaphtalin-1'-Sulfonsäure + 4H<sub>2</sub>O. Na + 2½(5)H<sub>2</sub>O, Mg + 5H<sub>2</sub>O, Ca + 5H<sub>2</sub>O, Fe + 5H<sub>2</sub>O, Anilinsalz (*Bl.* [3] 25, 863; *B.* 11, 2198; *Soc.* 51, 187; *B.* 38, 3207 *C.* 1905 [2] 1333). — IV, 1432; \*IV, 1044.
- 7) 2-Oxy-1-Phenylazonaphtalin- $\beta$ -Sulfonsäure. Ba (*B.* 11, 2197). — IV, 1432.
- 8) 3-Oxy-1-Phenylazonaphtalin-4-Sulfonsäure. Ag (*B.* 10, 1380; 11, 2197). — IV, 1432.
- 9) 4-Oxy-1-Phenylazonaphtalin-1'-Sulfonsäure (*B.* 11, 2197). — IV, 1431.
- 10) 4-Oxy-1-Phenylazonaphtalin-1'-Sulfonsäure. Na (*B.* 14, 1796; 30, 2664; *A.* 211, 60; *Soc.* 51, 184). — IV, 1431; \*IV, 1044.
- 11) 1-Oxy-2-Phenylazonaphtalin-2'-Sulfonsäure. Na (*B.* 24, 1597). — IV, 1431.
- 12) 1-Oxy-2-Phenylazonaphtalin-3-Sulfonsäure. Na (*B.* 30, 54). — IV, 1432.
- 13) 1-Oxy-2-Phenylazonaphtalin-4-Sulfonsäure. Na + 3H<sub>2</sub>O (*B.* 23, 809). — IV, 1432.
- 14) 1-Oxy-2-Phenylazonaphtalin-5-Sulfonsäure. Na (*B.* 30, 51). — IV, 1432.
- 15) 2-Benzoyl-5-Phenylimidazol-1-Sulfonsäure + 4H<sub>2</sub>O. Sm. 274° (wasserfrei). NH<sub>4</sub> + 2H<sub>2</sub>O, PbOH, Ag (*B.* 35, 4133 *C.* 1903 [1] 295; *B.* 38, 1531 *C.* 1905 [1] 1559). — \*III, 93.

- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>S** 16) Säure (aus 3-Cyanbenzol-1-Carbonsäure). Sm. 199° (*B.* 20, 528). — II, 1229.
- 17) Nitril d.  $\alpha$ -[4-Methylphenyl]sulfon- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 198° (*J. pr.* [2] 78, 130 *C.* 1908 [2] 1171).
- 18) Phenylamid d. 1-Nitronaphtalin-7-Sulfonsäure. Sm. 172–173° (*A.* 275, 252). — II, 213.
- 19) Phenylamid d. 1-Nitronaphtalin-8-Sulfonsäure. Sm. 173° (*A.* 275, 244). — II, 214.
- 20) 4-Nitrophenylamid d. Naphtalin-1-Sulfonsäure. Sm. 205–206° (*Soc.* 87, 924 *C.* 1905 [2] 320).
- 21) 4-Nitrophenylamid d. Naphtalin-2-Sulfonsäure. Sm. 168–169° (*Soc.* 87, 925 *C.* 1905 [2] 320).
- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) 2,4-Dinitrophenyldipyridindichlorid. Sm. 147–148° (*J. pr.* [2] 73, 271 *C.* 1906 [1] 1789).
- C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>N<sub>4</sub>S** 1) 6-Oxy-2-[4-Amidophenyl]- $\beta$ -Naphtisotriazol-8-Sulfonsäure (D.R.P. 214658 *C.* 1909 [2] 1514).
- C<sub>16</sub>H<sub>11</sub>O<sub>6</sub>N<sub>2</sub>S** 1) 1-[2,4-Dioxyphenylazo]naphtalin-4-Sulfonsäure. Na. — IV, 1446.
- 2) 2-Oxy-1-[2-Oxyphenylazo]naphtalin-1<sup>4</sup>-Sulfonsäure. Na (*B.* 39, 86 *C.* 1906 [1] 666).
- C<sub>16</sub>H<sub>12</sub>O<sub>5</sub>N<sub>4</sub>S** 1) 2-[4-Nitrophenyl]azo-1-Amidonaphtalin-3-Sulfonsäure (*B.* 30, 54). — IV, 1399.
- 2) 6-Nitro-2-[4-Amidophenylazo]naphtalin-8-Sulfonsäure (*A.* 323, 122 *C.* 1902 [2] 799). — \*IV, 1029.
- 3) 1-Phenylazo-2-Phenylimidazol-4[oder 5]-Carbonsäure-1<sup>4</sup>-Sulfonsäure. Zers. oberhalb 200° (*B.* 37, 703 *C.* 1904 [1] 1562).
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Verbindung (aus Diisatinsäure) (*C.* 1898 [2] 203). — \*II, 948.
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>S** 1) 4-Nitro-1-[4-Oxyphenyl]amidonaphtalin-6-Sulfonsäure (*C.* 1901 [2] 799).
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>S<sub>2</sub>** 1) Äthylenimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 245 bis 246° (*B.* 30, 1265; *C.* 1897 [1] 236). — \*II, 801.
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>As<sub>2</sub>** 1) 4,4'-Di[Oxalylamido]arsenobenzol (D.R.P. 206057 *C.* 1909 [1] 963).
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>Cl<sub>2</sub>** 1)  $\alpha\beta$ -Di[3-Nitrobenzoylchloramido]äthan. Sm. 173° (*Soc.* 87, 385 *C.* 1905 [1] 1587).
- 2)  $\alpha\beta$ -Di[4-Nitrobenzoylchloramido]äthan. Sm. 207° (*Soc.* 87, 386 *C.* 1905 [1] 1587).
- C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>S<sub>2</sub>** 1) 2-[3-Amidophenyl]-1,2,3-Naphttriazol-4,9-Disulfonsäure (D.R.P. 174548 *C.* 1907 [1] 1003).
- 2) 2-[4-Amidophenyl]-1,2,3-Naphttriazol-4,9-Disulfonsäure (D.R.P. 170513 *C.* 1906 [2] 726).
- 3) 2-[4-Amidophenyl]- $\beta$ -Naphtisotriazol-6,8-Disulfonsäure (D.R.P. 214658 *C.* 1909 [2] 1514).
- C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>N<sub>2</sub>S** 1) 4-Nitro-1-Äthylamido-9,10-Anthrachinonsulfonsäure (D.R.P. 156759 *C.* 1905 [1] 312).
- 2) 1,4-Naphtisodiazin-2,3-Di[Methylcarbonsäure]-6-Sulfonsäure. Sm. noch nicht bei 275° (*Bl.* [3] 23, 449). — \*IV, 683.
- C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2-[4-Nitrosophenyl]amidonaphtalin-6,8-Disulfonsäure (D.R.P. 205414 *C.* 1909 [1] 599).
- 2) 2-Phenylhydrazon-1-Keto-1,2-Dihydronaphtalin-3,6-Disulfonsäure. Na<sub>2</sub> + 6H<sub>2</sub>O (*B.* 38, 3378 *C.* 1905 [2] 1492).
- 3) 4-Oxyphenylazonaphtalindisulfonsäure (*J.* 1881, 490). — IV, 1415.
- 4) 2-Oxy-1-Phenylazonaphtalin-1<sup>4</sup>,P-Disulfonsäure. Ba + 7½H<sub>2</sub>O (*B.* 11, 2198). — IV, 1432.
- 5) isom. 2-Oxyphenylazonaphtalindisulfonsäure. Na<sub>2</sub>, Ba (*Soc.* 51, 196). — IV, 1432.
- C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>N<sub>4</sub>S** 1) P-Nitro-2-Methyl-5-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,3-Thiotrioxyd (*A.* 358, 170 *C.* 1908 [1] 856).
- 2) P-Nitro-2-Methyl-3-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,5-Thiotrioxyd. Zers. bei 285° (*A.* 358, 181 *C.* 1908 [1] 858).
- C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>N<sub>4</sub>S<sub>2</sub>** 1) 2-[4-Amidophenyl]-8-Oxynaphttriazol-3,6-Disulfonsäure (D.R.P. 146375 *C.* 1903 [2] 1402).
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>N<sub>2</sub>S<sub>2</sub>** 1) 1,8-Dioxy-2-Phenylazonaphtalin-3,6-Disulfonsäure (*B.* 31, 2158). — \*IV, 1050.
- C<sub>16</sub>H<sub>12</sub>O<sub>8</sub>N<sub>4</sub>S<sub>2</sub>** 1) 2-[4-Amidophenyl]naphttriazol-5,9-Disulfonsäure (D.R.P. 170477 *C.* 1906 [2] 186).



- $C_{16}H_{12}O_9N_3S_2$  1) Flavindindisulfonsäure? (A. 120, 30). — II, 1617.
- $C_{16}H_{12}O_9N_4S_2$  1)  $\beta$ -[2-Nitro-4-Amidophenyl]azo-2-Oxynaphtalin-3,6-Disulfonsäure.  $Na_2$  (B. 30, 986). — IV, 1551; \*IV, 1045.
- 2) 5-Keto-4-Phenylhydrazon-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure-1',4'-Disulfonsäure (Tartrazinsäure; Tartrazin).  $Na_2$ ,  $Na_3$ , (Tartrazin),  $Ba_3 + 6H_2O$  (A. 294, 226; 299, 127; 306, 1; B. 20, 840). — IV, 729; \*IV, 473.
- $C_{16}H_{12}O_{10}N_3S_3$  1) 2-Oxyphenylazonaphtalintrisulfonsäure.  $Na_3$ . — IV, 1433.
- $C_{16}H_{12}N_4ClI$  1) 3-Chlor-5-Jod-4-[4-Methylphenyl]azo-1-Phenylpyrazol. Sm. 143° (A. 338, 222 C. 1905 [1] 1158).
- $C_{16}H_{12}N_4Br_2J_2$  1) Hexamethylenamindibromojodid (C. r. 136, 1472 C. 1903 [2] 297).
- $C_{16}H_{13}ONS$  1)  $\gamma$ -Rhodan- $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 88—89° (B. 28, 959). — III, 228.
- 2) 2-Keto-4-Phenyl-3-[2-Methylphenyl]-2,3-Dihydrothiazol. Sm. 109° (J. pr. [2] 75, 210 C. 1907 [1] 1502).
- 3) 2-Keto-4-Phenyl-3-[3-Methylphenyl]-2,3-Dihydrothiazol. Sm. 123° (J. pr. [2] 75, 209 C. 1907 [1] 1502).
- 4) 2-Keto-4-Phenyl-3-[4-Methylphenyl]-2,3-Dihydrothiazol. Sm. 130,5° (J. pr. [2] 75, 206, 208 C. 1907 [1] 1502).
- $C_{16}H_{13}ONS_2$  1) Benzoylimidomethylenäther d.  $\alpha\beta$ -Dimerkapto- $\alpha$ -Phenyläthan (Benzoylimidomethylenphenyläthylendisulfid). Sm. 135° (C. 1902 [1] 1401).
- $C_{16}H_{13}ON_2Cl$  1) 2-Äthyläther d. 2-Oxy-10-Diazophenanthrenchlorid.  $2 + PtCl_4$  (Soc. 89, 1530 C. 1906 [2] 1765).
- 2) 4-Chlor-1-[ $\alpha$ -Phenylhydrazonäthyl]benzofuran. Sm. 90—92° (A. 312, 334). — \*III, 530.
- 3) Nitril d.  $\beta$ -Oximido- $\gamma$ -Phenyl- $\alpha$ -[4-Chlorphenyl]buttersäure. Sm. 125° (J. pr. [2] 67, 391 C. 1903 [1] 1357).
- 4) Cinnamylidenhydrazid d. 3-Chlorbenzol-1-Carbonsäure (J. pr. [2] 64, 328). — \*III, 47.
- $C_{16}H_{13}ON_2Br$  1) Phenylhydrazon d. 4-Brom-1-Acetylbenzofuran. Sm. 164° (A. 312, 333). — \*III, 530.
- 2) 4-Brom-3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihydropyrazol. Sm. 110—120° (B. 20, 2549). — IV, 906.
- 3) 3-[3-Brom-4-Methylphenyl]imido-2-Keto-5-Methyl-2,3-Dihydroindol (4-Methylisatin-3-Brom-4-Tolylimid). Sm. 210° (B. 19, 2267). — II, 1652.
- 4) 6-Brom-4-Keto-2-Methyl-3-[2-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 137—138° (C. 1906 [1] 944).
- $C_{16}H_{13}ON_3S$  1) Methyläther d. 4-Nitroso-3-Merkapto-1,5-Diphenylpyrazol. Sm. 148° u. Zers. (A. 358, 166 C. 1903 [1] 856).
- 2) 5-Acetylphenylamido-2-Phenyl-1,2,4-Thiodiazol. Sm. 196° (B. 24, 397). — IV, 847.
- 3) 3-Acetyl-2-Phenylimido-5-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 140° (B. 29, 2916). — IV, 1159.
- $C_{16}H_{13}ON_3S_2$  1) Phenylbenzylamid d. Isorhodanformylamidothioameisensäure. Sm. 180° (Soc. 83, 95 C. 1903 [1] 230, 447).
- $C_{16}H_{13}ON_3S_3$  1) Methyläther d. 5-[4-Oxybenzyliden]sulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 145—146° (J. pr. [2] 60, 201). — \*IV, 446.
- $C_{16}H_{13}ON_4Cl$  1) 3-Chlor-5-Keto-4-[4-Methylphenyl]azo-1-Phenyl-4,5-Dihydropyrazol. Sm. 85° (A. 338, 223 C. 1905 [1] 1158).
- 2) 5-Keto-4-[4-Chlorphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 141—142° (Soc. 83, 1125 C. 1903 [2] 24, 791). — \*IV, 1078.
- $C_{16}H_{13}ON_4Br$  1) 3-Keto-4-Phenylazo-5-Methyl-1-[4-Bromphenyl]-2,3-Dihydropyrazol. Sm. 219° (A. 358, 133 C. 1908 [1] 852).
- 2) 5-Keto-4-[4-Bromphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 152—153° (Soc. 83, 1124 C. 1903 [2] 24, 791). — \*IV, 1078.
- $C_{16}H_{13}ON_6Cl$  1) 4'-Diazoniumchlorid d. 5-Keto-4-[4-Amidophenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol (B. 33, 197). — \*IV, 1130.
- $C_{16}H_{13}O_2NCl_2$  1) 3-Chlor-4-Propionylchloramidodiphenylketon. Sm. 114° (Soc. 85, 343 C. 1904 [1] 1405).

- $C_{16}H_{13}O_2NCl_4$  1) 3,4,5,6-Tetrachlor-4'-Dimethylamidodiphenylmethan-2-Carbonsäure. Sm. 215° (C. 1899 [2] 372; Bl. [3] 25, 601). — \*II, 870.
- $C_{16}H_{13}O_2NBr_2$  1)  $\gamma$ -Dibrom- $\alpha$ -Nitro- $\alpha$ -Diphenyl- $\alpha$ -Buten. Zers. bei 165° (A. 360, 313 C. 1908 [2] 325).
- $C_{16}H_{13}O_2NBr_4$  1) N-Acetyl-3,4,5,6-Tetrabrom-2-Oxydibenzylamin. Sm. 150° (A. 344, 151 C. 1906 [1] 1157).
- 2) N-Acetyl-2,3,5,6-Tetrabrom-4-Oxydibenzylamin (A. 344, 169 C. 1906 [1] 1158).
- $C_{16}H_{13}O_2NS$  1) Nitril d.  $\alpha$ -[4-Methylphenyl]sulfon- $\beta$ -Phenylakrylsäure. Sm. 114° (J. pr. [2] 78, 129 C. 1908 [2] 1170).
- 2) Phenylamid d. Naphtalin-1-Sulfonsäure. Sm. 112° (Bl. 27, 360). — II, 425.
- 3) Phenylamid d. Naphtalin-2-Sulfonsäure. Sm. 132° (Bl. 27, 360). — II, 425.
- 4) 1-Naphtylamid d. Benzolsulfonsäure. Sm. 166—167° (168—169°) (B. 27, 2371; A. 287, 230; Am. 19, 764). — \*II, 336.
- 5) 2-Naphtylamid d. Benzolsulfonsäure. Sm. 102—103° (97°) (B. 27, 2371; Am. 19, 765). — \*II, 341.
- 6) Acetat d. Verb.  $C_4H_7ONS$ . Sm. 131—132° (B. 22, 334). — II, 822.
- $C_{16}H_{13}O_2NS_8$  1) Methylenester d. Benzolthiolcarbonsäure u. Benzoylamidodithioameisensäure. Sm. 138—139° (C. 1902 [1] 1400).
- $C_{16}H_{13}O_2N_2Cl$  1) Chlorbenzylat d. 5[oder 8]-Nitroisochinolin. Sm. 205° (M. 14, 154). — IV, 302.
- 2)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha$ -Carbonsäure (Anilmukoanilidochlorsäure). Zers. bei 150° (B. 34, 515).
- 3) Di[Phenylamid] d. Chlorfumarsäure. Sm. 186° (A. 279, 143). — \*II, 216.
- 4) Verbindung (aus Dicyanoxystilben). Sm. 196° (B. 27, 833). — II, 1974.
- $C_{16}H_{13}O_2N_2Cl_3$  1)  $\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[Benzoylamido]äthan. Sm. 267° (257°) (B. 9, 1428; A. ch. [6] 26, 33). — II, 1194.
- $C_{16}H_{13}O_2N_2Br$  1)  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha$ -Carbonsäure (Anilmukoanilidobromsäure). Zers. bei 135—140°. Ag, Anilinsalz (B. 34, 513, 516).
- $C_{16}H_{13}O_2N_2J$  1) 2,5-Diketo-4-[4-Jodbenzyl]-1-Phenyltetrahydroimidazol. Sm. 195 bis 196° (Am. 40, 466 C. 1909 [1] 71).
- $C_{16}H_{13}O_2N_2Br_2$  1) 3,5-Dibrom-4-Diacetylamidoazobenzol. Sm. 137° (Soc. 91, 1140 C. 1907 [2] 897).
- 2) 3,5-Dibrom-3,5-Dicyan-2,6-Diketo-4-Methyl-4-[ $\beta$ -Phenyläthyl]-hexahydropyridin. Sm. 163—165° (C. 1901 [1] 581). — \*II, 1218.
- $C_{16}H_{13}O_2N_3S$  1) 2-Methyl-5-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,3-Sulfid. Sm. 112°. (2HCl, PtCl<sub>4</sub>) (A. 358, 169 C. 1908 [1] 856).
- 2) 2-Methyl-3-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,5-Sulfid. Sm. 158° (A. 358, 180 C. 1908 [1] 858).
- 3) Methyläther d. 5-Merkapto-3-Phenyl-1-[3-Nitrophenyl]pyrazol. Sm. 106° (A. 358, 181 C. 1908 [1] 858).
- 4) 2-Diphenylamidoformylimido-4-Ketotetrahydrothiazol. Sm. 184 bis 185° (Soc. 75, 398). — \*II, 199.
- 5) Verbindung (aus Tolulylenoxamäthan). Sm. 198° (A. 268, 310). — IV, 605.
- $C_{16}H_{13}O_2N_4Cl$  1) Äthylester d. Cyklodiphenyltetrazoliumchloridcarbonsäure (A. 295, 335). — IV, 1291.
- $C_{16}H_{13}O_3NCl_2$  1) 3,6-Dichlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 222° (Bl. [3] 23, 380). — \*II, 1000.
- $C_{16}H_{13}O_3NBr_2$  1)  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[3-Nitro-4-Methylphenyl]- $\alpha$ -Phenylpropan. Sm. 171—172° (B. 32, 2285). — \*III, 174.
- 2)  $\alpha\beta$ -Dibrom- $\beta$ -[2-Benzoylamidophenyl]propionsäure. Zers. bei 210 bis 220° (B. 25, 1266). — II, 1367.
- 3) 3,6-Dibrom-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 249° (C. r. 142, 1274 C. 1906 [2] 247; C. 1907 [1] 1119).
- $C_{16}H_{13}O_3NS$  1) 1-Phenylamidonaphtalin-4-Sulfonsäure. Anilinsalz (B. 34, 3185; D.R.P. 170630 C. 1906 [2] 473).
- 2) 1-Phenylamidonaphtalin-6-Sulfonsäure (D.R.P. 159353 C. 1905 [1] 975).

- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>NS** 3) 1-Phenylamidonaphtalin-7-Sulfonsäure (D.R.P. 159353 C. 1905 [1] 975).  
 4) 1-Phenylamidonaphtalin-8-Sulfonsäure. Na (D.R.P. 70349; D.R.P. 158923 C. 1905 [1] 909). — \*II, 345.  
 5) 2-Phenylamidonaphtalin-5-Sulfonsäure. Na (B. 27, 2364; D.R.P. 53649). — \*II, 345.  
 6) 2-Phenylamidonaphtalin-6-Sulfonsäure. Na (C. 1901 [2] 670; 1904 [1] 1013).  
 7) 2-Phenylamidonaphtalin-8-Sulfonsäure. Na (B. 27, 2364; D.R.P. 53649; C. 1904 [1] 1013). — \*II, 345.  
 8) 2-Phenylamidonaphtalin-2<sup>3</sup>-Sulfonsäure. Na (J. pr. [2] 75, 282 C. 1907 [2] 409).  
 9) 2-Phenylamidonaphtalin-2<sup>4</sup>-Sulfonsäure. Na (J. pr. [2] 75, 282 C. 1907 [2] 409).  
 10) 2-Phenylazo-1-Phenylpyrrol-2<sup>4</sup>-Sulfonsäure. Na (B. 42, 2512 C. 1909 [2] 713).  
 11) Methylester d. Dibenzoylamidothioameisensäure. Sm. 81—82° (Am. 24, 203). — \*II, 744.  
 12) Benzylester d. Chinolin-6-Sulfonsäure + 2H<sub>2</sub>O. (+ J<sub>2</sub>, KJ) (B. 19, 920). — IV, 292.  
 13) Benzylester d. Chinolin-8-Sulfonsäure. Sm. 84° (A. 282, 133). — IV, 293.  
 14) 2-Amido-1-Naphtylester d. Benzolsulfonsäure. Sm. 118—119° (C. 1900 [1] 544). — \*II, 506.  
 15) Nitril d. α-[4-Methylphenyl]sulfon-β-[2-Oxyphenyl]akrylsäure. Sm. 152° (J. pr. [2] 78, 129 C. 1908 [2] 1171).  
 16) Nitril d. α-Phenylsulfon-β-[4-Methoxyphenyl]akrylsäure. Sm. 113° (J. pr. [2] 78, 127 C. 1908 [2] 1170).
- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>NS<sub>2</sub>** 1) Äthyläther d. 2-Thiocarbonyl-4-Keto-3-[4-Oxyphenyl]-5-[2-Furylidene]tetrahydrothiazol. Sm. 197° (M. 27, 1244 C. 1907 [1] 972).  
 2) Benzoyldithiocarbaminsäurephenylacetat. Sm. 127—129° (Am. 26, 200).
- C<sub>16</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub>Br** 1) Dimethyläther d. 5-Brom-7,8-Dioxy-1-Keto-1,2-Dihydro-2-Phenyl-2,3-Benzdiazin (Bromopianylphenylhydrazid). Sm. 160° (B. 25, 1999). — IV, 716.  
 2) β-Brom-γ-Phenylhydrazon-α-Oxyerotonphenyläthersäure (Mucophenoxybromsäurephenylhydrazon). Sm. 157° u. Zers. (B. 34, 1012). — \*IV, 462.
- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>N<sub>2</sub>Br<sub>3</sub>** 1) Methylester d. 3,5,6-Tribrom-4-Oxy-1-Phenylhydrazonmethylbenzol-4-Methyläther-2-Carbonsäure. Sm. 166—167° (A. 361, 235 C. 1908 [2] 411).
- C<sub>16</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>S** 1) 1,3-Di[Acetylamido]phenazthion (A. 322, 59 C. 1902 [2] 224). — \*IV, 838.  
 2) 2-Phenyldiazoamidonaphtalin-8-Sulfonsäure. Na (Soc. 89, 1507 C. 1906 [1] 1764).  
 3) 1-Amido-2-Phenylazonaphtalin-5-Sulfonsäure. Na (B. 30, 53). — IV, 1399.  
 4) 2-Amido-1-Phenylazonaphtalin-1<sup>4</sup>-Sulfonsäure. K + 7½H<sub>2</sub>O (B. 15, 2191). — IV, 1398.  
 5) 4-Amido-1-Phenylazonaphtalin-1<sup>4</sup>-Sulfonsäure. K + 3H<sub>2</sub>O, Ba + 3H<sub>2</sub>O (B. 12, 427; 15, 2190; 22, 2069). — IV, 1398.  
 6) 5-Phenylazo-2-Phenylpyrrol-5<sup>4</sup>-Sulfonsäure. Na + H<sub>2</sub>O (B. 42, 2511 C. 1909 [2] 713).  
 7) 2-Methyl-4,6-Diphenyl-1,3,5-Triazin-9-Sulfonsäure. Na + 3½H<sub>2</sub>O, Ba + 6H<sub>2</sub>O, Ag (PINNER, Imidoäther, 163). — IV, 1191.
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>NCl<sub>2</sub>** 1) Dichlordimethylamidooxydiphenylketon-2-Carbonsäure (aus 3-Dimethylamido-1-Oxybenzol u. ?Dichlorbenzol-1,2-Dicarbonsäureanhydrid). Sm. 191° (Bl. [3] 29, 60 C. 1903 [1] 456).
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>NBr<sub>2</sub>** 1) N - Acetyl-2-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 201—202° (A. 332, 193 C. 1904 [2] 210).  
 2) N - Acetyl-3-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 211—213° (A. 332, 195 C. 1904 [2] 210).  
 3) N - Acetyl-4-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 221—222° (A. 332, 198 C. 1904 [2] 210).



- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>NS** 1) 6-Methylphenylsulfonamido-1,2-Benzpyron. Sm. 165—167° (*Soc.* 85, 1238 *C.* 1904 [2] 1124).  
 2) 2-[4-Oxyphenyl]amidonaphtalin-6-Sulfonsäure (*C.* 1904 [1] 1013).  
 3) 2-[4-Oxyphenyl]amidonaphtalin-8-Sulfonsäure (*C.* 1904 [1] 1013).  
 4) 6-Phenylamido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 114248; *C.* 1901 [2] 670; D.R.P. 134029 *C.* 1902 [2] 868; *C.* 1904 [1] 1013). — \*II, 515.  
 5) 7-Phenylamido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 79014, 80417, 99339; *C.* 1901 [2] 670; 1904 [1] 1013). — \*II, 515.  
 6) 8-Phenylamido-1-Oxynaphtalin-5-Sulfonsäure (D.R.P. 181929 *C.* 1907 [1] 1654).
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) P-Trichlor- $\alpha$ -Di[p-Nitrophenyl]butan (*B.* 7, 1421). — II, 240.  
 2)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Di[p-Nitro-4-Methylphenyl]äthan. Sm. 121—122° (*B.* 7, 1192). — II, 239.  
 3)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Di[Phenylamido]äthan-2,2'-Dicarbonsäure. Sm. 165° (*C.* 1902 [2] 939; *B.* 35, 3898 *C.* 1903 [1] 29; *C.* 1908 [1] 936).  
 4)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Di[Phenylamido]äthan-3,3'-Dicarbonsäure. Sm. 240° u. Zers. (*C.* 1909 [2] 1418).  
 5)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Di[Phenylamido]äthan-4,4'-Dicarbonsäure. Sm. 215—220° u. Zers. (*C.* 1909 [2] 1418).
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>2</sub>As** 1) 2-Oxy-1-Phenylazonaphtalin-1<sup>4</sup>-Arsinsäure. Na + 5H<sub>2</sub>O, Na<sub>2</sub> + 6 $\frac{1}{2}$ H<sub>2</sub>O (*Soc.* 93, 1897 *C.* 1909 [1] 162).
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>S** 1) 5-Methylsulfon-3-Phenyl-1-[3-Nitrophenyl]pyrazol. Sm. 148° (*A.* 358, 182 *C.* 1908 [1] 858).
- C<sub>16</sub>H<sub>13</sub>O<sub>4</sub>N<sub>4</sub>J** 1) Jodmethylat d. 5-[2,4-Dinitrophenyl]amidochinolin. Sm. 164° (*J. pr.* [2] 77, 485 *C.* 1908 [2] 75).
- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>NS** 1) 7-[4-Oxyphenyl]amido-1-Oxynaphtalin-3-Sulfonsäure. Na (*C.* 1901 [2] 670; 1904 [1] 1013).  
 2) ?-Äthylamido-9,10-Anthrachinon-1-Sulfonsäure (D.R.P. 144634 *C.* 1903 [2] 750).  
 3) P-Dimethylamido-9,10-Anthrachinon-1-Sulfonsäure (D.R.P. 136777 *C.* 1902 [2] 1373).  
 4) P-Dimethylamido-9,10-Anthrachinon-2-Sulfonsäure (D.R.P. 136777 *C.* 1902 [2] 1373).
- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>NS<sub>2</sub>** 1) 1-Phenylsulfonamidonaphtalin-4-Sulfonsäure. Na (*B.* 39, 1566 *C.* 1906 [2] 36).
- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>N<sub>2</sub>Br** 1) Bromprune (*B.* 41, 607 *C.* 1908 [1] 1286).
- C<sub>16</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>S** 1) 2-Methyl-5-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,3-Thiotrioxyd. Zers. bei 285° (*A.* 358, 168 *C.* 1908 [1] 856).  
 2) 2-Methyl-3-Phenyl-1-[3-Nitrophenyl]-2,2-Dihydropyrazol-2,5-Thiotrioxyd. Sm. 300° (*Am.* 358, 181 *C.* 1908 [1] 858).  
 3) Benzolsulfonat d. 3-Oxy-5-Methyl-1-[3-Nitrophenyl]pyrazol. Sm. 90° (*A.* 358, 150 *C.* 1908 [1] 854).
- C<sub>16</sub>H<sub>13</sub>O<sub>6</sub>NS** 1) 4-Äthylamido-1-Oxy-9,10-Anthrachinon-7-Sulfonsäure (D.R.P. 155440 *C.* 1904 [2] 1356).  
 2) 3-Dimethylamido-1-Oxy-9,10-Anthrachinon-4-Sulfonsäure? (*Bl.* [3] 25, 212).
- C<sub>16</sub>H<sub>13</sub>O<sub>6</sub>NS<sub>2</sub>** 1) 2-Phenylamidonaphtalin-2<sup>3</sup>,6-Disulfonsäure. Na (*C.* 1904 [1] 1013).  
 2) 2-Phenylamidonaphtalin-2<sup>4</sup>,6-Disulfonsäure. Na (*C.* 1904 [1] 1013).
- C<sub>16</sub>H<sub>13</sub>O<sub>6</sub>N<sub>3</sub>S<sub>2</sub>** 1) 4-Amido-2-Phenylazonaphtalin-2<sup>4</sup>,4-Disulfonsäure? Ba + 7 $\frac{1}{2}$ H<sub>2</sub>O (*B.* 15, 2194). — IV, 1399.
- C<sub>16</sub>H<sub>13</sub>O<sub>6</sub>N<sub>6</sub>Cl** 1) Äthylester d. 2-Chlor-1,2-Di[3-Nitrophenyl]-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure. Sm. 175—176° (*B.* 28, 1695). — IV, 1240.
- C<sub>16</sub>H<sub>13</sub>O<sub>7</sub>NS<sub>2</sub>** 1) 8-Phenylamido-1-Oxynaphtalin-3,5-Disulfonsäure (D.R.P. 181929 *C.* 1907 [1] 1654).  
 2) 8-Phenylamido-1-Oxynaphtalin-3,6-Disulfonsäure (D.R.P. 181929 *C.* 1907 [1] 1654).  
 3) 2-[4-Oxyphenyl]amidonaphtalin-6,8-Disulfonsäure. Na (*J. pr.* [2] 75, 265 *C.* 1907 [2] 408).
- C<sub>16</sub>H<sub>13</sub>O<sub>7</sub>N<sub>3</sub>S<sub>2</sub>** 1) 2-Oxy-1-[4-Amidophenyl]azonaphtalin-3,6-Disulfonsäure (*B.* 17, 344, 1350). — IV, 1433; \*IV, 1045.
- C<sub>16</sub>H<sub>13</sub>O<sub>8</sub>N<sub>3</sub>S<sub>2</sub>** 1) 2-[4-Nitro-2-Amidophenyl]amidonaphtalin-5,7-Disulfonsäure (D.R.P. 214658 *C.* 1909 [2] 1514).

- $C_{16}H_{13}O_3NS_3$  1) 2-Phenylamidonaphtalin- $\beta$ -Trisulfonsäure. Ba (A. 209, 160; Ph. Ch. 11, 632). — II, 632.
- $C_{16}H_{13}O_{12}NS_4$  1) 1-Phenylamidonaphtalin- $\beta$ -Tetrasulfonsäure. Ba<sub>2</sub> (A. 209, 156). — II, 632.
- $C_{16}H_{13}NClBr$  1) Chlorbenzylat d.  $\beta$ -Bromisochinolin. Sm. 115°.  $2 + PtCl_4$  (J. pr. [2] 43, 193). — IV, 301.
- $C_{16}H_{13}N_4ClS$  1) 3-Chlor-5-Merkapto-4-[4-Methylphenyl]azo-1-Phenylpyrazol. Sm. 146°.  $HgCl$  (A. 338, 224 C. 1905 [1] 1158).
- $C_{16}H_{14}ONCl$  1) Chlorbenzylat d. 6-Oxychinolin  $+ 1\frac{1}{2}H_2O$ . Sm. 235—237° u. Zers.  $2 + PtCl_4$  (J. pr. [2] 43, 526). — IV, 271.
- 2) Chlorbenzylat d. 8-Oxychinolin  $+ 1\frac{1}{2}H_2O$ . Sm. 182° (wasserfrei) (J. pr. [2] 47, 429; [2] 54, 7). — IV, 273.
- 3) Chlorbenzylat d. 8-Oxyisochinolin  $+ 2H_2O$ . Sm. 202° (wasserfrei) (J. pr. [2] 52, 14). — IV, 303.
- 4) 2-Methylphenylamid d.  $\alpha$ -Chlor- $\beta$ -Phenylakrylsäure. Sm. 78° (Soc. 89, 114 C. 1906 [1] 1016).
- 5) 4-Methylphenylamid d.  $\alpha$ -Chlor- $\beta$ -Phenylakrylsäure. Sm. 116° (Soc. 89, 114 C. 1906 [1] 1016).
- 6) 4-Methylphenylamid d. Allo- $\pi$ -Chlor- $\beta$ -Phenylakrylsäure. Sm. 132° (Soc. 89, 115 C. 1906 [1] 1016).
- $C_{16}H_{14}ONBr$  1)  $\beta$ -Brom- $\alpha$ -[2-Acetylamidophenyl]- $\alpha$ -Phenyläthen. Sm. 146° (B. 42, 3121 C. 1909 [2] 1353).
- 2) 9-[ $\alpha$ -Brombutyryl]carbazol. Sm. 110° (B. 31, 2850). — \*IV, 233.
- $C_{16}H_{14}ONJ$  1) Jodmethylat d. 2,5-Diphenyloxazol. Sm. 196° u. Zers. (B. 29, 208). — IV, 433.
- $C_{16}H_{14}ON_2Cl_2$  1)  $\alpha$ -Acetyl- $\alpha$ -[2-Chlorbenzyl]- $\beta$ -[2-Chlorbenzyliden]hydrazin. Sm. 110° (B. 34, 852). — \*IV, 542.
- $C_{16}H_{14}ON_2S$  1) s-Cinnamoylphenylthioharnstoff. Sm. 165—166° (Soc. 67, 1046). — \*II, 852.
- 2) Carbonyl-4-Ditolythioharnstoff(s-Carbonyl-p-Ditolylpseudothioharnstoff). Sm. 116° (B. 14, 1487). — II, 500.
- 3) Acetyldehydrothio-p-Toluidin. Sm. 227° (225°) (B. 22, 582, 970). — II, 822.
- 4) 1-[4-Dimethylamidophenyl]imido-2-Keto-1,2-Dihydrobenzthiofuran. Sm. 176° (D.R.P. 214781 C. 1909 [2] 1603).
- 5) 1-[4-Äthylamidophenyl]imido-2-Keto-1,2-Dihydrobenzthiofuran. Sm. 158° (D.R.P. 214781 C. 1909 [2] 1603).
- 6) 2-Merkapto-5-Keto-1-Methyl-4,4-Diphenyl-4,5-Dihydroimidazol. Sm. 185° (B. 42, 1797 C. 1909 [2] 203).
- 7) Methyläther d. 2-Merkapto-4-Keto-5,5-Diphenyl-4,5-Dihydroimidazol. Sm. 207° (B. 42, 1796 C. 1909 [2] 203).
- 8) 2-[Phenylbenzylamido]-4-Keto-4,5-Dihydrothiazol. Sm. 118 bis 119° (124—125°) (Soc. 71, 631; C. 1902 [2] 578; Am. 28, 146 C. 1902 [2] 794). — \*II, 299.
- 9) 2-Phenylimido-4-Keto-3-Phenyl-3,4,5,6-Tetrahydro-1,3-Thiazin. Sm. 106°. — \*II, 201.
- 10) 1-[4-Acetylamido-3-Methylphenyl]benzthiazol. Sm. 206° (D.R.P. 83089). — \*IV, 678.
- 11) Äthyläther d. 2-Merkapto-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 114° (B. 30, 1689; Am. 21, 149). — IV, 898.
- $C_{16}H_{14}ON_2Se$  1) Phenylbenzylamid d. Selencyanessigsäure. Sm. 70° (Ar. 241, 218 C. 1903 [2] 104).
- $C_{16}H_{14}ON_4Cl_2$  1) Verbindung (aus s-Tetrachlordiacetyl u. Phenylhydrazin). Sm. 180° u. Zers. (A. 249, 95). — IV, 780.
- $C_{16}H_{14}ON_4Br_2$  1) Verbindung (aus s-Tetrabromdiacetyl u. Phenylhydrazin). Sm. 190° u. Zers. (B. 23, 36). — IV, 780.
- $C_{16}H_{14}ON_4S$  1) 2-Thiocarbonyl-5-[4-Methylphenyl]azo-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 215° (B. 24, 4197). — IV, 806.
- 2) Acetylderivat d. 3,5-Diimido-2,4-Diphenyltetrahydro-1,2,4-Thiodiazol. Sm. 223° (240°) (B. 22, 1179; B. 42, 3807 C. 1909 [2] 1858). — IV, 1236.
- 3) 2-Keto-5-[2-Methylphenyl]azo-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 144° (B. 24, 4202). — IV, 802.

- C<sub>16</sub>H<sub>14</sub>ON<sub>4</sub>S** 4) 2-Keto-5-[4-Methylphenyl]azo-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 174° (B. 24, 4195). — IV, 806.
- 5) Acetylderivat d. Verb. C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>S. Sm. 235° (B. 39, 865 C. 1906 [1] 1413).
- C<sub>16</sub>H<sub>14</sub>ON<sub>4</sub>S<sub>3</sub>** 1) 4-Methylnitrosamidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 127° (J. pr. [2] 60, 212). — \*IV, 535.
- 2) 4-Äthylnitrosamidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 136—138° (B. 29, 2143). — IV, 683.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>NCl** 1) 3-Chlorphenylacetylamidobenzoylmethan. Sm. 82° (B. 25, 2868). — III, 127.
- 2) 3-Chlor-4-Propionylamidodiphenylketon. Sm. 107,5° (Soc. 85, 343 C. 1904 [1] 1405).
- 3) 2-Propionylchloramidodiphenylketon. Sm. 107° (C. 1903 [1] 1137).
- 4) 4-Propionylchloramidodiphenylketon. Sm. 129° (C. 1903 [1] 1137).
- 5) Äthyl-4-Benzoylchloramidodiphenylketon. Sm. 70° (C. 1903 [1] 1223).
- 6) 4-Acetylchloramido-3-Methyldiphenylketon. Sm. 110° (Soc. 85, 593 C. 1904 [1] 1554).
- 7) 6-Acetylchloramido-3-Methyldiphenylketon. Sm. 116° (Soc. 85, 595 C. 1904 [1] 1554).
- 8) 2-Chlorphenylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure. Sm. 61° (Bl. [3] 21, 12). — \*IV, 143.
- 9) Chlorid d. 4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 115° (A. 307, 307).
- 10) Chlorid d. α-Benzoylamido-β-Phenylpropionsäure. Sm. 150—165° u. Zers. (123—125° u. Zers.) (B. 42, 2523 C. 1909 [2] 606; A. 369, 281 C. 1909 [2] 2140).
- 11) Gem. Imid d. Phenyllessigsäure d. 4-Chlorphenyllessigsäure. Sm. 172° (J. pr. [2] 69, 16 C. 1904 [1] 640).
- 12) Chlorimid d. 1-Methylbenzol-4-Carbonsäure. Sm. 129° (C. 1902 [2] 360).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>NBr** 1) 2-Propionylbromamidodiphenylketon. Sm. 90° (C. 1903 [1] 1137).
- 2) 4-Propionylbromamidodiphenylketon. Sm. 123° (C. 1903 [1] 1137).
- 3) Äthyl-4-Benzoylbromamidodiphenylketon. Sm. 111° (C. 1903 [1] 1223).
- 4) Benzylhydroxyd d. 5-Brom-6-Oxychinolin + H<sub>2</sub>O. Sm. 112° u. Zers. (B. 38, 892 C. 1905 [1] 1028).
- C<sub>16</sub>H<sub>14</sub>O<sub>4</sub>NBr<sub>3</sub>** 1) α, 5, 8 - Tribrom-2, 4, 4-Trimethyl-3, 4-Dihydrochino-β-Methylcumarin. Sm. 191° u. Zers. (B. 32, 3703). — \*IV, 217.
- 2) Phenylamidoformiat d. 4,6-Dibrom-2-Oxy-5-Brommethyl-1,3-Dimethylbenzol. Sm. 257° u. Zers. (B. 32, 3306; A. 302, 80). — \*II, 457.
- 3) Phenylamidoformiat d. 3,6-Dibrom-5-Oxy-2-Brommethyl-1,4-Dimethylbenzol. Sm. 226° (225—230°) (A. 302, 80; B. 32, 3309). — \*II, 451.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) Dimethyläther d. αβ-Dichlor-αβ-Di[2-Oxyphenylimido]äthan. Sm. 101° (B. 42, 2114 C. 1909 [2] 350).
- 2) Dimethyläther d. αβ-Dichlor-αβ-Di[4-Oxyphenylimido]äthan. Sm. 150° (B. 42, 2111 C. 1909 [2] 349).
- 3) Äthylenäther d. α-Chlor-α-Oximidophenylmethan (Äthylenäther d. Benzenylchloroxim). Sm. 59—60° (B. 29, 1162). — \*II, 752.
- 4) 3,3'-Dichlor-4,4'-Di[Acetylamido]biphenyl. Sm. 302° (J. C. CAIN, Privatmitteilung).
- 5) αβ-Di[Benzoylchloramido]äthan. Sm. 162° (Soc. 87, 385 C. 1905 [1] 1587).
- 6) Dimethyläther d. Di[α-Chlor-4-Oxybenzyliden]hydrazin. Sm. 130—150° (J. pr. [2] 74, 13 C. 1906 [2] 791).
- 7) Dimethyläther d. Di[α-Oxy-4-Chlorbenzyliden]hydrazin. Sm. 162° (J. pr. [2] 74, 11 C. 1906 [2] 791).
- 8) 5-Methyläther d. 2',4'-Dichlor-5,6-Dioxy-3-Allylazobenzol. Sm. 130° (G. 36 [2] 47 C. 1906 [2] 1193).



- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 9) Amid d. 3,6-Dichlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 220° (*B.* [3] 25, 507). — \*II, 1001.
- 10) Verbindung (aus Äthylendiphenyldiamin). Sm. 183° (167°) (*B.* 14, 2183; 20, 784). — II, 380.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Äthylenäther d.  $\alpha$ -Brom- $\alpha$ -Oximidophenylmethan. Sm. 100° (*B.* 29, 1163). — \*II, 752.
- 2) isom. Äthylenäther d. Benzenylbromoxim. Sm. 81–82° (*B.* 29, 1163). — \*II, 752.
- 3)  $\alpha\beta$ -Di[Benzoylbromamido]äthan. Sm. 180–182° u. Zers. (*Soc.* 87, 385 *C.* 1905 [1] 1587).
- 4) s-Diphenylamid d. Dibrombernsteinsäure. Sm. noch nicht bei 300° (*A.* 239, 139). — II, 414.
- 5) s-Di[4-Brom-2-Methylphenylamid] d. Oxalsäure. Sm. 254–255° (*M.* 25, 378 *C.* 1904 [2] 320).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Phtalimidinbromid? Sm. 150° u. Zers. (*A.* 247, 295). — II, 1557.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Methyläther d. Dibenzoylamidoimidomerkaptomethan. Sm. 130 bis 135° (*Am.* 35, 301 *C.* 1906 [1] 1544).
- 2) Methyläther d. Benzoylamidobenzoylimidomerkaptomethan. Sm. 147–148° (*Am.* 35, 303 *C.* 1906 [1] 1544).
- 3) 4-Amido-1-Phenylsulfonamidonaphtalin. Sm. 186–187° (*Soc.* 87, 929 *C.* 1905 [2] 320).
- 4) 5-Amido-1-Phenylsulfonamidonaphtalin. Sm. 161° (*Soc.* 89, 8 *C.* 1906 [1] 937).
- 5) 8-Amido-1-Phenylsulfonamidonaphtalin. Sm. 166° (*Soc.* 89, 9 *C.* 1906 [1] 937).
- 6) 5-Methylsulfon-1,3-Diphenylpyrazol. Sm. 162° (*A.* 358, 175 *C.* 1908 [1] 857).
- 7) 3-Methylsulfon-1,5-Diphenylpyrazol. Sm. 121° (*A.* 358, 166 *C.* 1908 [1] 856).
- 8) 4[oder 6]-Nitro-3,5-Dimethyl-1-[3-Methylphenyl]benzthiazol. Sm. 146° (*J. pr.* [2] 65, 154 *C.* 1902 [1] 991). — \*IV, 255.
- 9) 4[oder 6]-Nitro-3,5-Dimethyl-1-[3-Methylphenyl]benzthiazol. Sm. 152° (*J. pr.* [2] 65, 153 *C.* 1902 [1] 991). — \*IV, 255.
- 10)  $\beta$ -[2-Phenylthioureidophenyl]akrylsäure. Sm. 235–237° u. Zers. (*B.* 23, 3343). — II, 1418.
- 11) Äthylester d. 3[oder 5]-Thiänyl-1-Phenylpyrazol-5[oder 3]-Carbonsäure. Sm. 81° (*G.* 21 [2] 273). — IV, 893.
- 12) 4-Amidophenylamid d. Naphtalin-1-Sulfonsäure. Sm. 175° (*Soc.* 87, 924 *C.* 1905 [2] 320).
- 13) 4-Amidophenylamid d. Naphtalin-2-Sulfonsäure. Sm. 231–232° (*Soc.* 87, 925 *C.* 1905 [2] 320).
- 14) 1-Naphtylamid d. 1-Amidobenzol-4-Sulfonsäure. Sm. 196° (*J. pr.* [2] 77, 380 *C.* 1908 [1] 2151).
- 15) 2-Naphtylamid d. 1-Amidobenzol-4-Sulfonsäure. Sm. 203° (*J. pr.* [2] 77, 382 *C.* 1908 [1] 2151).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) Benzolsulfonat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Fl. (*A.* 361, 270 *C.* 1908 [2] 521).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1)  $\gamma$ -Phenylhydrazon- $\alpha$ -[5-Chlor-2-Nitrophenyl]- $\alpha$ -Buten. Sm. 161° (*A.* 262, 147). — IV, 774.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) 3,3'-Dichlor-4,4'-Di[Acetylamido]azobenzol. Sm. 280° (*Soc.* 95, 716 *C.* 1909 [2] 18).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>Br<sub>2</sub>** 1) 4,4'-Dibrom-2,2'-Di[Acetylamido]azobenzol. Sm. 280–282° (*Am.* 8, 347). — IV, 1359.
- 2) Äthylester d. 4-Bromphenylazo-4-Bromphenylhydrazonessigsäure. Sm. 158–160° (*A.* 338, 391 *C.* 1905 [1] 1224).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>S** 1) s-Phenyl-4-[2-Keto-5-Methyl-2,3-Dihydro-1,3,4-Oxidiazolyl-3]-phenylthioharnstoff. Sm. 170° (*B.* 26, 1320). — IV, 1127.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>ClBr** 1)  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 155° (*B.* 36, 2401 *C.* 1903 [2] 499).
- 2) isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 160° (*B.* 36, 2402 *C.* 1903 [2] 499).
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>ClJ** 1)  $\gamma$ -Chlor- $\gamma$ -Jod- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 133–134° u. Zers. (*B.* 36, 2414 *C.* 1903 [2] 500).

- $C_{16}H_{14}O_2Cl_2Se$  1) Dichlorselenoacetophenon. Sm.  $122^\circ$  (B. 30, 2826; A. 314, 285). — \*III, 111.
- $C_{16}H_{14}O_2Cl_2Te$  1) Dichlortelluroacetophenon. Sm.  $186-187^\circ$  (B. 30, 2833). — \*III, 111.
- $C_{16}H_{14}O_2Br_2Se$  1) Di[Benzoylmethyl]selenidbromid. Sm.  $102^\circ$  (A. 314, 284). — \*III, 111.
- $C_{16}H_{14}O_2Br_4S$  1) Diäthyläther d. Di[ $\beta$ -Dibrom-4-Oxyphenyl]sulfid. Sm.  $142^\circ$  (B. 27, 2544). — \*II, 574.
- $C_{16}H_{14}O_2J_2Se$  1) Di[Benzoylmethyl]selenidjodid (Dijodselenoacetophenon). Sm.  $112^\circ$  (A. 314, 285). — \*III, 111.
- $C_{16}H_{14}O_3NCl$  1) Phenylester d.  $\alpha$ -Chlor- $\alpha$ -Benzoylamidopropionsäure. Sm.  $137^\circ$  (H. 20, 425). — \*II, 747.
- $C_{16}H_{14}O_3N_2Br_2$  1)  $\alpha\beta$ -Dibrom- $\beta$ -[2-Phenylureidophenyl]propionsäure. Sm.  $227^\circ$  (B. 28, 3229). — \*II, 837.
- 2)  $\alpha\beta$ -Dibrom- $\beta$ -[3-Phenylureidophenyl]propionsäure. Sm.  $240^\circ$  (B. 28, 3230). — \*II, 837.
- 3)  $\alpha\beta$ -Dibrom- $\beta$ -[4-Phenylureidophenyl]propionsäure. Sm. oberhalb  $200^\circ$  (B. 28, 3231). — \*II, 837.
- 4) Äthylester d.  $\alpha\beta$ -Di[4-Bromphenyl]harnstoff- $\alpha$ -Carbonsäure. Sm.  $153^\circ$  (B. 13, 229). — II, 382.
- $C_{16}H_{14}O_3N_2Br_4$  1) Diäthyläther d. 3,5,3',5'-Tetrabrom-4,4'-Dioxyazoxybenzol. Sm.  $163^\circ$  (B. 35, 1132 C. 1902 [1] 915; Am. 30, 65 C. 1903 [2] 355). — \*IV, 1001.
- $C_{16}H_{14}O_3N_2S$  1) 2-Methyl-1,5-Diphenyl-2,2-Dihydropyrazol-2,3-Thiotrioxyd. Zers. oberhalb  $300^\circ$  (A. 358, 165 C. 1908 [1] 856).
- 2) 2-Methyl-1,3-Diphenyl-2,2-Dihydropyrazol-2,5-Thiotrioxyd. Zers. oberhalb  $300^\circ$  (A. 358, 174 C. 1908 [1] 857).
- 3) 1,3-Di[Acetylamido]phenoxthin. Sm.  $224-225^\circ$  (B. 38, 1413 C. 1905 [1] 1398).
- 4) 2-Phenylamido-1-Amidonaphtalin-5-Sulfonsäure. Na +  $H_2O$  (B. 27, 2367). — IV, 920.
- 5) 2-Phenylamido-1-Amidonaphtalin-8-Sulfonsäure (B. 27, 2368). — IV, 921.
- 6) 2-[4-Amidophenyl]amidonaphtalin-6-Sulfonsäure. Na (C. 1901 [2] 670; 1904 [1] 1013; J. pr. [2] 75, 267 C. 1907 [2] 408).
- 7) s-Diphenylacetylthioharnstoff-3-Carbonsäure. Sm.  $159-160^\circ$  (B. 17, 429, 430). — II, 1263.
- 8) 5-Methyl-1,3-Diphenylpyrazol-1'-Sulfonsäure (A. 278, 300). — IV, 936.
- 9) p-Toluylsulfo-p-Tolenylamidinsäureanhydrid. Sm.  $161,5-162^\circ$  u. Zers. (B. 26, 2837). — IV, 852.
- 10) Benzolsulfonat d. 5-Oxy-3-Methyl-1-Phenylpyrazol. Sm.  $91-92^\circ$  (J. pr. [2] 54, 205). — IV, 511.
- 11) Benzolsulfonat d. 3-Oxy-5-Methyl-1-Phenylpyrazol. Sm.  $76^\circ$  (A. 338, 278 C. 1905 [1] 1160).
- $C_{16}H_{14}O_3N_3Br$  1) 3,5-Di[Acetylamido]phenoxazoniumbromid (A. 322, 26 C. 1902 [2] 222). — \*IV, 837.
- $C_{16}H_{14}O_3N_3As$  1) 2-Amido-1-Naphtylazophenylarsinsäure. HCl (B. 40, 3297 C. 1907 [2] 898).
- $C_{16}H_{14}O_3Br_2S$  1) Diformaldibromdibenzylsulfon. Sm.  $280^\circ$  (B. 42, 3823 C. 1909 [2] 1861).
- $C_{16}H_{14}O_4NBr$  1) Dimethyläther d. 10-Brom-10-Nitro-9,9-Dioxy-9,10-Dihydroanthracen. Sm.  $139-140^\circ$  u. Zers. (A. 323, 241 C. 1902 [2] 803; A. 330, 169 C. 1904 [1] 891).
- 2) 2-Phenylamid d. 6-Brom-3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure-1-Aldehyd. Sm.  $191^\circ$  (B. 25, 1997). — II, 1943.
- $C_{16}H_{14}O_4N_2Br_2$  1) N-Acetyl-4-Nitro-2-Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm.  $161-162^\circ$  (A. 332, 191 C. 1904 [2] 210).
- 2) N-Acetyl-3-Nitro-4-Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm.  $179-180,5^\circ$  (A. 332, 192 C. 1904 [2] 210).
- $C_{16}H_{14}O_4N_3S$  1) Dibenzolsulfondihydroaldin. Sm.  $163^\circ$  (B. 26, 99). — II, 115.
- $C_{16}H_{14}O_4N_4Br_2$  1) Bromderivat d. Ricinin. Sm.  $229,5-230^\circ$  u. Zers. (C. 1900 [1] 612).
- $C_{16}H_{14}O_4N_4S$  1) 5-Keto-4-Phenylhydrazon-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-1'-Sulfonsäure. Sm.  $262^\circ$  u. Zers. (B. 25, 1945). — IV, 736.
- $C_{16}H_{14}O_4S_2As_2$  1) Arsenobenzol-4,4'-Di[Merkaptoessigsäure] (D. R. P. 216270 C. 1909 [2] 2105).

- $C_{16}H_{14}O_6NBr$  1) 6-Brom-3,4-Dioxy-1-N-Phenylbenzaldoxim-3,4-Dimethyläther-2-Carbonsäure (Bromopiansäure-N-Phenyloxim) (*B.* 34, 1019).
- $C_{16}H_{14}O_5N_2S$  1) 1,4-Di[Methylamido]-9,10-Anthrachinon-5-Sulfonsäure. K (D.R.P. 205096 *C.* 1909 [1] 483).
- $C_{16}H_{14}O_6N_2Hg_2$  1) Benzolazophenoldimerkuriacetat (*Soc.* 93, 847 *C.* 1908 [1] 2149).
- $C_{16}H_{14}O_6N_2Br_2$  1)  $\beta\beta$ -Di[5-Brom-3-Nitro-4-Oxyphenyl]butan. Sm. 146—147° (*A.* 362, 209 *C.* 1908 [2] 942).
- $C_{16}H_{14}O_6N_2S_2$  1) 2-[4-Amidophenyl]amidonaphtalin-6,8-Disulfonsäure. Na (*J. pr.* [2] 75, 265 *C.* 1907 [2] 408).
- 2) 6-[3-Amidophenylsulfon]amido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 151017 *C.* 1904 [1] 1382).
- 3) 6-[3-Amidophenylsulfon]amido-2-Oxynaphtalin-4-Sulfonsäure (D.R.P. 151017 *C.* 1904 [1] 1382).
- 4) Indolindisulfonsäure. Na<sub>2</sub> (*J.* 1880, 587). — II, 1624.
- $C_{16}H_{14}O_6N_4S_2$  1) 2,2'-Dinitro-4,4'-Di[Acetylamido]diphenyldisulfid. Sm. noch nicht bei 260° (*C.* 1906 [2] 1587).
- $C_{16}H_{14}O_7N_3J$  1) 4-Jod-2',4',6-Trinitro-3-Methyl-6-Isopropyldiphenyläther. Sm. 155° (*J. pr.* [2] 39, 295). — II, 772.
- $C_{16}H_{14}O_7N_4S_2$  1) 2-Amido-5-Oxy-1-[4-Amidophenyl]azonaphtalin-1<sup>3</sup>,7-Disulfonsäure (D.R.P. 180147 *C.* 1907 [1] 1367).
- $C_{16}H_{14}O_8N_2S_2$  1) 1,5-Di[Sulfomethylamido]-9,10-Anthrachinon (D.R.P. 112115 *C.* 1900 [2] 651). — \*III, 297.
- 2) Hydrindindisulfonsäure. Ba + 4H<sub>2</sub>O (*A.* 120, 20). — II, 1617.
- $C_{16}H_{14}O_9N_2S$  1) Methylentanninthioharnstoff, Zers. bei 190—200° (D.R.P. 164612 *C.* 1905 [2] 1751).
- $C_{16}H_{14}O_9N_4S$  1) 5,5'-Dinitro-4,4'-Di[Acetylamido]biphenyl-3-Sulfonsäure. K (*B.* 23, 3460). — IV, 968.
- $C_{16}H_{14}O_{12}N_2S_2$  1)  $\beta$ -Diamido-1,3,5,7-Tetraoxy-9,10-Anthrachinondimethyläther- $\beta$ -Disulfonsäure (D.R.P. 146265 *C.* 1903 [2] 1227).
- $C_{16}H_{14}NClBr_2$  1) Bromid d. Chinolinchlorbenzylat. Sm. 91—92° (*B.* 18, 1306). — IV, 252.
- $C_{16}H_{14}NCl_2Br$  1) Chlorid d. Chinolinbrombenzylat. Sm. 80° (*B.* 18, 1306). — IV, 252.
- $C_{16}H_{14}NBrJ_2$  1) Jodid d. Chinolinbrombenzylat. Sm. 109—110° (*B.* 18, 1306). — IV, 252.
- $C_{16}H_{14}N_2ClJ$  1) Jodmethylat d. 5-Chlor-1,3-Diphenylpyrazol. Sm. 172° (*A.* 358, 172 *C.* 1908 [1] 857).
- 2) Jodmethylat d. 3-Chlor-1,5-Diphenylpyrazol. Sm. 138° (*A.* 358, 161 *C.* 1908 [1] 855).
- $C_{16}H_{14}N_2Br_2S_2$  1) Äthyläther d. 2-Brom-5-Merkapto-2-[4-Bromphenyl]-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol<sup>?</sup> Sm. 184° (*J. pr.* [2] 67, 240). — \*IV, 483.
- $C_{16}H_{15}ONBr_2$  1) Methyläther d.  $\alpha\beta$ -Phenylimido- $\alpha$ -[ $\beta$ -Dibrom-4-Oxyphenyl]-propan<sup>?</sup> Sm. 82° (*J. pr.* [2] 52, 205). — \*II, 448.
- 2) 1-[3,5-Dibrom-2-Oxybenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 113 bis 114° (*A.* 332, 224 *C.* 1904 [2] 203).
- $C_{16}H_{15}ONS$  1) 5-Methyl-1-[4-Äthoxyphenyl]benzthiazol. Sm. 170° (*B.* 25, 3530). — II, 1541.
- $C_{16}H_{15}ONS_2$  1) 1,2-Diphenyl-3-Äthylimidoxanthid. Sm. 98—98,5° (97°) (*B.* 35, 2471 *C.* 1902 [2] 441; *C.* 1904 [1] 1003; 1907 [1] 1205).
- 2) Benzylester d. Phenylacetylamidodithioameisensäure. Sm. 123° (*C.* 1906 [2] 1836).
- 3) 3-Methylbenzylester d. Benzoylamidodithioameisensäure. Sm. 93—94° (*Am.* 26, 203).
- $C_{16}H_{15}ONS_3$  1) Dibenzylester d. Imidothiolameisensäure-Dithioameisensäure. Sm. 144—145° (*B.* 28, 1112). — \*II, 640.
- $C_{16}H_{15}ON_2Cl_3$  1)  $\delta\delta\delta$ -Trichlor- $\gamma$ -Oxy- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylbutan. Sm. 156 bis 158° (141—142°) (*B.* 26, 556, 911). — IV, 771.
- $C_{16}H_{15}ON_3S$  1) 3-Merkapto-5-Keto-4-[2,4-Dimethylphenyl]-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 262° (*B.* 32, 1084). — \*IV, 448.
- 2) Äthyläther d. 5-Thiocarbonyl-3-Oxy-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 83° (*Am.* 34, 125 *C.* 1905 [2] 1030).
- 3) 5-[4-Methylphenyl]imido-3-Keto-2-[4-Methylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 163° (*B.* 39, 864 *C.* 1906 [1] 1413).



- C<sub>16</sub>H<sub>15</sub>ON<sub>3</sub>S** 4) 5-Phenylamido-2-Keto-3-[2,4-Dimethylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 158° (B. 32, 1085). — \*IV, 544.  
5) 5-[2,4-Dimethylphenyl]amido-2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 126° (B. 32, 1084). — \*IV, 448.
- C<sub>16</sub>H<sub>15</sub>ON<sub>2</sub>S** 1) Nitrosoderivat d. 3,5-Diimido-2,4-Di[2-Methylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 135° (B. 23, 368). — IV, 1236.  
2) Nitrosoderivat d. 3,5-Diimido-2,4-Di[4-Methylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 247° u. Zers. (B. 23, 366). — IV, 1236.
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>NCl<sub>2</sub>** 1) 3,6-Dichlor-5-[4-Methylphenyl]amido-2-Isopropyl-1,4-Benzochinon. Sm. 187° (B. 35, 1505 C. 1902 [1] 1211). — \*III, 270.  
2) 3,6-Dichlor-4'-Dimethylamidodiphenylmethan-2-Carbonsäure. Sm. 225° (233°) (Bl. [3] 23, 381; C. 1900 [2] 102). — \*II, 869.
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>NBr<sub>2</sub>** 1) N-Acetyl-2-Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 115° (A. 332, 186 C. 1904 [2] 210).  
2) N-Acetyl-2-Methylphenyl-3,5-Dibrom-4-Oxybenzylamin (B. 41, 1056 C. 1908 [1] 1775).  
3) 3,6-Dibrom-5-[3-Methylphenyl]amido-2-Isopropyl-1,4-Benzochinon. Sm. 171° (B. 35, 1503 C. 1902 [1] 1211). — \*III, 270.  
4) 3,6-Dibrom-5-[4-Methylphenyl]amido-2-Isopropyl-1,4-Benzochinon. Sm. 195° (B. 34, 1559). — \*III, 270.  
5) 3,6-Dibrom-4'-Dimethylamidodiphenylmethan-2-Carbonsäure. Sm. 253° (C. r. 142, 1275 C. 1906 [2] 247).  
6) Acetat d. Methylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 91° (A. 332, 225 C. 1904 [2] 203).  
7) Acetat d. 4-Methylphenyl-3,5-Dibrom-4-Oxybenzylamin. Sm. 109° (B. 41, 1058 C. 1908 [1] 1775).  
8) Phenylamidoformiat d. 4,6-Dibrom-2-Oxy-1,3,5-Trimethylbenzol. Sm. 213—216° (B. 32, 3306). — \*II, 456.
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>NBr<sub>4</sub>** 1) 5,8-Dibrom-2,4,4-Trimethyl-3,4-Dihydrochino-β-Methyleumarindibromid. Sm. 204° u. Zers. (B. 32, 3702). — \*IV, 174.
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>NS** 1) Benzoylmethylester d. 2-Methylphenylamidothioldiameisensäure. Sm. 138° (J. pr. [2] 75, 210 C. 1907 [1] 1502).  
2) 2-Methylphenylamid d. Benzoylmerkaptoessigsäure. Sm. 141 bis 142° (Am. 28, 148 C. 1902 [2] 794).
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>NS<sub>2</sub>** 1) Dibenzylester d. Imidodi[thiolcarbonsäure]. Sm. 146° (A. 275, 38). — II, 1054.
- C<sub>16</sub>H<sub>15</sub>O<sub>4</sub>N<sub>2</sub>Cl** 1) 5-Methyläther d. 4'-Chlor-5,6-Dioxy-3-Allylazobenzol. Sm. 117° (G. 36 [2] 43 C. 1906 [2] 1193).  
2) Äthyläther d. Benzoylimido-3-Chlorphenylamidooxymethan. Sm. 47—48° (Am. 32, 366 C. 1904 [2] 1507).  
3) 5-Chlor-2,4'-Di[Acetylamido]biphenyl. Sm. 204° (A. 303, 318). — \*IV, 638.  
4) Phenylamid d. 7-Chlor-3-Methyl-3,4-Dihydro-1,4-Benzoxazin-4-Carbonsäure. Sm. 148° (B. 31, 757). — \*II, 416.  
5) Verbindung (aus Essigsäurechlorid u. 3-Phenylimido-3,4-Dihydro-2,4-Benzoxazin). Sm. 119° (B. 27, 2423). — IV, 874.
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>N<sub>3</sub>Br** 1) 5-Brom-2,4'-Di[Acetylamido]biphenyl. Sm. 223° (A. 303, 328). — \*IV, 638.  
2) 5-Methyläther d. 3'-Brom-5,6-Dioxy-3-Allylazobenzol. Sm. 96° (G. 35 [1] 69 C. 1905 [1] 1238; G. 36 [2] 41 C. 1906 [2] 1193).  
3) 5-Methyläther d. 4'-Brom-5,6-Dioxy-3-Allylazobenzol. Sm. 123 bis 124° (G. 36 [2] 45 C. 1906 [2] 1193).  
4) s-2-Methylphenylamid-4-Brom-2-Methylphenylamid d. Oxalsäure. Sm. 186° (M. 25, 380 C. 1904 [2] 320).
- C<sub>16</sub>H<sub>15</sub>O<sub>2</sub>N<sub>3</sub>S** 1) p-Nitro-3,5-Dimethyl-1-[6-Amido-3-Methylphenyl]benzthiazol. Sm. 192° (J. pr. [2] 65, 158 C. 1902 [1] 992). — \*IV, 681.  
2) 3,5-Di[Acetylamido]phenthiazin (B. 32, 2608). — \*II, 477.  
3) 3,9-Di[Acetylamido]phenthiazin. Sm. 280° (B. 39, 916 C. 1906 [1] 1259).  
4) α-Benzylidenamido-β-Phenylthioharnstoff-α-Methylcarbonsäure (Phenylthiobenzylidenamidohydantoinsäure). Sm. 245° (B. 31, 169).  
5) Phenylamid d. 3-Methyl-1-Phenylpyrazol-5-Sulfonsäure. Sm. 127° (A. 361, 277 C. 1908 [2] 521).

- $C_{16}H_{15}O_2N_4Cl$  1) Äthylester d. 2-Chlor-1,2-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure. Sm. 195—198° u. Zers. +  $C_2H_6O$  (B. 27, 2924). — IV, 1240.
- $C_{16}H_{15}O_2N_4Br$  1) 8-Brom-5-[2-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. bei 170—175° (Soc. 85, 749 C. 1904 [2] 448).  
2) 8-Brom-5-[3-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. bei 165—166° (Soc. 85, 749 C. 1904 [2] 448).  
3) 8-Brom-5-[4-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. bei 178° (Soc. 85, 749 C. 1904 [2] 448).
- $C_{16}H_{15}O_3NCl_2$  1) 2-Dichlordimethylamidooxydiphenylmethan-2-Carbonsäure. Sm. 195° (Bl. [3] 29, 62 C. 1903 [1] 456).
- $C_{16}H_{15}O_3NBr_2$  1) N-Acetyl-2-Methoxyphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 102—103° (A. 332, 192 C. 1904 [2] 210).  
2) N-Acetyl-4-Methoxyphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 114—115° (A. 332, 193 C. 1904 [2] 210).  
3) Methyläther d. 3,6-Dibrom-5-[4-Oxyphenyl]amido-2-Isopropyl-1,4-Benzochinon. Sm. 196° (B. 35, 1503 C. 1902 [1] 1211). — \*III, 270.  
4) 5,8-Dibrom-2,4,4-Trimethyl-3,4-Dihydro- $\beta$ -Methylcumarilsäure. Sm. 206° u. Zers. (B. 32, 3703). — \*IV, 230.  
5) 2-Phenylamidoformiat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 135° (B. 28, 2916). — \*II, 690.
- $C_{16}H_{15}O_3N_2Br$  1) Äthylester d. 2-Brom-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 116° (B. 31, 1785). — IV, 1469.
- $C_{16}H_{15}O_3N_2J$  1)  $\alpha$ -[ $\beta$ -Phenylureido]- $\beta$ -[4-Jodphenyl]propionsäure. Sm. 178—179° (Am. 40, 466 C. 1909 [1] 71).
- $C_{16}H_{15}O_3N_3S$  1)  $\beta$ -Phenylhydrazonpropylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 166° (B. 29, 330). — IV, 767.  
2) Verbindung (aus Anisaldehyd u. Stickstoffsulfid). Sm. 205° u. Zers. Ag (Soc. 85, 1540 C. 1905 [1] 167).
- $C_{16}H_{15}O_3N_5S$  1) 4-Phenylazo-5-Amido-3-Methyl-1-Phenylpyrazol-4'-Sulfonsäure. Sm. 255° (A. 354, 110 C. 1907 [2] 611).
- $C_{16}H_{15}O_4N_2Cl_3$  1) 2-Acetat d. 3,5,6-Trichlor-2,2,4-Trioxy-1-Phenylhydrazon-1,2-Dihydrobenzol-2,4-Dimethyläther. Sm. 235° (Am. 38, 145 C. 1907 [2] 1161).  
2) Verbindung (aus Trichlormethyldichloroformiat). Sm. 95° (J. pr. [2] 36, 477). — I, 466.
- $C_{16}H_{15}O_4N_2Br$  1) Methyl ester d.  $\alpha$ '-[4-Bromphenyl]hydrazon- $\alpha$ '-[4,6-Dioxyphenyl]-äthan- $\alpha$ '-Carbonsäure. Sm. 227—228° (B. 39, 2081 C. 1906 [2] 423; B. 40, 3579 C. 1907 [2] 1745; B. 41, 1615 C. 1908 [2] 68).
- $C_{16}H_{15}O_4N_2J$  1) Diacetat d. 4-Jodosoazobenzol. Sm. 164° (B. 37, 1312 C. 1904 [1] 1341).
- $C_{16}H_{15}O_4N_4Cl_3$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[5-Nitro-2-Methylphenylamido]äthan. Sm. 142 bis 143° (C. 1909 [2] 1419).  
2)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2-Nitro-4-Methylphenylamido]äthan. Sm. 165—166° (C. 1909 [2] 1419).  
3)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Nitro-4-Methylphenylamido]äthan. Sm. 108 bis 109° (C. 1909 [2] 1419).
- $C_{16}H_{15}O_5NS$  1) Dinitroisonitrosodiäthylthionin (J. pr. [2] 76, 476 C. 1908 [1] 859).
- $C_{16}H_{15}O_6NS$  1) 4-Dimethylamidodiphenylketon-2-Carbonsäure-2-Sulfonsäure. Ba (Bl. [3] 17, 582).
- $C_{16}H_{15}O_6Cl_3S_2$  1) 2-Trichlor- $\alpha\alpha$ -Diphenylbutan-2-Disulfonsäure. Ba (B. 7, 1421). — II, 240.
- $C_{16}H_{15}O_7N_2Br$  1) 5-Acetat d. 5-Oxy-2,4,6-Triketo-5-[4-Oxybenzoyl]brommethylhexahydro-1,3-Diazin-5'-Äthyläther. Zers. bei 178—179° (B. 42, 1295 C. 1909 [1] 1550).
- $C_{16}H_{15}N_2BrS_2$  1) Äthyläther d. 2-Brom-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 185—187° u. Zers. +  $Br_2$ , +  $J_2$  (J. pr. [2] 67, 239 C. 1903 [1] 1263). — \*IV, 483.
- $C_{16}H_{15}N_2JS_2$  1) Methyläther d. 2-Jod-5-Merkapto-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 188° (J. pr. [2] 67, 259 C. 1903 [1] 1265). — \*IV, 589.  
2) Äthyläther d. 2-Jod-5-Merkapto-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 193—194° u. Zers. +  $J_2$  (J. pr. [2] 67, 241 C. 1903 [1] 1263). — \*IV, 483.

- C<sub>16</sub>H<sub>18</sub>ONCl** 1) 2-Benzoylamido-1-[β-Chlorpropyl]benzol. Sm. 130—131° (B. 37, 4584 C. 1905 [1] 184; B. 37, 4728 C. 1905 [1] 385; D.R.P. 164365 C. 1905 [2] 1564).  
 2) 2-Benzoylamido-1-[γ-Chlorpropyl]benzol. Sm. 108° (B. 37, 2921 C. 1904 [2] 1238; D.R.P. 164365 C. 1905 [2] 1564).  
 3) Aldehyd d. 2-Chlor-4-Äthylbenzylamidobenzol-1-Carbonsäure. Fl. (C. 1900 [1] 238).
- C<sub>16</sub>H<sub>18</sub>ONBr** 1) Diphenylamid d. α-Brombuttersäure. Sm. 85° (B. 31, 2682). — \*II, 177.  
 2) Diphenylamid d. α-Bromisobuttersäure. Sm. 82° (B. 31, 2682). — \*II, 177.  
 3) Phenylbenzylamid d. α-Brompropionsäure. Sm. 78° (80°) (B. 31, 2676; B. 37, 4342 C. 1905 [1] 21). — \*II, 295.  
 4) Verbindung (aus d. Methyläther d. 3-Brom-4-Oxy-1-[αβ-Dibrompropyl]-benzol). Sm. 75° (J. pr. [2] 52, 196). — \*II, 448.
- C<sub>16</sub>H<sub>18</sub>ONBr<sub>3</sub>** 1) α-[4-Dimethylamidophenyl]-α-[2,3,5-Tribrom-4-Oxyphenyl]-äthan. Sm. 108°. HBr, HJ (A. 334, 333 C. 1904 [2] 989).  
 2) Verbindung (aus Tribromxylenolbromid). Sm. 121—122° (B. 29, 2352). — \*II, 445.
- C<sub>16</sub>H<sub>18</sub>ONJ** 1) 2-Benzoylamido-1-[γ-Jodpropyl]benzol. Sm. 112—113° (B. 40, 1841 C. 1907 [2] 39).  
 2) Verbindung (aus Bisanhydrophenacylamin). Sm. 175° (B. 41, 1140 C. 1908 [1] 1893).
- C<sub>16</sub>H<sub>18</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) Phenylamid d. p-Dibrom-p-Phenylamidoisobuttersäure. Sm. 152° (B. 36, 1271 C. 1903 [1] 1219).
- C<sub>16</sub>H<sub>18</sub>ON<sub>2</sub>S** 1) Methyläther d. α-Benzoylimido-α-Methylphenylamido-α-Merkaptomethan. Sm. 113° (Am. 29, 81 C. 1903 [1] 523).  
 2) Methyläther d. Benzoylimido-4-Methylphenylamidomerkaptomethan (Benzoyl-p-Tolylthiolmethylpseudothioharnstoff). Sm. 130° (Am. 26, 412).  
 3) Äthyläther d. Benzoylimidophenylamidomerkaptomethan (Benzoylpseudoäthylphenylthioharnstoff). Sm. 87—88° (C. 1901 [2] 276).  
 4) β-Acetyl-α-Phenyl-α-Benzylthioharnstoff. Sm. 110—111° (Soc. 87, 339 C. 1905 [1] 1098, 1315).  
 5) α-Äthyl-α-Phenyl-β-Benzoylthioharnstoff. Sm. 133—134° (Soc. 55, 305). — II, 1172.  
 6) α-[β-Benzoyläthyl]-β-Phenylthioharnstoff. Sm. 90° (B. 41, 246 C. 1908 [1] 729).  
 7) α-Phenacetyl-β-[2-Methylphenyl]thioharnstoff. Sm. 149—150° (Soc. 69, 866). — \*II, 814.  
 8) α-Phenacetyl-β-[4-Methylphenyl]thioharnstoff. Sm. 150—151° (Soc. 69, 867). — \*II, 814.  
 9) Propionyldiphenylisothioharnstoff. Sm. 93,5° (B. 32, 3657). — \*II, 198.  
 10) Äthyläther d. α-Phenyl-β-[α-Oxybenzyliden]thioharnstoff (Phenylthiocarbamidimidoäthylbenzoat). Sm. 119° (C. 1900 [2] 530). — \*II, 760.  
 11) 3-Methyläther d. 2-Phenylimido-3-[2-Oxyphenyl]tetrahydrothiazol. (2HCl. PtCl<sub>4</sub>), HJ (B. 21, 1863). — II, 712.  
 12) 6-Äthyläther d. 2-Merkapto-6-Oxy-4-Methyl-1-Phenylbenzimidazol. Sm. 244—245° (B. 36, 3853 C. 1904 [1] 90).  
 13) 6-Äthyläther d. 2-Merkapto-6-Oxy-5-Methyl-1-Phenylbenzimidazol. Sm. 238—240° (A. 287, 150). — \*II, 427.  
 14) 6-Äthyläther d. 2-Merkapto-6-Oxy-1-[4-Methylphenyl]benzimidazol. Sm. 205—206° (B. 36, 3851 C. 1904 [1] 89).  
 15) Äthyläther d. 2-Thiocarbonyl-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 238° (J. pr. [2] 52, 398). — IV, 634.  
 16) Amid d. 5-Keto-2-Methyl-1-[2-Naphtyl]tetrahydropyrrol-2-Thiocarbonsäure. Sm. 151° (B. 38, 1224 C. 1905 [1] 1257).  
 17) Phenylamid d. 3-Methyl-3,4-Dihydro-1,4-Benzoxazin-4-Thiocarbonsäure. Sm. 125° (B. 30, 1638). — \*II, 391.  
 18) Di[2-Methylphenylamid] d. Thiooxalsäure. Sm. 126° (A. 360, 110 C. 1908 [1] 2145).  
 19) Di[3-Methylphenylamid] d. Thiooxalsäure. Sm. 88—89° (A. 360, 111 C. 1908 [1] 2145).



- C<sub>16</sub>H<sub>16</sub>ON<sub>2</sub>S** 20) Di[4-Methylphenylamid] d. Thiooxalsäure. Sm. 153—154° (A. 360, 110 C. 1908 [1] 2145).
- C<sub>16</sub>H<sub>16</sub>ON<sub>2</sub>S<sub>2</sub>** 1) Dimethyläther d. α-Dimerkaptomethylen-β-Benzoyl-β-Phenylhydrazin. Sm. 110—111° (J. pr. [2] 61, 342). — \*IV, 440.  
 2) Monoäthyläther d. α-Dimerkaptomethylen-β-Benzoyl-β-Phenylhydrazin. Sm. 165° (J. pr. [2] 61, 343; J. pr. [2] 67, 242 C. 1903 [1] 1263). — \*IV, 440.  
 3) Monobenzyläther d. α-Dimerkaptomethylen-β-Acetyl-β-Phenylhydrazin. Sm. 154° (J. pr. [2] 61, 343). — \*IV, 440.  
 4) Dimethyläther d. 5-Merkapto-2-Oxy-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 82° (J. pr. [2] 67, 225 C. 1903 [1] 1261). — \*IV, 590.  
 5) Oxyd d. Methylphenylamidothioameisensäure. Sm. 116,5° (B. 20, 1631). — II, 385.  
 6) Methylester d. Benzoyl-4-Methylphenylamidodithioameisensäure. Sm. 160° (J. pr. [2] 67, 259 C. 1903 [1] 1266). — \*IV, 536.
- C<sub>16</sub>H<sub>16</sub>ON<sub>2</sub>Se** 1) Di[2-Methylphenylamid] d. Selenoxalsäure. Sm. 131,5—132,5° (A. 360, 123 C. 1908 [1] 2146).  
 2) Di[3-Methylphenylamid] d. Selenoxalsäure. Sm. 73—74° (A. 360, 123 C. 1908 [1] 2146).  
 3) Di[4-Methylphenylamid] d. Selenoxalsäure. Sm. 165—166° (A. 360, 122 C. 1908 [1] 2146).
- C<sub>16</sub>H<sub>16</sub>ON<sub>3</sub>Cl** 1) Verbindung (aus Butyrylchloralhydrat u. salzs. Phenylhydrazin). Ag (B. 31, 1413). — \*IV, 480.
- C<sub>16</sub>H<sub>16</sub>ON<sub>3</sub>Cl<sub>2</sub>** 1) 4-Butyrylchloralamidoazobenzol. Sm. 96—97° (G. 28 [1] 242). — IV, 1355.
- C<sub>16</sub>H<sub>16</sub>ON<sub>3</sub>Br** 1) 4-[α-Brombutyryl]amidoazobenzol. Sm. 170° (B. 31, 2852, 3239). — \*IV, 1011.  
 2) 4-[α-Bromisobutyryl]amidoazobenzol. Sm. 167—168° (B. 31, 2852). — \*IV, 1011.
- C<sub>16</sub>H<sub>16</sub>ON<sub>4</sub>Br<sub>2</sub>** 1) 4-Bromphenylhydrazidd.γ-[4-Bromphenyl]hydrazonbuttersäure. Sm. 206° (J. pr. [2] 76, 550 C. 1908 [1] 451).
- C<sub>16</sub>H<sub>16</sub>ON<sub>4</sub>S** 1) α-Acetylamido-α-Phenylimido-α-[β-Phenylthioureido]methan. Sm. 240° (A. 356, 186 C. 1907 [2] 1797).  
 2) 2-Keto-5-[2-Methylphenyl]hydrazido-3-[2-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 159—160° (B. 24, 4203). — IV, 803.  
 3) 2-Keto-5-[4-Methylphenyl]hydrazido-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 168° (B. 24, 4196). — IV, 806.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>NCl** 1) Äthylester d. α-Chlor-β-[1-Naphtyl]imidobuttersäure. Sm. 75° (B. 20, 2750). — II, 611.  
 2) Äthylester d. α-Phenyl-2-Chlorphenylamidoessigsäure. Sm. 53 bis 54° (B. 30, 2761). — \*II, 820.  
 3) Äthylester d. α-Phenyl-3-Chlorphenylamidoessigsäure. Sm. 88 bis 88,5° (B. 30, 2762). — \*II, 820.  
 4) Äthylester d. α-Phenyl-4-Chlorphenylamidoessigsäure. Sm. 87,8° (B. 30, 2763). — \*II, 820.  
 5) Phenylamidoformiat d. 2-Oxy-1-[γ-Chlorpropyl]benzol. Sm. 74 bis 76° (B. 38, 855 C. 1905 [1] 882).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>NCl<sub>3</sub>** 1) Verbindung (aus 4-Dimethylamido-1-Methylbenzol u. 3,5,6-Trichlor-2-Methyl-1,4-Benzochinon). Sm. 74—76° (Am. 34, 456 C. 1906 [1] 31).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>NBr** 1) β-Bromäthyläther d. 4'-Acetylamido-4-Oxybiphenyl. Sm. 202° (D. R. P. 85988). — \*II, 538.  
 2) Verbindung (aus d. Methyläther d. α-Bromäthyl-3-Brom-4-Oxyphenylketon). Sm. 119° (J. pr. [2] 52, 198). — III, 142.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>4</sub>** 1) Verbindung (aus Tetrachlor-1,4-Benzochinon u. 1,4-Di[Dimethylamido]benzol). Sm. 80° (A. 368, 282 C. 1909 [2] 1453).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>3</sub>Br<sub>2</sub>** 1) α-Propionyl-α-[3,5-Dibrom-2-Oxybenzyl]-β-Phenylhydrazin. Sm. 164° (A. 364, 181 C. 1909 [1] 919).  
 2) 5-Methyläther d. 5,6-Dioxy-3-[βγ-Dibrompropyl]azobenzol. Sm. 98° (G. 35 [1] 64 C. 1905 [1] 1238).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>3</sub>J<sub>2</sub>** 1) Di[4-Acetylamidophenyl]jodoniumjodid. Sm. 176,5° (B. 40, 4073 C. 1907 [2] 1834).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Di[2-Formylamidobenzyl]sulfid. Sm. 163° (B. 27, 3522). — \*II, 645.  
 2) Di[2-Acetylamidophenyl]sulfid. Sm. 160° (B. 29, 2774). — \*II, 476.

- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>S** 3) Di[4-Acetylamidophenyl]sulfid. Sm. 213,5—215° (B. 4, 390; 27, 2812, 3262). — II, 805.  
 4) 2,4'-Di[Acetylamido]diphenylsulfid. Sm. 208° (B. 38, 1136 C. 1905 [1] 1232).  
 5) Di[2-Acetylamidophenyl]sulfid. Sm. 185° (180°) (B. 27, 2812; 29, 2775). — \*II, 476.  
 6) Methyläther d.  $\alpha$ -Benzyl- $\beta$ -[4-Oxybenzoyl]thioharnstoff. Sm. 127 bis 128° (Soc. 75, 388). — \*II, 908.  
 7) Methyläther d.  $\alpha$ -[2-Methylphenyl]- $\beta$ -[4-Oxybenzoyl]thioharnstoff. Sm. 126,5° (Soc. 75, 387). — \*II, 908.  
 8) Methyläther d.  $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Oxybenzoyl]thioharnstoff. Sm. 127—128° (Soc. 75, 387). — \*II, 908.  
 9) Phenyläther d.  $\alpha$ -Oxyacetyl- $\beta$ -[2-Methylphenyl]thioharnstoff. Sm. 100—101° (Soc. 89, 909 C. 1906 [2] 774).  
 10) Phenyläther d.  $\alpha$ -Oxyacetyl- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. 129—130° (Soc. 89, 909 C. 1906 [2] 774).  
 11) Di[ $\beta$ -Oximido- $\beta$ -Phenyläthyl]sulfid (Dioxim d. Phenacylsulfid). Sm. 151° (B. 23, 3475). — III, 129.  
 12) Äthylester d.  $\beta$ -Benzoyl- $\beta$ -Phenylhydrazidothioameisensäure. Sm. 138—139° (Am. 24, 70). — \*IV, 437.  
 13) Äthylester d.  $\beta$ -Benzoyl- $\beta$ -Phenylhydrazidothioameisensäure. Sm. 173° (Am. 24, 68). — \*IV, 437.  
 14) Äthylester d.  $\alpha\alpha$ -Diphenylthioharnstoff- $\beta$ -Carbonsäure. Sm. 125 bis 125,5° (Soc. 93, 698 C. 1908 [2] 234).  
 15) Äthylester d.  $\alpha\beta$ -Diphenylthioharnstoff- $\alpha$ -Carbonsäure. Sm. 95° (J. pr. [2] 32, 263; Soc. 83, 557 C. 1903 [1] 1123). — II, 398.  
 16) Benzylester d.  $\alpha$ -Methyl- $\alpha$ -Phenylharnstoff- $\beta$ -Thiocarbonsäure. Sm. 90—91° (Soc. 75, 404). — \*II, 638.  
 17) 2-Methylphenylester d.  $\alpha$ -[2-Methylphenyl]thioharnstoff- $\beta$ -Carbonsäure. Sm. 142—143° (Soc. 89, 901 C. 1906 [2] 774).  
 18) 4-Methylphenylester d.  $\alpha$ -[2-Methylphenyl]thioharnstoff- $\beta$ -Carbonsäure. Sm. 160—161° (Soc. 89, 903 C. 1906 [2] 774).  
 19) 2-Methylphenylester d.  $\alpha$ -[4-Methylphenyl]thioharnstoff- $\beta$ -Carbonsäure. Sm. 150—151° (Soc. 89, 901 C. 1906 [2] 774).  
 20) Phenylamid d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäure (Ph. d. Thiodiglykolsäure). Sm. 165° (168°) (G. 28 [1] 361; C. 1900 [2] 1269; A. 273, 71; J. pr. [2] 66, 188 C. 1902 [2] 933). — II, 403; \*II, 204.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) Di[4-Acetylamidophenyl]disulfid. Sm. 213—214° (215—217°) (B. 11, 1170; J. pr. [2] 41, 203; B. 39, 2430 C. 1906 [2] 1004). — II, 817; \*II, 480.  
 2) isom. Di[4-Acetylamidophenyl]disulfid + H<sub>2</sub>O. Sm. 120—122° (B. 41, 629 C. 1908 [1] 1267).  
 3) isom. Di[4-Acetylamidophenyl]disulfid. Sm. 182° (B. 27, 2815; B. 38, 1134 C. 1905 [1] 1232; B. 38, 1433 C. 1905 [1] 1464; B. 39, 2429 C. 1906 [2] 1004; B. 42, 3374 C. 1909 [2] 1642).  
 4) Pseudodithioacetanilid. Sm. 162°. + C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (B. 41, 631 C. 1908 [1] 1267).  
 5) Phenylamid d. Dimethyldisulfid- $\alpha\alpha'$ -Dicarbonsäure (Ph. d. Dithioglykolsäure). Sm. 160—161°. Cu<sub>2</sub> (G. 28 [1] 361; J. pr. [2] 66, 185 C. 1902 [2] 933). — \*II, 204.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>S<sub>3</sub>** 1) Di[4-Acetylamidophenyl]trisulfid. Sm. 213—214° (B. 11, 1171). — II, 817.  
 2) Amid d. Dibenzyltrisulfid- $\alpha\alpha'$ -Dicarbonsäure + H<sub>2</sub>O. Sm. 217° (C. 1903 [2] 1272).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>Hg** 1) Quecksilberdi[4-Acetylamidophenyl]. Sm. 244—246° (G. 24 [2] 451). — IV, 1708.
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>Se** 1) Phenylbenzylamid d. Carbaminselenessigsäure. Sm. 140—141° u. Zers. (Ar. 241, 219 C. 1903 [2] 104).  
 2) Di[Phenylamid] d. Dimethylselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 198° (A. 360, 119 C. 1908 [1] 2146).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>Se<sub>2</sub>** 1) Di[Phenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure (Diselenglykolsäureanilid). Sm. 158° (Ar. 241, 201 C. 1903 [2] 103).
- C<sub>16</sub>H<sub>16</sub>O<sub>2</sub>N<sub>4</sub>Br<sub>2</sub>** 1) Di[4-Bromphenylhydrazon] d. d-Erythrulose. Sm. 194—195° (Bl. [3] 23, 683; C. 1900 [2] 33). — \*IV, 519.

- $C_{16}H_{16}O_3N_6J_2$  1) 4,4'-Di[Semicarbazonomethyl]diphenyljodoniumjodid. Sm. 218° (B. 38, 3449 C. 1905 [2] 1586).
- $C_{16}H_{16}O_3Br_2Mg_2$  1) Verbindung (aus Benzaldehyd, Äthylenbromid u. Magnesium) (B. 38, 1298 C. 1905 [1] 1367).
- $C_{16}H_{16}O_3NBr$  1) Phenylamid d.  $\beta$ -Brom- $\alpha\gamma$ -Dioxy- $\gamma$ -Phenylbuttersäure. Sm. 167 bis 168° (B. 27, 3111). — II, 1767.
- $C_{16}H_{16}O_3N_2S$  1) Di[4-Acetylamidophenyl]sulfoxyd. Sm. 278° (B. 41, 2838 C. 1908 [2] 1348).
- 2) Amidd. 2-Acetylamido- $\alpha\beta$ -Diphenyläthen-4-Sulfonsäure. Sm. 205° (B. 41, 2293 C. 1908 [2] 599).
- $C_{16}H_{16}O_3N_3Cl$  1)  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -[5-Chlor-2-Nitrophenyl]butan. Sm. 157–158° (A. 262, 146). — IV, 773.
- 2) Verbindung (aus Phenylimidomucocoxychlorsäure u. Phenylhydrazin) (Am. 9, 169). — II, 417.
- $C_{16}H_{16}O_3N_3Br$  1) Äthylester d.  $\beta$ -Brom-N-Oxy-4'-Methyldiazoamidobenzol-2'-Carbonsäure. Sm. 148° (Soc. 95, 1121 C. 1909 [2] 595).
- 2) Verbindung (aus Phenylimidomucocoxybromsäure u. Phenylhydrazin) (Am. 9, 156). — II, 417.
- $C_{16}H_{16}O_3N_4S$  1) 1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin- $\beta$ -Sulfonsäure (Soc. 57, 53). — IV, 1234.
- $C_{16}H_{16}O_4N_2Br_2$  1) Tetramethyläther d.  $\beta$ -Dibrom-2,5,2',5'-Tetraoxyazobenzol. Sm. 220° (B. 17, 2125). — IV, 1446.
- $C_{16}H_{16}O_4N_2S$  1) 2,4-Di[Acetylamido]diphenylsulfon. Sm. 197° (B. 34, 1152).
- 2) 4,4'-Di[Acetylamido]diphenylsulfon. Sm. 280° (B. 41, 2270 C. 1908 [2] 692).
- 3) Di[ $\beta$ -Acetylamidophenyl]sulfon. Sm. 211° (J. 1885, 1590; J. pr. [2] 16, 460). — II, 814.
- 4) 8-Phenylazo-5-Oxy-1,2,3,4-Tetrahydronaphtalin-8'-Sulfonsäure. Na (B. 23, 217). — IV, 1426.
- 5) Di[Phenylamid] d. Dimethylsulfon- $\alpha\alpha'$ -Dicarbonsäure. Sm. 225° u. Zers. (C. 1900 [2] 1269). — \*II, 204.
- $C_{16}H_{16}O_4N_3S_2$  1) Di[4-Nitrobenzyläther] d.  $\alpha\alpha$ -Dimerkaptoäthan. Sm. 82° (B. 40, 2007 C. 1907 [2] 45).
- 2) Di[4-Acetylamidophenyl]disulfoxyd. Sm. 190° u. Zers. +  $2C_2H_4O_2$  (B. 42, 1282 C. 1909 [1] 1703).
- 3) isom. Di[4-Acetylamidophenyl]disulfoxyd. Sm. 233°. +  $C_2H_4O_2$  (B. 42, 1283 C. 1909 [1] 1703).
- $C_{16}H_{16}O_4N_2As_2$  1)  $\beta$ -Dinitro-2,5,2',5'-Tetramethylarsenobenzol. Sm. 165° (A. 320, 338 C. 1902 [1] 923). — \*IV, 1201.
- 2) Arsenobenzol-4,4'-Di[Amidoessigsäure] (p-Arsenophenylglycin) (D.R.P. 206057 C. 1909 [1] 963).
- $C_{16}H_{16}O_4N_4Br_2$  1) Dibromricinin (oder  $C_{16}H_{14}O_4N_4Br_2$ ). Sm. 247° (C. 1895 [1] 853). — \*III, 690.
- $C_{16}H_{16}O_4Br_2S$  1) Diäthyläther d. Di[ $\beta$ -Brom-4-Oxyphenyl]sulfon. Sm. 183° (A. 172, 53). — II, 840.
- $C_{16}H_{16}O_4Br_2S_2$  1) 3,3'-Dimethyläther d.  $\beta$ -Dibromdi[3,4-Dioxybenzyl]disulfid. Sm. 159° (A. 345, 321 C. 1906 [1] 1695).
- $C_{16}H_{16}O_5N_2S$  1) 4,4'-Di[Acetylamido]biphenyl-3-Sulfonsäure. Na (B. 23, 3460). — IV, 968.
- $C_{16}H_{16}O_5N_4S$  1) 5-[4-Nitrophenylazo]amido-1,2,3,4-Tetrahydronaphtalin-8-Sulfonsäure (Soc. 85, 758 C. 1904 [2] 449).
- $C_{16}H_{16}O_7N_2S$  1) 2,4-Di[Acetylamido]-1-Acetoxylnaphtalin-7-Sulfonsäure. Ba +  $3\frac{1}{2}H_2O$  (B. 32, 233). — \*II, 518.
- $C_{16}H_{16}O_8N_2S$  1) Diäthyläther d. Di[3-Nitro-4-Oxyphenyl]sulfon. Sm. 192° (A. 172, 53; B. 40, 645 C. 1907 [1] 956). — II, 840.
- $C_{16}H_{16}O_8N_2S_2$  1) 4,4'-Di[Acetylamido]biphenyl-2,2'-Disulfonsäure. Na +  $1\frac{1}{2}C_2H_6O$  (J. pr. [2] 66, 572 C. 1903 [1] 520). — \*IV, 644.
- $C_{16}H_{16}O_9N_2S_2$  1) Äther d.  $\beta$ -Oxyäthyl-3-Nitrophenylsulfon. Sm. 133° (A. 294, 247).
- $C_{16}H_{16}O_{10}N_2S_2$  1) Oxalyldi[2-Amido-1-Oxybenzolzomethyläther-4-Sulfonsäure]. Sm. 271°. ( $NH_4$ )<sub>2</sub> (B. 42, 2115 C. 1909 [2] 350).
- 2) Oxalyldi[4-Amido-1-Oxybenzolzomethyläther-2-Sulfonsäure] +  $8H_2O$  (B. 42, 2113 C. 1909 [2] 350).
- $C_{16}H_{16}N_2Cl_3Br$  1)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Brom- $\alpha$ -Di[2-Methylphenylamido]äthan. Sm. 268° (C. 1908 [1] 936).



- $C_{16}H_{16}N_2Br_2S$  1) Dibromid d. 3,5-Dimethyl-1-[4-Amido-3-Methylphenyl]benzthiazol. +  $CHCl_3$  (B. 22, 584). — II, 827.
- $C_{16}H_{16}N_3BrS$  1) uns-Diäthylthioninbromid. +  $ZnBrOH$  (J. pr. [2] 76, 487 C. 1908 [1] 860).
- $C_{16}H_{16}N_3JS$  1) Methyläther d. 5-Jod-3-Merkapto-5-Methyl-1,4-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 250° (J. pr. [2] 67, 255 C. 1903 [1] 1265).
- $C_{16}H_{17}ONBr_2$  1) 2,6-Dibrom-4-Oxy-3,5-Dimethyldibenzylamin. Sm. 127° (A. 344, 233 C. 1906 [1] 1163).  
 2) Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 99°. HBr (B. 29, 1121; A. 344, 217 C. 1906 [1] 1161). — \*II, 455.  
 3) Methylphenyl-2,6-Dibrom-4-Oxy-3,5-Dimethylbenzylamin. Sm. 103—104° (A. 344, 240 C. 1906 [1] 1163).  
 4) 2-Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 154—154,5° (A. 344, 293 C. 1906 [1] 1612).  
 5) 3-Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 123,5—125° (A. 344, 293 C. 1906 [1] 1612).  
 6) 4-Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 96—98° (A. 344, 293 C. 1906 [1] 1612).  
 7) 2,4,5-Trimethylphenyl-3,5-Dibrom-4-Oxybenzylamin. Sm. 123 bis 125° (B. 41, 1057 C. 1908 [1] 1775).  
 8) Methyläther d. Phenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 115—116° (A. 334, 303 C. 1904 [2] 985).
- $C_{16}H_{17}ONBr_4$  1) Dimethylphenyl-2,5,6-Tribrom-4-Oxy-3-Methylbenzylammoniumbromid. Sm. 225—226° (231—233°) (B. 29, 2352).
- $C_{16}H_{17}ONS$  1) Benzyläther d.  $\beta$ -Benzoylamido- $\alpha$ -Merkaptoäthan. Sm. 78—80° (B. 25, 3051). — II, 1160.  
 2) 4-Acetylamido-3,4-Dimethyldiphenylsulfid. Sm. 135—136° (J. pr. [2] 68, 282 C. 1903 [2] 994).  
 3) Phenylamid d.  $\alpha$ -Merkaptopropionbenzyläthersäure. Sm. 119,5° (J. pr. [2] 74, 34 C. 1906 [2] 752).  
 4) Phenylamid d. 5-Oxy-1-Methylbenzoläthyläther-2-Thiocarbon-säure. Sm. 117° (J. pr. [2] 59, 580). — \*II, 918.  
 5) Phenylamid d. 4-Oxy-1-Methylbenzoläthyläther-3-Thiocarbon-säure. Sm. 111° (J. pr. [2] 59, 580). — \*II, 921.  
 6) Phenylamid d. 6-Oxy-1-Methylbenzoläthyläther-3-Thiocarbon-säure. Sm. 169° (Ph. Ch. 30, 533; W. TETZLAFF, Dissert. Heidelberg 1894, S. 19; J. pr. [2] 59, 579). — \*II, 921.  
 7) 2-Methylphenylamid d. Merkaptoessigbenzyläthersäure. Sm. 74 bis 75° (J. pr. [2] 74, 41 C. 1906 [2] 753).  
 8) 3-Methylphenylamid d. Merkaptoessigbenzyläthersäure. Sm. 39 bis 40° (J. pr. [2] 74, 45 C. 1906 [2] 753).  
 9) 4-Methylphenylamid d. Merkaptoessigbenzyläthersäure. Sm. 73 bis 74° (J. pr. [2] 74, 49 C. 1906 [2] 754).  
 10) 2-Methylphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbon-säure. Sm. 106° (B. 25, 3530; J. pr. [2] 59, 585). — II, 1541.  
 11) 3-Methylphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbon-säure. Sm. 130° (J. pr. [2] 59, 586). — \*II, 915.  
 12) 4-Methylphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbon-säure. Sm. 151° (B. 25, 3530; J. pr. [2] 59, 586). — II, 1541.
- $C_{16}H_{17}ON_2Br$  1) 5-Brom-2-Benzoylamido-4-Dimethylamido-1-Methylbenzol. Sm. 177—178° (Soc. 87, 949 C. 1905 [2] 468).  
 2)  $\alpha$ -Brombutyryl-s-Diphenylhydrazin. Sm. 123° (B. 31, 3243). — IV, 1496.
- $C_{16}H_{17}ON_3Br_2$  1) 5-Dibromid d. 3-Keto-4,6-Dimethyl-1-Äthyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol. Sm. 180° (A. 366, 392 C. 1909 [2] 289).
- $C_{16}H_{17}ON_3S$  1)  $\alpha$ -Phenylbenzylamidoformyl- $\beta$ -Methylthioharnstoff. Sm. 99—100° (Soc. 75, 408). — \*II, 297.  
 2)  $\alpha$ -Diphenylamidoformyl- $\beta$ -Äthylthioharnstoff. Sm. 137—138° (Soc. 75, 396). — \*II, 199.  
 3)  $\alpha$ -Äthylphenylamidoformyl- $\beta$ -Phenylthioharnstoff. Sm. 106—107° (Soc. 75, 405). — \*II, 199.  
 4)  $\alpha$ -Methylphenylamidoformyl- $\beta$ -[2-Methylphenyl]thioharnstoff. Sm. 108° (Soc. 75, 402). — \*II, 255.

- C<sub>16</sub>H<sub>17</sub>ON<sub>3</sub>S** 5)  $\alpha$ -Methylphenylamidoformyl- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm. 156—157° (Soc. 75, 402). — \*II, 274.
- 6)  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oximido-2,4-Dimethylbenzyl]thioharnstoff. Sm. 150° (B. 22, 2448). — II, 1377.
- 7) Methyläther d. Phenylimido[ $\beta$ -Acetyl- $\beta$ -Phenylhydrazido]merkaptomethan. Sm. 139—140° (B. 34, 343). — \*IV, 443.
- 8) Verbindung (aus d. Äthyläther d.  $\alpha$ -[4-Oxyphenyl]- $\alpha$ -[2-Amidobenzyl]hydrazin]. Sm. 198° (B. 27, 2904). — IV, 1131.
- C<sub>16</sub>H<sub>17</sub>ON<sub>3</sub>S<sub>2</sub>** 1) Dimethyläther d.  $\alpha$ -Dimerkaptomethylenamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 105° (B. 36, 1365 C. 1903 [1] 1341). — \*IV, 450.
- 2) Methylester d.  $\alpha$ -Phenylamidoformyl- $\alpha$ -[2-Methylphenyl]hydrazin- $\beta$ -Dithiocarbonsäure (B. 36, 1370 C. 1903 [1] 1342). — \*IV, 531.
- 3) Methylester d.  $\alpha$ -Phenylamidoformyl- $\alpha$ -[3-Methylphenyl]hydrazin- $\beta$ -Dithiocarbonsäure. Sm. 152° (B. 36, 1372 C. 1903 [1] 1343). — \*IV, 532.
- C<sub>16</sub>H<sub>17</sub>OCIS** 1) Dimethyldesylsulfinchlorid. 2 + PtCl<sub>4</sub> (C. 1905 [1] 1218).
- C<sub>16</sub>H<sub>17</sub>OBrS** 1) Dimethyldesylsulfimbromid. Sm. 110° u. Zers. (C. 1905 [1] 1218).
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>NS** 1) 1-Phenylsulfon-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 109,5 bis 110° (R. 23, 323 C. 1905 [1] 102).
- 2) Äthylester d. 4-Merkaptophenylamidoameisen-4-Methylphenyläthersäure (p-Thiotolylphenylurethan). Sm. 94° (J. pr. [2] 68, 269 C. 1903 [2] 993).
- 3) Nitril d.  $\gamma$ -[2-Naphtyl]sulfonpentan- $\gamma$ -Carbonsäure. Fl. (J. pr. [2] 72, 331 C. 1905 [2] 1785).
- 4) Phenylamid d. 1,2,3,4-Tetrahydronaphtalin-5-Sulfonsäure. Sm. 144—145° (Soc. 85, 757 C. 1904 [2] 449).
- 5) 4-Methoxyphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 154,5° (J. pr. [2] 59, 587). — \*II, 914.
- 6) 4-Äthoxyphenylamid d. 4-Oxybenzolz-methyläther-1-Thiocarbonsäure. Sm. 135,5° (J. pr. [2] 59, 588). — \*II, 914.
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) 4-Methylphenylimid d.  $\alpha$ -Chlor- $\beta$ -[1-Piperidyl]maleinsäure. Sm. 130° (A. 295, 49). — \*IV, 17.
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Dimethyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2-Oxyphenylamido]äthan. Sm. 121° (C. 1908 [1] 935).
- 2) Dimethyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Oxyphenylamido]äthan. Sm. 118—120° (C. 1908 [1] 935).
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) 6-Brom-4',6'-Dioxy-2,4,5,2'-Tetramethylazobenzol. Sm. 214 bis 215° u. Zers. (Soc. 93, 1020 C. 1908 [2] 410).
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Äthylester d.  $\alpha\beta$ -Diphenylthioharnstoff- $\alpha$ -Amidoameisensäure. Sm. 145° (B. 34, 2327). — \*IV, 448.
- 2) Äthylester d.  $\alpha\beta$ -Diphenylharnstoff- $\alpha$ -Amidothioameisensäure. Sm. 114—115° (Am. 24, 439). — \*IV, 448.
- 3) Äthylester d.  $\alpha\beta$ -Diphenylharnstoff- $\alpha$ -Amidothiolameisensäure. Sm. 156° (Am. 24, 439). — \*IV, 448.
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>S<sub>2</sub>** 1) Äthyläther-4-Nitrobenzyläther d. Phenylhydrazondimerkaptomethan. Sm. 75° (B. 14, 1125). — \*IV, 438.
- 2) isom. Äthyläther-4-Nitrobenzyläther d. Phenylhydrazondimerkaptomethan. Sm. 42° (B. 34, 1125). — \*IV, 438.
- C<sub>16</sub>H<sub>17</sub>O<sub>2</sub>ClS** 1) Chlorid d. 2-Methyl-5-Isopropylbiphenyl-2-Sulfonsäure. Sm. 173° (B. 40, 2371 C. 1907 [2] 335).
- C<sub>16</sub>H<sub>17</sub>O<sub>3</sub>NS** 1) Methylphenylamid d. 4-Methylphenylsulfonessigsäure. Sm. 112° (C. 1900 [2] 1269). — \*II, 485.
- 2) 2-Methylphenylamid d. 4-Methylphenylsulfonessigsäure. Sm. 129° (C. 1900 [2] 1269). — \*II, 485.
- 3) 4-Methylphenylamid d. 4-Methylphenylsulfonessigsäure. Sm. 157° (C. 1900 [2] 1269). — \*II, 485.
- 4) 2,5-Dimethylphenylamid d. Phenylsulfonessigsäure. Sm. 143° (C. 1900 [2] 1269). — \*II, 471.
- 5) 3,4-Dimethylphenylamid d. Phenylsulfonessigsäure. Sm. 141° (C. 1900 [2] 1269). — \*II, 471.
- 6) Butyrylphenylamid d. Benzolsulfonsäure. Sm. 89—90° (Am. 19, 762). — \*II, 223.
- 7) Gem. Imid d. Benzolsulfonsäure u. 1-Isopropylbenzol-4-Carbonsäure. Sm. 164°. Ag, Ag + NH<sub>3</sub> (J. 1856, 505). — II, 1386.



- $C_{13}H_{17}O_3N_2Br$  1) Phenylhydrazid d.  $\beta$ -Brom- $\alpha\gamma$ -Dioxy- $\gamma$ -Phenylbuttersäure. Sm. 168—169° u. Zers. (B. 27, 3111). — IV, 709.
- $C_{16}H_{17}O_3N_2J$  1) Di[4-Acetylamidophenyl]jodoniumhydroxyd. Salze, siehe (B. 40, 4073 C. 1907 [2] 1834).
- $C_{16}H_{17}O_3N_3Br_2$  1)  $\beta$ -Dibromphenylnitrosamidoimid d. Camphersäure. Sm. 147 bis 148° (Soc. 91, 1895 C. 1908 [1] 256).
- $C_{16}H_{17}O_3N_3S$  1) 5-Amido-8-Phenylazo-1,2,3,4-Tetrahydronaphtalin-8<sup>4</sup>-Sulfonsäure. Na (B. 22, 626, 2069; Soc. 85, 754 C. 1904 [2] 448). — IV, 1389.
- 2) 1-Phenylazo-6-Methyl-1,2,3,4-Tetrahydrochinolin-1<sup>4</sup>-Sulfonsäure. Ba (B. 24, 2073). — IV, 1581.
- 3) 8-Phenylazo-6-Methyl-1,2,3,4-Tetrahydrochinolin-8<sup>4</sup>-Sulfonsäure (B. 24, 2069). — IV, 1484.
- 4) 6-Phenylazo-8-Methyl-1,2,3,4-Tetrahydrochinolin-6<sup>4</sup>-Sulfonsäure (B. 24, 2064). — IV, 1484.
- $C_{16}H_{17}O_3N_5S$  1) Dimethyläther d. Nitrosodi[2-Oxyphenyl]thiodicyandiamin. Sm. 171—172° (B. 36, 3324 C. 1903 [2] 1169).
- $C_{16}H_{17}O_4NS$  1) Lakton d.  $\delta$ -[Methyl-2-Naphtylsulfon]amido- $\gamma$ -Oxybutan- $\alpha$ -Carbonsäure. Sm. 82—83° (B. 40, 307 C. 1907 [1] 535).
- 2) Methylester d. 2-[Methyl-4-Methylphenylsulfon]amidobenzol-1-Carbonsäure. Sm. 94° (B. 35, 4274 C. 1903 [1] 332).
- 3) Äthylester d. 2-[4-Methylphenylsulfon]amidobenzol-1-Carbonsäure. Sm. 112° (A. 367, 111 C. 1909 [2] 698).
- 4) Äthoxylphenylamid d. Phenylsulfonessigsäure. Sm. 151° (C. 1900 [2] 1269). — \*II, 471.
- 5) Acetyl-4-Methoxylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 148° (B. 42, 1523 C. 1909 [1] 1809).
- $C_{16}H_{17}O_4N_2Br$  1) Diäthylester d. 1-[4-Bromphenyl]pyrazol-4-Carbonsäure-3-Methylcarbonsäure. Sm. 128—129° (A. 356, 43 C. 1907 [2] 1613; A. 356, 48 C. 1907 [2] 1613).
- 2) 4-Brom-3-Nitrophenylimid d. Camphersäure. Sm. 171—172° (Soc. 91, 1898 C. 1908 [1] 257).
- $C_{16}H_{17}O_4N_2As$  1) Di[4-Acetylamidophenyl]arsinsäure. Sm. 260—262° (275°). Na + 9H<sub>2</sub>O (B. 41, 2370 C. 1908 [2] 783; Soc. 93, 1185 C. 1908 [2] 782).
- $C_{16}H_{17}O_4N_3Br_2$  1)  $\beta$ -Dibromphenylnitramidoimid d. Camphersäure. Sm. 140—142° u. Zers. (Soc. 91, 1895 C. 1908 [1] 256).
- $C_{16}H_{17}O_4N_3S$  1) 1,2,3,4-Tetrahydro-1,5-Amidonaphtolazobenzolsulfonsäure (B. 22, 961). — IV, 1426.
- $C_{16}H_{17}O_4BrS$  1) Diäthyläther d.  $\beta$ -Brom-4,4'-Dioxydiphenylsulfon. Sm. 185° (B. 27, 2544). — \*II, 576.
- $C_{16}H_{17}O_5NS$  1) Diäthylester d. 2-Phenylimido-4-Ketotetrahydrothiophen-3,3-Dicarbonsäure. Sm. 115—116° (Soc. 93, 627 C. 1908 [1] 1930).
- 2) Diäthylester d. isom. 2-Phenylimido-4-Ketotetrahydrothiophen-3,3-Dicarbonsäure. Sm. 134° (Soc. 93, 628 C. 1908 [1] 1930).
- $C_{16}H_{17}O_5N_2Cl$  1) Methylester d. 9-Dimethylamido-2,3-Dioxyphenoxazoniumchlorid-5-Carbonsäure. + ZnCl<sub>2</sub> (J. pr. [2] 72, 261 C. 1905 [2] 1451).
- $C_{16}H_{17}O_5N_2Cl_3$  1) 2,6-Dinitro-4-Acetyl- $\beta$ -Trichloräthyliden-5-Pseudobutyl-1,3-Dimethylbenzol. Sm. 179° (B. 31, 1346). — \*III, 127.
- $C_{16}H_{17}O_5N_2Br$  1) Diäthylester d.  $\beta$ -[4-Bromphenyl]azo- $\alpha$ -Oxy- $\alpha\gamma$ -Butadien- $\alpha\delta$ -Dicarbonsäure. Sm. 125—126° (A. 338, 382 C. 1905 [1] 1223).
- $C_{16}H_{17}O_5N_3S_2$  1) Di[ $\beta$ -3-Nitrophenylsulfonäthyl]amin. Sm. 125°. HCl, HNO<sub>3</sub> (A. 294, 251). — \*II, 473.
- 2) Butylimid d. 3-Nitrobenzol-1-Sulfonsäure. Sm. 136° (C. 1899 [2] 867). — \*II, 75.
- $C_{16}H_{17}N_3ClJ$  1) Jodmethylat d. 3-Chlor-4,6-Dimethyl-2-[2-Methylphenyl]-2,1,5-Benztriazol. Sm. 138° (A. 366, 405 C. 1909 [2] 290).
- 2) Jodmethylat d. 3-Chlor-4,6-Dimethyl-2-[4-Methylphenyl]-2,1,5-Benztriazol. Sm. 246—247° (A. 366, 402 C. 1909 [2] 290).
- $C_{16}H_{17}N_3J_2S$  1)  $\beta$ -Jod-3,9-Di[Dimethylamido]phentiazoniumjodid +  $\frac{1}{2}$ H<sub>2</sub>O (Jodmethylenblau) (J. pr. [2] 76, 418 C. 1908 [1] 531).
- $C_{16}H_{18}ONCl$  1) 4-Chlorphenylimidocampher. Sm. 140° (Soc. 95, 954 C. 1909 [2] 361).
- $C_{16}H_{18}ONBr$  1) Dimethylphenylphenacylammoniumbromid. Sm. 125—128° (B. 35, 775 C. 1902 [1] 720; B. 41, 2803 C. 1908 [2] 1345). — \*III, 97.



- C<sub>18</sub>H<sub>18</sub>ONJ** 1) Jodmethylat d. Methylphenylamidobenzoylmethan (B. 13, 843). — III, 126.  
2) Jodmethylat d. 3-Dimethylamidodiphenylketon (A. 354, 189 C. 1907 [2] 988).  
3) Jodmethylat d. 4-Dimethylamidodiphenylketon. Sm. 181° u. Zers. (B. 14, 1837; A. 210, 269). — III, 183.
- C<sub>16</sub>H<sub>13</sub>ON<sub>2</sub>S** 1) α-Methyl-β-[β-Oxy-α-β-Diphenyläthyl]thioharnstoff. Sm. 136° (B. 28, 1899). — \*II, 661.  
2) Methyläther d. α-Phenyl-β-[α-4-Oxyphenyläthyl]thioharnstoff. Sm. 125,5° (J. pr. [2] 77, 18 C. 1908 [1] 630).  
3) Äthyläther d. 4'-Oxy-4-Methyl-s-Diphenylthioharnstoff. Sm. 134 bis 135° (B. 36, 3851 C. 1904 [1] 90).  
4) s-Isovaleryl-1-Naphtylthioharnstoff. Sm. 129—130° (Soc. 67, 1044). — \*II, 335.
- C<sub>16</sub>H<sub>18</sub>ON<sub>3</sub>Cl** 1) 3,9-Di[Dimethylamido]phenoxazoniumchlorid. 2 + PtCl<sub>4</sub> (B. 42, 1278 C. 1909 [1] 1753).  
2) Chlormethylat d. 3-Keto-1,4,6-Trimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol + H<sub>2</sub>O. Sm. 174°. 2 + PtCl<sub>4</sub> (A. 366, 390 C. 1909 [2] 289).
- C<sub>16</sub>H<sub>13</sub>ON<sub>3</sub>J** 1) 3,9-Di[Dimethylamido]phenoxazoniumjodid (A. 289, 119). — IV, 1178.  
2) Jodmethylat d. 3-Keto-1,4,6-Trimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol + H<sub>2</sub>O. Sm. 145° (220° wasserfrei) (A. 366, 389 C. 1909 [2] 289).  
3) Jodmethylat d. 3-Keto-4,5,6-Trimethyl-2-Phenyl-2,3-Dihydro-5,1,2-Benzotriazol + H<sub>2</sub>O. Sm. 145° (220° wasserfrei) (A. 366, 382 C. 1909 [2] 289).  
4) Jodmethylat d. 3-Keto-4,6-Dimethyl-2-[2-Methylphenyl]-2,3-Dihydro-5,1,2-Benzotriazol. Sm. 268° (A. 366, 377 C. 1909 [2] 288).
- C<sub>16</sub>H<sub>13</sub>ON<sub>4</sub>S** 1) α-Phenyl-β-[2-Methylnitrosamido-3,5-Dimethylphenyl]thioharnstoff. Sm. 132—132,5° (B. 31, 2934). — \*IV, 414.  
2) Äthyläther d. α-Amido-α-Phenylimido-α-[β-4-Oxyphenylthio-ureido]methan. Sm. 170° (A. 356, 185 C. 1907 [2] 1797).  
3) Äthyläther d. α-Amido-α-[4-Oxyphenyl]imido-α-[β-Phenylthio-ureido]methan. Sm. 168° (A. 356, 183 C. 1907 [2] 1797).
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>NBr** 1) 2-Methylphenylimid d. Brompyrocampensäure. Sm. 155—156° (Soc. 87, 1521 C. 1905 [2] 1673).  
2) 4-Bromphenylimid d. Campersäure. Sm. 180—181° (Soc. 91, 1898 C. 1908 [1] 257).
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>NBr<sub>3</sub>** 1) Methylhydroxyd d. 2,3,5-Tribrom-4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 210—212° (A. 334, 332 C. 1904 [2] 988).
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) ?-Dibromphenylamidoimid d. Campersäure. Sm. 198—199° (Soc. 91, 1894 C. 1908 [1] 256).
- C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Methyläther d. 2-Methoxyphenylamido-2-Methoxyphenylimido-merkaptomethan. Sm. 87°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 21, 1861). — II, 711.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2,4,5-Trimethyl-1-[4-Methylphenylthiosulfon]diazobenzol. Sm. 87° u. Zers. (J. pr. [2] 62, 396). — \*IV, 1116.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>N<sub>4</sub>S** 1) Dimethyläther d. Di[2-Oxyphenyl]thiodicyandiamin. Sm. 80—82°. HCl, HNO<sub>3</sub>, Pikrat (B. 36, 3323 C. 1903 [2] 1169).  
2) Thiodi[4-Methylphenyl]diharnstoff. + C<sub>6</sub>H<sub>6</sub> (Sm. 150—151°) (B. 20, 669). — II, 821.  
3) Di[4-Acetylhydrazidophenyl]sulfid. Sm. 170—171° u. Zers. (A. 270, 153). — IV, 816.  
4) α-Phenylhydrazid d. α-Phenylhydrazin-α-Thiocarbonsäure-β-Carbonsäureäthylester. Sm. 138° (B. 34, 2329). — \*IV, 449.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Cl<sub>2</sub>Se** 1) Diäthyläther d. Di[β-Oxyphenyl]selenidchlorid. Sm. 140° (B. 28, 611). — \*II, 576.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Cl<sub>2</sub>Te** 1) Diäthyläther d. Di[β-Oxyphenyl]telluriddichlorid. Sm. 185° (B. 30, 2831). — \*II, 577.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Br<sub>2</sub>Se** 1) Diäthyläther d. Di[β-Oxyphenyl]selenidbromid. Sm. 123° (B. 28, 612). — \*II, 576.
- C<sub>16</sub>H<sub>13</sub>O<sub>2</sub>Br<sub>2</sub>Te** 1) Diäthyläther d. Di[β-Oxyphenyl]telluriddibromid. Sm. 183° (B. 30, 2831). — \*II, 577.

- $C_{16}H_{18}O_2J_2Se$  1) Diäthyläther d. Di[*p*-Oxyphenyl]selenidjodid. Sm. 96° (B. 28, 612). — \*II, 576.
- $C_{16}H_{18}O_3NCl$  1) Chlorphenylat d. Dimethylamidomethyl-3,4-Dioxyphenylketon. Sm. 162° u. Zers. (182°) (J. r. 25, 280; D.R.P. 71312). — III, 138; \*III, 109.
- $C_{16}H_{18}O_3N_2Br_2$  1) Phenylhydrazon d. Cantharidindibromid. Sm. 245° (B. 26, 140). — III, 624.
- $C_{16}H_{18}O_3N_2S$  1) Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[4-Methylphenyl]sulfonäthan. Sm. 93° (J. pr. [2] 78, 10 C. 1908 [2] 506).  
2) Phenylamid d.  $\beta$ -Acetylphenylamidoäthan- $\alpha$ -Sulfonsäure. Sm. 152° (Am. 19, 747). — \*II, 225.
- $C_{16}H_{18}O_3N_3Br$  1) 4-Bromphenylnitrosamidoimid d. Camphersäure. Sm. 154—155° (Soc. 91, 1893 C. 1908 [1] 256).
- $C_{16}H_{18}O_3N_4S$  1) *p*-Nitro-3,9-Di[Dimethylamido]phentiazoniumhydroxyd. Chlorid, Bromid + 2H<sub>2</sub>O, Nitrat (B. 39, 1021 C. 1906 [1] 1361; J. pr. [2] 76, 410 C. 1908 [1] 531).
- $C_{16}H_{18}O_4NCl$  1) Chlormethylat d. Phenylmethylamidomethyl-2,3,4-Trioxyphenylketon + H<sub>2</sub>O. Sm. 130° (J. r. 25, 281; D.R.P. 71312). — III, 139; \*III, 109.
- $C_{16}H_{18}O_4N_2Br_2$  1) Dibrombiliverdin (J. 1876, 935). — III, 663.
- $C_{16}H_{18}O_4N_2S$  1) 2-Methyläther- $\alpha$ -Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[2-Oxyphenyl]sulfonäthan. Sm. 94° (J. pr. [2] 78, 12 C. 1908 [2] 506).  
2) 4-Oxy-2-Methyl-5-Isopropylazobenzol-*p*-Sulfonsäure. Sm. 215,8° u. Zers. Na, Ba (B. 14, 2795). — IV, 1425.  
3) 4-Äthoxyphenylamid d. 4-Acetylamidobenzol-1-Sulfonsäure. Sm. 204° (B. 39, 1564 C. 1906 [2] 35).  
4) Methyl-5-Nitro-2,4-Dimethylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 135—136° (Soc. 91, 364 C. 1907 [1] 1403).  
5) Äthyl-2-Nitro-4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 127° (D.R.P. 164130 C. 1905 [2] 1477).
- $C_{16}H_{18}O_4N_2S_2$  1) 1,4-Diphenylsulfonhexahydro-1,4-Diazin (Diphenylsulfonpiperazin). Sm. 282—283° (J. pr. [2] 53, 22; B. 31, 3261). — \*II, 71.
- $C_{16}H_{18}O_4N_2Hg_2$  1) Diquecksilberdi[4-Acetylamidophenylhydroxyd]. Zers. bei 270° (G. 24 [2] 449). — IV, 1708.
- $C_{16}H_{18}O_4N_3Br$  1) 4-Bromphenylnitramidoimid d. Camphersäure. Sm. 159—160° (Soc. 91, 1893 C. 1908 [1] 256).
- $C_{16}H_{18}O_4N_3J$  1) Jodmethylat d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3,4'-Dicarbonsäure. Sm. 211° (A. 366, 370 C. 1909 [2] 288).
- $C_{16}H_{18}O_5N_2S$  1) Äthylester d. 2-Naphtylsulfonamidoacetylamidessigsäure ( $\beta$ -Naphthalinsulfoglycylglycinäthylester). Sm. 119—120° (B. 36, 2105 C. 1903 [1] 1304).  
2) 4-Nitro-5-Äthoxyl-2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 150° (D.R.P. 157859 C. 1905 [1] 416).
- $C_{16}H_{18}O_5N_4S$  1) 3-Nitro-4'-Dimethylamido-2,4-Dimethylazobenzol-5-Sulfonsäure. NH<sub>4</sub>, Dimethylanilinsalz (A. 339, 216 C. 1905 [1] 1382).
- $C_{16}H_{18}O_6N_2S_2$  1) 2,4,2',4'-Tetramethylazobenzol-5,5'-Disulfonsäure + 5H<sub>2</sub>O. K + 4H<sub>2</sub>O, K<sub>2</sub> + 4H<sub>2</sub>O, Na<sub>2</sub> + H<sub>2</sub>O, Ca + H<sub>2</sub>O, CaH + 1½H<sub>2</sub>O, Ba, BaH + H<sub>2</sub>O (B. 16, 194; 34, 2854; A. 330, 46 C. 1904 [1] 1141). — IV, 1387; \*IV, 1024.  
2) Diäthylester d. Azobenzol-3,3'-Disulfonsäure. Sm. 100° (A. 202, 336). — IV, 1365.
- $C_{16}H_{18}O_{10}N_2S_2$  1) Leukindindisulfonsäure. Ba + 5H<sub>2</sub>O (A. 120, 34). — II, 1617.
- $C_{16}H_{18}N_9ClS$  1) Metylenblau + 3H<sub>2</sub>O (Tetramethylthioninchlorid). 2 + ZnCl<sub>2</sub> + H<sub>2</sub>O (B. 12, 593; 16, 2729; 17, 224; 28, 1697; 30, 1571; 31, 2181; 33, 316; A. 230, 137; 251, 79; D.R.P. 1886, 13281, 24125, 25150, 31852, 38573, 39757, 45839, 46805, 47374; Ph. Ch. 24, 507). — II, 809; \*II, 478.
- $C_{16}H_{18}N_4ClBr$  1) Brommethylat d. Verb. C<sub>15</sub>H<sub>16</sub>N<sub>4</sub>Cl. HBr + H<sub>2</sub>O (B. 37, 558 C. 1904 [1] 893).
- $C_{16}H_{19}ON_2Cl$  1) Trimethyl-3-Benzoylamidophenylammoniumchlorid (D.R.P. 88557). — \*IV, 376.
- $C_{16}H_{19}ON_2Br$  1) 4-Bromphenylhydrazon d. Campherchinon. Sm. 215—216° (Soc. 79, 380). — \*IV, 527.
- $C_{16}H_{19}ON_2J$  1) Trimethyl-3-Benzoylamidophenylammoniumjodid. Sm. 170° (D.R.P. 88557). — \*IV, 376.



- C<sub>16</sub>H<sub>19</sub>ON<sub>3</sub>S** 1) Methyläther d. s-β-[2-Oxyphenyl]amidoäthyl-Phenylthioharnstoff. Sm. 117—118° (B. 27, 930). — II, 712.
- C<sub>16</sub>H<sub>19</sub>ON<sub>4</sub>Cl** 1) Base (aus 4-Chlor-1,2-Di[Methylamido]benzol). Chlorid, Bromid, Pikrat (B. 37, 557 C. 1904 [1] 893).
- C<sub>16</sub>H<sub>19</sub>ON<sub>5</sub>S** 1) α-Imido-α-[α-Phenylhydrazido]-α'-[4-Äthoxyphenyl]imido-α'-Merkaptodimethylamin. Sm. 236° (A. 356, 195 C. 1907 [2] 1798).  
2) α-Imido-α-[β-Phenylhydrazido]-α'-[4-Äthoxyphenyl]imido-α'-Merkaptodimethylamin. Sm. 168° u. Zers. (A. 356, 194 C. 1907 [2] 1798).
- C<sub>16</sub>H<sub>19</sub>OSP** 1) Äthylester d. Di[4-Methylphenyl]thiophosphinsäure. Sm. 41 bis 42° (A. 315, 69). — \*IV, 1178.
- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>NS** 1) Phenylamid d. 1-sec. Butylbenzol-4-Sulfonsäure. Sm. 63—64° (B. 39, 2133 C. 1906 [2] 232).  
2) Äthyl-4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 71° (D.R.P. 164130 C. 1905 [2] 1477).  
3) Äthyl-2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 70° (B. 38, 910 C. 1905 [1] 1003).
- C<sub>16</sub>H<sub>19</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) 4-Bromphenylamidoimid d. Camphersäure. Sm. 182—183° (Soc. 91, 1893 C. 1908 [1] 256).  
2) 4-Brom-3-Amidophenylimid d. Camphersäure. Sm. 130° (Soc. 91, 1898 C. 1908 [1] 257).
- C<sub>16</sub>H<sub>19</sub>O<sub>3</sub>NS** 1) Benzaldehyd-γ-Phenylpropylthionaminsäure. Sm. 105—106° (B. 26, 2162). — III, 7.  
2) 5-Äthoxyl-2-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 112° (D.R.P. 157859 C. 1905 [1] 416).
- C<sub>16</sub>H<sub>19</sub>O<sub>3</sub>N<sub>2</sub>J** 1) Jodmethylat d. α-Oxy-4-Nitro-4'-Dimethylamidodiphenylmethan. Sm. 175° u. Zers. (B. 21, 3295). — II, 1078.
- C<sub>16</sub>H<sub>19</sub>O<sub>3</sub>N<sub>3</sub>S** 1) d-Campher-β-Sulfo-p-Phenylendiazoimid. Zers. 118—120° (Soc. 87, 78 C. 1905 [1] 734).
- C<sub>16</sub>H<sub>19</sub>O<sub>3</sub>N<sub>3</sub>S<sub>2</sub>** 1) Tetramethylindaminthiosulfonat + 1/2 H<sub>2</sub>O (A. 251, 69; D.R.P. 46805). — II, 801; \*II, 475.
- C<sub>16</sub>H<sub>19</sub>O<sub>4</sub>NS** 1) r-α-[2-Naphtylsulfon]amido-γ-Methylvaleriansäure. Sm. 145 bis 146° (B. 35, 3782 C. 1902 [2] 1469).  
2) act. α-[2-Naphtylsulfon]amido-γ-Methylvaleriansäure + H<sub>2</sub>O. Sm. 68° (B. 35, 3783 C. 1902 [2] 1469).
- C<sub>16</sub>H<sub>19</sub>O<sub>4</sub>NS<sub>2</sub>** 1) Di[β-Phenylsulfonäthyl]amin. Sm. 77—78°. HCl, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 30, 324; [2] 40, 531). — II, 781.  
2) Di[4-Methylphenylsulfonmethyl]amin. Sm. 158—160° (J. pr. [2] 63, 170).  
3) Butylimid d. Benzolsulfonsäure. Sm. 89—90° (C. 1899 [2] 867). — \*II, 70.  
4) Isobutylimid d. Benzolsulfonsäure. Sm. 76° (C. 1897 [2] 848). — \*II, 70.
- C<sub>16</sub>H<sub>19</sub>O<sub>5</sub>NS** 1) 4-Amidobenzol-1-Carbonsäureäthylester + 1-Methylbenzol-4-Sulfonsäure. Sm. 185—187° (D.R.P. 150070 C. 1904 [1] 975).
- C<sub>16</sub>H<sub>19</sub>O<sub>5</sub>N<sub>2</sub>Br** 1) 4-Brom-3-Nitrophenylmonamid d. Camphersäure. Sm. 204—206° (Soc. 91, 1896 C. 1908 [1] 256).
- C<sub>16</sub>H<sub>19</sub>O<sub>6</sub>NBr<sub>2</sub>** 1) Acetylhydrocotarninessigsäuredibromid. Sm. 188° (B. 38, 2875 C. 1905 [2] 1103).
- C<sub>16</sub>H<sub>19</sub>O<sub>6</sub>NS** 1) 1-Oxybenzomethyläther-4-Sulfonsäure + 4-Amidobenzol-1-Carbonsäureäthylester. Sm. 188° (D.R.P. 149345 C. 1904 [1] 846).
- C<sub>16</sub>H<sub>19</sub>O<sub>7</sub>NS** 1) 1,2-Dioxybenzol-1-Methyläther-3-Sulfonsäure + 4-Amidobenzol-1-Carbonsäureäthylester. Sm. 175° (D.R.P. 149345 C. 1904 [1] 846).
- C<sub>16</sub>H<sub>19</sub>O<sub>7</sub>NS<sub>2</sub>** 1) Verbindung (aus 4-Oxybenzyläthyläther-1-Sulfinsäure). Sm. 161° (B. 32, 1144). — \*II, 490.
- C<sub>16</sub>H<sub>19</sub>N<sub>4</sub>BrS** 1) p-Amido-3,9-Di[Dimethylamido]phentiazoniumbromid + 2H<sub>2</sub>O (Amidomethylenblaubromhydrat) (J. pr. [2] 76, 414 C. 1908 [1] 531).
- C<sub>16</sub>H<sub>19</sub>N<sub>4</sub>JS** 1) p-Amido-3,9-Di[Dimethylamido]phentiazoniumjodid + 1 1/2 H<sub>2</sub>O (J. pr. [2] 76, 415 C. 1908 [1] 531).
- C<sub>16</sub>H<sub>20</sub>ONCl** 1) 4-Chlorphenylamidocampher. Sm. 98° (Soc. 95, 954 C. 1909 [2] 360).
- C<sub>16</sub>H<sub>20</sub>ONP** 1) Diäthylamid d. Diphenylphosphinsäure. Sm. 138° (A. 326, 183 C. 1903 [1] 819). — \*IV, 1176.
- C<sub>16</sub>H<sub>20</sub>ON<sub>2</sub>S** 1) Di[2-Dimethylamidophenyl]sulfoxyd. Sm. 151—152°. 2HCl, (2HCl, PtCl<sub>4</sub> + 8H<sub>2</sub>O), Pikrat (A. 310, 149). — \*II, 479.



- $C_{16}H_{20}ON_2Zn$  1) Verbindung (aus Diphenylnitrosamin u. Zinkäthyl) (*Am.* 21, 441).
- $C_{16}H_{20}ON_5J$  1) Jodmethylat d. 4-Dimethylamido-4'-Oxyazobenzol-4'-Methyläther (*Soc.* 95, 1298 *C.* 1909 [2] 979).
- $C_{16}H_{20}ON_4S_2$  1) Diäthyläther d. 4-[ $\beta$ -2-Methylphenylthioureido]-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 129—130° (*Am.* 36, 147 *C.* 1906 [2] 1064).
- 2) Diäthyläther d. 4-[ $\beta$ -4-Methylphenylthioureido]-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 115° (*Am.* 36, 147 *C.* 1906 [2] 1064).
- $C_{16}H_{20}O_2NCl$  1) Phenylchloracetyltropein. Fl. HCl, (HCl, AuCl<sub>3</sub>), Pikrat (*Soc.* 95, 1024 *C.* 1909 [2] 543).
- $C_{16}H_{20}O_2NJ$  1) Benzoylderivat d. Tropinonjodmethylat. Sm. 263—265° (*B.* 41, 877 *C.* 1908 [1] 1707).
- $C_{16}H_{20}O_2N_2J$  1) Methyl-5-Amido-2,4-Dimethylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. HCl (*Soc.* 91, 364 *C.* 1907 [1] 1403).
- 2) 3-Dimethylamido-4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 124° (D.R.P. 135016 *C.* 1902 [2] 1166). — \*IV, 402.
- 3) 5-Dimethylamido-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 112—113° (*Soc.* 91, 366 *C.* 1907 [1] 1404).
- $C_{16}H_{20}O_2N_3J$  1) Jodmethylat d. 4-[4-Methylphenyl]hydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 236° (*A.* 366, 374 *C.* 1909 [2] 288).
- 2) Jodäthylat d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 218° (*A.* 366, 363 *C.* 1909 [2] 286).
- $C_{16}H_{20}O_2N_4S_2$  1) 4'-Methyläther-2,5-Diäthyläther d. 4-[ $\beta$ -4-Oxyphenylthioureido]-2-Merkapto-5-Oxy-1,3-Diazin. Sm. 122—123° (*Am.* 36, 148 *C.* 1906 [2] 1064).
- $C_{16}H_{20}O_2N_5Br$  1)  $\beta$ -Phthalylamidoäthylhexamethylentetrammoniumbromid. Sm. 180 bis 182° u. Zers. (D.R.P. 164510 *C.* 1905 [2] 1754).
- $C_{16}H_{20}O_2N_5J$  1)  $\beta$ -Phthalylamidoäthylhexamethylentetrammoniumjodid. Sm. 161° u. Zers. (D.R.P. 164510 *C.* 1905 [2] 1754).
- $C_{16}H_{20}O_3NBr$  1) Benzoat d. 5-Brom-3-Oxy-4-Keto-2,2,6,6-Tetramethylhexahydropyridin (B. d. Bromoxytriacetonamin). Sm. 114° (*B.* 31, 672). — \*IV, 35.
- 2) 4-Bromphenylmonamid d. Camphersäure. Sm. 206—207° (*Soc.* 91, 1895 *C.* 1908 [1] 256).
- $C_{16}H_{20}O_3NP$  1) Diäthylmonamid d. Phosphorsäurediphenylester. Fl. (*A.* 326, 183 *C.* 1903 [1] 819).
- 2) Diphenylmonamid d. Phosphorsäurediäthylester. Sm. 175° (*B.* 28, 614). — \*II, 163.
- $C_{16}H_{20}O_3N_2S$  1) 4-Amido-4'-Sulfomethylamido-2,2'-Dimethyldiphenylmethan. Sm. 178—180° (D.R.P. 148760 *C.* 1904 [1] 555).
- 2) 4-Amido-4'-Sulfomethylamido-3,3'-Dimethyldiphenylmethan. Sm. 172° (D.R.P. 148760 *C.* 1904 [1] 555).
- 3) 6-Amido-6'-Sulfomethylamido-3,3'-Dimethyldiphenylmethan. Sm. 159—160° (D.R.P. 148760 *C.* 1904 [1] 555).
- 4) 4,4'-Di[Dimethylamido]biphenyl-3-Sulfonsäure. Sm. 261,5° u. Zers. (*B.* 37, 3770 *C.* 1904 [2] 1547).
- 5) Amid d. r- $\delta$ -[2-Naphtylsulfon]amido- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 176—178° (*B.* 41, 4438 *C.* 1909 [1] 440).
- $C_{16}H_{20}O_3N_4S$  1) 2,4-Di[Dimethylamido]azobenzol-4'-Sulfonsäure + H<sub>2</sub>O. Sm. 189° (*B.* 30, 3116; *B.* 41, 2060 *C.* 1908 [2] 405). — IV, 1370.
- $C_{16}H_{20}O_3N_5Br$  1) Verbindung (aus Bromäthylcarbonylsalicylamid u. Hexamethylentetramin). Sm. 175—176° u. Zers. (D.R.P. 164510 *C.* 1905 [2] 1754).
- $C_{16}H_{20}O_4NBr$  1) Acetat d. 6-Brom-2-Diacetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 136—137° (*G.* 19, 66). — II, 774.
- $C_{16}H_{20}O_4N_2S$  1) Diäthyläther d. Di[3-Amido-4-Oxyphenyl]sulfon. 2HJ (*A.* 172, 54). — II, 841.
- $C_{16}H_{20}O_4N_2S_2$  1) Äthylenamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 159,5—160,5° (*B.* 32, 2041). — \*II, 77.
- 2) Äthylendimethylamid d. Benzolsulfonsäure. Sm. 131° (*B.* 28, 3074). — \*II, 71.
- $C_{16}H_{20}O_4N_4S$  1) d-2-Naphtylsulfonarginin. Sm. 87—88° (*H.* 49, 220 *C.* 1906 [2] 1721).
- 2) l-2-Naphtylsulfonarginin. Sm. 82—83° (*H.* 49, 236 *C.* 1906 [2] 1722).
- 3) r-2-Naphtylsulfonarginin +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 82—83° (*H.* 49, 227 *C.* 1906 [2] 1721).

- $C_{16}H_{20}O_5NBr$  1) Diäthylester d. Phenylbromacetylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 70—71° (corr.) (A. 340, 202 C. 1905 [2] 313).
- $C_{16}H_{20}O_5N_2S$  1) 4-Nitrophenylamid d. d-Campher- $\beta$ -Sulfonsäure. Sm. 145° (Soc. 87, 77 C. 1905 [1] 733).
- $C_{16}H_{20}O_6N_2S_2$  1) 2'-Amido-2,4,3',5'-Tetramethyldiphenylamin-5,6'-Disulfonsäure +  $H_2O$  (A. 330, 58 C. 1904 [1] 1142).
- $C_{16}H_{20}O_6N_3Cl$  1)  $\alpha$ -[ $\alpha$ -Chloracetylamidopropionylamidoacetyl]amido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 206—207° (B. 41, 857 C. 1908 [1] 1456).
- $C_{16}H_{20}O_7N_2S$  1) 2-Naphtylsulfonhydrazon d. d-Glykose (C. 1904 [2] 1494).
- $C_{16}H_{20}O_8N_2S_2$  1) 4,4'-Diamido-3,3'-Dioxybiphenyl-3,3'-Diäthyläther-6,6'-Disulfonsäure (D.R.P. 174497 C. 1906 [2] 1224).
- $C_{16}H_{20}N_2Cl_2Si$  1) Di[2,4-Dimethylphenylamid]dichlorsilicium (Soc. 51, 44). — II, 543.
- $C_{16}H_{21}ON_2Cl$  1) Phenylhydrazon d. Keton  $C_{10}H_{15}O_2Cl$ . Sm. 107—108° (C. 1899 [1] 50). — \*IV, 527.
- 2) Verbindung +  $2H_2O$  (aus 4,4'-Tetramethyldiamidobiphenyl) (B. 37, 3766 C. 1904 [2] 1546).
- $C_{16}H_{21}ON_2J$  1) Jodäthylat d. 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 180° (J. pr. [2] 69, 237 C. 1904 [1] 1269).
- 2) Jodäthylat d. 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 206° (207°) (B. 35, 3086 C. 1902 [2] 1116; J. pr. [2] 69, 166 C. 1904 [1] 1268). — \*IV, 381.
- $C_{16}H_{21}ON_2J_3$  1) Verbindung (aus d. Verb.  $C_{16}H_{20}N_2J_4$ ) (B. 37, 3770 C. 1904 [2] 1547).
- $C_{16}H_{21}O_2NBr_2$  1) Acetat d. 1-[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]hexahydropyridin. Sm. 97° (A. 344, 219 C. 1906 [1] 1162).
- 2) Acetat d. 1-[2,6-Dibrom-4-Oxy-3,5-Dimethylbenzyl]hexahydropyridin. Sm. 122—123° (A. 302, 83; A. 344, 242 C. 1906 [1] 1163). — \*IV, 15.
- $C_{16}H_{21}O_2NS$  1) Phenylsulfoncamphenamin. Sm. 95—96°. Na (B. 33, 482). — \*IV, 74.
- $C_{16}H_{21}O_2N_2Br$  1) 4-Bromphenylhydrazoncamphonsäure. Na +  $H_2O$  (Soc. 77, 456). — \*IV, 454.
- $C_{16}H_{21}O_2N_2P$  1) Di[2-Methylphenylamid] d. Phosphorsäuremonoäthylester. Sm. 115° (A. 326, 250 C. 1903 [1] 868).
- $C_{16}H_{21}O_2N_3S$  1) 2,4-Di[Dimethylamido]phenylamid d. Benzolsulfonsäure. Sm. 84° (B. 30, 3115). — IV, 1123.
- $C_{16}H_{21}O_3NS$  1) Phenylsulfon- $\alpha$ -Anhydropulegonhydroxylamin. Sm. 120° (B. 37, 954 C. 1904 [1] 1087).
- 2) Phenylamid d. Campher- $\beta$ -Sulfonsäure. Sm. 119° (Bl. [3] 19, 125; Soc. 81, 1448 C. 1902 [2] 1465). — \*III, 363.
- $C_{16}H_{21}O_3N_2Br$  1) 4-Brom-3-Amidophenylmenamid d. Camphersäure. Sm. 207 bis 208° (Soc. 91, 1896 C. 1908 [1] 256).
- $C_{16}H_{21}O_3N_3S$  1) Methylester d. 2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyltetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 142° u. Zers. (C. 1904 [2] 1028).
- $C_{16}H_{21}O_4N_2P$  1) Di[4-Äthoxylphenylamid] d. Phosphorsäure. Sm. 202° (B. 33, 2110). — \*II, 400.
- $C_{16}H_{21}O_4N_3S_2$  1) Di[ $\beta$ -3-Amidophenylsulfonäthyl]amin. HCl (A. 294, 252). — \*II, 474.
- $C_{16}H_{22}ONCl$  1) 4-Keto-3-[ $\alpha$ -Chlorbenzyl]-2,2,6,6-Tetramethylhexahydropyridin. HCl (B. 41, 466 C. 1908 [1] 1052).
- $C_{16}H_{22}ON_2Cl_2$  1) Terpendichloridnitrolanilid. Sm. 140—141° (A. 270, 203). — III, 527.
- $C_{16}H_{22}ON_3P$  1) Diäthylmonamid-Di[Phenylamid] d. Phosphorsäure. Sm. 150° (A. 326, 184 C. 1903 [1] 820).
- 2) Isobutylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 207° (A. 326, 174 C. 1903 [1] 819).
- $C_{16}H_{22}O_2NCl$  1) Chlormethylat d. Benzoylpseudotropin.  $2 + PtCl_4 + 2H_2O + AuCl_3$  (A. 271, 209). — III, 795.
- $C_{16}H_{22}O_2NJ$  1) Jodmethylat d. Benzoylpseudotropin (A. 271, 209). — III, 795.
- $C_{16}H_{22}O_2N_2J_3$  1) Dimethylphenylaminoxydesquijodid. Sm. 100° (B. 32, 1901). — \*II, 150.
- $C_{16}H_{22}O_2N_3S$  1) Äthylester d. 2-[ $\beta$ -Phenylthioureido]hexahydrobenzol-1-Carbonsäure. Sm. 162—163° (A. 295, 205). — \*II, 705.
- 2) Äthylester d. 3-[ $\beta$ -Phenylthioureido]hexahydrobenzol-1-Carbonsäure. Sm. 149° (A. 319, 332 C. 1902 [1] 351).

- $C_{16}H_{22}O_2N_2Hg_2$  1) p-Diquecksilberäthylanilin. Zers. bei  $145^\circ$ . Salze, siehe (G. 23 [2] 545; 24 [2] 463). — IV, 1706.
- $C_{16}H_{22}O_3N_3J$  1) Jodmethylat d. 4-[3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydro-4-Pyrazolyl]tetrahydro-1,4-Oxazin. Sm.  $134^\circ$  (B. 38, 4049 C. 1906 [1] 469).
- $C_{16}H_{22}O_3N_2S$  1) Phenylhydrazoncamphersulfonsäure. Sm.  $235^\circ$  u. Zers. (Bl. [3] 19, 126). — IV, 796.  
2) 4-Amidophenylamid d. d-Campher- $\beta$ -Sulfonsäure. Sm.  $186^\circ$  (Soc. 87, 78 C. 1905 [1] 733).
- $C_{16}H_{22}O_4N_4S$  1) Di[4-Äthoxylphenylhydrazid] d. Schwefelsäure. Zers. bei 130 bis  $140^\circ$  (B. 25, 1851). — IV, 816.
- $C_{16}H_{22}N_3SP$  1) Äthylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm.  $140^\circ$  (A. 326, 203 C. 1903 [1] 821).  
2) Diäthylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm.  $192^\circ$  (A. 326, 212 C. 1903 [1] 822).  
3) Isobutylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm.  $118^\circ$  (A. 326, 204 C. 1903 [1] 821).
- $C_{16}H_{23}ONBr_2$  1) Verbindung (aus Tropin u. 1,2-Di[Brommethyl]benzol. Sm.  $160^\circ$  (C. 1899 [1] 1246). — \*III, 606.
- $C_{16}H_{23}ON_3S$  1) 4-[ $\alpha$ -Methyl- $\beta$ -Phenylthioureido]-5-Keto-1,2,2,4-Tetramethyl-tetrahydropyrrrol. Sm.  $132-135^\circ$  (M. 29, 504 C. 1908 [2] 1036).
- $C_{16}H_{23}O_2NS$  1)  $\alpha$ -Camphylamid d. Benzolsulfonsäure. Fl. (C. 1899 [2] 868; B. 33, 478, 483). — \*II, 71.  
2) Dihydrocarvylamid d. Benzolsulfonsäure. Sm.  $132^\circ$  (B. 33, 558). — \*IV, 61.  
3) Dihydroeucarvylamid d. Benzolsulfonsäure. Sm.  $103-105^\circ$  (B. 33, 559). — \*IV, 61.
- $C_{16}H_{23}O_3NCl_2$  1) 3,6-Dichlor-5-Diisoamylamido-2-Oxy-1,4-Benzochinon. Diisoamylaminsalz (Am. 20, 419). — \*III, 262.
- $C_{16}H_{23}O_3NS$  1) Phenylsulfonamidomenthon. Sm.  $82-85^\circ$  (C. 1899 [2] 868). — \*III, 349.
- $C_{16}H_{23}O_4N_3S$  1) Diäthylester d. 1-[ $\beta$ -Allylthioureido]-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm.  $192^\circ$  (B. 40, 4759 C. 1908 [1] 261).
- $C_{16}H_{23}N_4SP$  1) Di[Phenylhydrazid] d. Isobutylthiophosphinsäure. Sm.  $128^\circ$  (B. 32, 1581). — \*IV, 475.
- $C_{16}H_{24}ONCl$  1) Nitrosochlorid d.  $\alpha$ -[2,4,6-Trimethylphenyl]- $\alpha$ -Hepten. Sm.  $160^\circ$  u. Zers. (B. 37, 931 C. 1904 [1] 1209).
- $C_{16}H_{24}ONBr$  1) o-Bromthymotinipiperidid. Sm.  $76^\circ$  (H. 44, 273 C. 1905 [1] 1109).  
2) p-Bromthymotinipiperidid. Sm.  $59^\circ$  (H. 44, 269 C. 1905 [1] 1109).
- $C_{16}H_{24}ON_2S$  1)  $\alpha$ -Benzoyl- $\beta\beta$ -Diisobutylthioharnstoff. Sm.  $130-132^\circ$  (Am. 24, 206). — \*II, 737.  
2) Äthyläther d. Benzoylimidodipropylamidomerkaptomethan (Benzoyldipropylthioläthylpseudothioharnstoff). Sd.  $226-229^\circ_{17}$  (Am. 26, 413).
- $C_{16}H_{24}ON_5P$  1) Diäthylmonamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm.  $184-185^\circ$  (A. 326, 184 C. 1903 [1] 820). — \*IV, 423.  
1) Isobutylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm.  $141^\circ$  (A. 326, 174 C. 1903 [1] 819). — \*IV, 424.
- $C_{16}H_{24}O_2NCl$  1) Chlorbenzylat d. 1-Piperidyllessigsäureäthylester. Zers. bei 193 bis  $194^\circ$  (A. 318, 106). — \*IV, 16.
- $C_{16}H_{24}O_2NBr$  1) Brombenzylat d. 1-Piperidyllessigsäureäthylester. Sm.  $133-134^\circ$  u. Zers. ( $192-193^\circ$ ) (A. 318, 106; B. 35, 181 C. 1902 [1] 429). — \*IV, 16.
- $C_{16}H_{24}O_2NJ$  1) Jodbenzylat d. 1-Piperidyllessigsäureäthylester. Sm.  $193-195^\circ$  u. Zers. (B. 32, 515; B. 35, 180 C. 1902 [1] 428; B. 35, 1075 C. 1902 [1] 938). — \*IV, 16.
- $C_{16}H_{24}O_3N_2Cl_2$  1) 3,6-Dichlor-2,5-Di[Isoamylamido]-1,4-Benzochinon. Sm. 224 bis  $225^\circ$  (B. 30, 531; Am. 20, 416). — \*III, 260.
- $C_{16}H_{24}O_3N_2S$  1) Diäthyläther d.  $\alpha$ -[ $\beta\beta$ -Dioxyäthyl]- $\alpha$ -Allyl- $\beta$ -Phenylthioharnstoff. Sm.  $81-82^\circ$  (Ar. 246, 311 C. 1908 [2] 229).
- $C_{16}H_{24}O_3N_3J$  1) Jodmethylat d. Eserin. Sm.  $160^\circ$  u. Zers. (Bl. [3] 9, 1014). — III, 882.
- $C_{16}H_{24}O_3NJ$  1) Jodmethylat d. Propylhydrocotarnin. Sm.  $165-166^\circ$  (B. 39, 2227 C. 1906 [2] 440).  
2) Jodmethylat d. Isopropylhydrocotarnin. Sm.  $144-145^\circ$  (B. 39, 2228 C. 1906 [2] 440).



- $C_{16}H_{24}O_4N_2S$  1) 3,4-Diäthylpiperidid d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure. Sm. 89—90° (B. 38, 3054 C. 1905 [2] 1349).
- $C_{16}H_{24}O_5NCl$  1) Sinapinchlorid (C. 1897 [1] 822). — \*III, 690.
- $C_{16}H_{24}O_5NBr$  1) Sinapinbromid + 3H<sub>2</sub>O. Sm. 90—92° (107—115° wasserfrei) (C. 1897 [1] 821; B. 30, 2329). — \*III, 690.
- $C_{16}H_{24}O_5NJ$  1) Sinapinjodid + 3H<sub>2</sub>O. Sm. 178—179° wasserfrei (C. 1897 [1] 821; B. 30, 2329). — \*III, 690.
- $C_{16}H_{24}N_2ClP$  1) 4-Chlorphenylidi[1-Piperidyl]phosphin. Sm. 95° (B. 31, 1047). — \*IV, 1185.
- $C_{16}H_{24}N_5SP$  1) Diäthylmonamid-Di[Phenylhydrazid] d. Thiophosphorsäure (A. 326, 212 C. 1903 [1] 822).
- 2) Isobutylmonamid-Di[Phenylhydrazid] d. Thiophosphorsäure. Sm. 129° (A. 326, 205 C. 1903 [1] 821). — \*IV, 424.
- $C_{16}H_{25}ON_2Cl$  1) Chlormethylat d. Anagyrin. 2 + PtCl<sub>4</sub>, (HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), + AuCl<sub>3</sub> (C. 1899 [1] 1130; 1900 [1] 1163). — \*III, 600.
- $C_{16}H_{25}ON_2J$  1) Jodmethylat d. Anagyrin. Sm. oberhalb 235° (C. 1899 [1] 1130; 1900 [1] 1163). — \*III, 600.
- $C_{16}H_{25}ON_2P$  1) Phenylidi[1-Piperidyl]phosphinoxid. Sm. 68° (B. 31, 1041). — IV, 1682.
- $C_{16}H_{25}O_2N_2P$  1) 1,1'-Dipiperidid d. Phosphorsäuremonophenylester. Sd. 215 bis 216°<sub>10</sub> (A. 326, 197 C. 1903 [1] 821). — \*IV, 10.
- $C_{16}H_{25}O_2N_3P_2$  1) Thyminsäure. Ba (H. 22, 79, 323). — IV, 1623.
- $C_{16}H_{25}N_2SP$  1) Phenylidi[1-Piperidyl]phosphinsulfid. Sm. 92° (B. 31, 1042). — IV, 1682.
- $C_{16}H_{26}ON_2S$  1) Piperidid d. Camphorylamidothioameisensäure. Sm. 188° (Soc. 91, 1886 C. 1908 [1] 258).
- $C_{16}H_{26}ON_3P$  1) Phenylamid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 159° (A. 326, 197 C. 1903 [1] 821). — \*IV, 10.
- $C_{16}H_{26}O_2NBr$  1) Benzoat d. Dimethyläthyl-β-Oxy-β-Methylbutylammoniumbromid (D.R.P. 195813 C. 1908 [1] 1225).
- $C_{16}H_{26}O_2NJ$  1) Benzoat d. Dimethyläthyl-β-Oxy-β-Methylbutylammoniumjodid. Sm. 155—157° (D.R.P. 195813 C. 1908 [1] 1225).
- $C_{16}H_{26}O_2N_2S$  1) Diäthyläther d. α-[ββ-Dioxyäthyl]-α-Propyl-β-Phenylthioharnstoff. Sm. 44—47° (Ar. 246, 308 C. 1908 [2] 229).
- $C_{16}H_{26}O_7N_5Br$  1) α-Bromisocapronyltetra[Amidoacetyl]amidoessigsäure. Sm. 237° u. Zers. (B. 39, 459 C. 1906 [1] 1001).
- $C_{16}H_{26}O_{11}N_{12}S_3$  1) Verbindung (aus Isodialursäure u. Thioharnstoff) (A. 315, 261).
- $C_{16}H_{26}N_5SP$  1) Phenylmonamid-1,1'-Dipiperidid d. Thiophosphorsäure. Sm. 112° (A. 326, 217 C. 1903 [1] 822). — \*IV, 10.
- $C_{16}H_{27}ON_2Cl$  1) Chlormethylat d. d-Lupanin. (2HCl, PtCl<sub>4</sub>), 2 + PtCl<sub>4</sub> + H<sub>2</sub>O, + AuCl<sub>3</sub> (C. 1897 [1] 1232; A. 230, 381; Ar. 242, 435 C. 1904 [2] 783). — \*III, 662.
- 2) Chlormethylat d. Oxysparteïn. (HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (B. 25, 3608). — III, 933.
- $C_{16}H_{27}ON_2J$  1) Jodmethylat d. d-Lupanin. Sm. 239° (248—249° u. Zers.) (C. 1897 [1] 1232; G. 23 [1] 164; A. 230, 379; Ar. 242, 435 C. 1904 [2] 783). — III, 891; \*III, 662.
- 2) Jodmethylat d. i-Lupanin. Sm. 239—240° u. Zers. (C. 1897 [1] 1233; G. 23 [1] 163). — \*III, 662.
- 3) Jodmethylat d. Oxysparteïn. Sm. 191—193° (B. 25, 3608). — III, 933.
- $C_{16}H_{27}ON_4P$  1) Phenylhydrazid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 155° (A. 326, 197 C. 1903 [1] 821).
- $C_{16}H_{27}O_2NS$  1) Diisocamylamid-Benzolsulfonsäure. Fl. (C. 1898 [2] 888). — \*II, 70.
- $C_{16}H_{27}O_2N_2Cl$  1) Chlormethylat d. Oxylupanin. + (HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), + AuCl<sub>3</sub> (Ar. 242, 429 C. 1904 [2] 782).
- $C_{16}H_{27}O_2N_2J$  1) Jodmethylat d. Oxylupanin. Sm. 228,5—230,5° (Ar. 242, 429 C. 1904 [2] 782).
- $C_{16}H_{27}O_6N_4Br$  1) Äthylester d. α-Bromisocapronyltri[Amidoacetyl]amidoessigsäure. Sm. 241° u. Zers. (B. 39, 457 C. 1906 [1] 1001).
- $C_{16}H_{28}O_3N_2Cl_2$  1) Nitrosochlorid d. 3-Methyl-1-Methylenhexahydrobenzol (A. 347, 344 C. 1906 [2] 601).
- 2) Nitrosochlorid d. 4-Methyl-1-Methylenhexahydrobenzol (A. 347, 346 C. 1906 [2] 602).

- $C_{16}H_{28}O_3SSi$  1) Äthylpropylisobutylbenzylsilicium- $\beta$ -Sulfonsäure. Salze, siehe (Soc. 95, 74 C. 1909 [1] 1157).
- $C_{16}H_{28}O_5N_8Br$  1)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amidoisocapronylamidoacetylamidoessigsäure ( $\alpha$ -Bromisocapronylleucylglycylglycin). Sm. 161—162° (B. 37, 2505 C. 1904 [2] 426).
- $C_{16}H_{28}O_6N_2S$  1) Thiodiglykolyldiamylurethan. Sm. 137,5° (C. 1899 [2] 286). — \*I, 714.
- $C_{16}H_{29}ON_2J$  1) Jodäthylat d. Camphersäureäthylimid-Äthylimidin. Sm. 244 bis 245° u. Zers. (B. 14, 163; A. 214, 246). — I, 1393.
- $C_{16}H_{30}ON_2J_2$  1) Di[Jodmethylat] d. Base  $C_{14}H_{21}ON_2$  (B. 22, 679). — III, 878.
- $C_{16}H_{30}O_4NJ$  1) Jodmethylat d. i-Methyltropinsäuredipropylester. Sm. 116—117° (B. 28, 3291). — III, 794.
- $C_{16}H_{31}O_2ClS$  1) l-Menthylester d. Diäthylthetinchlorid. 2 +  $PtCl_4$  (Soc. 87, 460 C. 1905 [1] 1217, 1587).
- $C_{16}H_{31}O_2BrS$  1) l-Menthylester d. Diäthylthetinbromid. Sm. 73—74° (Soc. 87, 460 C. 1905 [1] 1217, 1587).
- $C_{16}H_{32}ONCl$  1) Chlorid d. Pentadekylamidoameisensäure (Am. 22, 26). — \*I, 713.  
2) Chloramid d. Palmitinsäure. Sm. 70—71° (B. 30, 899; Am. 22, 18). — \*I, 705.
- $C_{16}H_{33}N_3ClP$  1) Methyl-1-Tripiperidylphosphoniumchlorid. 2 +  $PtCl_4$  (B. 28, 2209). — IV, 11.
- $C_{16}H_{33}N_3BrP$  1) Methyl-1-Tripiperidylphosphoniumbromid (B. 28, 2209). — IV, 11.
- $C_{16}H_{33}N_3JP$  1) Methyl-1-Tripiperidylphosphoniumjodid. Sm. 251—255° (B. 28, 2208). — IV, 11.
- $C_{16}H_{34}ON_3P$  1) Methyl-1-Tripiperidylphosphoniumhydroxyd. Salze, siehe diese (B. 28, 2209). — IV, 11.
- $C_{16}H_{34}O_3N_2Cl_2$  1) Di[Chlormethylat] d. Chrysanthemin. 2 +  $PtCl_4$  (G. 21 [1] 523). — III, 862.
- $C_{16}H_{34}O_5N_2S$  1) Palmitinamidoximschwefligesäure.  $NH_4$  (B. 26, 2845). — \*I, 838.
- $C_{16}H_{36}O_4N_2J$  1) Verbindung (aus  $\alpha$ -Trimethylamido-norm. Valeriansäure?) (G. 23 [2] 211).

### $C_{16}$ -Gruppe mit fünf Elementen.

- $C_{16}H_4O_2N_2Cl_2Br_4$  1) Dichlortetrabromindigo (D.R.P. 195291 C. 1908 [1] 1230).
- $C_{16}H_6O_2N_2Cl_3Br$  1) Trichlorbromindigo (D.R.P. 215747 C. 1909 [2] 1952).
- $C_{16}H_8O_8N_2Cl_4S_2$  1) Tetrachlorindigodisulfonsäure (B. 41, 3801 C. 1908 [2] 1931).
- $C_{16}H_8O_2N_2ClBr$  1) Chlorbromindigo (D.R.P. 198816 C. 1908 [2] 215).
- $C_{16}H_8O_8N_2Br_4S_2$  1) 2,4,2',4'-Tetrabromdehydroindigoschwefligesäure +  $14H_2O$  (B. 42, 3662 C. 1909 [2] 1657).
- $C_{16}H_8O_{14}N_2Cl_4S_4$  1) m-Dichlorindigotetrasulfonsäure (B. 41, 3801 C. 1908 [2] 1931).
- $C_{16}H_8O_{20}N_2Cl_4S_6$  1) p-Dichlorindigoexasulfonsäure (B. 41, 3801 C. 1908 [2] 1931).
- $C_{16}H_9ON_2ClBr_2$  1) 2-Oxy-1-[2-Chlor-4,6-Dibromphenyl]azonaphtalin. Sm. 160 bis 161° (Soc. 91, 1567 C. 1907 [2] 1786).  
2) 2-Oxy-1-[4-Chlor-2,6-Dibromphenyl]azonaphtalin. Sm. 156 bis 157° (Soc. 91, 1562 C. 1907 [2] 1786).
- $C_{16}H_9ON_2Cl_2Br$  1) 2-Oxy-1-[2,4-Dichlor-6-Bromphenyl]azonaphtalin. Sm. 148 bis 149° (Soc. 91, 1565 C. 1907 [2] 1786).  
2) 2-Oxy-1-[2,6-Dichlor-4-Bromphenyl]azonaphtalin. Sm. 170° (Soc. 91, 1569 C. 1907 [2] 1786).
- $C_{16}H_9O_2NClBr$  1) 3-Chlor-2-[4-Bromphenyl]amido-1,4-Naphtochinon. Sm. 262° (B. 15, 486). — III, 377.
- $C_{16}H_9O_4N_2Cl_3S$  1) 2-Oxy-1-[2,5,6-Trichlorphenylazo]naphtalin-1<sup>3</sup>-Sulfonsäure. Na (B. 39, 81 C. 1906 [1] 665).
- $C_{16}H_9O_4N_2Br_3S$  1) 2-Oxy-1-[2,4,6-Tribromphenylazo]naphtalin-1<sup>3</sup>-Sulfonsäure (B. 39, 83 C. 1906 [1] 666).
- $C_{16}H_{10}ONBrS$  1) Benzoat d. 5-Brom-8-Merkaptochinolin. Sm. 115° (B. 41, 943 C. 1908 [1] 1704).
- $C_{16}H_{10}ON_2Br_3S_3$  1) Dibromtrithioisatyd (Z. 1865, 595). — II, 1616.
- $C_{16}H_{10}O_2NClJ_2$  1) 5-Jod-3-Nitrophenyl-1-Naphtyljodoniumchlorid. 2 +  $PtCl_4$  (B. 34, 3413).
- $C_{16}H_{10}O_2NBrJ_2$  1) 5-Jod-3-Nitrophenyl-1-Naphtyljodoniumbromid. Sm. 168° (B. 34, 3413).

- $C_{16}H_{10}O_2N_2Br_2S$  1) 5,5 - Dibrom - 2 - Thiocarbonyl - 4,6 - Diketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 190° (C. 1909 [1] 1856).
- $C_{16}H_{10}O_2N_2Br_2S_2$  1) Dibromdithioisatyd (Z. 1865, 595). — II, 1616.
- $C_{16}H_{10}O_4N_2Cl_2S$  1) 2-Oxy-1-[2,5-Dichlorphenylazo]naphtalin-1<sup>4</sup>-Sulfonsäure. Na (B. 39, 84 C. 1906 [1] 666).
- $C_{16}H_{10}O_4N_2Br_2S$  1) 2-Oxy-1-[2,6-Dibromphenylazo]naphtalin-1<sup>4</sup>-Sulfonsäure. — IV, 1432.
- $C_{16}H_{10}O_5NClS$  1) 2[oder 3]-Chlor-3[oder 2]-Phenylamido-1,4-Naphtochinon-7-Sulfonsäure. Sm. 190°. Ba, Ag + Ag<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 37, 190). — III, 388.
- $C_{16}H_{10}O_5N_2Cl_2S$  1) 2-Oxy-1-[3,6-Dichlor-2-Oxyphenylazo]naphtalin-1<sup>5</sup>-Sulfonsäure. Na (B. 39, 82 C. 1906 [1] 665).
- $C_{16}H_{10}O_5N_2Br_2S$  1) 2-Oxy-1-[4,6-Dibrom-2-Oxyphenylazo]naphtalin-1<sup>5</sup>-Sulfonsäure. Na (B. 39, 83 C. 1906 [1] 666).
- 2) Dioxynaphtalinazodibrombenzolsulfonsäure (B. 11, 2199). — IV, 1450.
- $C_{16}H_{10}O_9N_3ClS_2$  1) 2-Oxy-1-[2-Chlor-4-Nitrophenylazo]naphtalin-6,8-Disulfonsäure. Na<sub>2</sub> (C. 1902 [1] 752). — \*IV, 1045.
- $C_{16}H_{11}ONClBr$  1) Nitril d. α-[4-Chlorphenyl]-β-[3-Brom-4-Methoxyphenyl]akrylsäure. Sm. 164° (J. pr. [2] 61, 193). — \*II, 1003.
- $C_{16}H_{11}O_2N_2ClS_2$  1) 4-Chlor-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 116° (J. pr. [2] 62, 404). — \*IV, 1104.
- 2) 4-Chlor-1-[2-Naphtylthiosulfon]diazobenzol. Zers. bei 113 bis 114° (J. pr. [2] 62, 405). — \*IV, 1104.
- $C_{16}H_{11}O_2N_2BrS$  1) 5-Brom-2-Thiocarbonyl-4,6-Diketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 220° (C. 1909 [1] 1856).
- $C_{16}H_{11}O_2N_2BrS_2$  1) 4-Brom-1-[1-Naphtylthiosulfon]diazobenzol. Sm. 105—106° (J. pr. [2] 62, 410). — \*IV, 1105.
- 2) 4-Brom-1-[2-Naphtylthiosulfon]diazobenzol. Sm. 108—109° u. Zers. (J. pr. [2] 62, 410). — \*IV, 1105.
- $C_{16}H_{11}O_4N_2ClS$  1) Phenylamid d. 4-Chlor-1-Nitronaphtalin-7-Sulfonsäure. Sm. 151°. — II, 425.
- $C_{16}H_{11}O_4N_2Cl_3Br_2$  1) βββ-Trichlor-α-Di[4-Bromphenylamido]äthan-2,2'-Dicarbonsäure. Sm. 174—175° (C. 1909 [2] 1419).
- $C_{16}H_{11}O_4N_3Cl_2S$  1) 8-Amido-7-[2,4-Dichlorphenyl]azo-1-Oxynaphtalin-4-Sulfonsäure (C. 1903 [1] 676).
- $C_{16}H_{11}O_5N_2Br_3Hg_2$  1) 2,4,6-Tribrombenzazophenoldimerkuriacetat. Sm. noch nicht bei 300° (Soc. 93, 849 C. 1908 [1] 2149).
- $C_{16}H_{11}O_5N_3ClS$  1) 1-[4-Chlor-3-Nitrophenyl]azo-2-Oxynaphtalin-1<sup>6</sup>-Sulfonsäure (D.R.P. 132968 C. 1903 [2] 315; D.R.P. 145911 C. 1903 [2] 1153).
- $C_{16}H_{12}ONClBr_2$  1) Nitril d. α-β-Dibrom-α-[4-Chlorphenyl]-β-[4-Methoxyphenyl]propionsäure. Sm. 164,5° (J. pr. [2] 61, 189). — \*II, 996.
- $C_{16}H_{12}O_2NClS$  1) 1-Chlor-2-Naphtylamid d. Benzolsulfonsäure. Sm. 130—131°. Na + 5C<sub>2</sub>H<sub>6</sub>O (C. 1904 [1] 1075; Soc. 85, 378 C. 1904 [1] 1412).
- $C_{16}H_{12}O_2NBrS$  1) Anhydro-α-Benzoylamido-α-Merkaptopropion-4-Bromphenyläthersäure. Sm. 153—155° (H. 20, 432). — \*II, 748.
- $C_{16}H_{12}O_2N_2Br_2S$  1) Methyläther d. α-[4-Brombenzoyl]amido-α-[4-Brombenzoyl]imido-α-Merkaptomethan. Sm. 177—178° (Am. 35, 306 C. 1906 [1] 1545).
- $C_{16}H_{12}O_2N_3ClS$  1) 8-Phenylsulfonamido-1-Diazonaphtalinchlorid. 2 + PtCl<sub>4</sub> (Soc. 89, 11 C. 1906 [1] 938).
- $C_{16}H_{12}O_3NBrS$  1) Nitril d. α-[4-Bromphenyl]sulfon-β-[4-Methoxyphenyl]akrylsäure. Sm. 146° (J. pr. [2] 78, 134 C. 1908 [2] 1171).
- $C_{16}H_{12}O_3N_3BrS$  1) 4-Brom-2-Phenylazo-1-Amidonaphtalin-2<sup>4</sup>-Sulfonsäure (Soc. 85, 752 C. 1904 [2] 448).
- $C_{16}H_{12}O_4NClS_2$  1) Chlorid d. 1-Phenylsulfonamidonaphtalin-4-Sulfonsäure. Sm. 171° (B. 39, 1567 C. 1906 [2] 36).
- $C_{16}H_{12}O_5NBrS$  1) p-Brom-1-Dimethylamido-9,10-Anthrachinon-4-Sulfonsäure (D. R. P. 146691 C. 1903 [2] 1352).
- $C_{16}H_{12}O_7NClS_2$  1) 8-[4-Chlorphenyl]amido-1-Oxynaphtalin-3,6-Disulfonsäure (D.R.P. 181929 C. 1907 [1] 1654).
- $C_{16}H_{13}ONClBr$  1) Chlorbenzylat d. 5-Brom-6-Oxychinolin + H<sub>2</sub>O. Sm. 100—105° (139—140° wasserfrei). 2 + PtCl<sub>4</sub> + 3H<sub>2</sub>O (B. 38, 890 C. 1905 [1] 1028).



- $C_{16}H_{13}ON_4S_8P$  1) Phosphoryltrithiocyanat + Phenylbenzylamin. Sm. 137—138° (*Soc.* 85, 368 *C.* 1904 [1] 1407).
- $C_{16}H_{13}O_2NCl_2Br_2$  1) 2,6-Dibrom-3,5-Dichlorphenylester d. Äthylphenylamido-ameisensäure. Sm. 172° (*B.* 39, 4151 *C.* 1907 [1] 240).
- $C_{16}H_{13}O_2N_3ClJ$  1) Jodmethylat d. 5-Chlor-3-Phenyl-1-[3-Nitrophenyl]pyrazol. Sm. 172° (*A.* 358, 180 *C.* 1908 [1] 858).
- 2) Jodmethylat d. 3-Chlor-5-Phenyl-1-[3-Nitrophenyl]pyrazol. Sm. 169° (*A.* 358, 168 *C.* 1908 [1] 856).
- $C_{16}H_{13}O_2N_2BrS$  1) Benzolsulfonat d. 3-Oxy-5-Methyl-1-[4-Bromphenyl]pyrazol. Sm. 96° (*A.* 358, 132 *C.* 1908 [1] 852).
- $C_{16}H_{14}O_2N_2Cl_2S_2$  1) Di[4-Chlorphenylamid] d. Dimethyldisulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 194—195° (*A.* 360, 112 *C.* 1908 [1] 2145).
- $C_{16}H_{14}O_2N_2Cl_2Se1$  1) Di[4-Chlorphenylamid] d. Dimethylselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 190—191° (*A.* 360, 124 *C.* 1908 [1] 2146).
- $C_{16}H_{14}O_2N_2Cl_2Se_2$  1) Di[3-Chlorphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 183° (*Ar.* 241, 209 *C.* 1903 [2] 104).
- 2) Di[4-Chlorphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 172—173° (*A.* 360, 123 *C.* 1908 [1] 2146).
- $C_{16}H_{14}O_2N_2Br_2Se_2$  1) Di[3-Bromphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 198° (*Ar.* 241, 213 *C.* 1903 [2] 104).
- $C_{16}H_{14}O_2N_3ClS$  1) 1,3-Di[Acetylamido]phenazthioniumchlorid. +  $FeCl_3$  (*A.* 322, 58 *C.* 1902 [2] 224).
- 2) 3,9-Di[Acetylamido]phenthiazoniumchlorid. 2 +  $PtCl_4$  (*B.* 39, 917 *C.* 1906 [1] 1259).
- $C_{16}H_{14}O_3NBrS$  1)  $\alpha$ -Benzoylamido- $\alpha$ -Merkaptopropion-4-Bromphenyläthersäure. Sm. 136°. Ba (*H.* 20, 438). — \*II, 748.
- $C_{16}H_{14}O_3N_2ClBr$  1) Methyläther d. Bromgalloccyaninhydrochlorid (*Bl.* [3] 15, 406). — III, 677.
- $C_{16}H_{15}ON_2BrS_2$  1) Äthylester d. p-Brom- $\alpha$ -Benzoyl- $\alpha$ -Phenylhydrazin- $\beta$ -Dithiocarbonsäure. Sm. 117° (*J. pr.* [2] 67, 240 *C.* 1903 [1] 1263). — \*IV, 440.
- $C_{16}H_{15}O_2N_2BrS$  1) Acetat d. s-[2-Methyl-3-Bromphenyl]-4-Oxyphenylthioharnstoff. Sm. 156° (*B.* 16, 1832). — II, 720.
- 2) Amid d.  $\alpha$ -Benzoylamido- $\alpha$ -Merkaptopropion-4-Bromphenyläthersäure. Sm. 201° (191°) (*H.* 20, 431, 441). — \*II, 748.
- $C_{16}H_{15}O_2N_3ClJ$  1) Jodmethylat d. 3-Chlor-4,6-Dimethyl-2-Phenyl-2,1,5-Benzotriazol-2<sup>3</sup>-Carbonsäure. Sm. 239° u. Zers. (*A.* 366, 400 *C.* 1909 [2] 290).
- $C_{16}H_{15}O_5NBr_2S$  1) Diäthylester d. 5,5-Dibrom-2-Phenylimido-4-Ketotetrahydrothiophen-3,3-Dicarbonsäure. Sm. 140° (*Soc.* 95, 122 *C.* 1909 [1] 1340).
- $C_{16}H_{16}ONClS$  1) 4-Chlorphenylamid d. 6-Oxy-1-Methylbenzoläthyläther-3-Thiocarbonsäure. Sm. 203° (*J. pr.* [2] 59, 589). — \*II, 921.
- $C_{16}H_{16}ONBrS$  1) 3-Bromphenylamid d. 6-Oxy-1-Methylbenzoläthyläther-3-Thiocarbonsäure. Sm. 144° (*J. pr.* [2] 59, 590). — \*II, 921.
- $C_{16}H_{16}ONBr_4J$  1) Jodmethylat d. 3,4,5,6-Tetrabrom-4'-Dimethylamido-2-Oxydiphenylmethan. Sm. 165—166° (*A.* 334, 328 *C.* 1904 [2] 988).
- $C_{16}H_{16}ON_2ClJ$  1) Jodmethylat d. Verb.  $C_{15}H_{13}ON_2Cl$ . Sm. 184° u. Zers. (*B.* 38, 4120 *C.* 1906 [1] 363).
- $C_{16}H_{16}O_2N_2ClJ$  1) Di[4-Acetylamidophenyl]jodoniumchlorid. 2 +  $HgCl_2$ , 2 +  $PtCl_4$  (*B.* 40, 4073 *C.* 1907 [2] 1834).
- $C_{16}H_{16}O_2N_2Cl_3Br1$  1) Dimethyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha$ -Brom- $\alpha\alpha$ -Di[2-Oxyphenylamido]äthan. Sm. 230° (*C.* 1908 [1] 935).
- $C_{16}H_{16}O_2N_2BrJ$  1) Di[4-Acetylamidophenyl]jodoniumbromid. Sm. 165° (*B.* 40, 4073 *C.* 1907 [2] 1834).
- $C_{16}H_{16}O_2N_2S_3As_2$  1) Di[4-Acetylamidophenylarsen]trisulfid. Sm. 208° (*D.R.P.* 205617 *C.* 1909 [1] 808).
- $C_{16}H_{16}NCl_2JS_3$  1) Dichlormethylenblaujodid (*B.* 19, 2012). — II, 810.
- $C_{16}H_{17}ONBr_3J$  1) Jodmethylat d. 2,3,5-Tribrom-4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 171—173° (*A.* 334, 332 *C.* 1904 [2] 938).
- $C_{16}H_{17}O_4N_4ClS$  1) p-Nitro-3,9-Di[Dimethylamido]phenthiazoniumchlorid (Methylengrün). 2 +  $ZnCl_2$  (*C.* 1906 [2] 1012; *J. pr.* [2] 76, 409 *C.* 1908 [1] 531).
- $C_{16}H_{17}O_2N_4BrS$  1) p-Nitro-3,9-Di[Dimethylamido]phenthiazoniumbromid +  $2H_2O$  (*B.* 39, 1021 *C.* 1906 [1] 1361; *J. pr.* [2] 76, 410 *C.* 1908 [1] 531).

- $C_{16}H_{17}O_4NCIP$  1) Diphenylehloracetylamid d. Phosphorsäuredimethylester. Sm. 104—106° (B. 41, 3594 C. 1908 [2] 1686).
- $C_{16}H_{17}O_4NBr_2S_2$  1) Butylimid d. 4-Brombenzol-1-Sulfonsäure. Sm. 116° (C. 1899 [2] 867). — \*II, 74.
- $C_{16}H_{18}ONBr_2J$  1) Jodmethylat d. 3,5-Dibrom-4'-Dimethylamido-4-Oxydiphenylmethan. Sm. 165—170° (A. 334, 338 C. 1904 [2] 989).
- $C_{16}H_{18}ON_2ClP$  1) 2-Methylphenylmonamid d. 1,2,3,4-Tetrahydro-1-Chinolyolphosphinsäuremonochlorid. Sm. 122° (A. 326, 198 C. 1903 [1] 821). — \*IV, 142.
- $C_{16}H_{18}O_2NCIS$  1) Phenylamid d. 6-Chlor-4-Isopropyl-1-Methylbenzol-3-Sulfonsäure. Sm. 181° (B. 29, 316). — \*II, 82.
- $C_{16}H_{18}O_2N_2S_4As_3$  1) Verbindung (aus Thiolessigsäure) (G. 27 [2] 162).
- $C_{16}H_{18}O_2N_3ClS$  1) Methylenazurchlorid (A. 230, 175; B. 39, 1405 C. 1906 [1] 1668; B. 39, 1805 C. 1906 [2] 58). — II, 811.
- $C_{16}H_{18}O_2N_3JS$  1) Methylenazurjodid (A. 230, 175). — II, 810.
- $C_{16}H_{18}O_3N_3ClS$  1) 2-Chlor-4-Diäthylamidoazobenzol-4'-Sulfonsäure + 2H<sub>2</sub>O (aus 3-Chlor-1-Diäthylamidobenzol). Ba + 1½H<sub>2</sub>O (B. 35, 3543 C. 1902 [2] 1504). — \*IV, 1015.
- $C_{16}H_{18}O_4N_2Cl_2S_2$  1) αβ-Di[4-Methylphenylsulfonchloramido]äthan. Sm. 136° (Soc. 87, 387 C. 1905 [1] 1587).
- $C_{16}H_{18}O_4N_2Br_2S_2$  1) αβ-Di[4-Methylphenylsulfonbromamido]äthan. Sm. 165° (Soc. 87, 387 C. 1905 [1] 1587).
- $C_{16}H_{19}O_3NBr_2S$  1) 4-Bromphenylamid d. α-Bromcampher-β-Sulfonsäure. Sm. 95° (Soc. 89, 1050 C. 1906 [2] 785).
- $C_{16}H_{20}O_2NCIS$  1) Phenylamid d. α-Chlorcamphensulfonsäure. Sm. 234° u. Zers. (Soc. 69, 1557). — III, 536; \*III, 400.
- 2) Phenylamid d. β-Chlorcamphensulfonsäure. Sm. 103—105° (Soc. 69, 1562). — III, 536; \*III, 400.
- $C_{16}H_{20}O_2NSP$  1) Diäthylmonamid d. Thiophosphorsäurediphenylester. Sm. 58° (70°) (B. 31, 1102; A. 326, 211 C. 1903 [1] 822). — \*II, 359.
- $C_{16}H_{20}O_3NCIS$  1) Phenylamid d. α-Chlorcampher-β-Sulfonsäure. Sm. 97° (Soc. 89, 1050 C. 1906 [2] 785).
- $C_{16}H_{20}O_3NBrS$  1) Phenylamid d. α-Bromcampher-β-Sulfonsäure. Sm. 106° (C. 1901 [2] 418; Soc. 81, 1452 C. 1902 [2] 1465). — \*III, 364.
- 2) 4-Bromphenylamid d. Campher-β-Sulfonsäure. Sm. 167° (C. 1901 [2] 417; Soc. 81, 1449 C. 1902 [2] 1465). — \*III, 363.
- $C_{16}H_{21}O_3N_2SP$  1) Di[4-Äthoxylphenylamid] d. Thiophosphorsäure (B. 33, 2114). — \*II, 400.
- $C_{16}H_{22}ON_2Cl_2S$  1) Verbindung (aus Thionylehlorid u. Dimethylanilin). Sm. unterhalb 100° u. Zers. (A. 310, 141). — \*II, 149.
- $C_{16}H_{23}ONClBr$  1) Verbindung (aus d. Verb. C<sub>16</sub>H<sub>23</sub>ONBr<sub>2</sub>). 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (C. 1899 [1] 1246). — \*III, 606.
- $C_{16}H_{24}ON_3Br_2P$  1) 2,4-Dibromphenylamid-1,1-Dipiperidid d. Phosphorsäure. Sm. 186° (A. 326, 236 C. 1903 [1] 867). — \*IV, 10.
- $C_{16}H_{25}ON_2SP$  1) 1,1-Dipiperidid d. Thiophosphorsäuremonophenylester. Sm. 108° (A. 326, 217 C. 1903 [1] 822). — \*IV, 10.
- $C_{16}H_{25}ON_3ClP$  1) 4-Chlorphenylmonamid d. Dipiperidylphosphinsäure. Sm. 175° (B. 28, 620).
- $C_{16}H_{25}ON_3BrP$  1) 3-Bromphenylmonamid-1,1-Dipiperidid d. Phosphorsäure (A. 326, 234 C. 1903 [1] 867).
- 2) 4-Bromphenylmonamid-1,1-Dipiperidid d. Phosphorsäure. Sm. 169° (A. 326, 233 C. 1903 [1] 867). — \*IV, 10.
- $C_{16}H_{25}O_5N_5ClBr$  1) Chlorid d. α-Bromisocapronyltetra[Amidoacetyl]amidoessigsäure (B. 39, 2896 C. 1906 [2] 1398).
- $C_{16}H_{28}O_2N_2J_4Hg_8$  1) α-Verbindung (aus Methylheptenonoxim). Sm. 114° (A. 329, 188 C. 1903 [2] 1414).
- 2) β-Verbindung (aus Methylheptenonoxim). Sm. 150° u. Zers. (A. 329, 187 C. 1903 [2] 1414).

### C<sub>16</sub>-Gruppe mit sechs Elementen.

- $C_{16}H_{19}O_3NClBrS$  1) 4-Bromphenylamid d. α-Chlorcampher-β-Sulfonsäure. Sm. 115° (Soc. 89, 1050 C. 1906 [2] 785).

**C<sub>17</sub>-Gruppe mit einem Element.**

- C<sub>17</sub>H<sub>12</sub>** C 94,4 — H 5,6 — M. G. 216.  
 1) Chrysofluoren. Sm. 187—188°; Sd. 413°. Pikrat (*B.* 18, 1934; 27, 954; 29, 828; *A.* 335, 134 *C.* 1904 [2] 1134). — *II*, 286; \**II*, 125.  
 2) Isochrysofluoren. Sm. 76°. Pikrat (Sm. 122,5°) (*B.* 27, 953). — \**II*, 125.
- C<sub>17</sub>H<sub>14</sub>** C 93,6 — H 6,4 — M. G. 218.  
 1) 2,4-Diphenyl-R-Penten. Sm. 156° (*B.* 41, 209 *C.* 1908 [1] 946).  
 2) 2,5-Diphenylisocyclopentenin. Sm. 211°; Sd. oberhalb 300° (*Bl.* [3] 25, 849).  
 3) 3-Methyl-1-Benzylideninden. Sm. 43—44° (*A.* 347, 265 *C.* 1906 [2] 957).  
 4) 1-Benzyl-naphthalin. Sm. 59; Sd. 350°. Pikrat (*Bl.* 26, 2; *J.* 1873, 390; *B.* 27, 953; *A. ch.* [6] 12, 326; *J. pr.* [2] 35, 504). — *II*, 281; \**II*, 125.  
 5) 2-Benzyl-naphthalin. Sm. 35,5°; Sd. 350°. Pikrat (*A. ch.* [6] 12, 326; *B.* 27, 954). — *II*, 281; \**II*, 125.  
 6) Trimethylanthracen. Sm. 64°. Pikrat (*J. pr.* [2] 41, 124). — *II*, 282.
- C<sub>17</sub>H<sub>16</sub>** C 92,7 — H 7,3 — M. G. 220.  
 1) 1,2,4-Trimethylanthracen. Sm. 243° (*A.* 234, 239; *B.* 20, 868). — *II*, 375.  
 2) 1,3,6-Trimethylanthracen. Sm. 222° (*J. pr.* [2] 41, 142). — *II*, 375.  
 3) 1,4,6-Trimethylanthracen. Sm. 227° (*J. pr.* [2] 35, 482). — *II*, 375.
- C<sub>17</sub>H<sub>18</sub>** C 91,9 — H 8,1 — M. G. 222.  
 1)  $\alpha$ -Phenyl- $\beta$ -[4-Isopropylphenyl]äthen. Sm. 83—84° (86°) (*Am.* 1, 314; *J. pr.* [2] 61, 177; *B.* 35, 3969 *C.* 1903 [1] 31; *A.* 333, 241 *C.* 1904 [2] 1390). — *II*, 253; \**II*, 120.  
 2) 1,2-Diphenyl-R-Pentamethylen. Sm. 47°; Sd. 305° u. ger. Zers. (*Soc.* 51, 423; 71, 131). — *II*, 253; \**II*, 120.  
 3) isom. 1,2-Diphenyl-R-Pentamethylen? Sm. 108°; Sd. noch nicht bei 340°<sub>12</sub> (*A.* 302, 222; *Soc.* 79, 1022; *C.* 1898 [1] 888). — \**II*, 120.  
 4) Retenfluoren. Sm. 96,5—97° (*A.* 229, 142). — *II*, 253.
- C<sub>17</sub>H<sub>20</sub>** C 91,1 — H 8,9 — M. G. 224.  
 1)  $\alpha\beta$ -Di[ $\beta$ -Methylphenyl]propan. Sd. 312—314° (*J. r.* 27, 302). — \**II*, 116.  
 2)  $\alpha$ -Phenyl- $\alpha$ -[ $\beta$ -Trimethylphenyl]äthan (Phenylpseudocumyläthan). Sd. 324° (*B.* 23, 3273). — *II*, 241; \**II*, 116.  
 3) 2-Methyl-5-Isopropyl-diphenylmethan. Sd. 296—297°<sub>748</sub> (*B.* 40, 2372 *C.* 1907 [2] 335).  
 4) 2,3,5,6-Tetramethyldiphenylmethan (3-Benzyl-1,2,4,5-Tetramethylbenzol). Sm. 60,5°; Sd. 310° (*J.* 1879, 373; *A. ch.* [6] 1, 516). — *II*, 241.  
 5) isom. Benzyl- $\beta$ -Tetramethylbenzol. Sm. 145°; Sd. 325—327° (*Bl.* 50, 678). — *II*, 241.  
 6)  $\beta$ -Benzyl-4-Isopropyl-1-Methylbenzol. Sd. 296—297° (308°) (*J.* 1878, 402). — *II*, 241.  
 7)  $\beta$ -[2-Naphtyl]- $\alpha$ -Methyl- $\alpha$ -Hexen. Sd. 175—178°<sub>10</sub>. Pikrat (*Bl.* [3] 25, 499).  
 8) Kohlenwasserstoff (aus Formaldehyd u. 1,4-Dimethylbenzol). Sm. 149° (*A.* 356, 128 *C.* 1907 [2] 1697).  
 C 90,3 — H 9,7 — M. G. 226.
- C<sub>17</sub>H<sub>22</sub>**  
 1)  $\alpha$ -Benzylcamphen. Sd. 170—171°<sub>20</sub> (*C. r.* 142, 678 *C.* 1906 [1] 1427).  
 2)  $\beta$ -Benzylcamphen. Sm. 24°; Sd. 150—161°<sub>11</sub> (*C. r.* 142, 680 *C.* 1906 [1] 1427).  
 3) Benzylidendihydrocamphen. Fl. (*C. r.* 142, 681 *C.* 1906 [1] 1428).  
 4) Kohlenwasserstoff (aus akt. Benzyliden-*m*-Methylecyclohexanon). Sd. 180—184°<sub>14</sub> (*C. r.* 144, 1221 *C.* 1907 [2] 406).  
 5) Kohlenwasserstoff (aus Benzyltanacetylalkohol). Sd. 165°<sub>15</sub> (*B.* 36, 4370 *C.* 1904 [1] 455).  
 6) Kohlenwasserstoff (aus Benzyl-dihydrocarvol). Sd. 166—169°<sub>10</sub> (*A.* 305, 269). — \**II*, 108.  
 7) Kohlenwasserstoff (aus Benzylfenchol). Sd. 152—154°<sub>14—15</sub> (*C. r.* 148, 1613 *C.* 1909 [2] 359).  
 8) Kohlenwasserstoff (aus Benzylfenchol). Sd. 163—166°<sub>13—14</sub> (*C. r.* 148, 1613 *C.* 1909 [2] 359).



- $C_{17}H_{22}$  9) Kohlenwasserstoff (aus Benzylpulegol). Sd. 162—164 $^{\circ}_{10}$  (A. 305, 268). — \*II, 108.
- $C_{17}H_{24}$  C 89,5 — H 10,5 — M. G. 228.
- $C_{17}H_{26}$  1) 1-Methyl-4-Isopropylhexahydrofluoren. Sd. 153—155 $^{\circ}_{10}$  (A. 305, 264). — \*II, 94.  
C 88,7 — H 11,3 — M. G. 230.
- $C_{17}H_{30}$  1)  $\varepsilon$ -Phenyl- $\beta\beta$ -Dimethyl- $\delta$ -Nonen. Sd. 153—155 $^{\circ}_{18}$  (B. 40, 3117 C. 1907 [2] 813).  
C 87,2 — H 12,8 — M. G. 234.
- $C_{17}H_{34}$  1) Kohlenwasserstoff (aus Petroleum). Sd. 190—195 $^{\circ}_{90}$  (Am. 33, 272 C. 1905 [1] 1350).  
2) Kohlenwasserstoff (aus Petroleum). Sd. 210—215 $^{\circ}_{90}$  (C. 1904 [1] 61).  
C 85,7 — H 14,3 — M. G. 238.
- $C_{17}H_{36}$  1) Heptadeken. Sd. 160 $^{\circ}_{9,5}$  (B. 22, 2135). — I, 125.  
2) Kohlenwasserstoff (aus Petroleum). Sd. 175—180 $^{\circ}_{25}$  (C. 1900 [2] 761).  
3) Kohlenwasserstoff (aus Petroleum). Sd. 177—179 $^{\circ}_{30}$  (Am. 33, 257 C. 1905 [1] 1349).  
C 85,0 — H 15,0 — M. G. 240.
- 1) norm. Heptadekan. Sm. 22,5 $^{\circ}$ ; Sd. 303 $^{\circ}$  (81%) (B. 15, 1702; 21, 2261; 22, 2133; 29, 1323; R. 15, 57; C. 1900 [2] 452; Am. 28, 176 C. 1902 [2] 1081; B. 40, 4788 C. 1908 [1] 452). — I, 106; \*I, 14.

### $C_{17}$ -Gruppe mit zwei Elementen.

- $C_{17}H_5O_6$  1) Verbindung (aus Dibromeichenrindengerbsäure) =  $(C_{17}H_5O_6)_x$  (A. 240, 335). — III, 588.
- $C_{17}H_9O_8$  C 60,0 — H 2,3 — O 37,6 — M. G. 340.
- 1) 9,10-Anthrachinon-1,2,4-Tricarbonsäure. Sm. noch nicht bei 320 $^{\circ}$ .  
 $Na + 2H_2O$ ,  $Na_2 + 3H_2O$ ,  $Ag_3$  (J. pr. [2] 41, 126). — II, 2086.
- 2) 9,10-Anthrachinon-1,3,6-Tricarbonsäure. Sm. oberhalb 300 $^{\circ}$ . Ba,  
(J. pr. [2] 41, 144). — II, 2087.
- $C_{17}H_9N$  C 89,9 — H 3,9 — N 6,2 — M. G. 227.
- 1) Nitril d. Pyrencarbonsäure. Sm. 149—150 $^{\circ}$ . Pikrat (M. 4, 253, 254).  
— II, 1480.
- $C_{17}H_9N_3$  C 80,0 — H 3,5 — N 16,5 — M. G. 255.
- 1) Nitril d.  $\alpha\beta$ -Naphthophenazin- $\beta$ -Carbonsäure. Sm. 236—237 $^{\circ}$  (B. 20, 2662). — IV, 1052.
- $C_{17}H_{10}O$  C 88,7 — H 4,3 — O 6,9 — M. G. 230.
- 1) Chrysoketon. Sm. 132,5 (B. 18, 1933; 23, 2439; 29, 826; 33, 680; A. 311, 268; A. 335, 132 C. 1904 [2] 1134). — III, 257; \*III, 196.
- 2) Allochrysoketon. Sm. 157 $^{\circ}$  (B. 40, 3844 C. 1907 [2] 1693).
- 3)  $\alpha$ -Phenylen- $\beta\beta$ -Naphtylenketon. Sm. 152 $^{\circ}$  (A. 369, 293 C. 1909 [2] 2168).
- 4) Benzanthon. Sm. 170 $^{\circ}$  (B. 38, 195 C. 1905 [1] 448; D.R.P. 176018 C. 1906 [2] 1787; D.R.P. 176019 C. 1906 [2] 1788).
- 5) Verbindung (aus Isophenanthroxylenacetessigsäure). Sm. noch nicht bei 310 $^{\circ}$  (Soc. 59, 13). — II, 1909.
- $C_{17}H_{10}O_2$  C 82,9 — H 4,0 — O 13,0 — M. G. 246.
- 1) Phenylen- $\alpha$ -Naphtylenketonoxyd. Sm. 155 $^{\circ}$  (B. 19, 2612; 25, 1643).  
— III, 256.
- 2) Phenylen- $\beta$ -Naphtylenketonoxyd. Sm. 140 $^{\circ}$  (B. 25, 1643; B. 38, 2117 C. 1905 [2] 246). — III, 256.
- 3) Pyrencarbonsäure. Sm. 267 $^{\circ}$ .  $Ca + H_2O$ ,  $Ba + 2\frac{1}{2}H_2O$  (M. 4, 257).  
— II, 1480.
- $C_{17}H_{10}O_3$  C 77,9 — H 3,8 — O 18,3 — M. G. 262.
- 1) 5-Benzoyl-1,4-Naphtochinon. Sm. 152 $^{\circ}$  (A. 247, 182). — III, 254.
- 2) 6-Benzoyl-1,4-Naphtochinon. Sm. 130—132 $^{\circ}$  (A. 247, 186). — III, 255.
- 3) 1,1'-Dibenzfuranketon (Dicumarylketon). Sm. 154 $^{\circ}$  (A. 312, 333). — \*III, 534.
- 4)  $\alpha$ -Oxy- $\alpha$ -Phenonaphtoxanthon. Sm. 270 $^{\circ}$  (B. 25, 1646). — III, 256.
- 5)  $\beta$ -Oxy- $\beta$ -Phenonaphtoxanthon. Sm. 290 $^{\circ}$  (B. 25, 1646). — III, 256.
- 6) 9-Oxynaphtoxanthon. Sm. 287—290 $^{\circ}$  (B. 38, 2124 C. 1905 [2] 247).

- C<sub>17</sub>H<sub>10</sub>O<sub>3</sub>** 7) Verbindung (aus Oxalyldibenzylketon). Sm. 237—239° u. Zers. Na + 3H<sub>2</sub>O (A. 284, 272). — III, 320.
- 8) Verbindung (aus d. Verb. C<sub>26</sub>H<sub>12</sub>O<sub>5</sub>). Sm. 273—275° (G. 37 [2] 308 C. 1907 [2] 1796).
- C<sub>17</sub>H<sub>10</sub>O<sub>4</sub>** C 73,4 — H 3,6 — O 23,0 — M. G. 278.
- 1) 3,4-Methylenäther d. 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydroindon. Sm. 209° (B. 30, 1185). — \*III, 235.
- 2) 3-Oxy-5-Benzoyl-1,4-Naphtochinon. Sm. 220—222° u. Zers. (A. 247, 185). — III, 255.
- 3) 3-Oxy-1-Methylbrasanchinon. Sm. 315° (B. 42, 823 C. 1909 [1] 1162).
- 4) Methyläther d. 3-Oxybrasanchinon. Sm. 290° (B. 41, 2375 C. 1908 [2] 714).
- 5) Acetat d. Anhydroindonresorcinäther. Sm. 191—192° (B. 32, 923). — \*III, 187.
- C<sub>17</sub>H<sub>10</sub>O<sub>5</sub>** C 69,4 — H 3,4 — O 27,2 — M. G. 294.
- 1) Säure (aus Phenol) (G. 14, 103). — II, 649.
- C<sub>17</sub>H<sub>10</sub>O<sub>6</sub>** C 65,8 — H 3,2 — O 31,0 — M. G. 310.
- 1) Anthracen-1,2,4-Tricarbonsäure. Ag<sub>3</sub> (J. pr. [2] 41, 129). — II, 2037.
- C<sub>17</sub>H<sub>10</sub>O<sub>7</sub>** C 62,6 — H 3,0 — O 34,3 — M. G. 326.
- 1) 2,3 [oder 3,4]-Anhydrid d. 5-Benzoxyl-1-Methylbenzol-2,3,4-Tricarbonsäure. Sm. 187—189° (B. 35, 2919 C. 1902 [2] 1042).
- C<sub>17</sub>H<sub>10</sub>O<sub>9</sub>** C 57,0 — H 2,8 — O 40,2 — M. G. 358.
- 1) Biphenyl-2,3,5-Tricarbonsäure-6-Ketocarbonsäure (C. 1908 [2] 1358).
- 2) Biphenyl-2,3,6-Tricarbonsäure-5-Ketocarbonsäure (C. 1908 [2] 1358).
- C<sub>17</sub>H<sub>10</sub>N<sub>4</sub>** C 75,6 — H 3,7 — N 20,7 — M. G. 270.
- 1) 2,3<sup>2</sup>-Anhydrid d. 3-[2-Oxy-1-Naphtyl]azoinadazol. Sm. 249° (B. 32, 1799). — \*IV, 1081.
- 2) Azoimid d. 2-[2-Amidophenyl]-peri-Naphtimidazol. Zers. bei 140° (B. 42, 3682 C. 1909 [2] 1664).
- C<sub>17</sub>H<sub>11</sub>N** C 89,1 — H 4,8 — N 6,1 — M. G. 229.
- 1) α-Anthrachinolin. Sm. 170°; Sd. 446°. HCl, (2HCl, PtCl<sub>4</sub>), HJ, H<sub>2</sub>SO<sub>4</sub>, Pikrat (A. 201, 344; B. 17, 170). — IV, 461.
- 2) β-Anthrachinolin (B. 29, 708). — IV, 463.
- 3) 9,10-Phenanthrochinolin. Sm. 174°. HNO<sub>3</sub> (B. 41, 1998 C. 1908 [2] 330).
- 4) α-Naphtophenanthridin. Sm. 135,5°. HCl + H<sub>2</sub>O, Pikrat (A. 335, 127 C. 1904 [2] 1133).
- 5) β-Naphtophenanthridin. Sm. 182°. HCl (A. 335, 129 C. 1904 [2] 1133).
- 6) α-Chrysidin (2,1-Naphtakridin). Sm. 108°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, Pikrat (A. 266, 163; B. 37, 2924 C. 1904 [2] 1411; A. 355, 349 C. 1907 [2] 1509). — IV, 463.
- 7) β-Chrysidin (1,2-Naphtakridin). Sm. 131°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HNO<sub>3</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> + 2H<sub>2</sub>O, Pikrat (A. 266, 166; B. 35, 2670 C. 1902 [2] 650; B. 37, 2926 C. 1904 [2] 1412; B. 37, 3078 C. 1904 [2] 1474; B. 39, 2624 C. 1906 [2] 1204; A. 355, 351 C. 1907 [2] 1509). — IV, 464; \*IV, 279.
- 8) Phenonaphtakridin. Sm. 225—226°. (2HCl, PtCl<sub>4</sub>) (B. 27, 2843). — IV, 464.
- C<sub>17</sub>H<sub>11</sub>N<sub>3</sub>** C 79,4 — H 4,3 — N 16,3 — M. G. 257.
- 1) 3-Phenyl-1,2,4-Naphtisotriazin. Sm. 145° (B. 33, 751). — \*IV, 877.
- 2) Nitril d. αβ-Di[2-Cyanphenyl]propionsäure. Sm. 114° (B. 27, 835, 2492). — II, 2025.
- C<sub>17</sub>H<sub>12</sub>O** C 88,0 — H 5,1 — O 6,9 — M. G. 232.
- 1) Chrysofluorenalkohol. Sm. 166—167° (B. 18, 1934). — II, 1083.
- 2) Phenyl-1-Naphtylketon. Sm. 75,5°; Sd. 385°. Pikrat (B. 6, 541, 1238, 1246; A. ch. [6] 12, 338; A. 264, 196; Bl. 40, 166; [3] 15, 71; J. pr. [2] 35, 508; B. 37, 628 C. 1904 [1] 810; R. 26, 280 C. 1907 [2] 1243; C. r. 146, 769 C. 1908 [1] 1928; Bl. [4] 3, 916 C. 1908 [2] 1357; C. 1909 [2] 23). — III, 254; \*III, 194.
- 3) Phenyl-2-Naphtylketon. Sm. 82°; Sd. 398°<sub>754</sub>. Pikrat (B. 6, 541, 1239, 1246; Bl. [3] 15, 71; J. pr. [2] 35, 503; A. ch. [6] 12, 341; R. 26, 280 C. 1907 [2] 1243; C. r. 146, 769 C. 1908 [1] 1928; C. 1909 [2] 23). — III, 255; \*III, 195.

$C_{17}H_{12}O$ 

4) 1-Methylphenanthrenfuran (Methylbiphenylenfuran). Sm. 123–124° (B. 17, 2829; 21, 2933). — III, 447.

5)  $\beta$ -Phenylennaphtylenmethanoxyd. Sm. 80° (A. 257, 89). — II, 1002.

6) Verbindung (aus Phenanthroxylencrotonsäureäthylester). Sm. 215° (B. 16, 280; Soc. 59, 10). — II, 1906.

 $C_{17}H_{12}O_2$ 

C 82,2 — H 4,8 — O 12,9 — M. G. 248.

1) Dioxystilbenacetonanhydrid. Sm. 215° (B. 38, 1628 C. 1905 [1] 1557).

2) 1,3-Diketo-2-[2-Methylbenzyliden]-2,3-Dihydroinden. Sm. 156° (B. 40, 3891 C. 1907 [2] 1495).

3) 1,3-Diketo-2,2-[1,2-Xylylen]-2,3-Dihydroinden. Sm. 150° (B. 40, 3890 C. 1907 [2] 1495).

4) polym. 1,3-Diketo-2,2-[1,2-Xylylen]-2,3-Dihydroinden. Sm. 245° (B. 40, 3890 C. 1907 [2] 1495).

5) Anhydrophenanthrenacetonechinon. Sm. 195° (B. 17, 2827). — III, 447.

6) 2,6-Diphenyl-1,4-Pyron. Sm. 138,5–139,5° (2HCl, PtCl<sub>4</sub>) (B. 23, 3735; Soc. 93, 434 C. 1908 [1] 1703). — III, 304.

7) Pheno- $\alpha$ -Naphtoxanthidrol. 2 Chlorid + PtCl<sub>4</sub> (B. 34, 3303). — \*III, 585.

8) Methyläther d. 3-Oxybrasan. Sm. 205–206° (B. 41, 2376 C. 1908 [2] 714).

9) Diphenospiropyran. Sm. 102° (B. 41, 3005 C. 1908 [2] 1187).

10)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butenin- $\alpha$ -Carbonsäure (A. 306, 218). — \*II, 878.

11) 2-Phenylnaphtalin-1-Carbonsäure ( $\beta$ -Chrysensäure). Sm. 114°. Ag (B. 33, 681; A. 335, 129 C. 1904 [2] 1134). — \*II, 878.

12) 2-Phenylnaphtalin-2<sup>c</sup>-Carbonsäure (Chrysensäure). Sm. 186,5° (190°). Ba (B. 23, 2440; 33, 681; A. 311, 270). — II, 1480; \*II, 878.

13) Lakton d.  $\gamma$ -Oxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure (L. d. Cornicularsäure). Sm. 141–142° (A. 219, 23; 306, 219; B. 15, 1547). — II, 1720; \*II, 1016.

14) Lakton d.  $\delta$ -Oxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta$ -Carbonsäure (Benzalphenylcrotonlakton). Sm. 150° (A. 306, 157). — \*II, 1017.

15) isom. Benzalphenylcrotonlakton. Sm. 163° (A. 306, 164). — \*II, 1017.

16) 1-Naphtylester d. Benzolcarbonsäure. Sm. 56° (Z. 1869, 216). — II, 1148.

17) 2-Naphtylester d. Benzolcarbonsäure. Sm. 107°. + AlCl<sub>3</sub> (Z. 1869, 216; Bl. [3] 9, 1050; C. 1896 [2] 429). — II, 1149.

18) Verbindung (aus Phenanthroxylencrotonsäureäthylester). Sm. 276 bis 277° u. Zers. (Soc. 59, 18). — II, 1908.

19) Verbindung (aus 2-[2-Oxynaphtoyl]benzol-1-Carbonsäure). Sm. 114° (B. 16, 306). — II, 1909.

 $C_{17}H_{12}O_3$ 

C 77,3 — H 4,5 — O 18,2 — M. G. 264.

1) Methylenäther d. 5,6-Dioxy-1-Keto-2-Benzyliden-2,3-Dihydroinden. Sm. 200° (Soc. 91, 1085 C. 1907 [2] 602).

2) Methylenäther d. 1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 179–180° (B. 34, 414). — \*III, 189.

3) 2,4,5-Triketo-1,3-Diphenyl-R-Pentamethylen (B. 27, 1353).

4) 5-Oxy-1,3-Diketo-2,4-Diphenyl-2,3-Dihydro-R-Penten (Oxalyldibenzylketon). Sm. 192–193°. Ag (A. 284, 250). — III, 319.

5) 1,4-Dioxy-5-Benzoylnaphtalin. Sm. 190–191° u. Zers. (A. 247, 183). — III, 255.

6) 1,8-Dioxy-2-Benzoylnaphtalin (Phenyl-1,8-Dioxy-2-Naphtylketon). Sm. 121–122° (C. 1901 [2] 1287; D.R.P. 129035 C. 1902 [1] 688; D.R.P. 129036 C. 1902 [1] 689). — \*III, 195.

7)  $\beta$ -Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 103–106° (A. 257, 93). — III, 255.

8)  $\beta$ -Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 168–169°. K<sub>2</sub> (A. 257, 90). — III, 255.

9)  $\gamma$ -Keto- $\gamma$ -[1-Oxy-2-Naphtyl]- $\alpha$ -Furanylpropen. Sm. 121–122° (B. 32, 1039). — \*III, 522.

10) Methyläther d. 3-Oxy-2-Phenyl-1,4-Naphtochinon. Sm. 122–123° (A. 296, 20). — \*III, 327.

11) 2-Oxybenzol-2-Naphtyläther-1-Carbonsäure. Sm. 121° (124°) (D.R.P. 158998 C. 1905 [1] 843; B. 38, 2116 C. 1905 [2] 246).



- C<sub>17</sub>H<sub>12</sub>O<sub>8</sub>** 12)  $\delta$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Butin- $\gamma$ -Carbonsäure. Sm. 135°. K + 2H<sub>2</sub>O (B. 21, 1488). — II, 1720.
- 13) 2,5-Diphenylfuran-3-Carbonsäure. Sm. 217°. Na, Ag (B. 21, 1489, 3059; A. 308, 174; Soc. 57, 951). — III, 713; \*III, 508.
- 14) 1-Keto-3-Phenylinden-2-Methylcarbonsäure. Sm. 167,5°. Ba + 3H<sub>2</sub>O, Ag (B. 35, 1729 C. 1902 [2] 54; B. 41, 4382 C. 1909 [1] 375).
- 15) Anhydrid d.  $\alpha\alpha$ -Diphenylpropen- $\beta\gamma$ -Dicarbonsäure. Sm. 151—152° (147—150° u. Zers.) (A. 308, 98; A. 330, 354 C. 1904 [1] 929; B. 41, 3723 C. 1908 [2] 1827). — \*II, 1100.
- 16) Anhydrid d.  $\gamma\gamma$ -Diphenylpropen- $\alpha\beta$ -Dicarbonsäure. Sm. 96—98°. + C<sub>6</sub>H<sub>6</sub> (A. 330, 357 C. 1904 [1] 929).
- 17) Lakton d.  $\gamma$ -Keto- $\beta$ -Oxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 231—233° (A. 282, 20).
- 18)  $\alpha\gamma$ -Lakton d.  $\beta\gamma$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure (Pulvinon). Sm. 248—249°. Na + 4H<sub>2</sub>O, K + 4H<sub>2</sub>O, Ba + 8H<sub>2</sub>O, Ag (A. 284, 277). — II, 1899.
- 19) Lakton d.  $\gamma$ -Oxy- $\alpha\gamma$ -Diphenylpropen- $\beta$ -Ketocarbonsäure. Sm. 167° (B. 32, 1451). — \*II, 1100.
- 20) Lakton d. 3-Keto-1-Oxy-1-Phenyl-2,3-Dihydroinden-2-Methylcarbonsäure. Sm. 119—120° (B. 35, 1735 C. 1902 [2] 55).
- 21) Aldehyd d. 2-Benzoxynaphtalin-1-Carbonsäure. Sm. 109° (Bl. [3] 29, 879 B. 1903 [2] 885).
- 22) Phenylester d. 1-Oxynaphtalin-2-Carbonsäure. Sm. 96° (B. 20, 2700). — II, 1687.
- 23) Phenylester d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 128—129° (B. 34, 4143 C. 1902 [1] 315).
- 24) 1-Naphtylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 83° (D.R.P. 38973, 43713). — \*II, 888.
- 25) 2-Naphtylester d. 2-Oxybenzol-1-Carbonsäure (Betol). Sm. 95° (93°) (J. pr. [2] 61, 550; D.R.P. 38973, 43713; Ph. Ch. 29, 51). — \*II, 888.
- C<sub>17</sub>H<sub>12</sub>O<sub>4</sub>** C 72,9 — H 4,3 — O 22,8 — M. G. 280.
- 1) 3-Methyläther d. 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydrobenzol. Sm. 212° (B. 30, 1186). — \*III, 235.
- 2) 5,6-Methylenäther d. 5,6-Dioxy-1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Zers. bei 250° (Soc. 91, 1097 C. 1907 [2] 604).
- 3) 5,6-Dioxy-2-Keto-1-Cinnamyliden-1,2-Dihydrobenzofuran (Dioxy-cinnamylidencumaranon). Sm. 236° (B. 30, 2951; B. 37, 826 C. 1904 [1] 1152). — \*III, 534.
- 4) 3-Acetoxyphenanthren-2-Carbonsäure. Sm. 207—208° (B. 35, 4427 C. 1903 [1] 334).
- 5) 2-Acetoxyphenanthren-3-Carbonsäure. Sm. 210° (B. 35, 4428 C. 1903 [1] 334).
- 6) 2-Acetoxyphenanthren-9-Carbonsäure. Sm. 223° (B. 39, 3123 C. 1906 [2] 1332).
- 7)  $\beta$ -Dimethyl-9,10-Anthrachinon- $\beta$ -Carbonsäure. Sm. 239—240° (A. 234, 241). — II, 1905.
- 8) Gem. Anhydrid d. Benzolcarbonsäure u.  $\beta$ -Benzoylakrylsäure. Sm. 158° (C. r. 147, 250 C. 1908 [2] 867).
- 9) Lakton d.  $\gamma$ -Oxy- $\beta$ -Phenyl- $\gamma$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\alpha$ -Carbonsäure. Sm. 143° (B. 38, 3128 C. 1905 [2] 1429).
- 10) Lakton d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 183° (A. 333, 264 C. 1904 [2] 1392; B. 38, 3128 C. 1905 [2] 1429).
- 11)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure (Ketophenylparakophenon). Sm. 212° u. Zers. (215°) (A. 281, 47; Soc. 89, 1243 C. 1906 [2] 1118). — II, 1978.
- 12)  $\alpha\gamma$ -Lakton d.  $\gamma$ -Oxy- $\gamma\gamma$ -Diphenylpropen- $\alpha\beta$ -Dicarbonsäure + H<sub>2</sub>O ( $\gamma\gamma$ -Diphenylakonsäure). Sm. 100—101° (138—139° wasserfrei). Ca, Ba + 2 $\frac{1}{2}$  H<sub>2</sub>O, Ag (A. 308, 106). — \*II, 1150.
- 13) 8,9-Lakton d. 3,4,8-Trioxypheanthren-3,4-Dimethyläther-9-Carbonsäure. Sm. 160° (B. 39, 3120 C. 1906 [2] 1331).
- 14) Äthylester d. 9,10-Anthrachinon-1-Carbonsäure. Sm. 169° (A. 290, 232; B. 30, 1116). — \*II, 1103.

- C<sub>17</sub>H<sub>12</sub>O<sub>4</sub>**
- 15) Äthylester d. 9,10-Anthrachinon-2-Carbonsäure. Sm. 147° (B. 17, 890). — II, 1904.
  - 16) Acetat d. 3-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 134—135° (B. 31, 2795). — \*III, 323.
  - 17) Acetat d. 4-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 179—180° (B. 20, 2069). — III, 449.
  - 18) Acetat d. 4-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 177° (B. 16, 702). — III, 451.
  - 19) Acetat d. 1-[4-Oxybenzoyl]benzofuran. Sm. 116—117° (B. 41, 1339 C. 1908 [1] 1981).
  - 20) Acetat d. 7-Oxy-4-Phenyl-1,2-Benzpyron (A. d.  $\beta$ -Phenylumbelliferon). Sm. 123° (B. 27, 1999). — II, 1889.
  - 21) Acetat d. 3-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 110—111° (B. 37, 2820 C. 1904 [2] 712).
  - 22) Acetat d. 6-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 157—158° (B. 32, 332). — \*III, 561.
  - 23) Acetat d. 7-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 129—130° (B. 31, 704). — \*III, 561.
  - 24) Acetat d. 2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 97° (B. 34, 1693). — \*III, 561.
  - 25) Acetat d. 2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 137° (B. 33, 2516). — \*III, 561.
  - 26) Benzoat d. 7-Oxy-4-Methyl-1,2-Benzpyron. Sm. 159—160° (B. 16, 2124). — II, 1780.  
C 68,9 — H 4,0 — O 27,0 — M. G. 296.
- C<sub>17</sub>H<sub>12</sub>O<sub>5</sub>**
- 1) 3',4'-Methylenäther-5-Methyläther d. 5-Oxy-2-Keto-1-[3,4-Dioxybenzoliden]-1,2-Dihydrobenzofuran. Sm. 175° (176°) (B. 29, 1755; 30, 302; 32, 311, 313). — \*III, 533.
  - 2) 3,4,5-Trioxyphenyl-4-Oxy-1-Naphtylketon. Sm. 246° u. Zers. Na (A. 269, 313; D.R.P. 50450, 50451). — III, 256; \*III, 195.
  - 3) 2,3,4-Trioxyphenyl-3-Oxy-2-Naphtylketon. Sm. 287—289° (B. 30, 2594). — \*III, 195.
  - 4)  $\gamma$ -Keto- $\beta\gamma$ -Diphenylpropen- $\alpha\alpha$ -Dicarbonsäure (Desylenmalonsäure). Sm. 130°. Ag<sub>2</sub> (Soc. 67, 136). — II, 1981.
  - 5)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 208—209° (A. 333, 255 C. 1904 [2] 1391).
  - 6) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 205° (A. 333, 255 C. 1904 [2] 1391).
  - 7) Lakton d.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]äthan-3,4-Methylenäther- $\alpha$ -Ketocarbonsäure. Sm. 205° (B. 36, 2346 C. 1903 [2] 433).
  - 8) isom. Lakton d.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[3,4-Dioxyphenyl]äthan-3,4-Methylenäther- $\alpha$ -Ketocarbonsäure. Sm. 205° (B. 36, 2346 C. 1903 [2] 433).
  - 9) Citrakonfluorescein + 4 H<sub>2</sub>O. Zers. bei 230—240°. Na<sub>2</sub>, Ca + 8 H<sub>2</sub>O, Pb, Pb + 2 PbO (Soc. 59, 303; 63, 677; B. 29, 2824). — II, 2026; \*II, 1184.
  - 10) Dimethylester d. 9-Ketofluoren-1,7-Dicarbonsäure. Sm. 184° (188 bis 189°) (A. 229, 154; M. 29, 767 C. 1908 [2] 1602). — II, 1979.
  - 11) Monoacetat d. Chrysophansäure. Sm. 152° (A. 309, 39). — \*III, 323.
  - 12) Monacetat d. 2,4-Dioxy-1-Methyl-9,10-Anthrachinon (M. d. Rubiadin). Sm. 225° (Soc. 65, 184). — III, 449.
  - 13) 1-Acetat d. 1,2-Dioxy-9,10-Anthrachinon-2-Methyläther. Sm. 186 bis 187° (Soc. 65, 185). — III, 422.
  - 14) 2-Acetat d. 1,2-Dioxy-9,10-Anthrachinon-1-Methyläther. Sm. 209 bis 210° (196—198°) (Soc. 63, 1175; 75, 446). — III, 422; \*III, 302.
  - 15) 4-Acetat d. 3,4-Dioxy-9,10-Phenanthrenchinon-3-Methyläther (Acetylmethylmorpholchinon). Sm. 205—207° (208—209°) (corr.) (B. 31, 52, 2924, 3200; B. 35, 4415 C. 1903 [1] 344; B. 39, 3254 C. 1906 [2] 1336). — \*III, 318.
  - 16) Acetat d. Morindadiol. Sm. 229° (Ar. 246, 155 C. 1908 [1] 1844).
  - 17) Acetat d. Soranjidiol. Sm. 230° (Ar. 246, 157 C. 1908 [1] 1844).
  - 18) Verbindung (aus d. Wurzel von Ventilago madraspatana) (Soc. 65, 938). — III, 454.

$C_{17}H_{12}O_6$ 

C 65,4 — H 3,8 — O 30,8 — M. G. 312.

- 1) Fukugetin +  $1\frac{1}{2}H_2O$ . Sm. 288—290° (wasserfrei) (*Soc.* 85, 59 *C.* 1904 [1] 380, 729).
- 2) Lupigenin.  $NH_4 + H_2O$  (*B.* 11, 2201). — III, 597.
- 3) 2,5-Dioxy-9,10-Anthrachinon-2,5-Dimethyläther-1-Carbonsäure (Dimethylrhein). Sm. 283—284° (*Soc.* 95, 1093 *C.* 1909 [2] 623).
- 4)  $\alpha$ ,2-Lakton d. 4,5-Dioxy-1-[ $\alpha$ -Oxy- $\beta$ -Benzoxyläthyl]benzol-4,5-Methylenäther-2-Carbonsäure. — II, 1992.
- 5)  $\alpha$ ,2-Lakton d.  $\alpha\beta$ -Diphenyläthan- $\alpha$ ,2,2'-Tricarbonsäure. Sm. 204 bis 207°.  $Ba + H_2O$ ,  $Ag_2$  (*B.* 27, 2502). — II, 2056.
- 6) Monomethylester d. Diphtalylsäure. Sm. 275° (*A.* 311, 266). — \*II, 1185.
- 7) Äthylester d. 2,5-Dioxy-9,10-Anthrachinon-1-Carbonsäure (Rhein-äthylester). Sm. 159° (*Soc.* 95, 1091 *C.* 1909 [2] 623).
- 8) Acetat d. Emodin. Sm. 179—180° (*A.* 183, 162). — III, 454.
- 9) Acetat d. isom. Emodin. Sm. 168° (*C.* 1905 [1] 389).
- 10) Acetat d. Pseudobaptigenin. Sm. 173° (*C.* 1897 [2] 1077). — \*III, 433.
- 11) Diacetat d. 1,3-Dioxyxanthon. Sm. 144° (*B.* 24, 3981). — III, 204.
- 12) Diacetat d. 1,7-Dioxyxanthon. Sm. 185° (*B.* 10, 1402). — III, 206.
- 13) Diacetat d. 2,3-Dioxyxanthon. Sm. 186° (*B.* 37, 2735 *C.* 1904 [2] 542).
- 14) Diacetat d. 3,4-Dioxyxanthon. Sm. 161° (*B.* 24, 969). — III, 204.
- 15) Diacetat d. 3,6-Dioxyxanthon. Sm. 124—130° (200—202°) (*A.* 254, 302; *B.* 32, 2105). — III, 205; \*III, 158.
- 16) Diacetat d.  $\beta$ -Isoxanthon. Sm. 175° (*A.* 254, 301). — III, 206.

 $C_{17}H_{12}O_7$ 

C 62,2 — H 3,6 — O 34,2 — M. G. 328.

- 1) Trimethyläther d. Resoflavin. Sm. 286—288° (283—285°) (*A.* 351, 26 *C.* 1907 [1] 1428; *M.* 29, 673 *C.* 1908 [2] 1263).
- 2) Acetylaloëxantin (*J.* 1877, 910). — III, 618.
- 3) Monacetat d. Rhein. Sm. 262—265° (*B.* 28 [2] 1058).
- 4) Diacetat d. 7,8-Dioxy-2-[2-Furanyl]-1,4-Benzpyron. Sm. 201° (*B.* 29, 2435). — III, 728.

 $C_{17}H_{12}N_2$ 

C 83,6 — H 4,9 — N 11,5 — M. G. 244.

- 1) 2-Phenyl- $\alpha$ -Naphtimidazol. Sm. 217°.  $HCl + 1\frac{1}{2}H_2O$ , (2HCl,  $PtCl_4 + 2H_2O$ ), (HCl,  $AuCl_3$ ),  $HNO_3$ ,  $H_2SO_4$ , Benzozat (*B.* 34, 935; *A.* 208, 328; 263, 314; *Soc.* 59, 705). — IV, 1061; \*IV, 715.
  - 2) 2-Phenyl- $\beta\beta$ -Naphtimidazol. Sm. 210—211°.  $HCl$ ,  $H_2SO_4$  (*J. pr.* [2] 73, 567 *C.* 1906 [2] 885).
  - 3) 2-Phenyl-peri-Naphtimidazol. Sm. 187°.  $HCl$ ,  $HNO_3$ , Pikrat (*Ch. Z.* 26, 5; *A.* 365, 94 *C.* 1909 [1] 1412). — \*IV, 716.
  - 4) 8-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 179° (*B.* 42, 1385 *C.* 1909 [1] 1710).
  - 5) 9-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 179,8° (*B.* 19, 917). — IV, 1063; \*IV, 715.
  - 6) 10-Methyl- $\alpha\beta$ -Naphtophenazin (Naphtomethylphenazin). Sm. 169°. Pikrat (*B.* 20, 578; 27, 2778; D.R.P. 157861 *C.* 1905 [1] 483; *B.* 38, 1815 *C.* 1905 [1] 1655). — IV, 1063; \*IV, 715.
  - 7) 9-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 208,5°; subl. bei 240°<sub>13</sub> (*B.* 34, 2449). — \*IV, 716.
  - 8) 2'-Amido-1,2-Naphtakridin. Sm. 238° (D.R.P. 123260 *C.* 1901 [2] 568). — \*IV, 716.
  - 9) 3'-Amido-1,2-Naphtakridin. Sm. 270°.  $HCl$ , (2HCl,  $ZnCl_2$ ), (2HCl,  $PtCl_4$ ),  $H_2CrO_4$  (*B.* 37, 3082 *C.* 1904 [2] 1474; *B.* 39, 2438 *C.* 1906 [2] 887).
  - 10) Amidophenakridin.  $HCl$ ,  $HNO_3$  (D.R.P. 130360 *C.* 1902 [1] 1032; *C.* 1906 [1] 58).
  - 11) Verbindung (aus Phenanthrenchinon). Sm. 127—128°. (2HCl,  $PtCl_4$ ) (*B.* 21, 2362). — III, 445.
- C 75,0 — H 4,4 — N 20,6 — M. G. 272.
- 1) 4-Cyanamido-1-Phenylazonaphtalin. Sm. 176—180° (*C. r.* 143, 343 *C.* 1906 [2] 1055).
  - 2) 3-Imido-2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin ( $\beta$ -Naphtophenyliminoketotriazin). Sm. 160°.  $HCl$ ,  $H_2Cr_2O_7$  (*C.* 1908 [2] 1587).
  - 3) Nitril d. 5-[ $\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 167,5°. — IV, 1170.

 $C_{17}H_{12}N_4$



- C<sub>17</sub>H<sub>12</sub>Cl<sub>4</sub>** 1)  $\gamma\gamma$ -Dichlor- $\alpha\epsilon$ -Di[4-Chlorphenyl]- $\alpha\delta$ -Pentadien. Sm. 102—103°. + SnCl<sub>4</sub> (B. 39, 2998 C. 1906 [2] 1429).
- C<sub>17</sub>H<sub>12</sub>Br<sub>2</sub>** 1) Trimethyldibromanthracen. Sm. 105° u. Zers. (J. pr. [2] 41, 126). — II, 282.
- C<sub>17</sub>H<sub>18</sub>N** C 88,3 — H 5,6 — N 6,1 — M. G. 231.
- 1) 1-Benzylidenamidonaphtalin. Sm. 73° (A. 171, 138; M. 9, 698; D.R.P. 157617 C. 1905 [1] 316). — III, 31.
- 2) 2-Benzylidenamidonaphtalin. Sm. 102—103° (112°) (M. 9, 698; A. 237, 273; D.R.P. 157617 C. 1905 [1] 316). — III, 31.
- 3) 1-Phenylimidomethylnaphtalin ( $\alpha$ -Naphthobenzylidenanilin). Sm. 71° (B. 22, 2149). — III, 63.
- 4) 2-Phenylimidomethylnaphtalin. Sm. 113° (Soc. 89, 276 C. 1906 [1] 1487).
- 5) Benzyliden-1-Phenylpyrrol (oder C<sub>34</sub>H<sub>28</sub>N<sub>2</sub>). Sm. 265,5° (B. 35, 1655 C. 1902 [1] 1358). — \*IV, 67.
- 6) 2,6-Diphenylpyridin. Sm. 81°; Sd. 396—398° u. ger. Zers. (HCl, AuCl<sub>3</sub>), (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), H<sub>2</sub>CrO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (B. 20, 2764; 28, 1731; 29, 798; 30, 1499; A. 249, 122; B. 42, 2022 C. 1909 [2] 291). — IV, 455.
- 7) 2-[ $\beta$ -Phenyläthenyl]chinolin (Benzylidenchinaldin). Sm. 100° (98—99°). HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> + 2½ H<sub>2</sub>O (B. 16, 2006, 2008; 22, 3008; 32, 3604; A. 318, 85; B. 39, 2749 C. 1906 [2] 1203). — IV, 454; \*IV, 272.
- 8) 4-[ $\beta$ -Phenyläthenyl]chinolin. Sm. 92° (B. 18, 1646; 21, 2172). — IV, 455.
- 9) 2-Methyl-1,2-Naphtocarbazol. Sm. 181°. Pikrat (B. 31, 1698; A. 332, 103 C. 1904 [1] 1571). — \*IV, 273.
- 10) Dihydrophenonaphtakridin. Sm. 287° (B. 26, 2597; 27, 2840). — IV, 456.
- 11) Nitril d.  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 118—119° (B. 23, 2856). — II, 1479.
- 12) Verbindung (aus 4-Methylphenyl-2-Naphtylamin). Sm. 223—224° (B. 40, 864 C. 1907 [1] 1054).
- C<sub>17</sub>H<sub>13</sub>N<sub>3</sub>** C 78,8 — H 5,0 — N 16,2 — M. G. 259.
- 1) 5-Amido-10-Methyl- $\alpha\beta$ -Naphtophenazin (Eurhodin). HCl + H<sub>2</sub>O (B. 18, 1119; 19, 442; 23, 2454). — IV, 1209.
- 2) 9-Amido-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 250°. HCl (B. 38, 1814 C. 1905 [1] 1655).
- 3) 1-Amido-2-Phenyl- $\beta\beta$ -Naphtimidazol. Sm. 264° u. Zers. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (J. pr. [2] 73, 557 C. 1906 [2] 884).
- 4) 2-Phenylamido-peri-Naphtimidazol. Sm. 245°. Pikrat (A. 365, 145 C. 1909 [1] 1822).
- 5) 2-[2-Amidophenyl]-peri-Naphtimidazol. Sm. 148—150° (B. 42, 3679 C. 1909 [2] 1664).
- 6) 2-[3-Amidophenyl]-peri-Naphtimidazol. Sm. 175—180° (B. 42, 3680 C. 1909 [2] 1664).
- 7) 2-[4-Amidophenyl]-peri-Naphtimidazol. Sm. 205° u. Zers. (B. 42, 3681 C. 1909 [2] 1664).
- 8) 3-[4-Methylphenyl]- $\beta$ -Naphtisotriazol. Sm. 145° (B. 31, 1698). — \*IV, 827.
- 9) 1-[4-Methylphenyl]- $\beta\beta$ -Naphtisotriazol. Sm. 145° (A. 332, 103 C. 1904 [1] 1571).
- 10) 2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin + ⅔ H<sub>2</sub>O. Sm. 164°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 24, 1003). — IV, 1393.
- 11) 3',7'-Diamido-1,2-Naphtakridin. Sm. 180° (B. 39, 2444 C. 1906 [2] 888).
- 12) Methylrosindulin. Zers. bei 100°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HJ, HNO<sub>3</sub> (B. 30, 394). — IV, 1205.
- 13) Nitril d. 3-Methyl-1,5-Diphenylpyrazol-4-Carbonsäure. Sm. 188 bis 189° (J. pr. [2] 47, 115). — IV, 783.
- C<sub>17</sub>H<sub>13</sub>Br** 1)  $\beta$ -Brom-1-Benzylnaphtalin (Bl. 26, 4; J. 1873, 390). — II, 281.
- 2) 1-[ $\alpha$ -Brombenzyl]naphtalin. Fl. (C. 1902 [2] 789).
- C<sub>17</sub>H<sub>14</sub>O** C 87,2 — H 6,0 — O 6,8 — M. G. 234.
- 1) 1-[ $\alpha$ -Oxybenzyl]naphtalin. Sm. 86,5°; Sd. oberhalb 360° (B. 13, 359; C. 1902 [2] 1199; B. 37, 628 C. 1904 [1] 810; B. 37, 2757 C. 1904 [2] 707; J. pr. [2] 77, 16 C. 1908 [1] 630; Bl. [4] 3, 916 C. 1908 [2] 1357). — II, 1082.

$C_{17}H_{14}O$ 

- 2) 2-[ $\alpha$ -Oxybenzyl]naphthalin. Sm.  $83^\circ$  (Bl. [4] 3, 737 C. 1908 [2] 600).
- 3) 2-Oxy-1-Benzyl-naphthalin. Sm.  $115-116^\circ$  (G. 33 [2] 489 C. 1904 [1] 656).
- 4) 4-Oxy-1-Benzyl-naphthalin. Sm.  $125-126^\circ$  (G. 33 [2] 471 C. 1904 [1] 655).
- 5) Methyläther d. 1-[4-Oxybenzyliden]inden. Sm.  $118-119^\circ$  (A. 347, 268 C. 1906 [2] 957).
- 6) Benzyläther d. 1-Oxynaphtalin. \*Sd.  $320^\circ$  u. Zers. (A. 217, 48).
- 7) Benzyläther d. 2-Oxynaphtalin. Sm.  $99^\circ$  (A. 217, 47; B. 14, 899). — II, 1050.
- 8) 4-Methylphenyläther d. 2-Oxynaphtalin. Sm.  $135^\circ$  (B. 30, 884). — \*II, 520.
- 9)  $\epsilon$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha\gamma$ -Pentadien. Sm.  $102-103^\circ$ . (HCl, SbCl<sub>5</sub>), (HCl, SnCl<sub>4</sub>), + 2FeCl<sub>3</sub>, 2 Pikrat (B. 28, 1730; 35, 1066; B. 37, 3670 C. 1904 [2] 1569; A. 336, 341 C. 1905 [1] 89; A. 341, 33 C. 1905 [2] 821). — III, 251; \*III, 189.
- 10)  $\gamma$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha\delta$ -Pentadien (Dibenzylidenacetone). Sm.  $112$  bis  $112,5^\circ$ . 2 + Al<sub>2</sub>Br<sub>6</sub>, (2HJ, J<sub>1</sub>) (A. Spl. 5, 82; J. pr. [2] 60, 151; B. 14, 350, 1460, 2461, 2470; 30, 2802; A. 223, 141; C. 1899 [2] 187, 476; 1903 [2] 284; Ph. Ch. 10, 420; Am. 27, 253 C. 1902 [1] 1292; B. 35, 1190 C. 1902 [1] 1004; B. 37, 1650 C. 1904 [1] 1603; B. 37, 3284 C. 1904 [2] 1038; B. 37, 3669 C. 1904 [2] 1569; A. 349, 41 C. 1906 [2] 1199; B. 40, 2698 Ann. C. 1907 [2] 331). — III, 252; \*III, 190.
- 11) 2-Keto-4,5-Diphenyl-2,3-Dihydro-R-Penten. Sm.  $110^\circ$ ; Sd. 250 bis  $260^\circ_{18-20}$  (Soc. 51, 422; 71, 131, 141). — III, 251; \*I, 189.
- 12) isom. 2-Keto-4,5-Diphenyl-2,3-Dihydro-R-Penten? Sm.  $167^\circ$  (B. 38, 1626 C. 1905 [1] 1557).

 $C_{17}H_{14}O_2$ 

- C 81,6 — H 5,6 — O 12,8 — M. G. 250.
- 1)  $\gamma$ -Keto- $\epsilon$ -Phenyl- $\alpha$ -[2-Oxyphenyl]- $\alpha\delta$ -Pentadien. Sm.  $139^\circ$  (B. 31, 728). — \*III, 191.
  - 2) 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten (Anhydroacetonebenzil). Sm.  $147^\circ$  ( $149^\circ$ ) (B. 18, 182; Soc. 51, 429; 71, 130; 75, 1019; Soc. 87, 677 C. 1905 [2] 244). — III, 251; \*III, 189.
  - 3) 5-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten. Sm.  $176^\circ$  (B. 36, 1494 C. 1903 [1] 1350; B. 37, 1133 C. 1904 [1] 1256).
  - 4) Methyläther d. 6-Oxy-1-Keto-2-Benzyliden-2,3-Dihydroinden. Sm.  $134^\circ$  (Soc. 91, 1094 C. 1907 [2] 603).
  - 5)  $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -Phenyl- $\alpha$ -Buten (Benzylidenbenzoylacetone). Sm. 98 bis  $99^\circ$  (B. 36, 2134 C. 1903 [2] 366).
  - 6) 1,3-Diketo-2-Äthyl-2-Phenyl-2,3-Dihydroinden. Sm.  $103-103,5^\circ$  (B. 26, 2579). — III, 303.
  - 7) 1,3-Diketo-2,5-Dimethyl-2-Phenyl-2,3-Dihydroinden. Sm.  $123,5^\circ$  (B. 29, 2377). — \*III, 233.
  - 8) 1,3-Diketo-2-Methyl-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm.  $149^\circ$  (B. 33, 2821). — \*III, 233.
  - 9) 1,3-Diketo-2-Methyl-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm.  $97^\circ$  (B. 28, 1391). — III, 303.
  - 10) 1,2,4-Trimethyl-9,10-Anthrachinon. Sm.  $162-163^\circ$  (A. 234, 241; J. pr. [2] 41, 123). — III, 457.
  - 11) 1,3,6-Trimethyl-9,10-Anthrachinon. Sm.  $190^\circ$  (J. pr. [2] 41, 143). — III, 458.
  - 12) 1,4,6-Trimethyl-9,10-Anthrachinon. Sm.  $184^\circ$  (J. pr. [2] 41, 140; B. 19, 409). — III, 458.
  - 13)  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenyl- $\alpha$ -[2-Furanyl]methan. Sm.  $92,4^\circ$  (Am. 35, 70 C. 1906 [1] 852).
  - 14) Methyläther d. 7-Oxy-4-Methylen-2-Phenyl-1,4-Benzpyran.  $\alpha$ -Modif. Sm.  $120-125^\circ$ ;  $\beta$ -Modif. Sm.  $261-263^\circ$  (B. 34, 1792). — \*III, 547.
  - 15)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure (Phenylcinnamenylakrylsäure). Sm.  $187-188^\circ$ . Na, Ag (G. 15, 105; A. 306, 197). — II, 1479; \*II, 877.
  - 16)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta$ -Carbonsäure. Sm.  $167^\circ$ . Ba, Ag (A. 306, 154). — \*II, 877.
  - 17) 1-Phenyl-1,2-Dihydronaphtalin-2-Carbonsäure. Sm.  $191^\circ$  (A. 306, 156). — \*II, 878.
  - 18) Atronsäure. Sm.  $164^\circ$ . Ca + 6H<sub>2</sub>O, Ba + 4H<sub>2</sub>O (A. 206, 50). — II, 1479.

- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>** 19) Isoatronsäure. Sm. 156—157°. Ca, Ba + 6H<sub>2</sub>O (A. 206, 57). — II, 1479.
- 20) Aldehyd d.  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -Phenylpropen- $\alpha^4$ -Carbonsäure. Sm. 130° (M. 27, 975 C. 1907 [1] 342).
- 21) Lakton d.  $\alpha$ -Oxy- $\alpha$ - $\gamma$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure (A. 294, 333). — \*II, 1012.
- 22) Lakton d.  $\gamma$ -Oxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 91° (A. 319, 217 C. 1902 [1] 108). — \*II, 1013.
- 23) Lakton d.  $\delta$ -Oxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 126° (A. 306, 164). — \*II, 1014.
- 24) lab. Lakton d.  $\alpha$ -Oxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 100 bis 101° (A. 306, 188). — \*II, 1013.
- 25) Lakton d.  $\beta$ -Oxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure (L. d. Dihydrocornicularsäure). Sm. 116—117° (B. 14, 1691; A. 219, 27; A. 319, 223 C. 1902 [1] 108). — II, 1717; \*II, 1012.
- 26) isom. Lakton d. Dihydrocornicularsäure. Sm. 128,5° (A. 319, 225 C. 1902 [1] 109). — \*II, 1012.
- 27) Lakton d. Isodihydrocornicularsäure. Sm. 102—105° (A. 219, 35; 319, 215 Anm.; B. 15, 1547). — II, 1717; \*II, 1012.
- 28) stab. Lakton d.  $\delta$ -Oxy- $\alpha$ - $\delta$ -Diphenyl- $\beta$ -Buten- $\beta$ -Carbonsäure. Sm. 66,5—67° (A. 306, 190). — \*II, 1013.
- 29) Lakton d.  $\alpha$ -Oxy- $\alpha$ - $\beta$ -Diphenyl- $\beta$ -Buten- $\gamma$ -Carbonsäure. Sm. 88,5° (Soc. 83, 290 C. 1903 [1] 877).
- 30) Äthylester d. Anthracen-2-Carbonsäure. Sm. 134° (B. 13, 49). — II, 1478.
- 31) Äthylester d. Phenanthren-9-Carbonsäure. Sm. 61° (B. 35, 2726 C. 1902 [2] 643).
- 32) Propionat d. 9-Oxyphenanthren. Sm. 95° (A. 321, 301 C. 1902 [2] 59). — \*III, 320.
- 33) Verbindung (aus  $\alpha$  $\beta$ -Dioxy- $\alpha$  $\beta$ -Diphenylbutan- $\alpha$  $\gamma$ -Dicarbonsäure). Sm. 138—139° (Soc. 83, 293 C. 1903 [1] 877).  
C 76,7 — H 5,2 — O 18,1 — M. G. 266.
- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>** 1)  $\gamma$ -Keto- $\alpha$ -s-Di[2-Oxyphenyl]- $\alpha$ - $\delta$ -Pentadien (Lygosin). Sm. 160° (168°). Na, Na<sub>2</sub> + 7H<sub>2</sub>O (B. 18, 1968; D.R.P. 110521 C. 1900 [2] 302; C. 1903 [1] 835; B. 41, 3001 C. 1908 [2] 1186). — III, 252; \*III, 191.
- 2) lab.  $\gamma$ -Keto- $\alpha$ -s-Di[4-Oxyphenyl]- $\alpha$ - $\delta$ -Pentadien. Sm. 232°. HCl (B. 36, 133 C. 1903 [1] 458).
- 3) stab.  $\gamma$ -Keto- $\alpha$ -s-Di[4-Oxyphenyl]- $\alpha$ - $\delta$ -Pentadien. Sm. 237—238°. HCl, HBr, H<sub>2</sub>SO<sub>4</sub> (B. 36, 130 C. 1903 [1] 457; B. 38, 760 C. 1905 [1] 870).
- 4)  $\beta$ -Oxy- $\alpha$ - $\alpha$ -Dibenzoylpropen. Sm. 80—85°. Fe + 3H<sub>2</sub>O (B. 18, 2133; 27, 114; 35, 243; A. 277, 189; 291, 56, 62, 73). — III, 318; \*III, 243.
- 5) Methylenäther d.  $\gamma$ -Keto- $\delta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha$ -Buten. Sm. 100—102° (M. 22, 758). — \*III, 186.
- 6) Methylenäther d.  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 130° (B. 35, 1070 C. 1902 [1] 929). — \*III, 184.
- 7) 3-Methyläther d. 3,4-Dioxy-1-Acetylphenanthren. Sm. 161—162° (B. 42, 3520 C. 1909 [2] 1473).
- 8)  $\alpha$ -Dibenzoyl- $\beta$ -Ketopropan (Dibenzoylacetone). Sm. 107—110°. + Triäthylamin (A. 277, 66, 193; 278, 136; 291, 78; B. 27, 114; B. 37, 3449 C. 1904 [2] 1273; B. 40, 4918 C. 1908 [1] 514; A. 363, 57 C. 1908 [2] 1722). — III, 319.
- 9) isom.  $\alpha$ -Dibenzoyl- $\beta$ -Ketopropan. Sm. 147—149° (B. 39, 208 C. 1906 [1] 760; A. 363, 105 C. 1908 [2] 1725).
- 10) 2<sup>3</sup>-Methyläther d. 1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 187° (B. 34, 414). — \*III, 189.
- 11) 2<sup>4</sup>-Methyläther d. 1-Keto-2-[2,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 220° u. Zers. (Soc. 91, 1091 C. 1907 [2] 603).
- 12) Äthyläther d. 5-Oxy-1,3-Diketo-2-Phenyl-2,3-Dihydroinden. Sm. 172° (B. 34, 3738 C. 1902 [1] 39). — \*III, 232.
- 13) Methylenäther d. 4-Oxy-1,3-Dimethyl-9,10-Anthrachinon. Sm. 176 bis 177° (Soc. 91, 1635 C. 1907 [2] 2059).
- 14) Phenanthrenacetonchinon. Sm. 89,5—90° (Soc. 41, 274; B. 17, 2828). — III, 447.



- $C_{17}H_{14}O_3$
- 15) Oxoniumhydroxyd d. 2-[ $\beta$ -2-Oxyphenyläthenyl]benzpyran. Na, Chlorid +  $FeCl_3$  (B. 41, 3002 C. 1908 [2] 1386).
  - 16) Methyläther d. 7-Oxy-5-Methyl-2-Phenyl-1,4-Benzpyron. Sm. 115° (B. 41, 795 C. 1908 [1] 1555).
  - 17) Äthyläther d. 6-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 146—147° (B. 32, 330). — \*III, 561.
  - 18) Äthyläther d. 7-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 138—139° (B. 31, 703; B. 34, 3727 C. 1902 [1] 46). — \*III, 561.
  - 19) Äthyläther d. 2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 118° (B. 34, 1692). — \*III, 561.
  - 20) Äthyläther d. 2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 139—140° (B. 33, 2516). — \*III, 561.
  - 21) Äthyläther d. 6[oder 7]-Oxy-3-Phenyl-2,1-Benzpyron. Sm. 144 bis 145° (B. 34, 3742 C. 1902 [1] 40).
  - 22) Thebenol. Sm. 186° (186—188°). Na (B. 27, 2962; 30, 1379). — \*III, 677.
  - 23) 3-Oxyphenanthrenäthyläther-10-Carbonsäure. Sm. 206° (A. 322, 154 C. 1902 [2] 282).
  - 24)  $\gamma$ -Keto- $\alpha$ -Diphenyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 143°. Ag (B. 32, 1435). — \*II, 1017.
  - 25)  $\gamma$ -Keto- $\alpha$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure (Cornicularsäure). Sm. 123°. Na +  $2\frac{1}{2}H_2O$ , Ag (A. 219, 23; 306, 220; B. 15, 1547, 1549). — II, 1720; \*II, 1016.
  - 26)  $\delta$ -Keto- $\alpha$ -Diphenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure (Phenacylzimtsäure). Sm. 171°. Ba, Cu, Ag (A. 306, 159). — \*II, 1017.
  - 27) isom. Phenacylzimtsäure. Sm. 127° (A. 306, 163). — \*II, 1017.
  - 28)  $\gamma$ -Keto- $\alpha$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 220—221° (A. 284, 283). — II, 1720.
  - 29)  $\alpha$ -Keto- $\alpha\beta$ -Diphenyl- $\beta$ -Buten- $\gamma$ -Carbonsäure (Desylenpropionsäure). Sm. 174,5° (Soc. 83, 289 C. 1903 [1] 877).
  - 30) Säure (aus 2-Keto-1,3-Dimethyl-4,5-Diphenyl-2,3-Dihydro-R-Penten). Sm. 175°. Ag (A. 341, 50 C. 1905 [2] 821).
  - 31) Aldehyd d.  $\gamma$ -Keto- $\gamma$ -[4-Methoxylphenyl]- $\alpha$ -Phenylpropen- $\alpha^4$ -Carbonsäure. Sm. 121° (M. 27, 978 C. 1907 [1] 342).
  - 32) Lakton d.  $\gamma$ -Oxy- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropen-4-Methyläther- $\alpha$ -Carbonsäure. Sm. 105° (B. 36, 2524 C. 1903 [2] 575).
  - 33) Lakton d.  $\alpha$ -Oxy- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenylpropen-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 122° (B. 36, 2524 C. 1903 [2] 575; A. 333, 273 C. 1904 [2] 1392; B. 38, 3126 C. 1905 [2] 1429).
  - 34) Lakton d.  $\gamma$ -Oxy- $\gamma$ -[4-Oxyphenyl]- $\beta$ -Phenylpropen-4-Methyläther- $\alpha$ -Carbonsäure. Sm. 105° (A. 333, 273 C. 1904 [2] 1392; B. 38, 3126 C. 1905 [2] 1429).
  - 35) Lakton d.  $\gamma$ -Oxy- $\gamma$ -Methoxyl- $\beta\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure. Sm. 102,5° (A. 319, 175 C. 1902 [1] 105). — \*II, 1016.
  - 36) Lakton d.  $\alpha$ -Oxy- $\alpha$ -[4- oder 5-Äthoxylphenyl]- $\beta$ -Phenyläthen- $\alpha^2$ -Carbonsäure (Benzal- $\beta$ -Äthoxyphtalid). Sm. 133—134° (B. 34, 3737 C. 1902 [1] 39).
  - 37) Lakton d.  $\beta$ -Oxy- $\delta$ -Keto- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 171°. Na (B. 16, 2818; 27, 2222; 31, 2220). — II, 1894; \*II, 1098.
  - 38) Lakton d.  $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Ketocarbonsäure. Sm. 137° (B. 35, 1937, 1942 C. 1902 [2] 119).
  - 39) Lakton d. isom.  $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Ketocarbonsäure. Sm. 134° (B. 35, 1937, 1942 C. 1902 [2] 119).
  - 40) Methylester d.  $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen- $\alpha^2$ -Carbonsäure. Fl. (M. 20, 710). — \*II, 1016.
  - 41) Methylester d.  $\gamma$ -Keto- $\beta\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure (M. d. Desylenessigsäure). Sm. 89° (A. 319, 177 C. 1902 [1] 105). — \*II, 1016.
  - 42) Äthylester d. Fluoren-9-Ketocarbonsäure. Sm. 74—76° (B. 33, 771, 852). — \*II, 1015.
  - 43) Acetat d.  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 51—52° (B. 31, 1758). — \*III, 180.
  - 44) Acetat d.  $\gamma$ -Keto- $\gamma$ -[3-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 101° (B. 32, 1925). — \*III, 180.
  - 45) Acetat d.  $\gamma$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 90° (B. 32, 1924). — \*III, 181.

- $C_{17}H_{14}O_3$
- 46) Acetat d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[2-Oxyphenyl]propen. Sm. 68—69° (B. 29, 234). — III, 247.
  - 47) Acetat d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[3-Oxyphenyl]propen. Sm. 102—103° (B. 29, 235). — III, 247.
  - 48) Acetat d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Sm. 129—131° (B. 29, 236). — III, 247.
  - 49) Acetat d. 2-Oxy-1-Keto-2-Phenyl-2,3-Dihydroinden? Sm. 167° (B. 25, 2100). — III, 249.
  - 50) 3-Acetat d. 3,4-Dioxyphenanthren-4-Methyläther. Sm. 93—94° (B. 33, 1823). — \*II, 607.
  - 51) 4-Acetat d. 3,4-Dioxyphenanthren-3-Methyläther. Sm. 130° (131°) (B. 19, 794; 27, 1148; 31, 52, 2924; 33, 1813; B. 39, 3135 C. 1906 [2] 1335). — II, 1000; III, 908; \*II, 607.
  - 52) Benzotat d.  $\gamma$ -Keto- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten. Sm. 87—88° (B. 24, 3182). — III, 161.
- $C_{17}H_{14}O_4$
- C 72,3 — H 4,9 — O 22,7 — M. G. 282.
- 1)  $\beta$ -Methyläther d.  $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten (B. 27, 715). — III, 317.
  - 2)  $\gamma$ -Keto- $\gamma$ -[4,6-Dioxy-3-Acetylphenyl]- $\alpha$ -Phenylpropen (Benzalresor-diacetophenon). Sm. 192° (C. 1905 [1] 816).
  - 3) Monomethyläther d. 1,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinon. Sm. 214—215° (Soc. 83, 1332 C. 1904 [1] 100).
  - 4) Dimethyläther d. 3,4-Dioxy-1-Methyl-9,10-Anthrachinon. Sm. 224° (Soc. 89, 1660 C. 1907 [1] 407).
  - 5) Dimethyläther d. 4,6[oder 4,7]-Dioxy-1-Methyl-9,10-Anthrachinon. Sm. 141° (Soc. 91, 1634 C. 1907 [2] 2059).
  - 6) Dimethyläther d. 1,3-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 181° (Soc. 91, 1913 C. 1908 [1] 397).
  - 7) Dimethyläther d. isom. 1,3-Dioxy-2-Methyl-9,10-Anthrachinon? Sm. 153° (M. 26, 589 C. 1905 [2] 334).
  - 8) Dimethyläther d. Chrysophansäure. Sm. 195° (Ar. 243, 439 C. 1905 [2] 897).
  - 9) 2-Methyläther-1-Äthyläther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 169—170° (B. 39, 115 C. 1906 [1] 676).
  - 10) Dimethyläther d. 1-[3,4-Dioxybenzoyl]benzfuran. Sm. 90—91° (B. 41, 1340 C. 1908 [1] 1981).
  - 11) Dimethyläther d. 1-Keto-2-[3,4-Dioxybenzyliden]-1,2-Dihydrobenz-furan. Sm. 99—100° (B. 42, 836 C. 1909 [1] 1165).
  - 12) Dimethyläther d. 3,5-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenz-furan. Sm. 150—152° (B. 30, 2154). — \*III, 531.
  - 13) Dimethyläther d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenz-furan. Sm. 148—149,5° (151°) (B. 29, 2433; B. 36, 4239 C. 1904 [1] 381). — \*III, 532.
  - 14) 2<sup>3</sup>-Methyläther d. 5-Oxy-7-Methyl-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 156° (B. 41, 789 C. 1908 [1] 1553).
  - 15) 2<sup>3</sup>-Methyläther d. 5-Oxy-7-Methyl-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 146° (B. 41, 790 C. 1908 [1] 1553).
  - 16) 2<sup>3</sup>-Methyläther d. 5-Oxy-7-Methyl-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 274° (B. 41, 791 C. 1908 [1] 1554).
  - 17) Dimethyläther d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyron. Sm. 166 bis 167° (M. 18, 743). — \*II, 1144.
  - 18) Dimethyläther d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 128 bis 129° (B. 37, 778 C. 1904 [1] 1156).
  - 19) Dimethyläther d. 2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 154 bis 155° (B. 38, 2179 C. 1905 [2] 258).
  - 20) 6-Äthyläther d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 177 bis 178° (B. 37, 777 C. 1904 [1] 1156).
  - 21) Monoäthyläther d. 5,7-Dioxy-2-Phenyl-1,4-Benzpyron (M. d. Chrysin). Sm. 146° (B. 10, 177). — III, 628.
  - 22) 7-Äthyläther d. 7-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 263 bis 264° (B. 32, 325). — \*III, 563.
  - 23) Äthyläther d. 4-Oxy-3-Acetyl-1,2- $\alpha$ -Naphtopyron. Sm. 183° (A. 368, 47 C. 1909 [2] 1443).

- $C_{17}H_{14}O_4$
- 24) 5,6-Dioxyphenanthrendimethyläther-1-Carbonsäure. Sm. 196° (B. 35, 4392 C. 1903 [1] 339; B. 40, 1998 C. 1907 [2] 157).
  - 25) 2,3-Dioxyphenanthrendimethyläther-9-Carbonsäure. Sm. 270° (B. 33, 1830). — \*II, 1099.
  - 26) 3,4-Dioxyphenanthrendimethyläther-9-Carbonsäure. Sm. 227 bis 228° (B. 33, 1819). — \*II, 1099.
  - 27)  $\alpha$ -Phenyl- $\beta$ -[2-Acetoxyphenyl]akrylsäure. Sm. 170—180°. Ag (J. 1879, 731). — II, 1707.
  - 28)  $\alpha$ -Phenyl- $\beta$ -[4-Acetoxyphenyl]akrylsäure. Sm. 174° (A. 349, 111 C. 1906 [2] 1256).
  - 29)  $\gamma$ -Oxy- $\alpha\gamma$ -Diphenylpropen- $\beta$ -Ketocarbonsäure. Na + 4H<sub>2</sub>O, Ba, Ag (B. 32, 1453). — \*II, 1100.
  - 30) 4-[ $\alpha$ -Oxyisopropyl]-9-Ketofluoren-1-Carbonsäure. Sm. bei 190°. Ba + 2H<sub>2</sub>O, Ag (A. 229, 146). — II, 1900.
  - 31)  $\beta\gamma$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\alpha$ -Carbonsäure (Dibenzylloxalylcarbon-säure). Sm. 231—233° (A. 282, 20). — II, 1899.
  - 32)  $\beta\beta$ -Dibenzoylpropionsäure. Sm. 194° (A. 347, 89 C. 1906 [2] 510).
  - 33)  $\alpha\alpha$ -Diphenylpropen- $\beta\gamma$ -Dicarbonsäure ( $\gamma\gamma$ -Diphenylitakonsäure). Sm. 168—169° u. Zers. + 2 Molec. Diäthyläther, Na + 2H<sub>2</sub>O, Ca, Ba, Ag<sub>2</sub> (A. 282, 318; 308, 94; B. 28, 3192; A. 330, 352 C. 1904 [1] 929). — \*II, 1099.
  - 34)  $\gamma\gamma$ -Diphenylpropen- $\alpha\beta$ -Dicarbonsäure. Sm. 105—115° u. Zers. Ca + 2H<sub>2</sub>O, Ba + 3½H<sub>2</sub>O, Ag<sub>2</sub> (A. 330, 357 C. 1904 [1] 929).
  - 35) Gem. Anhydrid d. Essigsäure u. 4-Methyldiphenylketon-2'-Carbonsäure. Sm. 102° (A. 299, 308). — \*II, 1005.
  - 36) Laktond.  $\beta$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Methoxyphenyl]äthan- $\alpha$ -Ketocarbon-säure. Sm. 180°. + C<sub>2</sub>H<sub>6</sub>O (A. 337, 300 C. 1905 [1] 380).
  - 37)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 191° (A. 333, 268 C. 1904 [2] 1392).
  - 38)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylmethan-2,4-Dicarbonsäure-4-Äthylester (L. d. Benzhydrylisophthalsäure). Sm. 114—115° (B. 9, 1764). — II, 1973.
  - 39)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylmethan-2,2'-Dicarbonsäure-2'-Äthylester (L. d. Benzhydroidicarbonsäure). Sm. 99,5° (A. 242, 241). — II, 1973.
  - 40) Methylester d. 2-Cinnamoyloxybenzol-1-Carbonsäure. Sm. 71° (C. 1907 [1] 1118).
  - 41) Methylester d. 9-Acetoxyfluoren-9-Carbonsäure. Sm. 147—148° (B. 39, 3898 C. 1907 [1] 167).
  - 42) Äthylester d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan-2-Carbonsäure. Sm. 71° (B. 23, 1345). — \*II, 1098.
  - 43) Diphenylester d. Mesakonsäure. Sm. 66—67° (A. 359, 188 C. 1908 [1] 1531).
  - 44) Acetat d.  $\beta$ -Oxy- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 94° (B. 23, 3377). — III, 297.
  - 45) Acetat d. 8-Oxy-5,7-Dimethylfluoron. Sm. 208—210° (M. 21, 67). — \*III, 571.
  - 46) Acetat d. Chrysarobin. Sm. 188—190° (A. 309, 64). — \*III, 323.
  - 47) Verbindung (aus Chrysarobin). Sm. 181° (Soc. 81, 1583 C. 1903 [1] 34, 167).
  - 48) Verbindung (aus 6-Phenyl-1,2-Pyron u. 1,2-Dioxybenzol). Sm. 64—66° (B. 28, 1553). — II, 1680.
  - 49) Verbindung (aus 6-Phenyl-1,2-Pyron u. 1,3-Dioxybenzol). Sm. 110° (B. 28, 1554). — II, 1680.
  - 50) Verbindung (aus 6-Phenyl-1,2-Pyron u. 1,4-Dioxybenzol). Sm. 108° (B. 28, 1554). — II, 1680.
- $C_{17}H_{14}O_5$
- 1)  $\alpha^3\alpha^4$ -Methylenäther- $\gamma^4$ -Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen (Piperonalpaeonol). Sm. 148,5° (B. 32, 313). — \*III, 183.
  - 2) 5,6,7-Trioxy-1,2,4-Trimethyl-9,10-Anthrachinon. Sm. 244° (A. 240, 290). — III, 457.
  - 3) 5,6[oder 7,8]-Dimethyläther d. 4,5,6[oder 4,7,8]-Trioxy-1-Methyl-9,10-Anthrachinon (A. 240, 303). — III, 450.



$C_{17}H_{14}O_5$ 

- 4) Trimethyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 160° (168°) (D.R.P. 158278 C. 1905 [1] 704; M. 23, 1020 C. 1903 [1] 291).
- 5) Trimethyläther d. 1,2,6-Trioxy-9,10-Anthrachinon. Sm. 225° (B. 31, 2799; A. 349, 215 C. 1906 [2] 1337). — \*III, 312.
- 6) Trimethyläther d. 1,2,7-Trioxy-9,10-Anthrachinon. Sm. 201° (A. 349, 228 C. 1906 [2] 1338).
- 7) Trimethyläther d. 1,2,8-Trioxy-9,10-Anthrachinon. Sm. 157° (A. 349, 220 C. 1906 [2] 1338).
- 8) Monomethyläther d. Brasilein (B. 27, 526). — III, 654.
- 9) 2<sup>3</sup>,2<sup>4</sup>-Dimethyläther d. 3-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 199—200° (B. 38, 2181 C. 1905 [2] 258).
- 10) 2<sup>3</sup>,6-Dimethyläther d. 3,6-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 187—188° (B. 37, 2348 C. 1904 [2] 230).
- 11) 2<sup>3</sup>,6-Dimethyläther d. 3,6-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 144° (B. 37, 959 C. 1904 [1] 1160).
- 12) 2<sup>3</sup>,6-Dimethyläther d. 3,6-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 184—185° (B. 37, 783 C. 1904 [1] 1159).
- 13) 2<sup>3</sup>,7-Dimethyläther d. 3,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 203° (B. 37, 4157 C. 1904 [2] 1658).
- 14) 2<sup>3</sup>,7-Dimethyläther d. 3,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 170° (B. 37, 4160 C. 1904 [2] 1658).
- 15) 2<sup>3</sup>,7-Dimethyläther d. 3,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 196—197° (B. 37, 4162 C. 1904 [2] 1659).
- 16) 2<sup>2</sup>,7-Dimethyläther d. 5,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 154—156° (B. 34, 1456). — \*III, 563.
- 17) 2<sup>4</sup>,5-Dimethyläther d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (D. d. Apigenin). Sm. 264° (B. 33, 2909). — \*III, 564.
- 18) 2<sup>4</sup>,7-Dimethyläther d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (D. d. Apigenin). Sm. 171—172° (Soc. 71, 812; B. 33, 1993). — \*III, 564.
- 19) 5,7-Dimethyläther d. 3,5,7-Trioxy-2-Phenyl-1,4-Benzpyron. Sm. 177—178° (B. 37, 2804 C. 1904 [2] 712).
- 20) 7,8-Dimethyläther d. 3,7,8-Trioxy-2-Phenyl-1,4-Benzpyron. Sm. 203° (B. 37, 2808 C. 1904 [2] 713).
- 21)  $\alpha$ -Methylphyscion. Sm. 205° (J. pr. [2] 57, 438). — \*III, 470.
- 22)  $\beta$ -Methylphyscion. Sm. 178° (J. pr. [2] 57, 438). — \*III, 470.
- 23)  $\alpha\beta$ -Diphenylakrylsäure- $\alpha^2$ -Oxyessigsäure. Sm. 204—205° (B. 42, 837 C. 1909 [1] 1165).
- 24)  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[2-Oxyphenyl]akryl-2-Methyläther-3,4-Methylenäthersäure. Sm. 225—226° (B. 38, 941 C. 1905 [1] 1019).
- 25)  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[3-Oxyphenyl]akryl-3-Methyläther-3,4-Methylenäthersäure. Sm. 204—206° (B. 38, 941 C. 1905 [1] 1019).
- 26)  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[4-Oxyphenyl]akryl-4-Methyläther-3,4-Methylenäthersäure. Sm. 199—200° (B. 38, 941 C. 1905 [1] 1019).
- 27)  $\gamma$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 147° (A. 333, 266 C. 1904 [2] 1392).
- 28)  $\alpha$ -Keto- $\alpha$ -[4-Acetoxyphenyl]- $\beta$ -Phenyläthan- $\alpha^3$ -Carbonsäure. Sm. 140° (M. 28, 287 C. 1907 [1] 1749).
- 29) 1,5,6-Trioxyphenanthren-1,5-Dimethyläther-10-Carbonsäure. Sm. 231° (B. 33, 180). — \*II, 1148.
- 30) 3,4,6-Trioxyphenanthren-3,6-Dimethyläther-9-Carbonsäure. Sm. 254—256° (B. 35, 4409 C. 1903 [1] 343).
- 31) 3,4,8-Trioxyphenanthren-3,4-Dimethyläther-9-Carbonsäure. Sm. 193° (B. 39, 3120 C. 1906 [2] 1331).
- 32)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 157° (A. 333, 263 C. 1904 [2] 1391).
- 33) 2,6-Dimethyldiphenylketon - 3,5 - Dicarbonsäure? (Benzoylcumidin-säure). Sm. 85°. Ba + 2 $\frac{1}{2}$ H<sub>2</sub>O (J. 1879, 562). — II, 1978.
- 34) 3,5-Dioxy-2-Phenylbenzofuran-3,5-Dimethyläther-1-Carbonsäure. Sm. 215° (B. 42, 3150 C. 1909 [2] 1347).
- 35)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 153° (A. 333, 260 C. 1904 [2] 1391).
- 36) isom. Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 155° (A. 333, 260 C. 1904 [2] 1391).

- $C_{17}H_{14}O_5$
- 37) Dimethylester d. Diphenylketon-2,4-Dicarbonsäure. Sm. 117—118° (B. 9, 1763). — II, 1975.
  - 38) Dimethylester d. Diphenylketon-2,5-Dicarbonsäure. Sm. 100—101° (J. 1878, 403). — II, 1975.
  - 39) Dimethylester d. Diphenylketon-2,2'-Dicarbonsäure. Sm. 85—86° (A. 242, 246). — II, 1975.
  - 40) Dimethylester d. Diphenylketon-2,4'-Dicarbonsäure. Sm. 107° (A. 309, 101; B. 28, 1135). — II, 1976.
  - 41) Dimethylester d. Diphenylketon-4,4'-Dicarbonsäure. Sm. 224° (A. 312, 97). — \*II, 1148.
  - 42) Dimethylester d. isom. Diphenylketon-4,4'-Dicarbonsäure. Sm. 138° (B. 20, 523). — II, 1976.
  - 43) Äthylester d. 4-Oxy-1,2- $\beta\beta$ -Naphtopyron-4-Methyläther-3-Carbonsäure. Sm. 146° (A. 347, 256 C. 1909 [2] 1239).
  - 44) Monacetat d. 1,7-Dioxyxanthon- $\alpha$ -Monäthyläther. Sm. 180—182° (M. 12, 164). — III, 206.
  - 45) Monacetat d. 1,7-Dioxyxanthon- $\beta$ -Monäthyläther. Sm. 164—166° (M. 13, 419). — III, 206.
  - 46) Diacetat d. 2,2'-Dioxydiphenylketon. Sm. 96° (83°) (J. pr. [2] 28, 287; B. 14, 657; 19, 2611). — III, 195.
  - 47) Diacetat d. 2,4'-Dioxydiphenylketon. Sm. 84—85° (120°) (Am. 5, 83; B. 35, 992 Anm. C. 1902 [1] 870). — III, 198.
  - 48) Diacetat d. 3,3'-Dioxydiphenylketon. Sm. 89—90° (B. 13, 836; A. 218, 357). — III, 198.
  - 49) Diacetat d. 4,4'-Dioxydiphenylketon. Sm. 152° (148°) (A. 194, 336; 202, 130). — III, 199.
  - 50) Diacetat d. 2,3-Dioxyxanthon. Sm. 110° (B. 37, 2735 C. 1904 [2] 542).
- $C_{17}H_{14}O_6$
- 51) Verbindung (aus Phloretin). Sm. 213° (B. 27, 1632).  
C 65,0 — H 4,4 — O 30,6 — M. G. 314.
  - 1) Trimethyläther d.  $\beta$ -Tetraoxy-9,10-Anthrachinon. Sm. 226° (Soc. 93, 437 C. 1908 [1] 1697).
  - 2) 5,6-Dimethyläther d. 5,6-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. K (Soc. 83, 137 C. 1903 [1] 90, 466).
  - 3) 5,7-Dioxy-3-Äthyl-2-[3,4-Dioxyphenyl]-1,4-Benzpyron ( $\alpha$ -Äthyl-luteolin). Sm. 286—287° (B. 34, 3720 C. 1902 [1] 45). — \*III, 567.
  - 4) Dimethyläther d. 3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 142—143° (Ar. 247, 458 C. 1909 [2] 2083).
  - 5) Dimethyläther d. 5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (D. d. Luteolin). Sm. 224—225° (Soc. 77, 1321). — \*III, 440.
  - 6)  $\alpha\alpha$ -Diphenyläthan- $\alpha\beta\beta$ -Tricarbonsäure. Sm. 253—255°.  $Ba_3$ ,  $Ag_3$  (B. 15, 1479). — II, 2025.
  - 7)  $\alpha\alpha$ -Diphenyläthan- $\beta\beta\beta$ -Tricarbonsäure ( $\beta$ -Phenyl- $\beta$ -Dicarboxyphenyl-propionsäure). Sm. 218° u. Zers.  $Ca_3$ ,  $Ba_3$  (B. 26, 1582). — II, 2025.
  - 8) Lakton d.  $\alpha$ -Oxy-4'-Methoxyldiphenylmethan-2-Carbonsäure-2'-Oxyessigsäure. Sm. 188° (Soc. 93, 511 C. 1908 [1] 1701).
  - 9) Monacetat d. 3,4,5-Trioxy-1,2-Dibenzoylbenzol. Sm. 165° (J. r. 25, 115). — III, 297.
  - 10) 1-Acetat d. 1,3,7-Trioxyxanthon-3,7-Dimethyläther. Sm. 189° (M. 12, 320). — III, 210.  
C 61,8 — H 4,2 — O 33,9 — M. G. 330.
  - 1) Dimethyläther d. 3,5,7-Trioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron (D. d. Morin). Sm. 225—227° (Soc. 69, 797). — \*III, 683.
  - 2) 2 $\beta$ ,7-Dimethyläther d. 3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Rhamnazin). Sm. 214—215°. HK,  $H_2SO_4$  (Soc. 67, 497, 651; 71, 819; 75, 439; Soc. 81, 469 C. 1902 [1] 1014). — III, 604; \*III, 448.
  - 3) 2'-Methoxyldiphenylketon-2-Carbonsäure-4'-Oxyessigsäure. Sm. 144—146° (Soc. 93, 512 C. 1908 [1] 1701).
  - 4) Di[2-Methylcarboxyphenylester] d. Kohlensäure. Sm. 109° (D. R. P. 58129). — \*II, 890.
  - 5) Diacetat d.  $\beta$ -Rhamnocitrin. Sm. 190—191° (C. 1900 [2] 874). — \*III, 492.  
C 59,0 — H 4,0 — O 37,0 — M. G. 346.
- $C_{17}H_{14}O_8$
- 1) Triacetat d. Verb.  $C_{11}H_8O_5$  +  $C_2H_4O_2$  (Sm. 137—138°) (Soc. 63, 1084). — III, 661.

- $C_{17}H_{14}O_{10}$  C 54,0 — H 3,7 — O 42,3 — M. G. 378.  
 1) Monacetat d. Verb.  $C_{15}H_{12}O_9$  (aus Sordidin). Sm. 149—150° (*G.* 24 [2] 333). — II, 2059.
- $C_{17}H_{14}N_2$  C 82,9 — H 5,7 — N 11,4 — M. G. 246.  
 1) 1[oder 2]-Amido-2[oder 1]-Benzylidenamidonaphtalin. Sm. 156 bis 157° (*B.* 29, 1499). — IV, 920.  
 2)  $\alpha$ -Imido- $\alpha$ -[1-Naphtyl]amido- $\alpha$ -Phenylmethan. Sm. 141°. HCl, Chromat, Oxalat (*B.* 11, 1757). — IV, 845.  
 3) Phenylamido-1-Naphtylimidomethan. Sm. 142° (*Am.* 13, 516). — II, 604.  
 4) 1-Naphtophenylamidin. Sm. 128—130° (*J. pr.* [2] 54, 131). — IV, 955.  
 5) 2-Naphtophenylamidin. Sm. 162—163° (*J. pr.* [2] 54, 130). — IV, 956.  
 6) 1-Phenylhydrazonmethylnaphtalin. Sm. 152° (*Bl.* [3] 17, 304). — \*IV, 489.  
 7) 2-Phenylhydrazonmethylnaphtalin. Sm. 205—206° u. Zers. (*Soc.* 89, 276 *C.* 1906 [1] 1487).  
 8) Benzyliden-1-Naphtylhydrazin. Sm. 144—145° (*B.* 33, 751). — \*IV, 613.  
 9) Benzyliden-2-Naphtylhydrazin. Sm. 194° (*C.* 1903 [2] 427).  
 10) 1-[2-Methylphenyl]azonaphtalin. Sm. 52° (*B.* 26, 145). — IV, 1400.  
 11) 1-[3-Methylphenyl]azonaphtalin. Sm. 43—44° (*B.* 31, 995). — IV, 1400.  
 12) 2-Phenylazo-1-Methylnaphtalin. Sm. 79—80° u. Zers. (*C.* 1907 [2] 1415).  
 13) 2-Methyl-5,6-Diphenyl-1,4-Diazin. Sm. 86—87°. Pikrat (*Soc.* 63, 1285). — IV, 1040.  
 14) 8-[2-Methylphenyl]imidomethylchinolin. Sm. 105° (*B.* 38, 1282 *C.* 1905 [1] 1410).  
 15)  $\alpha$ -[3-Amidophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 158—159° (*B.* 23, 3648). — IV, 1040.  
 16)  $\alpha$ -[4-Amidophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 171—173° (154°). HCl (*B.* 22, 285; *B.* 39, 2751 *C.* 1906 [2] 1203). — IV, 1040.  
 17)  $\alpha$ -[3-Amidophenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 141° (*B.* 21, 2169). — IV, 1040.  
 18) 4-Methyl-2-[ $\beta$ -Phenyläthenyl]-1,3-Benzdiazin. Sm. 96°. HCl (*B.* 26, 1394). — IV, 1040.  
 19) Chinoxalinderivat d. 1,2-Diamidofluoren (*B.* 35, 3288 *C.* 1902 [2] 1263). — \*IV, 699.  
 20) Pyrazol (aus d. Phenylhydrazon d. 1-Keto-2-Acetyl-2,3-Dihydroinden). Sm. 84° (*A.* 347, 120 *C.* 1906 [2] 776).  
 21) Base (aus p-Toluidin u. Benzonitril). Sm. 121—123°. (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 54, 125). — IV, 844.  
 22) Nitril d.  $\alpha\gamma$ -Diphenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 70—71° (*B.* 22, 3290). — II, 1894.  
 23) Nitril d.  $\alpha\gamma$ -Diphenylpropan- $\beta\beta$ -Dicarbonsäure. Sm. 130° (131°); Sd. ca. 360° (*G.* 26 [2] 221; *Am.* 22, 188). — \*II, 1097.  
 24) Verbindung (aus d. Nitril d.  $\beta$ -Imido- $\beta$ -[4-Methylphenyl]propionsäure). Sm. 215° u. Zers. (*J. pr.* [2] 52, 113). — III, 37.
- $C_{17}H_{14}N_4$  C 74,4 — H 5,1 — O 20,5 — N 20,5 — M. G. 274.  
 1) 3,5-Di[Benzylidenamido]pyrazol. Zers. bei 170° (*B.* 27, 690; *J. pr.* [2] 52, 46). — IV, 1238.  
 2) 3-Methyl-1,4-Diphenylbipyrazol. Sm. 232°. Ag (*B.* 36, 527 *C.* 1903 [1] 642). — \*IV, 950.  
 3) 3-Imido-2-Phenyl-1,2,3,4-Tetrahydro-1,2,4-Naphtisotriazin. HCl (*C.* 1908 [2] 1588).
- $C_{17}H_{11}Cl_2$  1)  $\gamma\gamma$ -Dichlor- $\alpha\epsilon$ -Diphenyl- $\alpha\delta$ -Pentadiën. Sm. 78° (77°). + 4 HgCl<sub>2</sub>, SnCl<sub>4</sub> (*B.* 34, 2695; *B.* 39, 2988, 2993 *C.* 1906 [2] 1427; *B.* 40, 2698 *Ann.* *C.* 1907 [2] 331).
- $C_{17}H_9Cl_4$  1)  $\gamma\gamma\delta\epsilon$ -Tetrachlor- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Penten. Sm. 133° u. Zers. (*B.* 39, 2990 *C.* 1906 [2] 1428).
- $C_{17}H_{14}Br_2$  1) 9,10-Dibrom-1,3,6-Trimethylantracen. Sm. 142° (*J. pr.* [2] 41, 143). — II, 275.
- $C_{17}H_{14}S$  1) Benzyläther d. 1-Merkaptonaphtalin. Sm. 78—80° (*Bl.* [3] 31, 1188 *C.* 1905 [1] 80).



$C_{17}H_{14}S$ 

- 2) 2-Methylphenyläther d. 1-Merkaptonaphtalin. Sd.  $227,5^{\circ}_{11}$  (B. 24, 2267; 28, 2328). — II, 867; \*II, 509.
- 3) 3-Methylphenyläther d. 1-Merkaptonaphtalin. Sd.  $229^{\circ}_{11}$  (B. 24, 2266; 28, 2328). — II, 867; \*II, 509.
- 4) 4-Methylphenyläther d. 1-Merkaptonaphtalin. Sm.  $40,5^{\circ}$ ; Sd.  $233^{\circ}_{12}$  (B. 24, 2265; 28, 2328). — II, 867; \*II, 509.
- 5) 2-Methylphenyläther d. 2-Merkaptonaphtalin. Sd.  $232^{\circ}_{12}$  (B. 24, 2266; 28, 2328). — II, 887; \*II, 529.
- 6) 3-Methylphenyläther d. 2-Merkaptonaphtalin. Sm.  $60^{\circ}$ ; Sd.  $236^{\circ}_{12}$  (B. 24, 2266; 28, 2328). — II, 887; \*II, 529.
- 7) 4-Methylphenyläther d. 2-Merkaptonaphtalin. Sm.  $70,5^{\circ}$ ; Sd.  $237,5^{\circ}_{12}$  (B. 24, 2265; 28, 2328). — II, 887.
- 8) Diphenylthiänylmethan. Sm. 63; Sd.  $330-340^{\circ}$ . +  $C_6H_6$  (Sm.  $48^{\circ}$ ) (B. 19, 1624). — III, 749.

 $C_{17}H_{14}Se$ 

- 1) Benzyläther d. 1-Selenonaphtalin. Sm.  $68-69^{\circ}$ . Pikrat (Bl. [3] 35, 671 C. 1906 [2] 1120).

 $C_{17}H_{15}N$ 

- C 87,6 — H 6,4 — N 6,0 — M. G. 233.
- 1) 6-Benzylidenamido-2-Methylinden. Sm.  $73^{\circ}$  (B. 19, 1251). — III, 71.
- 2) 2-[Methylphenylamido]naphtalin (Methylphenyl-2-Naphtylamin). Sm.  $52-53^{\circ}$  (D. R. P. 96402). — \*II, 333.
- 3) 1-[2-Methylphenyl]amidonaphtalin. Sm.  $94-95^{\circ}$ ; Sd.  $395-405^{\circ}$  (B. 16, 2084; B. 37, 2924 C. 1904 [2] 1411). — II, 600.
- 4) 1-[4-Methylphenyl]amidonaphtalin. Sm.  $78^{\circ}$ ; Sd.  $360^{\circ}_{528}$  (Bl. 18, 68; B. 14, 2344; 16, 2084). — II, 600; \*II, 332.
- 5) 2-[2-Methylphenyl]amidonaphtalin. Sm.  $95-96^{\circ}$  ( $105^{\circ}$ ); Sd.  $400$  bis  $405^{\circ}$ . Pikrat (B. 16, 2082; B. 37, 2926 C. 1904 [2] 1412; J. pr. [2] 75, 270 C. 1907 [2] 408). — II, 603.
- 6) 2-[3-Methylphenyl]amidonaphtalin. Sm.  $67-68^{\circ}$  (J. pr. [2] 75, 269 C. 1907 [2] 408).
- 7) 2-[4-Methylphenyl]amidonaphtalin. Sm.  $102-103^{\circ}$  (B. 14, 2344; 16, 2078; J. pr. [2] 51, 328; J. pr. [2] 75, 268 C. 1907 [2] 408). — II, 603; \*II, 333.
- 8) 1- $[\alpha$ -Amidobenzyl]naphtalin. Sm.  $121^{\circ}$ ; Sd.  $255^{\circ}_{15}$ . HCl (J. pr. [2] 77, 15 C. 1908 [1] 630).
- 9) 1-Benzylamidonaphtalin. Sm.  $66-67^{\circ}$  (Bl. 20, 68). — II, 600; \*II, 332.
- 10) 2-Benzylamidonaphtalin. Sm.  $68^{\circ}$  (A. 241, 360). — II, 602.
- 11) 5-Methyl-1,2-Diphenylpyrrol. Sm.  $84^{\circ}$  (B. 18, 2596). — IV, 333.
- 12) 2- $[\beta$ -Phenyläthyl]chinolin (2-Benzylchinaldin). Sm. bei  $30^{\circ}$ . Pikrat (B. 21, 1426). — IV, 444.
- 13) 4- $[\beta$ -Phenyläthyl]chinolin. Sm.  $100-101^{\circ}$  (B. 21, 1427, 2171; 32, 3605). — IV, 444; \*IV, 266.
- 14) 4-[4-Methylbenzyl]isochinolin. Sm.  $66-67^{\circ}$ . ( $3HCl$ ,  $2HgCl_2$ ), ( $2HCl$ ,  $PtCl_4 + H_2O$ ),  $H_2SO_4$ , Pikrat (A. 326, 297 C. 1903 [1] 929). — \*IV, 266.
- 15) 1-Methyl-2-Benzyliden-1,2-Dihydrochinolin (B. 38, 2500 C. 1905 [2] 633).
- 16) 2-Methyl-1-Benzyliden-1,2-Dihydroisochinolin (B. 38, 2499 C. 1905 [2] 633).
- 17) 3-Crotonyl- $\beta$ -Naphtochinolin. Fl. ( $2HCl$ ,  $PtCl_4 + 3H_2O$ ) (B. 27, 2024). — IV, 444.
- 18) Base (aus Isochinolinrot). Sm.  $86-86,5^{\circ}$ . ( $2HCl$ ,  $PtCl_4$ ) (B. 20, 16). — IV, 444.
- C 78,1 — H 5,7 — N 16,1 — M. G. 261.
- 1) 2-Benzylamidodiazonaphtalin. Sm.  $110^{\circ}$  (B. 21, 1019). — IV, 1575.
- 2) 2-[4-Methylphenyl]amidodiazonaphtalin. Sm.  $131-132^{\circ}$  (B. 21, 2567). — IV, 1574.
- 3) 4-Amido-1-[4-Methylphenyl]azonaphtalin. Sm.  $145^{\circ}$ .  $HCl$ ,  $H_2SO_4 + 3H_2O$  (B. 12, 229; 30, 885). — IV, 1400.
- 4) 2-[4-Amido-3-Methylphenylazo]naphtalin. Sm.  $175^{\circ}$  (D. R. P. 131860 C. 1902 [2] 83). — \*IV, 1029.
- 5) 4-Phenylazo-2-Methyl-5-Phenylpyrrol. Sm.  $120^{\circ}$  (C. 1901 [1] 1323). — \*IV, 1077.
- 6) 2,6-Di $[\beta$ -Amidophenyl]pyridin. Sm.  $75-76^{\circ}$ .  $3HCl$  (B. 30, 1501). — IV, 1192.

 $C_{17}H_{15}N_3$

$C_{17}H_{15}N_3$ 

- 7) 6-Phenylamido-5-Methyl-3-Phenyl-1,2-Diazin (Methylphenylanilido-pyridazin). Sm. 173—174° (B. 34, 4233 C. 1902 [1] 213). — \*IV, 820.
- 8) 6-Amido-5-Methyl-2,4-Diphenyl-1,3-Diazin. Sm. 172—173°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, 3 H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (J. pr. [2] 39, 195; [2] 42, 8). — IV, 1192.
- 9) 6-Phenylamido-4-Methyl-2-Phenyl-1,3-Diazin. Sm. 160—161° (150 bis 153°). HCl, HBr, HNO<sub>3</sub> (PINNER, Imidoäther 248; Am. 20, 485). — IV, 1167; \*IV, 820.
- 10) 4-Methyl-6-[3-Amidophenyl]-2-Phenyl-1,3-Diazin. Sm. 104—105° (Soc. 83, 1375 C. 1904 [1] 450).
- 11) 2-Äthyl-4,6-Diphenyl-1,3,5-Triazin. Sm. 67°; Sd. 233—234°. (2HCl, PtCl<sub>4</sub>) (B. 22, 806). — IV, 1191.
- 12) 6-Phenylhydrazonmethyl-2-Methylchinolin. Sm. 160° (B. 18, 3238). — IV, 372.
- 13) 5-Phenylhydrazonmethyl-2-Methylchinolin. 3 + 2 H<sub>2</sub>SO<sub>4</sub> + 9 H<sub>2</sub>O (B. 22, 280; 38, 2775). — IV, 373.
- 14) α-Benzyliden-β-[4-Methyl-2-Chinolyl]hydrazin. Sm. 150°. H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (B. 33, 1896). — \*IV, 815.
- 15) α-Benzyliden-β-[2-Methyl-4-Chinolyl]hydrazin. Sm. 161—162°. Pikrat (B. 33, 1899). — \*IV, 815.
- 16) Äthenyl-β-o-Amido-p-Tolyl-m[oder p]-Tolimidazol. Sm. 173° (193°; 218°) (B. 32, 1485). — \*IV, 852.
- 17) Methyl-N-Äthylindophenazin. Sm. 213°. HCl (B. 34, 1114). — \*IV, 850.
- 18) Base (aus Aceton u. 4-Amidoazobenzol). Sm. 204—205°. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (B. 20, 480). — IV, 1192.
- 19) Nitril d. αδ-Di[4-Amidophenyl]-αγ-Butadien-α-Carbonsäure. Sm. 196° (B. 34, 3109).
- 20) Nitril d. 2-Phenylhydrazon-1-Methyl-2,3-Dihydroinden-1-Carbonsäure. Sm. 169° (Soc. 93, 182 C. 1908 [1] 1276).

 $C_{17}H_{15}N_5$  $C_{17}H_{16}O$ 

- 1) p-Di[Phenylazo]-1-Methylpyrrol. Sm. 196° (B. 19, 2253). — IV, 1483.

C 86,4 — H 6,8 — O 6,8 — M. G. 236.

- 1) Methyläther d. 3-[4-Oxybenzyl]inden. Sm. 63—64° (A. 347, 269 C. 1906 [2] 957).
- 2) Methyläther d. 9-Oxy-9-Methyl-10-Methylen-9,10-Dihydroanthracen (Bl. [3] 33, 1147 C. 1906 [1] 47).
- 3) γ-Keto-αε-Diphenyl-α-Penten. Sm. 53° (A. 330, 233 C. 1904 [1] 945).
- 4) ε-Keto-δε-Diphenyl-α-Penten (Allyldesoxybenzoïn). Sd. 335—337° (B. 23, 2067). — III, 249.
- 5) γ-Keto-δ-Phenyl-α-[4-Methylphenyl]-α-Buten. Sm. 115° (M. 22, 751). — \*III, 186.
- 6) 6-Benzoyl-1,2,3,4-Tetrahydronaphtalin. Sd. 375° u. Zers. (B. 35, 2513 C. 1902 [2] 451).
- 7) 9-Keto-4-Isopropyl-1-Methylfluoren (Retenketon). Sm. 90° (A. 229, 136; B. 17, 692). — III, 249.

 $C_{17}H_{16}O_2$ 

C 81,0 — H 6,3 — O 12,7 — M. G. 252.

- 1) Dimethyläther d. 5,6-Dioxy-1-Methylphenanthren. Sm. 68° (B. 39, 3110 C. 1906 [2] 1328).
- 2) Dimethyläther d. 5,6-Dioxy-3-Methylphenanthren. Sm. 70—72°. Pikrat (B. 39, 3114 C. 1906 [2] 1329).
- 3) Methyläther d. γ-Keto-δ-Phenyl-α-[4-Oxyphenyl]-α-Buten. Sm. 98 bis 100° (M. 22, 755). — \*III, 185.
- 4) Äthyläther d. α-Oxy-γ-Keto-αγ-Diphenylpropen (Ä. d. α-Oxybenzylidenacetophenon). Sm. 77—78° (C. 1902 [1] 37; Soc. 85, 462 C. 1904 [1] 1079, 1438; R. 24, 369 C. 1905 [2] 1178).
- 5) Äthyläther d. isom. α-Oxy-γ-Keto-αγ-Diphenylpropen. Sm. 61° (R. 24, 369 C. 1905 [2] 1178).
- 6) Äthyläther d. γ-Keto-γ-[4-Oxyphenyl]-α-Phenylpropen. Sm. 74 bis 75° (B. 25, 3535; 32, 1924). — III, 247; \*III, 181.
- 7) Äthyläther d. γ-Keto-γ-Phenyl-α-[3-Oxyphenyl]propen. Sm. 75° (B. 29, 1891). — \*III, 180.
- 8) Äthyläther d. γ-Keto-γ-Phenyl-α-[4-Oxyphenyl]propen. Sm. 63° (B. 29, 1892). — \*III, 180.

$C_{17}H_{16}O_2$ 

- 9)  $\alpha\epsilon$ -Diketo- $\alpha\epsilon$ -Diphenylpentan ( $\alpha\gamma$ -Dibenzoylpropan). Sm. 62—63° (67,5°) (A. ch. [6] 22, 358; Soc. 79, 1017, 1021, 1023; A. 302, 217). — III, 299; \*II, 230.
- 10)  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenyl- $\beta$ -Äthylpropan ( $\alpha\alpha$ -Dibenzoylpropan). Sm. 87°; Sd. 230°<sub>25</sub> (A. ch. [6] 22, 351; R. 24, 371 C. 1905 [2] 1178). — III, 300.
- 11)  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Di[4-Methylphenyl]propan. Sm. 126° (Bl. [3] 9, 699). — III, 300.
- 12) 4,4'-Diacetyldiphenylmethan. Sm. 93°; Sd. 259—260° (C. r. 146, 343 C. 1908 [1] 1393).
- 13) Dimethylphenyl-m-Biscyklohexanon. Sm. 152°; Sd. 355° (A. 281, 87; B. 36, 2148 C. 1903 [2] 369). — III, 324.
- 14) 2,6-Diphenyltetrahydro-1,4-Pyron. Sm. 131° (130°) (B. 30, 2802; C. 1899 [2] 187; J. pr. [2] 60, 151; B. 41, 3982 C. 1909 [1] 17). — \*III, 543.
- 15) Methyläther d. 4'-Oxy-1,2-Hydrindochroman (Soc. 91, 1092 C. 1907 [2] 603).
- 16) Propyloxanthranol. Sm. 164° (B. 22, 1071). — III, 250.
- 17)  $\alpha\beta$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure ( $\gamma\delta$ -Diphenylallylessigsäure). Sm. 106°. Ca + 1½(2)H<sub>2</sub>O, Ba + 2H<sub>2</sub>O (B. 34, 4177 C. 1902 [1] 255).
- 18)  $\alpha\gamma$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 118° (Am. 38, 233 C. 1907 [2] 1241).
- 19)  $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 88°. Na + 5H<sub>2</sub>O (A. 306, 238). — \*II, 875.
- 20)  $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 124° (A. 306, 230). — \*II, 875.
- 21)  $\alpha\delta$ -Diphenyl- $\beta$ -Buten- $\alpha$ -Carbonsäure. Sm. 101,5°. Ca + 2H<sub>2</sub>O (A. 306, 218, 237). — \*II, 875.
- 22) 1-Phenyl-1,2,3,4-Tetrahydronaphtalin-3-Carbonsäure. Sm. 177°. Na + 6H<sub>2</sub>O (A. 306, 233). — \*II, 876.
- 23) Distyrensäure. Sm. bei 50°. Ca, Ba, Ag (A. 216, 182). — II, 1476.
- 24) Lakton d.  $\gamma$ -Oxy- $\gamma\delta$ -Diphenylvaleriansäure ( $\gamma\delta$ -Diphenylvalerolakton). Sm. 59—60° (B. 34, 4177 C. 1902 [1] 255).
- 25) Lakton d.  $\gamma$ -Oxy- $\alpha\delta$ -Diphenylbutan- $\alpha$ -Carbonsäure (L. d. Tetrahydrocornicularsäure). Sm. 69—71° (73°) (B. 14, 1692; A. 219, 35; 306, 239). — II, 1702; \*II, 999.
- 26) Lakton d.  $\alpha$ -Oxy- $\alpha'$ -Phenyl- $\alpha''$ -[2,3,5-Trimethylphenyl]methan- $\alpha'$ -2-Carbonsäure (Pseudocumilphtalid). Sm. 140° (A. 234, 238). — II, 1702.
- 27) Lakton d.  $\alpha$ -Oxy- $\alpha'$ -Phenyl- $\alpha''$ -[2,4,6-Trimethylphenyl]methan- $\alpha'$ -2-Carbonsäure (Mesitylphtalid). Sm. 163—164° (A. 234, 237). — II, 1702.
- 28) Äthylester d.  $\alpha\beta$ -Diphenylakrylsäure. Fl. (J. 1878, 821). — II, 1474.
- 29) 1,2,3,4-Tetrahydro-2-Naphtylester d. Benzolcarbonsäure. Fest. Sd. 254—255°<sub>40</sub> (B. 23, 209). — II, 1148.
- 30) Benzoat d.  $\beta$ -[6-Oxy-3-Methylphenyl]propen. Sm. 49° (B. 41, 372 C. 1908 [1] 1055; A. 362, 46 C. 1908 [2] 793).
- 31) Verbindung (aus d. Phenylester d. 4-Oxy-1-Isobutylbenzol-3-Carbonsäure). Sm. 158° (J. pr. [2] 36, 397). — II, 1588.

 $C_{17}H_{16}O_3$ 

- 1) Trimethyläther d. 1,5,6-Trioxypheanthren. Sm. 135° (138°). Pikrat (B. 33, 182; B. 40, 2001 C. 1907 [2] 158; B. 40, 2003 C. 1907 [2] 158; B. 40, 3350 C. 1907 [2] 921). — \*II, 627.
- 2) Trimethyläther d. 3,4,5-Trioxypheanthren. Sm. 90°. Pikrat (B. 39, 1720 C. 1906 [2] 54).
- 3) Trimethyläther d. 3,4,6-Trioxypheanthren (Methylthebaol). Fl. Pikrat (B. 35, 4406 C. 1903 [1] 342; B. 35, 4411 C. 1903 [1] 343; B. 36, 3081 C. 1903 [2] 955; B. 38, 3255 C. 1905 [2] 1449).
- 4)  $\beta$ -Oxy- $\alpha\delta$ -Diketo- $\alpha\beta$ -Diphenylpentan (Acetonbenzil). Sm. 78° (B. 18, 179; Soc. 57, 673). — III, 299.
- 5) 4-Äthyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropen. Sm. 104° (B. 31, 698). — \*III, 182.
- 6)  $\alpha^2$ -Äthyläther d.  $\gamma$ -Keto- $\alpha\gamma$ -Di[2-Oxyphenyl]propen. Sm. 61° (B. 32, 320). — \*III, 181.
- 7) Äthyläther d. 2-Oxydibenzoylmethan. Sm. 86° (B. 33, 332). — \*III, 226.



- $C_{17}H_{16}O_3$  8) 4-Methyläther- $\beta$ -Phenyläther d.  $\beta$ -Oxy- $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten. Sm. 106° (B. 35, 3555 C. 1902 [2] 1311).
- 9) Äthyläther d. 6-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 103° (B. 32, 330). — \*III, 559.
- 10) Äthyläther d. 6{oder 7}-Oxy-3-Phenyl-3,4-Dihydro-2,1-Benzpyron. Sm. 83—84° (B. 34, 3744 C. 1902 [1] 40).
- 11)  $\delta$ -Oxy- $\alpha$ - $\gamma$ -Diphenyl- $\beta$ -Buten- $\delta$ -Carbonsäure. Sm. 168° (A. 333, 281 C. 1904 [2] 1393).
- 12) 2-Oxy-1-Phenyl-1,2,3,4-Tetrahydronaphtalin-3-Carbonsäure. Sm. 194° (A. 306, 236). — \*II, 1014.
- 13) lab.- $\alpha$ -Phenyl- $\alpha$ -[2-Methoxyphenyl]propen- $\beta$ -Carbonsäure. Sm. 110° (B. 41, 341 C. 1908 [1] 836).
- 14) stab.  $\alpha$ -Phenyl- $\alpha$ -[2-Methoxyphenyl]propen- $\beta$ -Carbonsäure. Sm. 139°. +  $C_6H_6$  (B. 41, 341 C. 1908 [1] 836).
- 15)  $\alpha$ -(4{oder 5}-Äthoxyphenyl)- $\beta$ -Phenyläthen- $\alpha^2$ -Carbonsäure. Sm. 172° (B. 34, 3741 C. 1902 [1] 39).
- 16)  $\beta$ -Oxy- $\beta$ -Phenylakryl-2,4-Dimethylphenyläthersäure. Sm. 121—122° u. Zers. Ag (Soc. 79, 1187).
- 17)  $\gamma$ -Keto- $\alpha$ - $\alpha$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 90° (Soc. 71, 677). — \*II, 1014.
- 18)  $\alpha$ -Keto- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure ( $\beta$ -Phenyl- $\gamma$ -Benzoylbutter-säure). Sm. 155—156° (152—153,5°) (A. 294, 332; B. 34, 656; Am. 37, 389 C. 1907 [1] 1541). — \*II, 1012.
- 19)  $\beta$ -Keto- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 128° (A. 333, 282 C. 1904 [2] 1393).
- 20)  $\delta$ -Keto- $\alpha$ - $\delta$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 169,5° (A. 306, 186; Bl. [3] 17, 411). — \*II, 1013.
- 21)  $\gamma$ -Keto- $\alpha$ - $\delta$ -Diphenylbutan- $\alpha$ -Carbonsäure (Dihydrocornicularsäure). Sm. 134°. Ag (B. 14, 1690; 15, 1548; A. 219, 25; 306, 222; A. 319, 218 C. 1902 [1] 108). — II, 1717; \*II, 1012.
- 22) Isodihydrocornicularsäure (A. 219, 35). — II, 1717.
- 23)  $\alpha$ -Benzoyl- $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. Sm. 213—215°. Ag (B. 21, 1353). — II, 1716.
- 24)  $\alpha$ -Benzoyl- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure ( $\gamma$ -Benzoyl- $\gamma$ -Phenylbutter-säure). Sm. 136°.  $Zn + xH_2O$ ,  $Cu + xH_2O$ , Ag (B. 21, 1351). — II, 1716.
- 25)  $\alpha$ -Benzyl- $\beta$ -Benzoylpropionsäure. Sm. 176° (B. 38, 1206 C. 1905 [1] 1240).
- 26) 2,3,5-Trimethyldiphenylketon-2'-Carbonsäure? Sm. 146,5° (B. 15, 638; J. pr. [2] 41, 122). — II, 1716.
- 27) 2,4,6-Trimethyldiphenylketon-2'-Carbonsäure. Sm. 212—212,5° (B. 15, 639). — II, 1717.
- 28) Säure (aus Benzaldehyd u. Bernsteinsäurediäthylester). Sm. 170—171° u. Zers. Ca, Ba +  $H_2O$  (B. 37, 2247 C. 1904 [2] 328).
- 29) Säure (aus d. Lakton d.  $\beta$ -Oxy- $\alpha$ - $\gamma$ -Diphenylpropan- $\alpha$ -Ketocarbonsäure). Sm. 161° (B. 35, 1941 C. 1902 [2] 120).
- 30) Säure (aus d. Lakton d.  $\gamma$ -Oxy- $\alpha$ - $\gamma$ -Diphenylpropen- $\beta$ -Ketocarbonsäure). Sm. 143° (B. 35, 1941 C. 1902 [2] 120).
- 31) Säure (aus d. Säure  $C_{17}H_{16}O_3$  vom Sm. 143°). Sm. 97° (B. 35, 1941 C. 1902 [2] 120).
- 32) Säure (aus d. Säure  $C_{17}H_{16}O_3$  vom Sm. 161°). Sm. 128° (B. 35, 1941 C. 1902 [2] 120).
- 33) Gem. Anhydrid d. Benzolcarbonsäure u. 1-Isopropylbenzol-4-Carbonsäure. Fl. (A. 87, 79). — II, 1385.
- 34) Gem. Anhydrid d. Benzolcarbonsäure u. 1,3,5-Trimethylbenzol-2-Carbonsäure. Sm. 105° (B. 36, 2537 Anm. C. 1903 [2] 720).
- 35)  $\beta\delta$ -Lakton d.  $\beta\delta$ -Dioxy- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta$ -Dicarbonsäure. Sm. 153° (B. 35, 1939, 1942 C. 1902 [2] 119; A. 333, 278 C. 1904 [2] 1392).
- 36) isom.  $\beta\delta$ -Lakton d.  $\beta\delta$ -Dioxy- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 113° (A. 333, 278 C. 1904 [2] 1392).
- 37)  $\beta\delta$ -Lakton d. isom.  $\beta\delta$ -Dioxy- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 113° (B. 35, 1939, 1942 C. 1902 [2] 119).
- 38)  $\alpha$ - $\gamma$ -Lakton d.  $\alpha$ - $\gamma$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -Benzylpropan- $\alpha$ -Carbonsäure. Sm. 110° (B. 35, 1940, 1942 C. 1902 [2] 119).

- $C_{17}H_{16}O_3$  39)  $\alpha\gamma$ -Lakton d. isom.  $\alpha\gamma$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -Benzylpropan- $\alpha$ -Carbonsäure. Sm. 109–110° (B. 35, 1940, 1942 C. 1902 [2] 120).
- 40)  $\alpha\gamma$ -Lakton d. isom.  $\alpha\gamma$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -Benzylpropan- $\alpha$ -Carbonsäure. Sm. 155° (B. 35, 1940, 1942 C. 1902 [2] 119).
- 41)  $\alpha\gamma$ -Lakton d. isom.  $\alpha\gamma$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -Benzylpropan- $\alpha$ -Carbonsäure. Sm. 155–156° (B. 35, 1940, 1942 C. 1902 [2] 120).
- 42) Lakton d.  $\alpha$ -Oxy- $\alpha$ -[4 (oder 5)-Äthoxyphenyl]- $\beta$ -Phenyläthan- $\alpha^2$ -Carbonsäure. Sm. 87–88° (B. 34, 3740 C. 1902 [1] 39).
- 43) Lakton d.  $\alpha$ -Äthoxyl-6-Oxy-3-Methyldiphenylessigsäure. Sm. 122° (B. 31, 2819). — \*II, 1091.
- 44) Lakton d.  $\alpha$ -Äthoxyl-2-Oxy-4-Methyldiphenylessigsäure. Sm. 91 bis 93° (B. 31, 2821). — \*II, 1091.
- 45) Methylester d. 2-Oxy-1,2-Diphenyl-R-Trimethylen-3-Carbonsäure. Sm. 89° (B. 31, 2229). — \*II, 1012.
- 46) Methylester d. lab.  $\beta$ -Phenyl- $\beta$ -[2-Methoxyphenyl]akrylsäure. Fl. (B. 41, 340 C. 1908 [1] 836).
- 47) Methylester d. stab.  $\beta$ -Phenyl- $\beta$ -[2-Methoxyphenyl]akrylsäure. Sm. 58° (B. 41, 339 C. 1908 [1] 835).
- 48) Methylester d.  $\alpha$ -Oxy- $\beta$ -Phenylakryl-[2-Methylphenyläther]säure. Sm. 61° (G. 20, 505). — II, 1637.
- 49) Methylester d.  $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan- $\alpha$ -Carbonsäure. Sm. 66 bis 67° (J. pr. [2] 55, 353). — \*II, 1009.
- 50) Methylester d.  $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure. Sm. 104–105° (A. 284, 4; B. 28, 963; A. 354, 148 C. 1907 [2] 695). — II, 1713.
- 51) Methylester d.  $\beta$ -Phenyl- $\alpha$ -Benzoylpropionsäure. Sd. 250–255°, (Soc. 49, 155). — II, 1713.
- 52) Methylester d.  $\beta$ -Phenyl- $\beta$ -Benzoylpropionsäure. Sm. 49° (A. 354, 147 C. 1907 [2] 695).
- 53) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 183° (B. 28, 1999). — \*II, 1006.
- 54) Äthylester d.  $\alpha$ -Oxy- $\beta$ -Phenylakrylphenyläthersäure. Sm. 48,5°; Sd. 220–223° (C. 1899 [2] 92; B. 38, 1956 C. 1905 [2] 132).
- 55) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakrylphenyläthersäure. Sm. 73–74°; Sd. 204–205°, (Soc. 77, 985). — \*II, 962.
- 56) Äthylester d.  $\alpha\alpha$ -Diphenyläthan- $\alpha\beta$ -Oxyd- $\beta$ -Carbonsäure. Sm. 47°; Sd. 202–204°, (C. r. 148, 418 C. 1909 [1] 1094).
- 57) Äthylester d. Benzoylphenylessigsäure. Sm. 90° (J. pr. [2] 55, 318). — \*II, 1003.
- 58) Äthylester d. 4-Methyldiphenylketon-2'-Carbonsäure. Sm. 68–69° (Bl. 35, 505). — II, 1712.
- 59) Äthylester d. 1-[ $\gamma$ -Keto- $\alpha$ -Butenyl]naphtalin-8-Carbonsäure. Fl. (M. 22, 820).
- 60) 6-Methoxyl-3-Methylphenylester d.  $\beta$ -Phenylakrylsäure. Sm. 125° (C. 1900 [1] 1086). — \*II, 851.
- 61) Diphenylmethylester d. Acetessigsäure. Sm. 56°. Cu (Am. 33, 80 C. 1905 [1] 609).
- 62) Acetat d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[2-Oxyphenyl]propan. Sm. 65–66° (B. 31, 719). — \*III, 167.
- 63) Acetat d.  $\alpha$ -Keto- $\alpha$ -[4-Oxy-3-Methylphenyl]- $\beta$ -Phenyläthan. Sm. 73° (M. 26, 1154 C. 1905 [2] 1182).
- 64) Acetat d. Oxydimethyldiphenylketon  $C_{15}H_{14}O_2$ . ( $CH_3 : CH_3 : OH = 1 : 2 : 4$ ). Sm. 74–74,5° (G. 32 [1] 501 C. 1902 [2] 581).
- 65) Acetat d. Oxydimethyldiphenylketon  $C_{15}H_{14}O_2$ . ( $CH_3 : CH_3 : OH = 1 : 4 : 2$ ). Sm. 62–62,5° (G. 32 [1] 496 C. 1902 [2] 581).
- 66) Acetat d. 7-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzopyran. Sm. 112 bis 114° (B. 34, 3896 C. 1902 [1] 122). — \*III, 546.
- 67) 4-Benzoat d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 69–70° (70,5–71°); Sd. oberhalb 360° (A. 108, 322; B. 15, 2067; Ph. Ch. 10, 421; B. 35, 3188 C. 1902 [2] 1254). — II, 1151.
- 68) 4-Benzoat d. 3,4-Dioxy-1-Propenylbenzol-3-Methyläther (Benzoyl-isoeugenol). Sm. 103–104° (B. 24, 2874; D.R.P. 57568; Ph. Ch. 10, 421; C. 1899 [2] 927; A. 301, 103). — II, 1151; \*II, 720.
- 69) 4-Benzoat d.  $\beta$ -[3,4-Dioxyphenyl]propen-3-Methyläther. Sm. 58 bis 59° (Bl. [4] 3, 733 C. 1908 [2] 595).

- $C_{17}H_{16}O_3$  70) Benzoylacetat d. Dracoresinotannol (*C.* 1896 [2] 713).  
 71) Verbindung (aus Benzaldehyd u. Safrol). Sm. 150—180° (*B.* 42, 1391 *C.* 1909 [1] 1558).  
 72) Verbindung (aus Benzaldehyd u. Isosafrol). Sm. 170—180° (*B.* 42, 1391 *C.* 1909 [1] 1558).  
 $C_{17}H_{16}O_4$  73) Verbindung (Dibenzoylacetone?). Sm. 156—157,5° (*A.* 278, 138).  
 C 71,8 — H 5,6 — O 22,5 — M. G. 284.  
 1)  $\alpha^2\gamma^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[2-Oxyphenyl]-propen. Sm. 94° (*B.* 37, 4156 *C.* 1904 [2] 1658).  
 2)  $\gamma^2\gamma^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[2-Oxyphenyl]-propen. Sm. 124°. K, HCl (*Soc.* 93, 1109 *C.* 1908 [2] 608).  
 3)  $\alpha^3\gamma^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3-Oxyphenyl]-propen. Sm. 80—81° (*B.* 37, 4159 *C.* 1904 [2] 1658).  
 4)  $\alpha^4\gamma^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[4-Oxyphenyl]-propen (Anisalpaenonol). Sm. 113—114° (*B.* 32, 322). — \*III, 182.  
 5)  $\alpha^4\gamma^5$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,5-Dioxyphenyl]- $\alpha$ -[4-Oxyphenyl]-propen. Sm. 130° (*B.* 39, 4033 *Anm.* *C.* 1907 [1] 265).  
 6)  $\gamma^3\gamma^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[3,4-Dioxyphenyl]- $\alpha$ -[2-Oxyphenyl]-propen. Sm. 148° (*B.* 41, 1339 *C.* 1908 [1] 1981).  
 7)  $\alpha^3\alpha^4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 115° (*B.* 38, 2178 *C.* 1905 [2] 257).  
 8) 3,4-Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxyphenyl]- $\alpha$ -Phenylpropen. Sm. 98° (*B.* 36, 4238 *C.* 1904 [1] 381).  
 9) 2,4-Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphenyl]- $\alpha$ -Phenylpropen. Sm. 91—92° (*B.* 32, 2263). — \*III, 183.  
 10) Dimethyläther d.  $\alpha\gamma$ -Diketo- $\gamma$ -Phenyl- $\alpha$ -[3,5-Dioxyphenyl]propan. Sm. 75°. Cu +  $C_6H_6$  (*B.* 35, 3902 *C.* 1903 [1] 27).  
 11) Dimethyläther d.  $\alpha\gamma$ -Diketo- $\alpha$ -Phenyl- $\gamma$ -[2,4-Dioxyphenyl]propan. Sm. 55°. Cu (*C.* 1903 [1] 580; *Soc.* 85, 160 *C.* 1904 [1] 724).  
 12) Trimethyläther d. 2,5,6-Trioxy-9-Keto-9,10-Dihydroanthracen. Sm. 169—170° (*B.* 31, 2799). — \*III, 178.  
 13) Dimethyläther d. 4-[3,4-Dioxybenzoyl]-1,2-Dihydrobenzofuran. Sm. 136—137° (*B.* 40, 3667 *C.* 1907 [2] 1420).  
 14) Dimethyläther d. 4-[3,5-Dioxybenzoyl]-1,2-Dihydrobenzofuran. Sm. 94—95° (*B.* 41, 1329 *C.* 1908 [1] 1979).  
 15) Dimethyläther d. 2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 123—125° (*B.* 38, 2179 *C.* 1905 [2] 258).  
 16) Dimethyläther d. 6-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 120° (*B.* 37, 2348 *C.* 1904 [2] 230).  
 17) Dimethyläther d. 6-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 104° (*B.* 37, 958 *C.* 1904 [1] 1160).  
 18) Dimethyläther d. 6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 160° (*B.* 37, 782 *C.* 1904 [1] 1159).  
 19) Dimethyläther d. 7-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 102° (*B.* 37, 4157 *C.* 1904 [2] 1658).  
 20) Dimethyläther d. 7-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 104° (*B.* 37, 4159 *C.* 1904 [2] 1658).  
 21) Dimethyläther d. 7-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 94—95° (*B.* 37, 4161 *C.* 1904 [2] 1659).  
 22) Dimethyläther d. 5,7-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 146—147° (*B.* 37, 2803 *C.* 1904 [2] 712).  
 23) Dimethyläther d. 7,8-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 115° (*B.* 36, 4243 *C.* 1904 [1] 382; *B.* 37, 2807 *C.* 1904 [2] 713).  
 24) Diäthyläther d. 1,7-Dioxyxanthon. Sm. 126° (*B.* 15, 1678). — III, 206.  
 25) Diäthyläther d. 3,6-Dioxyxanthon. Sm. 185° (*Soc.* 67, 996). — III, 205; \*III, 157.  
 26)  $\beta$ -[3,4-Dioxyphenyl]- $\beta$ -[4-Methylphenyl]propion-3,4-Methylenäthersäure. Sm. 161°. Ag (*C. r.* 143, 915 *C.* 1907 [1] 478).  
 27)  $\gamma$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 126° (*A.* 333, 273 *C.* 1904 [2] 1392; *B.* 38, 3126 *C.* 1905 [2] 1429).  
 28)  $\alpha$ -Phenyl- $\beta$ -[2,4-Dioxyphenyl]akryl-2,4-Dimethyläthersäure. Sm. 196—198° (*B.* 38, 942 *C.* 1905 [1] 1019).  
 29)  $\alpha$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 148° (*A.* 333, 272 *C.* 1904 [2] 1392).



- $C_{17}H_{16}O_4$  30)  $\alpha$ -Keto- $\alpha$ -[4(oder 5)-Äthoxylphenyl]- $\beta$ -Phenyläthan- $\alpha^2$ -Carbonsäure. Sm. 95—96° (B. 34, 3738 C. 1902 [1] 39).
- 31)  $\beta$ -Keto- $\alpha$ -[4(oder 5)-Äthoxylphenyl]- $\beta$ -Phenyläthan- $\alpha^2$ -Carbonsäure. Sm. 172—173° (B. 34, 3742 C. 1902 [1] 40).
- 32) 2-Oxy-3, 5-Dimethyldiphenylketon-2-Methyläther-2'-Carbonsäure. Sm. 188—189° (Soc. 91, 1634 C. 1907 [2] 2059).
- 33)  $\alpha\alpha$ -Diphenylpropan- $\beta\gamma$ -Dicarbonsäure +  $H_2O$ . Sm. 175° (180—184° wasserfrei). Ca +  $2H_2O$ , Ba +  $H_2O$ ,  $Ag_2$  (A. 308, 100; C. 1905 [1] 1388). — \*II, 1098.
- 34)  $\alpha\beta$ -Diphenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 223—224°.  $Ag_2$  (C. 1908 [1] 1777).
- 35)  $\alpha\gamma$ -Diphenylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 176° (C. 1908 [1] 1778).
- 36)  $\alpha\gamma$ -Diphenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 164° (B. 22, 3290). — II, 1894.
- 37)  $\alpha\gamma$ -Diphenylpropan- $\beta\beta$ -Dicarbonsäure (Dibenzylmalonsäure). Sm. 170 bis 172° (162° u. Zers.) (A. 239, 97; Soc. 47, 821; B. 24, 1062; R. 6, 88; Ph. Ch. 8, 452; Soc. 95, 163 C. 1909 [1] 1312). — II, 1892.
- 38)  $\alpha$ -Phenyl- $\alpha$ -[2(oder 4)-Methylphenyl]äthan- $\beta$ -Carbonsäure-4[oder 2]-Carbonsäure (Phenylcarboxyltolylpropionsäure). Sm. 252°. Ca,  $Ag_2$  (B. 26, 1582). — II, 1894.
- 39) 2,2'-Dimethyldiphenylmethan-5,5'-Dicarbonsäure? Sm. 184°.  $Ag_2$  (Ar. 245, 581 C. 1908 [1] 526).
- 40)  $\beta$ -Isopropylbiphenyldicarbonsäure. Sm. 247—249°. Ag (M. 29, 775 C. 1908 [2] 1602).
- 41) 2-Methyl-1-Benzyliden-R-Penten-5-Carbonsäure-4-[Äthyl- $\beta$ -Carbonsäure]. Zers. bei 203°.  $Ag_2$  (B. 36, 951 C. 1903 [1] 1022).
- 42) Dialdehyd d. 4-Oxybenzol- $\alpha\gamma$ -Propylenäther-1-Carbonsäure. Sm. 135—136° (A. 357, 376 C. 1908 [1] 358).
- 43)  $\alpha\gamma$ -Lakton d.  $\alpha\beta\gamma$ -Trioxo- $\alpha\delta$ -Diphenylvaleriansäure. Sm. 138° (A. 319, 221 C. 1902 [1] 108). — \*II, 1143.
- 44)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 123° (A. 333, 270 C. 1904 [2] 1392).
- 45) isom. Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 155° (A. 333, 271 C. 1904 [2] 1392).
- 46) Methylenester d. 1-Methylbenzol-2-Carbonsäure. Sm. 61—62° (C. r. 134, 717 C. 1902 [1] 975).
- 47) Methylenester d. 1-Methylbenzol-3-Carbonsäure. Sm. 55—56°; Sd. 242—244°<sub>15</sub> (C. r. 134, 717 C. 1902 [1] 975).
- 48) Methylenester d. 1-Methylbenzol-4-Carbonsäure. Sm. 104° (C. r. 134, 717 C. 1902 [1] 975).
- 49) Methylenester d. Phenylessigsäure. Sd. 245—247°<sub>15</sub> (C. r. 134, 717 C. 1902 [1] 975).
- 50) Methylester d.  $\alpha$ -Oxy- $\beta$ -[4-Oxyphenyl]akryl- $\alpha$ -Phenyläther-4-Methyläthersäure. Sm. 100° (G. 14, 149). — II, 1778.
- 51) Methylester d.  $\alpha$ -Acetoxy- $\alpha\alpha$ -Diphenylessigsäure. Sm. 122° (B. 22, 1539). — II, 1697.
- 52) Dimethylester d. Diphenylmethan-2,2'-Dicarbonsäure. Sm. 43—44° (A. 242, 254). — II, 1888.
- 53) Dimethylester d. Diphenylmethan-2,4'-Dicarbonsäure. Sm. 48° (A. 309, 117). — \*II, 1096.
- 54) Äthylester d. 2-Naphtoylacetessigsäure. Sm. 57° (Soc. 89, 124 C. 1906 [1] 1023).
- 55) Diphenylester d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 54°; Sd. 236,5°<sub>15</sub> (B. 35, 4085 C. 1903 [1] 75).
- 56) Phenylbenzylester d. Bernsteinsäure. Sm. 51°; Sd. 245—250°<sub>8</sub> (B. 35, 4077 C. 1903 [1] 74).
- 57) Dibenzylester d. Malonsäure. Sd. 234,5°<sub>14</sub> u. Zers. (B. 35, 3457 C. 1902 [2] 1304).
- 58) 4-Acetat d. 3,4-Dioxy- $\beta$ -Benzoyl-1-Methylbenzol-3-Methyläther. Sm. 77,5° (G. 28 [2] 287). — \*III, 166.
- 59) Methylätheracetat d.  $\beta$ -Dioxy- $\beta$ -Methyldiphenylketon (M. d. Benzo-methylresorcin). Sm. 86° (B. 28, 2307 Ann.). — III, 216.
- 60) Acetat d. Lapachol. Sm. 82—83° (G. 12, 357). — III, 399.

- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>**
- 61) Acetat d. Iso- $\beta$ -Lapachol. Sm. 74° (Soc. 69, 1364). — III, 403; \*III, 290.
  - 62) Diacetat d. 2,4'-Dioxydiphenylmethan. Sm. 70° (J. pr. [2] 65, 314 C. 1902 [1] 1350).
  - 63) Diacetat d. 3,3'-Dioxydiphenylmethan. Sm. 57,5—58,5° (A. 356, 158 C. 1907 [2] 1699).
  - 64) Diacetat d. 4,4'-Dioxydiphenylmethan. Sm. 69—70° (A. 194, 324). — II, 993.
  - 65)  $\alpha$ -Benzoat d. 3,4-Dioxy-1-[ $\alpha$ -Oxypropyl]benzol-3,4-Methylenäther. Sm. 112° (G. 34 [2] 415 C. 1905 [1] 519).
  - 66) Dibenzoat d.  $\alpha\beta$ -Dioxypropan. Sd. 240°<sub>12-14</sub> (Z. 1871, 490; A. 133, 255). — II, 1141.
  - 67) Dibenzoat d.  $\alpha\gamma$ -Dioxypropan. Sm. 53° (57,5°; 59°) (A. ch. [5] 14, 500; B. 38, 2406 C. 1905 [2] 477; A. 354, 359 C. 1907 [2] 1058). — II, 1141.
  - 68) Dibenzoat d.  $\beta\beta$ -Dioxypropan. Sm. 69—71°; Sd. 230—240°<sub>10</sub> (A. Spl. 6, 361; A. 145, 195). — II, 1141.
  - 69) Salicylat d. Eugenol. Sm. 73° (J. pr. [2] 61, 550). — \*II, 889.
  - 70) Saures 1,2-Phtalat d. 1-Methyl-2-[ $\beta$ -Oxyäthyl]benzol. Sm. 107 bis 108° (C. 1907 [1] 1033).  
C 68,0 — H 5,3 — O 26,7 — M. G. 300.
- C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>**
- 1) 1,3,8-Trioxo-2,4,5,7-Tetramethylfluoron. H<sub>2</sub>SO<sub>4</sub> (M. 25, 666 C. 1904 [2] 1144).
  - 2) Decarbousol. Sm. 209°. Na + 3H<sub>2</sub>O (A. 324, 184 C. 1902 [2] 1512).
  - 3) Dimethyläther d. Methylgenistein. Sm. 200—202° (Soc. 77, 1311).
  - 4)  $\alpha\beta$ -Diphenylpropionsäure- $\alpha^2$ -Oxyessigsäure. Sm. 165° (B. 42, 837 C. 1909 [1] 1165).
  - 5)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[3,4-Dioxyphenyl]akryl- $\beta^3\beta^4$ -Dimethyläthersäure. Sm. 187° (B. 42, 837 C. 1909 [1] 1165).
  - 6) 6,4'[oder 6,5']-Dioxy-3-Methyldiphenylketondimethyläther-2'-Carbonsäure. Sm. 157,5° (Soc. 91, 1634 C. 1907 [2] 2059).
  - 7)  $\beta$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\alpha\beta$ -Dicarbonsäure? Sm. 197—198°. Ag<sub>2</sub> (A. 284, 288). — II, 1974.
  - 8)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy-4',5,6-Trimethoxydiphenylmethan-2-Carbonsäure (4-Methoxyphenylpseudomekonin). Sm. 111—113° (B. 31, 2797). — \*II, 1178.
  - 9)  $\alpha$ ,2'-Lakton d.  $\alpha$ ,4-Dioxy-3',4'-Dimethoxyl-2-Methyldiphenylmethan-2'-Carbonsäure (Kresylmekonin) (B. 27, 2640; 31, 2792). — II, 2021; \*II, 1178.
  - 10) Äthylester d. 2-Acetonyl-1,4-Naphtochinon-3-Methylcarbonsäure. Sm. 155° (B. 33, 578, 2404). — \*II, 1145.
  - 11) Diäthylester d. Benzoocykloheptadiënondicarbonsäure. Sm. 95,5° (A. 369, 294 C. 1909 [2] 2168).
  - 12) Monacetat d. 2,3,4-Trioxydiphenylketondimethyläther. Sm. 98° (104—105°) (A. 269, 302; G. 27 [2] 20). — III, 202; \*III, 156.
  - 13) 6-Acetate d. 2,4,6-Trioxydiphenylketondimethyläther (A. d. Hydrocotoin). Sm. 83° (A. 199, 60). — III, 203.
  - 14) Acetat d. Oxy- $\alpha$ -Lapachon. Sm. 179,5° (Soc. 69, 1372). — \*III, 289.
  - 15) Dibenzoat d.  $\alpha\beta\gamma$ -Trioxopropan. Sm. 70° (B. 19, 3221; B. 36, 1573 Anm. C. 1903 [2] 225). — II, 1142.  
C 64,5 — H 5,1 — O 30,4 — M. G. 316.
- C<sub>17</sub>H<sub>16</sub>O<sub>6</sub>**
- 1) Di[2,4-Dioxy-1-Acetyl-2-Phenyl]methan. Sm. oberhalb 250° (C. 1903 [1] 922).
  - 2) 3',4'-Methylenäther-2,4,6-Trimethyläther d. 2,4,6,3',4'-Pentaoxydiphenylketon (Oxyleucotin; Methylprotocotin). Sm. 134—135° (A. 199, 48; B. 24, 2984; 26, 779; C. 1896 [1] 312; 1907 [1] 817). — III, 208.
  - 3) Methylenbisvanillin. Sm. 155—156° (D. R. P. 75 264, 76 061). — \*III, 75.
  - 4) Methyläther d. Eriodictyonon. Sm. 160° (M. 28, 1035 C. 1907 [2] 2065).
  - 5) Methyläther d. Homoeriodiktyol + H<sub>2</sub>O. Sm. 138—139° (Soc. 91, 895 C. 1907 [2] 247).
  - 6) Pyrotartrylfluorescein (B. 17, 1280). — III, 299; \*III, 230.
  - 7) Santalin, siehe auch C<sub>15</sub>H<sub>14</sub>O<sub>5</sub>. Sm. 104—105° (B. 12, 14). — III, 672.

- $C_{17}H_{16}O_6$
- 8) 3-Benzoxyl-4,5-Dioxybenzol-4,5-Dimethyläther-1-Methylcarbon-säure. Sm. 131° (B. 26, 2017). — II, 1927.
  - 9)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 120°.  $Ag_2$  (Soc. 71, 133). — \*II, 1182.
  - 10) Di[4-Oxy-3-Methylphenyl]methan-5,5'-Dicarbonsäure? (Methylen-dikresotinsäure). Sm. 276–277° (B. 31, 149; D. R. P. 49970). — \*II, 1182.
  - 11) 2,3,4'[oder 3',4',5']-Trioxydiphenylketontrimethyläther-2-Carbonsäure. Sm. 169° (Soc. 93, 436 C. 1908 [1] 1697).
  - 12) 4,5,6-Trioxydiphenylketontrimethyläther-2-Carbonsäure. Sm. 215 bis 216°.  $Ag$  (B. 31, 2796). — \*II, 1181.
  - 13) 4,6-Dioxydiphenylketon-4,6-Dimethyläther-2-Oxyessigsäure. Sm. 140–141° (B. 42, 3150 C. 1909 [2] 1347).
  - 14)  $\alpha$ ,2-Lakton d.  $\alpha$ ,4,5,2',4'-Pentaoxydiphenylmethan-4,5,4'-Tri-methyläther-2-Carbonsäure. Sm. 206–207° (Soc. 93, 513 C. 1908 [1] 1701).
  - 15) Äthylester d. 1,3-Diacetoxynaphtalin-2-Carbonsäure. Sm. 64° (A. 298, 384). — \*II, 1082.
  - 16) 2[oder 5]-Äthylester d. 1,3,4-Trimethyl-p- $\beta$ -Benzdifuran-2,5-Di-carbonsäure. Sm. 220°.  $Na + 4H_2O$ ,  $K$  (A. 283, 266). — III, 736.
  - 17) Diäthylester d. 1,2-Naphtochinon-4-Methyldicarbonsäure. Sm. 107 bis 108° (110–112°) (B. 32, 264; B. 38, 3694 C. 1905 [2] 1731). — \*II, 1181.
  - 18) Diäthylester d. 4-Phenyl-1,2-Pyron-5,6-Dicarbonsäure. Sm. 94 bis 95° (Soc. 75, 783). — \*II, 1200.
  - 19) Diacetat d. Di[2,5-Dioxyphenyl]methan (C. 1908 [1] 824).
  - 20) Triacetat d. 2-Oxy-1-Dioxymethylnaphtalin. Sm. 124° (B. 16, 684). — III, 96.
- $C_{17}H_{16}O_7$
- 21) Verbindung (aus Formaldehyd u. Resorcin) (C. 1900 [1] 691).  
C 61,4 — H 4,8 — O 33,7 — M. G. 332.
  - 1) 4,5,2',4'-Tetraoxydiphenylketon-4,5,4'-Trimethyläther-2-Carbon-säure (Soc. 93, 512 C. 1908 [1] 1701).
  - 2) Everssäure. Sm. 168–169°.  $K + 2H_2O$ ,  $Ba + H_2O$  (A. 68, 84; 117, 297; 155, 55; 297, 301; J. pr. [2] 57, 249). — II, 1766; \*II, 1036.
  - 3) Ramalsäure. Sm. 179–180° u. Zers.  $K$  (B. 30, 364; A. 297, 306; J. pr. [2] 57, 254). — \*II, 1036.
- $C_{17}H_{16}O_8$
- 4) Umbilicarinsäure. Sm. 180° u. Zers. (J. pr. [2] 63, 548). — \*II, 1240.
- $C_{17}H_{16}O_9$
- 1) Di[Acetyl-p-Trioxyphenyl]methan. Sm. 265° (C. 1903 [1] 922).  
C 56,0 — H 4,4 — O 39,6 — M. G. 364.
  - 1) Acromelin. Sm. 242° (J. pr. [2] 76, 40 C. 1907 [2] 1083).
  - 2) Isoacromelin. Sm. 188° (J. pr. [2] 76, 41 C. 1907 [2] 1083).
  - 3) Eichengerbsäure (A. 63, 205; 145, 1; 202, 270; M. 1, 268; 4, 514; Fr. 20, 208; B. 14, 1598, 1826; 17, 1820). — III, 586.
- $C_{17}H_{16}O_{12}$
- C 49,5 — H 3,9 — O 46,6 — M. G. 412.
  - 1) Pentamethylester d. Benzolhexacarbonsäure. Sm. 141–144° (M. 25, 1213 C. 1905 [1] 366).
- $C_{17}H_{16}N_2$
- C 82,2 — H 6,4 — N 11,3 — M. G. 248.
  - 1)  $\epsilon$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha\gamma$ -Pentadien. Sm. 85–86° u. Zers.  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ),  $HBr$ , ( $HJ$ ,  $J_2$ ) (A. 333, 308, 314 C. 1904 [2] 1149; A. 338, 139 C. 1905 [1] 455; J. pr. [2] 73, 265 C. 1906 [1] 1789).
  - 2)  $p$ -Amido-1-[ $p$ -Amido-2-Methylphenyl]naphtalin. Sm. 76°.  $HCl$  (B. 26, 145). — IV, 1034.
  - 3) 2-[3-Amido-4-Methylphenyl]amidonaphtalin. Sm. 95° (J. pr. [2] 75, 275 C. 1907 [2] 408).
  - 4) 1-Amido-2-[4-Methylphenyl]amidonaphtalin. Sm. 146–147° (B. 25, 2846; 27, 2777). — IV, 918.
  - 5) 1-Methylamido-2-Phenylamidonaphtalin. Sm. 85° (B. 26, 189). — IV, 918.
  - 6) 1-[2-Amidobenzyl]amidonaphtalin. Sm. 134° (129°).  $2HCl$ ,  $2H_2SO_4$  (J. pr. [2] 52, 406; Bl. [3] 27, 1058 C. 1902 [2] 1509). — IV, 628.
  - 7) 1-[4-Amidobenzyl]amidonaphtalin (4-Amidobenzyl-1-Naphtylamin). Fl.  $2HCl$  (Bl. [3] 27, 1062 C. 1902 [2] 1510). — \*IV, 410.
  - 8) 2-[2-Amidobenzyl]amidonaphtalin. Sm. 99° (110–111°).  $2HCl$  (J. pr. [2] 52, 411; Bl. [3] 27, 1059 C. 1902 [2] 1510). — IV, 628; \*IV, 408.



- C<sub>17</sub>H<sub>16</sub>N<sub>2</sub>** 9) 2-[4-Amidobenzyl]amidonaphtalin (4-Amidobenzyl-2-Naphtylamin). Fl. 2HCl (*B.* [3] 27, 1064 *C.* 1902 [2] 1510). — \*IV, 411.
- 10) 1-Phenylhydrazon-4-Phenyl-2,3-Dihydro-R-Penten. Sm. 154—155° (*B.* 17, 914; *B.* 41, 198 *C.* 1908 [1] 944). — III, 273.
- 11) α-[2-Methylphenyl]-β-[1-Naphtyl]hydrazin. Sm. 107° (*B.* 26, 145). — IV, 1504.
- 12) 5-Methyl-1-Phenyl-3-Benzylpyrazol. Fl. (*B.* 18, 2137). — IV, 1034.
- 13) 3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 62—63°; Sd. 260—270°<sub>18-22</sub> (*A.* 352, 343 *C.* 1907 [1] 1337).
- 14) 4-Benzyliden-1-Phenyl-5-Methyl-4,5-Dihdropyrazol. Sm. 140° (*M.* 21, 1119). — \*IV, 307.
- 15) 1-Äthyl-2,4-Diphenylimidazol. Sm. 194° (*B.* 34, 1831). — \*IV, 689.
- 16) 1-Äthyl-4,5-Diphenylimidazol. Sm. 94—95°. HCl, (2HCl, PtCl<sub>4</sub>), HBr (*B.* 38, 1537 *C.* 1905 [1] 1560).
- 17) 2,6-Diphenyl-4-Methyl-1,4-Dihydro-1,3-Diazin. Sm. 149—150°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 83, 1374 *C.* 1904 [1] 164, 450).
- 18) 5,6-Diphenyl-2-Methyl-2,3-Dihydro-1,4-Diazin. Sm. 111—112° (*B.* 21, 2663). — III, 284.
- 19) 7-Dimethylamido-2-Phenylchinolin. Fl. (2HCl, PtCl<sub>4</sub> + 1½ H<sub>2</sub>O), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*A.* 281, 23). — IV, 1025.
- 20) α-Phenyl-β-[5-Amido-2-Chinolyl]äthan. Sm. 185°. 2HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 38, 3720 *C.* 1906 [1] 54).
- 21) α-Phenyl-β-[6-Amido-2-Chinolyl]äthan. Sm. 204°. 2HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*B.* 38, 3723 *C.* 1906 [1] 55).
- 22) α-Phenyl-β-[8-Amido-2-Chinolyl]äthan. Sm. 122°. 2HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 38, 3716 *C.* 1906 [1] 53).
- 23) 2-Propyl-4-Phenyl-1,3-Benzdiazin. Sm. 99—100°. (HCl, HgCl<sub>2</sub> + H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 25, 3087). — IV, 1034.
- 24) 2-Isopropyl-4-Phenyl-1,3-Benzdiazin. Sm. 99°. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 25, 3089). — IV, 1034.
- 25) N-Methyltetrahydro-α-Naphtinolin. Sm. 114° (*B.* 27, 2255). — IV, 1032.
- C<sub>17</sub>H<sub>16</sub>N<sub>4</sub>** 26) Nitrid d. β-[2,4-Dimethylphenyl]amido-α-Phenylakrylsäure. Sm. 130° (*B.* 35, 2506 *C.* 1902 [2] 438).  
C 73,9 — H 5,8 — N 20,3 — M. G. 276.
- 1) 4,4'-Di[Methylcyanamidophenyl]methan. Sm. 155° (*B.* 37, 2672 *C.* 1904 [2] 443).
- 2) 4-[α-Phenylhydrazonäthyl]-1-Phenylpyrazol. Sm. 142—144° u. Zers. (*G.* 19, 198). — IV, 550.
- 3) 4-Phenylazo-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 83°. HCl (*A.* 338, 209 *C.* 1905 [1] 1157).
- 4) 4-Phenylazo-5-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 102°. HCl (*A.* 350, 320 *C.* 1907 [1] 737).
- 5) 4-Phenylazo-3,5-Dimethyl-1-Phenylpyrazol. Sm. 63° (62°) (*B.* 21, 1702; *B.* 35, 2189 *C.* 1902 [2] 357). — IV, 1477; \*IV, 1071.
- 6) 4-[2-Methylphenyl]azo-3-Methyl-1-Phenylpyrazol. Sm. 91° (*A.* 338, 204 *C.* 1905 [1] 1157).
- 7) 4-[4-Methylphenyl]azo-3-Methyl-1-Phenylpyrazol. Sm. 84° (*A.* 338, 206 *C.* 1905 [1] 1157).
- 8) 2-[2-Methylphenyl]amido-4-Phenylamido-1,3-Diazin. Sm. 128°. HCl (*Am.* 40, 142 *C.* 1908 [2] 1106).
- 9) 2-[4-Methylphenyl]amido-4-Phenylamido-1,3-Diazin. Sm. 135°. HCl (*Am.* 40, 143 *C.* 1908 [2] 1107).
- 10) Di[2-Methyl-6-Benzimidazolyl]methan + H<sub>2</sub>O. Sm. 155° (285° wasserfrei). (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), 2HNO<sub>3</sub> (*B.* 33, 258). — \*IV, 961.
- 11) 6-[4-Dimethylamidophenyl]azochinolin. 2HCl (*A.* 310, 87). — \*IV, 1076.
- 12) 2-Methyl-3-[α-Phenylhydrazonäthyl]-1,4-Benzdiazin. Sm. 178° (*B.* 35, 3312 *C.* 1902 [2] 1109). — \*IV, 630.
- 13) Nitrid d. αγ-Di[4-Amidophenyl]propan-ββ-Dicarbonsäure. Sm. 161 bis 163°. + C<sub>2</sub>H<sub>6</sub>O (Sm. 159—161°). 2HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*G.* 35 [1] 122 *C.* 1905 [1] 1384).
- C<sub>17</sub>H<sub>17</sub>O<sub>9</sub>** 1) Gerbstoff (aus *Persea lingua*) = (C<sub>17</sub>H<sub>17</sub>O<sub>9</sub>)<sub>x</sub> (*G.* 11, 245). — III, 688.

$C_{17}H_{17}N$ 

C 86,8 — H 7,2 — N 6,0 — M. G. 235.

- 1) **d-2-Benzylidenamido-1,2,3,4-Tetrahydronaphtalin.** Sm. 58—60° (C. 1900 [1] 862; Soc. 79, 83). — \*III, 23.
- 2) **r-2-Benzylidenamido-1,2,3,4-Tetrahydronaphtalin.** Sm. 51,5—52° (B. 23, 879; C. 1900 [1] 862). — III, 31; \*III, 23.
- 3)  **$\alpha$ -Phenyl- $\delta$ -[4,6-Dimethyl-2-Pyridyl]- $\alpha\delta$ -Butadien.** Sd. 238—245°<sub>12</sub>. (HCl, AuCl<sub>3</sub>) (B. 42, 1452 C. 1909 [1] 1935).
- 4) **5-Methyl-1-Äthyl-2-Phenylindol.** Sm. 72° (D.R.P. 128660 C. 1902 [1] 611). — \*IV, 252.
- 5) **2-Methylen-3,3-Dimethyl-1-Phenyl-2,3-Dihydroindol.** Sd. 208 bis 208,5°<sub>52</sub>. (HCl, SnCl<sub>2</sub>), (HCl, FeCl<sub>3</sub>), (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (M. 21, 164; B. 31, 1948). — \*IV, 165.
- 6) **2-Methylen-1,3-Dimethyl-3-Phenyl-2,3-Dihydroindol.** Sm. 104 bis 105° (2HCl, PtCl<sub>4</sub>), HJ (G. 28 [2] 395). — \*IV, 254.
- 7) **1,2-Dimethyl-2-Phenyl-1,2-Dihydrochinolin.** Sd. 310—330° u. Zers. Pikrat (B. 42, 1112 C. 1909 [1] 1764).
- 8) **2-Methyl-1-Benzyl-1,2-Dihydroisochinolin.** Sd. 170—180°. (2HCl, PtCl<sub>4</sub>) (B. 42, 1762 C. 1909 [2] 37).
- 9) **3-Isobutyl- $\beta$ -Naphtochinolin.** Sm. 55° (B. 27, 2022).
- 10) **5-Isobutylakridin.** HCl, HNO<sub>3</sub>, H<sub>2</sub>CrO<sub>4</sub> (A. 224, 41). — IV, 421.
- 11) **1,3,7,9-Tetramethylakridin.** Sm. 122°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (Soc. 91, 1929 C. 1908 [1] 384).
- 12) **1,4,6,9-Tetramethylakridin.** Sm. 179,5—180,5°. (HCl, AuCl<sub>3</sub>) (Soc. 91, 1932 C. 1908 [1] 384).
- 13) **2,3,7,8-Tetramethylakridin.** Sm. 273,5°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (Soc. 95, 1625 C. 1909 [2] 2178).
- 14) **Nitril d.  $\alpha\beta$ -Diphenylbutan- $\alpha$ -Carbonsäure.** Sm. 115°; Sd. 235 bis 240°<sub>20</sub> (Am. 35, 392 C. 1906 [2] 47).
- 15) **Nitril d. isom.  $\alpha\beta$ -Diphenylbutan- $\alpha$ -Carbonsäure.** Sd. 210—212°<sub>20</sub> (Am. 35, 392 C. 1906 [2] 47).
- 16) **Nitril d. 2,4,6-Trimethyldiphenylelessigsäure.** Sm. 91°; Sd. 220 bis 230°<sub>40</sub> (B. 25, 1617). — \*II, 1472.

 $C_{17}H_{17}N_3$ 

C 77,6 — H 6,5 — N 15,9 — M. G. 263.

- 1) **s-Phenylhydrazon- $\alpha$ -Phenylamido- $\alpha\gamma$ -Pentadien.** Sm. 135° u. Zers. (A. 338, 141 C. 1905 [1] 455).
- 2) **uns-2-Amidobenzyl-2-Naphtylhydrazin.** Sm. 76° (J. pr. [2] 52, 416). — IV, 1130.
- 3) **5-Amido-3-Methyl-1-Phenyl-4-Benzylpyrazol.** Sm. 77°. HCl, Pikrat (A. 339, 156 C. 1905 [1] 1401).
- 4) **5-Benzylamido-3-Methyl-1-Phenylpyrazol.** Sd. 228°<sub>12</sub>. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), + HgCl<sub>2</sub> (A. 339, 165 C. 1905 [1] 1402).
- 5) **5-Methylphenylamido-3-Methyl-1-Phenylpyrazol.** Sm. 88,5°; Sd. 220—228°<sub>20</sub>. (2HCl, PtCl<sub>4</sub>) (B. 36, 3277 C. 1903 [2] 1189).
- 6) **5-[4-Methylphenyl]amido-3-Methyl-1-Phenylpyrazol.** Sm. 111° (C. 1900 [2] 654; B. 36, 3273).
- 7) **2,5-Phenylimido-2,3-Dimethyl-1-Phenyl-2,5-Dihydropyrazol**(Anilopyrin). Sm. 79—80°. (2HCl, PtCl<sub>4</sub>), HJ, Pikrat (B. 36, 3275 C. 1903 [2] 1189; A. 339, 177 C. 1905 [1] 1403).
- 8) **3-[ $\alpha$ -Phenylhydrazonäthyl]-2-Methylindol.** Sm. 134—138° (A. 242, 380). — IV, 242.
- 9) **3-[4-Dimethylamidophenyl]imido-2-Phenylpseudoindol.** Sm. 185° (C. 1908 [2] 605).
- 10) **Nitril d.  $\beta$ -Phenylbenzylhydrazonbuttersäure.** Sm. 105° (A. 339, 165 C. 1905 [1] 1402).
- 11) **Nitril d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[4-Dimethylamidophenyl]essigsäure.** Sm. 154—155° (B. 35, 3573 C. 1902 [2] 1384).

 $C_{17}H_{17}N_5$ 

C 70,1 — H 5,8 — N 24,0 — M. G. 291.

- 1) **Cyanid d. Di[2-Methylphenyl]guanidin.** Sm. 173,5—174,5° (B. 12, 1855). — II, 459.
- 2) **Cyanid d. Di[4-Methylphenyl]guanidin.** Zers. bei 70—80° (B. 10, 1587). — II, 489.
- 3) **Di[2-Methylphenyl]formoguanamin.** Sm. 255° (B. 34, 2600). — \*IV, 981.

$$\text{C}_{17}\text{H}_{17}\text{N}_5$$



$C_{17}H_{18}O_2$ 

- 5) Dimethyläther d.  $\alpha$ -Phenyl- $\beta$ -[2,5-Dioxyphenyl]propen. Fl. (C. 1906 [2] 322).
- 6) Isopropyläther d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 72—75°; Sd. 175—180°<sub>10</sub> (Soc. 77, 735). — \*III, 164.
- 7) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1-Allylbenzol (Benzyl-eugenol). Sm. 29—30°; Sd. 235° u. Zers. (C. 1897 [2] 1183; D. R. P. 65937). — \*II, 637.
- 8) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1-Propenylbenzol (Benzylisoeugenol). Sm. 48° (58—59°) (C. 1897 [2] 1183; D. R. P. 65937). — \*II, 637.
- 9) Diäthyläther d. 9,9-Dioxyfluoren. Sm. 82° (Soc. 87, 1252 C. 1905 [2] 1344).
- 10)  $\alpha\alpha$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 167—168° (C. 1908 [2] 1100).
- 11)  $\alpha\beta$ -Diphenylbutan- $\alpha$ -Carbonsäure. Sm. 152—153° (Am. 35, 393 C. 1906 [2] 47).
- 12) isom.  $\alpha\beta$ -Diphenylbutan- $\alpha$ -Carbonsäure. Sm. 178° (Am. 35, 393 C. 1906 [2] 47).
- 13)  $\alpha\delta$ -Diphenylbutan- $\alpha$ -Carbonsäure ( $\alpha\delta$ -Diphenylvaleriansäure). Sm. 77 bis 78° (B. 15, 1548; A. 369, 353 C. 1909 [2] 2155). — II, 1472.
- 14)  $\alpha\delta$ -Diphenylbutan- $\beta$ -Carbonsäure? Sm. 169,5—170° (B. 39, 1919 C. 1906 [2] 125).
- 15)  $\alpha\alpha$ -Diphenyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 134—135° (A. 318, 182; Am. 33, 89 C. 1905 [1] 610).
- 16)  $\alpha\alpha$ -Di[4-Methylphenyl]propionsäure. Sm. 151—152°. NH<sub>4</sub>, Ca, Ba, Pb, Cu, Ag (B. 14, 1596; 15, 1474; J. 1882, 367; B. 38, 840 C. 1905 [1] 874). — II, 1471.
- 17)  $\beta$ -Phenyl- $\beta$ -[2,4-Dimethylphenyl]propionsäure. Sm. 111—112°. Ca, Ag (B. 25, 959; 26, 1581). — II, 1472.
- 18) 2,4,5-Trimethyldiphenylmethan-2'-Carbonsäure. Sm. 184—186° (A. 234, 238). — II, 1472.
- 19) 2,4,6-Trimethyldiphenylmethan-2'-Carbonsäure. Sm. 221° (A. 234, 238). — II, 1472.
- 20)  $\beta$ -Methylisopropylbiphenyl-2-Carbonsäure. Sm. 132—134°. Ag (M. 29, 771 C. 1908 [2] 1602).
- 21) Methylester d.  $\beta\beta$ -Diphenylisobuttersäure. Sm. 84—85° (C. 1908 [2] 1100).
- 22) Methylester d.  $\beta\beta'$ -Diphenylisobuttersäure. Sm. 40—41° (B. 41, 1267 C. 1908 [1] 1877).
- 23) Methylester d.  $\beta$ -Phenyl- $\beta$ -[4-Methylphenyl]propionsäure. Fl. (B. 26, 1580). — II, 1469.
- 24) Methylester d. Di[4-Methylphenyl]essigsäure. Sm. 36—37° (A. 306, 81). — \*II, 872.
- 25) Äthylester d.  $\alpha\beta$ -Diphenylpropionsäure. Sd. 325° (B. 21, 1313). — II, 1467.
- 26) Äthylester d.  $\beta\beta$ -Diphenylpropionsäure. Sm. 63° (Soc. 59, 734). — II, 1468.
- 27) Äthylester d. 4-Methyldiphenylessigsäure. Sm. 34° (B. 10, 997). — II, 1469.
- 28) Benzylester d.  $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. Sd. 320—325° (A. 193, 313). — II, 1382.
- 29) Isobutytrat d.  $\alpha$ -Oxydiphenylmethan. Sm. 54°; Sd. 185—187°<sub>15</sub> (Am. 33, 88 C. 1905 [1] 610).
- 30) Benzoat d.  $\beta$ -Oxy- $\alpha$ -[3-Methylphenyl]propan. Sd. 188—190°<sub>12</sub> (C. r. 148, 1109 C. 1909 [1] 1989).
- 31) Benzoat d. 4-Oxy-1-tert. Butylbenzol. Sm. 83° (79—80°); Sd. 335° (A. 211, 246; B. 14, 2187; 18, 1717). — II, 1147.
- 32) Benzoat d. 6-Oxy-3-Isopropyl-1-Methylbenzol. Sm. 73° (A. 210, 42). — II, 1147.
- 33) Benzoat d. 2-Oxy-4-Isopropyl-1-Methylbenzol. Sd. oberhalb 260° (B. 19, 13). — II, 1147.
- 34) Benzoat d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 32° (Z. 1869, 44; J. pr. [2] 36, 9; G. 28 [1] 215). — II, 1148; \*II, 718.  
C 75,6 — H 6,6 — O 17,8 — M. G. 270.
- 1) 2<sup>4</sup>-Methyläther d. 1-Oxy-2-[2,4-Dioxybenzyl]-2,3-Dihydroinden. Sm. 152—154° (Soc. 91, 1092 C. 1907 [2] 603).

 $C_{17}H_{18}O_3$

$C_{17}H_{18}O_3$ 

- 2) Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropan. Sm. 103–104° (C. 1908 [2] 1024).
- 3) Diäthyläther d. 2,2'-Dioxydiphenylketon. Sm. 109° (B. 19, 2611). — III, 195.
- 4) Diäthyläther d. 4,4'-Dioxydiphenylketon. Sm. 131° (A. 194, 330: 306, 86; B. 28, 2871). — III, 199.
- 5) 3-Methyläther-4-Benzyläther d. Äthyl-3,4-Dioxyphenylketon. Sm. 93° (C. 1897 [2] 1183). — \*III, 114.
- 6) Anhydrid d. trans-trans- $\beta\zeta$ -Dioxy- $\gamma\epsilon$ -Diacetyl- $\delta$ -Phenyl- $\beta\epsilon$ -Heptadien. Fl. (A. 309, 217; G. 30 [1] 211). — \*III, 247.
- 7) 4-Keto-1,3-Diacetyl-6-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 68° (B. 36, 2145 C. 1903 [2] 369).
- 8) Dimethyläther d. 4-[3,5-Dioxybenzyl]-1,2-Dihydrobenzofuran. Sm. 84–85° (B. 41, 1328 C. 1908 [1] 1979).
- 9)  $\gamma$ -Oxy- $\alpha\delta$ -Diphenylbutan- $\alpha$ -Carbonsäure (Tetrahydrocornicularsäure). Fl. Ag (B. 14, 1692; A. 219, 35; 306, 239). — II, 1702; \*II, 999.
- 10)  $\alpha$ -[4- oder 5-Äthoxyphenyl]- $\beta$ -Phenyläthan- $\alpha'$ -Carbonsäure. Sm. 117° (B. 34, 3741 C. 1902 [1] 39).
- 11)  $\alpha$ -Oxypropion-[ $\beta$ -Methyl-4-Benzylphenyl]äthersäure. Sm. 115°. Pb +  $\frac{1}{2}H_2O$  (G. 12, 264; B. 15, 1758). — II, 898.
- 12) Anhydrid d.  $\alpha$ -[4-Isopropylphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 85° (B. 38, 3900 C. 1906 [1] 192).
- 13) Anhydrid d. Allo- $\alpha$ -[4-Isopropylphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sm. 112° (B. 38, 3901 C. 1906 [1] 192).
- 14) Aldehyd d. 3,4-Dioxybenzol-3-Propyläther-4-Benzyläther-1-Carbonsäure. Sm. 74° (D.R.P. 85196). — \*III, 75.
- 15) Methylester d.  $\beta$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 71° (B. 14, 1687; A. 219, 47; 284, 285). — II, 1701.
- 16) Methylester d.  $\alpha$ -Oxydi[4-Methylphenyl]essigsäure. Sm. 82° (B. 39, 3589 C. 1907 [1] 36).
- 17) Äthylester d.  $\alpha$ -Oxy- $\beta\beta$ -Diphenylpropionsäure. Sm. 66° (A. 248, 43). — II, 1699.
- 18) Äthylester d.  $\beta$ -Oxy- $\beta\beta$ -Diphenylpropionsäure. Sm. 87° (B. 40, 4538 C. 1908 [1] 131).
- 19) Propylester d.  $\alpha$ -Oxydiphenylessigsäure. Sd. 220°<sub>ss</sub> (B. 37, 2766 C. 1904 [2] 708).
- 20) Phenylester d. 4-Oxy-1-Isobutylbenzol-3-Carbonsäure. Sm. 68° (J. pr. [2] 36, 395). — II, 1588.
- 21) Phenylester d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 44°; Sd. 196 bis 197°<sub>16</sub> (B. 39, 3834 C. 1907 [1] 92).
- 22) 2-Methylphenylester d.  $\alpha$ -Oxypropion-2-Methylphenyläthersäure. Sd. 188°<sub>13</sub> (B. 39, 3835 C. 1907 [1] 92).
- 23) 3-Methylphenylester d.  $\alpha$ -Oxypropion-3-Methylphenyläthersäure. Sd. 199°<sub>15</sub> (B. 39, 3837 C. 1907 [1] 93).
- 24) 4-Methylphenylester d.  $\alpha$ -Oxypropion-4-Methylphenyläthersäure. Sm. 90°; Sd. 200°<sub>15</sub> (B. 39, 3839 C. 1907 [1] 93).
- 25) 4-tert. Butylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 66 bis 68° (D.R.P. 68111). — \*II, 88.
- 26) 2-Methyl-5-Isopropylphenylester d. 2-Oxybenzol-1-Carbonsäure (Salicylat d. Carvakrol). Fl. (J. pr. [2] 61, 550).
- 27) 3-Methyl-6-Isopropylphenylester d. 2-Oxybenzol-1-Carbonsäure (Salicylat d. Thymol). Fl. (D.R.P. 43713). — \*II, 888.
- 28) 4-Benzooat d. 3,4-Dioxy-1-Propylbenzol-3-Methyläther. Sm. 72° (Bl. [3] 35, 1099 C. 1907 [1] 469).
- 29) Benzoat d. Oxyketon  $C_{10}H_{14}O_2$  (aus Campherchinon). Sm. 79° (B. 35, 3838 C. 1902 [2] 1462).

 $C_{17}H_{18}O_4$ 

C 71,3 — H 6,3 — O 22,4 — M. G. 286.

- 1) Trimethyläther d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 59 bis 60° (Soc. 79, 672). — \*III, 165.
- 2) Trimethyläther d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 52 bis 53° (Soc. 91, 543 C. 1907 [2] 66).
- 3) 4,4'-Dimethyläther d. 4-[ $\alpha$ ,3,4-Trioxybenzyl]-1,2-Dihydrobenzofuran. Sm. 97–98° (B. 40, 3667 C. 1907 [2] 1420).

$C_{17}H_{18}O_4$ 

- 4)  $\alpha$ -Oxy- $\alpha$ -[4- oder 5-Äthoxyphenyl]- $\beta$ -Phenyläthan- $\alpha^2$ -Carbonsäure (B. 34, 3740 C. 1902 [1] 39).
- 5)  $\beta$ -Oxy- $\alpha$ -[4- oder 5-Äthoxyphenyl]- $\beta$ -Phenyläthan- $\alpha^2$ -Carbonsäure (Äthoxytoluylenhydratcarbonsäure). Fl. (B. 34, 3743 C. 1902 [1] 40).
- 6)  $\alpha$ -Äthoxyl-6-Oxy-3-Methyldiphenylessigsäure. Sm. 131—134° (B. 31, 2820). — \*II, 1091.
- 7) Methylester d. Di[4-Methoxyphenyl]essigsäure. Sm. 66—67° (A. 306, 83). — \*II, 1090.
- 8) Äthylester d. 6-Oxy-4-Keto-2-[ $\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 138° (A. 294, 298). — \*II, 1091.
- 9) Äthylester d. 4-Oxybenzol- $\beta$ -Phenoxyäthyläther-1-Carbonsäure. Sm. 81° (J. pr. [2] 27, 227). — II, 1527.
- 10)  $\beta$ -Acetat d.  $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Diphenyläther. Sm. 70—71° (B. 19, 65). — II, 662.
- 11)  $\alpha$ -Acetat d.  $\alpha$ -Oxydi[4-Oxyphenyl]methan-4,4'-Dimethyläther. Sm. 83,5° (B. 36, 655 C. 1903 [1] 768).
- 12) 4-Äthoxylbenzoat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Sm. 119—120° (D.R.P. 57941). — \*II, 906.  
C 67,6 — H 5,9 — O 26,5 — M. G. 302.

 $C_{17}H_{18}O_5$ 

- 1) 3,3',4'-Trimethyläther d. 3,2',3',4'-Tetraoxy-4-Methyldiphenylketon. Sm. 109° (Soc. 89, 1662 C. 1907 [1] 408).
- 2) Tetramethyläther d. 2,4,6,4'-Tetraoxydiphenylketon. Sm. 146° (B. 39, 4024 C. 1907 [1] 262).
- 3) Tetramethyläther d. 2,4,3',4'-Tetraoxydiphenylketon. Sm. 107° (B. 39, 4030 C. 1907 [1] 264).
- 4) Tetramethyläther d. 2,5,2',5'-Tetraoxydiphenylketon. Sm. 109° (A. 344, 74 C. 1906 [1] 1098; B. 41, 4425 C. 1909 [1] 369).
- 5) Tetramethyläther d. 2,5,3',4'-Tetraoxydiphenylmethan. Sm. 101 bis 102° (B. 39, 4030 C. 1907 [1] 264).
- 6) Tetramethyläther d. 3,4,3',4'-Tetraoxydiphenylketon. Sm. 145° (144°) (B. 39, 4027 C. 1907 [1] 263; Soc. 89, 1661 C. 1907 [1] 407).
- 7) Isovalerylchinhydron. Sm. 103° (B. 24, 1344). — III, 345.
- 8) 1,3,6,8-Tetraoxy-2,4,5,7-Tetramethylxanthen. Sm. 320—324° (M. 25, 674 C. 1904 [2] 1145).
- 9) Toluresitannol. K (C. 1895 [1] 353).
- 10)  $\alpha\beta\gamma$ -Trioxy- $\alpha\delta$ -Diphenylvaleriansäure. Ba, Ag (A. 319, 222 C. 1902 [1] 108). — \*II, 1142.
- 11) 4',5,6-Trimethoxydiphenylmethan-2-Carbonsäure. Sm. 122—124° (B. 31, 2798). — \*II, 1142.
- 12) Diäthylester d. Oxyessig-2-Naphtyläther-3-Carbonsäure. Sm. 70° (C. 1900 [1] 495). — \*II, 989.
- 13) Diäthylester d. 1-Keto-4-Phenyl-2,3-Dihydro-R-Penten-3,5-Dicarbonsäure (D. d. Phenylthronsäure). Sm. 44,5° (A. 250, 218). — II, 1970.
- 14) 2-Methoxyphenylester d.  $\alpha$ -Oxypropion-2-Methoxyphenyläthersäure. Sm. 64°; Sd. 226°<sub>15</sub> (B. 39, 3853 C. 1907 [1] 94).
- 15) Di[2-Äthoxyphenylester] d. Kohlensäure. Sm. 81° (D.R.P. 72806). — \*II, 550.
- 16) Carbonat d. 3,4-Dioxy-1-Methylbenzol-3-Methyläther. Sm. 145° (D.R.P. 58129). — \*II, 580.
- 17) Carbonat d. 3,4-Dioxy-1-Methylbenzol-4-Methyläther. Sm. 135° (D.R.P. 72806). — \*II, 580.
- 18)  $\beta$ -Benzoat d.  $\alpha\beta$ -Dioxy- $\zeta$ -Keto- $\delta\delta$ -Dimethyl- $\beta$ -Hepten- $\gamma$ -Carbonsäure- $\alpha\gamma$ -Lakton. Sm. 96° (A. 322, 362 C. 1902 [2] 735).
- 19) Diacetat d.  $\alpha\gamma$ -Dioxy- $\gamma$ -Phenyl- $\alpha$ -[2-Furanyl]propan. Sm. 149° (B. 42, 2360 C. 1909 [2] 362).
- 20) Verbindung (aus Brasilinsäure). Sm. 141—142° (Soc. 81, 1035 C. 1902 [2] 748). — \*II, 483.  
C 64,2 — H 5,6 — O 30,2 — M. G. 318.
- 1) Tetramethyläther d. 2,4,6,3',4'-Pentaoxydiphenylketon (Vanilloylphloroglucintrimethyläther). Sm. 180° (B. 25, 1134). — III, 208.
- 2) Tetramethyläther d. 3,4,5,3',4'-Pentaoxydiphenylketon. Sm. 115° (C. 1907 [1] 817).
- 3) Dimethyläther-Äthyläther d. 2,4,6,3',4'-Pentaoxydiphenylketon. Sm. 150—151° (B. 25, 1137). — III, 208.

 $C_{17}H_{18}O_6$



- C<sub>17</sub>H<sub>18</sub>O<sub>6</sub>**
- 4) Decarbousnin (Decarbousnein). Sm. 176—177°. NH<sub>4</sub>, (NH<sub>4</sub>)<sub>2</sub> (A. 288, 52; 310, 267; J. 1875, 613; G. 12, 234; J. pr. [2] 57, 237; A. 324, 144 C. 1902 [2] 1511). — II, 2057; \*II, 1204.
  - 5) Isodecarbousninsäure. Sm. 197° (A. 310, 276). — \*II, 1205.
  - 6) Acetyldecarbousninsäure. Sm. 147—148° (G. 12, 236). — II, 2058.
  - 7) Äthylester d. Säure C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> (aus β-Benzallävulinsäurem Natrium u. Natriummalonsäureäthylester). Sm. 154—155° (u. 167°) (A. 341, 81 C. 1905 [2] 823).
  - 8) Äthylester d. Säure C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> + H<sub>2</sub>O (aus δ-Benzallävulinsäurem Natrium u. Natriummalonsäureäthylester). Sm. 123° (wasserhaltig); Sm. 143° (wasserfrei) (A. 341, 86 C. 1905 [2] 823).
  - 9) Diäthylester d. α-[3,4-Dioxyphenyl]-αγ-Butadien-3,4-Methylenäther-δδ-Dicarbonsäure (D. d. Piperonylenmalonsäure). Sm. 106—107° (B. 28, 1191). — II, 2019.
  - 10) Diäthylester d. 3,4-Diketo-1-Phenyl-R-Pentamethylen-2,5-Dicarbonsäure. Sm. 160—161° (B. 32, 1932). — \*II, 1177.
  - 11) Diäthylester d. 1,5-Diketo-Phen-R-Heptamethylen-2,4-Dicarbonsäure. Sm. 86—87° (B. 32, 2230). — \*II, 1177.
- C<sub>17</sub>H<sub>18</sub>O<sub>7</sub>**
- 12) Monacetat d. Osthin. Sm. 171—180° (C. 1896 [1] 561).  
C 61,1 — H 5,4 — O 33,5 — M. G. 334.
  - 1) Aloin + 1/2 H<sub>2</sub>O. Zers. bei 100° (J. 1849, 330; 1850, 545; 1856, 679; A. 77, 208; 134, 241, 287; 138, 186; B. 1, 105; Fr. 5, 309; 21, 165, 226). — III, 616.
  - 2) Placodiolsäure. Sm. 156—157° (A. 346, 82 C. 1906 [1] 1886).
  - 3) Methylester d. Purpurogallintetramethyläthersäure. Sm. 120 bis 121° (Soc. 93, 1188 C. 1908 [2] 789).
  - 4) Methylester d. Purpurogallontetramethyläthersäure. Sm. 110—111° (Soc. 93, 1193 C. 1908 [2] 790).
  - 5) Monoäthylester d. Triketosantonsäure. Sm. 157—158° (G. 29 [2] 254). — \*II, 1201.  
C 58,3 — H 5,1 — O 36,6 — M. G. 350.
- C<sub>17</sub>H<sub>18</sub>O<sub>8</sub>**
- 1) Glykuronsäure (aus 2-Oxynaphtalinmethyläther) (H. 44, 272 C. 1905 [1] 1109).
  - 2) Verbindung (aus Äthylxanthophansäure). Sm. 162° (B. 40, 3581 C. 1907 [2] 1745).  
C 53,4 — H 4,7 — O 41,9 — M. G. 382.
- C<sub>17</sub>H<sub>18</sub>O<sub>10</sub>**
- 1) γ-Ampelochroinsäure (B. 25 [2] 478; Bl. [3] 7, 828).
  - 2) Carminsäure. Na<sub>2</sub>, K<sub>2</sub> + 1/2 H<sub>2</sub>O, Ba, Cu (A. 64, 22; 141, 329; J. 1864, 410; B. 27, 2980). — II, 2097.
  - 3) Pentaacetat d. 2,4,5-Trioxy-1-Dioxymethylbenzol. Sm. 130° (A. 311, 357). — \*III, 81.
  - 4) Pentaacetat d. 2,4,6-Trioxy-1-Dioxymethylbenzol. Sm. 155—156° (M. 24, 865 C. 1904 [1] 367).  
C 81,6 — H 7,2 — N 11,2 — M. G. 250.
- C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>**
- 1) αβ-Di[Benzylidenamido]propan. Fl. (B. 21, 2361). — III, 29.
  - 2) γ-[4-Dimethylamidophenyl]imido-α-Phenylpropen (4-Cinnamyliden-amido-1-Dimethylamidobenzol). Sm. 141°. HCl, 2HCl (B. 18, 575; C. 1907 [1] 107; 1908 [1] 1540). — IV, 597.
  - 3) γ-Phenylhydrazon-α-Phenyl-α-Penten. Sm. 101° (B. 35, 968 C. 1902 [1] 870). — \*IV, 504.
  - 4) α-Phenylhydrazon-δ-Phenyl-β-Penten. Sm. 100° (B. 31, 1994). — \*IV, 489.
  - 5) γ-Phenylhydrazon-α-Phenyl-β-Methyl-α-Buten. Sm. 105° (B. 35, 970 C. 1902 [1] 871). — \*IV, 504.
  - 6) γ-Phenylhydrazon-α-[4-Methylphenyl]-α-Buten. Sm. 138° (154°) (B. 32, 2283; A. 347, 362 C. 1906 [2] 604). — \*IV, 504.
  - 7) γ-Phenylhydrazon-γ-[2,5-Dimethylphenyl]propen. Sm. 132—133° (A. ch. [7] 2, 205). — IV, 774.
  - 8) α-Allyl-α-[4-Methylphenyl]-β-Benzylidenhydrazin. Sm. 61° (B. 26, 2180). — IV, 810.
  - 9) α-Benzyliden-β-2,4,5-Trimethylbenzylidenhydrazin (B. 35, 3238 C. 1902 [2] 1045).
  - 10) 3-Methyl-5-[4-Methylphenyl]-1-Phenyl-4,5-Dihydropyrazol. Sm. 112° (A. 347, 362 C. 1906 [2] 604).

- C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>**
- 11) 2,6-Dimethyl-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 89—93°. (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 73, 219 *C.* 1906 [1] 1261).
  - 12) 2-Diäthylamidoakridin. Fl. Pikrat (*B.* 35, 2672 *C.* 1902 [2] 650). — \*IV, 675.
  - 13) Nitril d.  $\alpha$ -Phenylamido- $\alpha$ -[4-Isopropylphenyl]essigsäure. Sm. 86° (*B.* 31, 2705; *B.* 37, 4085 *C.* 1904 [2] 1723). — \*II, 845.
  - 14) Verbindung (aus  $\alpha$ -Dibenzalacetonydroxyylaminoxim). (2HCl, PtCl<sub>4</sub>) (*G.* 34 [2] 374 *C.* 1905 [1] 91; *C.* 1906 [1] 136).
  - 15) Verbindung (aus  $\beta$ -Dibenzalacetonydroxyylaminoxim). HCl, (2HCl, PtCl<sub>4</sub>) (*C.* 1906 [1] 136).
  - 16) Verbindung (Base aus 4-Amido-1-Methylbenzol). Sm. 134°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O, Pikrat (*J. pr.* [2] 36, 227; *C.* 1906 [1] 1414). — II, 510.
- C<sub>17</sub>H<sub>18</sub>N<sub>4</sub>**
- C 73,4 — H 6,5 — N 20,1 — M. G. 278.
- 1) 1,2-Diphenylhydrazon-R-Pentamethylen. Sm. 146° (*B.* 30, 1472; *A.* 317, 64). — IV, 782; \*IV, 509.
  - 2) 3-Phenylhydrazon-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazol. Fl. HCl, (2HCl, PtCl<sub>4</sub>), HJ (*B.* 42, 2765 *C.* 1909 [2] 625).
  - 3) 5-[2-Methylphenyl]amido-2-Methyl-1-[2-Methylphenyl]-1,3,4-Triazol. Sm. 172—175° (*B.* 33, 1071). — \*IV, 902.
  - 4) Nitril d. Cinnamylidendi[ $\beta$ -Amidocrotonsäure]. Sm. 155—160° (*J. pr.* [2] 56, 135). — \*II, 1179.
  - 5) Verbindung (aus Glyoxal u. 4,4'-Dihydrazidodiphenylmethan). Zers. bei 280—282° (*B.* 41, 2179 *C.* 1908 [2] 708).
- C<sub>17</sub>H<sub>18</sub>Br<sub>2</sub>**
- 1)  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Isopropylphenyl]äthan. Sm. 183° (181°) (*J. pr.* [2] 61, 178; *A.* 333, 241 *C.* 1904 [2] 1390). — \*II, 116.
- C<sub>17</sub>H<sub>19</sub>N**
- C 86,1 — H 8,0 — N 5,9 — M. G. 237.
- 1) 4-Dimethylamido- $\alpha\alpha$ -Diphenylpropen. Sm. 91° (*C. r.* 149, 349 *C.* 1909 [2] 1450).
  - 2) Allyldibenzylamin. Sd. 168—170°<sub>10</sub>. HCl, (2HCl, PtCl<sub>4</sub>), HBr, HJ (*B.* 35, 1284 *C.* 1902 [1] 1094).
  - 3) Allylbenzyl-2-Methylphenylamin. Sd. 180—183°<sub>27</sub>. Pikrat (*B.* 37, 3896 *C.* 1904 [2] 1612).
  - 4) Allylbenzyl-4-Methylphenylamin. Sd. 214—215°<sub>31</sub>. Pikrat (*B.* 37, 2721 *C.* 1904 [2] 592).
  - 5) 4-Methylphenyl-4-Isopropylbenzylidenamin. Sm. 51° (*A.* 245, 292). — III, 56.
  - 6) 2-Methyl-5-Isopropylbenzylidenamidobenzol. Sd. 210°<sub>10</sub> (*Bl.* [3] 17, 942).
  - 7) 2,6-Diphenylhexahydropyridin. Sm. 71° (69°); Sd. 206—207°<sub>15</sub> (367 bis 368°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ, H<sub>2</sub>SO<sub>4</sub>, Pikrat, d-Bitartrat, d-Camphersulfonat (*B.* 20, 2765; 28, 1733; 29, 800; 30, 1503; 34, 1618). — \*IV, 241.
  - 8) Iso-2,6-Diphenylhexahydropyridin. Sd. 204—205°<sub>15</sub>. HCl, HBr, HJ, H<sub>2</sub>SO<sub>4</sub>, Pikrat (*B.* 34, 1617). — \*IV, 241.
  - 9) 1,2,3-Trimethyl-3-Phenyl-2,3-Dihydroindol. HJ (*G.* 28 [2] 401). — \*IV, 240.
  - 10) 2-[ $\beta$ -3-Methylphenyläthyl]-1,3-Dihydroisindol. Fl. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 1080). — \*IV, 140.
  - 11)  $\alpha$ -Phenyl- $\beta$ -[1,2,3,4-Tetrahydro-2-Chinolyl]äthan. Sd. 229—230°<sub>30</sub> (*B.* 35, 1958 *C.* 1902 [2] 131). — \*IV, 241.
  - 12) 2-Methyl-1-Benzyl-1,2,3,4-Tetrahydroisochinolin. Sd. 177—180°<sub>12</sub>. (2HCl, PtCl<sub>4</sub>) (*B.* 42, 1763 *C.* 1909 [2] 37).
  - 13) 5-Isobutyl-*p*-Dihydroakridin. Sm. 98—100° (*A.* 224, 44). — IV, 421.
  - 14) 10-Methyl-5-Isopropyl-5,10-Dihydroakridin. Sm. 99—102° (*B.* 42, 1756 *C.* 1909 [2] 36).
- C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>**
- C 77,0 — H 7,2 — N 15,8 — M. G. 265.
- 1) 6-[4-Methylphenyl]diazoamido-1,2,3,4-Tetrahydronaphtalin. Sm. 107° (*Soc.* 81, 902 *C.* 1902 [2] 214). — \*IV, 1136.
  - 2) 1-[Imido-4-Methylphenylamidomethyl]-1,2,3,4-Tetrahydrochinolin. Sm. 108°. Pikrat (*B.* 42, 2224 *C.* 1909 [2] 539).
  - 3) 1-Phenylazo-6,8-Dimethyl-1,2,3,4-Tetrahydrochinolin. Sm. 88—89° (*B.* 24, 2076). — IV, 1581.

- C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>**
- 4) 7-Methyl-3-Äthyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benzotriazin. Sm. 168° (B. 24, 1009). — IV, 1152.
  - 5) 2,8-Di[Dimethylamido]akridin. Sm. 181—182°. HCl, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 54, 243; D. R. P. 59179, 67126). — IV, 1182; \*IV, 840.
  - 6) Nitril d. α-Methylphenylamido-α-[4-Dimethylamidophenyl]essigsäure. Sm. 102—103° (B. 35, 3575 C. 1902 [2] 1384).
  - 7) Nitril d. α-[4-Methylphenyl]amido-α-[4-Dimethylamidophenyl]essigsäure. Sm. 127—128° (B. 35, 3573 C. 1902 [2] 1384).
- C<sub>17</sub>H<sub>19</sub>N<sub>5</sub>**
- C 69,6 — H 6,5 — N 23,9 — M. G. 293.
- 1) Di[4-Methylphenylazo]allylamin. Sm. 85—87° (B. 22, 941). — IV, 1569.
- C<sub>17</sub>H<sub>20</sub>O**
- C 85,0 — H 8,3 — O 6,7 — M. G. 240.
- 1) α-Oxy-αε-Diphenylpentan. Sm. 80—81° u. Zers. (B. 35, 1066 C. 1902 [1] 929).
  - 2) α-Oxy-2-Methyl-5-Isopropyldiphenylmethan. Sd. 327° (B. 18, 1798). — II, 1081.
  - 3) α-Oxy-2,3,4,6-Tetramethyldiphenylmethan. Sd. oberhalb 360° (Bl. 42, 172). — II, 1081.
  - 4) α-Oxy-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 131° (J. pr. [2] 35, 483). — II, 1081.
  - 5) 2-Oxy-?-Benzyl-4-Isopropyl-1-Methylbenzol. Sd. 235—240°<sub>50</sub> (G. 31 [1] 469).
  - 6) 3-Oxy-?-Benzyl-4-Isopropyl-1-Methylbenzol. Sd. 255°<sub>8</sub> (G. 11, 347). — II, 899.
  - 7) Äthyläther d. α-Oxy-αα-Diphenylpropan. Sm. 160—161° (C. 1905 [2] 826).
  - 8) Benzyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 221—223°<sub>85</sub> (C. 1907 [2] 2044).
  - 9) Benzylidencampher. d- u. l-Modif. Sm. 98°; r-Modif. Sm. 78° (B. 24 [2] 732; Bl. [3] 23, 346; [3] 27, 544; C. 1895 [2] 364; 1896 [2] 381; 1899 [2] 116, 117). — III, 514; \*III, 387.
  - 10) Benzylidendihydrocarvon. Sd. 187—190°<sub>10</sub> (A. 305, 269). — \*III, 143.
  - 11) Benzyliden-β-Dihydroumbellulon. Sm. 81—82°; Sd. 185—188°<sub>9</sub> (B. 40, 5020 C. 1908 [1] 463; B. 41, 3992 C. 1909 [1] 74).
  - 12) Benzylidenthujon. Sd. 176—178°<sub>12</sub> (C. r. 140, 1629 C. 1905 [2] 326).
  - 13) Benzylidenisothujon. Sm. 83° (A. 323, 349 C. 1902 [2] 1205).
  - 14) Benzylidenparapulegon. Sd. 202—203°<sub>12</sub> (B. 29, 1600; A. 305, 267). — \*III, 144.
  - 15) Benzyliden-synth. Pulegon. Sm. 83—84° (B. 29, 2958; A. 300, 271). — \*III, 144.
  - 16) Benzylidentanacetone. Sd. 178°<sub>9</sub> (B. 36, 4367 C. 1904 [1] 455).
  - 17) Verbindung (aus d-Brombenzylidencampher). Sm. 68° (C. r. 132, 1574). — \*III, 388.
  - 18) Verbindung (aus i-Brombenzylidencampher). Sm. 43° (C. r. 132, 1574). — \*III, 388.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>**
- C 79,7 — H 7,8 — O 12,5 — M. G. 256.
- 1) αε-Dioxy-αε-Diphenylpentan. Sm. 84—88° (Soc. 79, 1020).
  - 2) γγ-Di[4-Oxyphenyl]pentan. Sm. 198—200° (J. r. 23, 499). — II, 996.
  - 3) αβ-Dioxy-αα-Di[4-Methylphenyl]propan. Sm. 67°; Sd. 210°<sub>8</sub> (B. 39, 2304 C. 1906 [2] 525).
  - 4) 4,4'-Dioxy-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 181—182° (183—184°) (B. 36, 1891 C. 1903 [2] 291; B. 37, 1471 C. 1904 [1] 1518; A. 356, 132 C. 1907 [2] 1697; A. 356, 143 C. 1907 [2] 1698).
  - 5) 2,2'-Dioxy-3,5,3',5'-Tetramethyldiphenylmethan. Sm. 145—146° (B. 40, 2526 C. 1907 [2] 323; A. 353, 352 C. 1907 [2] 400).
  - 6) 4,4'-Dioxy-3,5,3',5'-Tetramethyldiphenylmethan. Sm. 175° (B. 40, 2527 C. 1907 [2] 324).
  - 7) Dimethyläther d. αα-Di[4-Oxyphenyl]propan. Sm. 44°; Sd. 362,5 bis 364,5°<sub>743</sub> (C. 1908 [2] 589).
  - 8) Dimethyläther d. αγ-Di[4-Oxyphenyl]propan. Sm. 68—69° (Bl. [3] 19, 401). — \*II, 605.
  - 9) Dimethyläther d. ββ-Di[4-Oxyphenyl]propan. Sm. 60,5°; Sd. 371° (J. r. 23, 498). — II, 996.



- $C_{17}H_{20}O_2$
- 10) Diäthyläther d.  $\alpha\alpha$ -Dioxydiphenylmethan. Sm. 51,5—52°; Sd. 294 bis 295° (Soc. 69, 990). — \*III, 145.
  - 11) Diäthyläther d. 2,4'-Dioxydiphenylmethan. Sm. 60° (J. pr. [2] 65, 314 C. 1902 [1] 1351).
  - 12) Diäthyläther d. 4,4'-Dioxydiphenylmethan. Sm. 38—39° (A. 194, 323). — II, 993.
  - 13) Diphenyläther d.  $\alpha\delta$ -Dioxyptentan. Sm. 48—49° (C. 1899 [1] 248). — \*II, 356.
  - 14) Diphenyläther d.  $\alpha\epsilon$ -Dioxyptentan. Sm. 48—49°; Sd. 340° (B. 38, 959 C. 1905 [1] 1008).
  - 15) Di[2-Methylphenyläther] d.  $\alpha\gamma$ -Dioxypropan. Sd. 341—342° (A. 357, 378 C. 1908 [1] 358).
  - 16) Di[4-Methylphenyläther] d.  $\alpha\gamma$ -Dioxypropan. Sm. 94°; Sd. oberhalb 300° (B. 25, 3045). — II, 749.
  - 17) 2-Keto-6-Benzoyl-4-Isopropenyl-1-Methylhexahydrobenzol. Sm. 84 bis 86° (Soc. 91, 702 C. 1907 [2] 65).
  - 18) isom. 2-Keto-6-Benzoyl-4-Isopropenyl-1-Methylhexahydrobenzol. Sm. 117—118°. HCN (Soc. 91, 701 C. 1907 [2] 65).
  - 19) Phenyläther d. Oxymethylencampher. Sd. 320° (A. 281, 370). — III, 115.
  - 20)  $\alpha$ -Oxybenzylidencampher (Benzoylcampher-Enolform). Sm. 221° (Soc. 83, 98 C. 1903 [1] 233, 458).
  - 21) d-2-Oxybenzylidencampher. Sm. 209—210° (C. r. 148, 1492 C. 1909 [2] 213).
  - 22) d-3-Oxybenzylidencampher. Sm. 144—145° (C. r. 148, 1492 C. 1909 [2] 213).
  - 23) d-4-Oxybenzylidencampher. Sm. 207° (C. r. 148, 1492 C. 1909 [2] 213).
  - 24) d- $\alpha$ -Benzoylcampher. Sm. 87—88° (Soc. 79, 997; B. 36, 2629, 2639 C. 1903 [2] 625; C. r. 136, 1223 C. 1903 [2] 116). — \*III, 218.
  - 25) d-l-Oxy-2-Benzoylcamphen. Sm. 89°. Na, Fe, Cu (Soc. 79, 994). — \*III, 218.
  - 26) Benzoat d. l-Oxycamphen. Sd. 215—220°<sub>50</sub> (Soc. 83, 152 C. 1903 [1] 72, 436).
  - 27) Benzoat d. Alkohol  $C_{10}H_{16}O$ . Sm. 85—86° (A. 340, 32 C. 1905 [2] 551).
  - 28) Verbindung (aus Campher u. Benzolcarbonsäureäthylester). Sm. 91,5° (Am. 40, 69 C. 1908 [2] 876).
- $C_{17}H_{20}O_3$
- C 75,0 — H 7,3 — O 17,7 — M. G. 272.
- 1) 2,5-Dimethyläther d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[2,5-Dioxyphenyl]propan. Sm. 56°; Sd. 230°<sub>30</sub> (B. 38, 797 C. 1905 [1] 866; A. 344, 55 C. 1906 [1] 1097).
  - 2)  $\alpha\gamma$ -Dibenzyläther d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 157—158° (C. 1900 [2] 32). — \*II, 636.
  - 3)  $\alpha\gamma$ -Di[2-Methylphenyläther] d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 36—37°; Sd. 226°<sub>13</sub> (296°) (Soc. 83, 1137 C. 1903 [2] 1059; C. 1909 [1] 1556).
  - 4)  $\alpha\gamma$ -Di[3-Methylphenyläther] d.  $\alpha\beta\gamma$ -Trioxypropan. Sd. 232°<sub>13</sub> (253 bis 254°) (Soc. 83, 1139 C. 1903 [2] 1059; C. 1909 [1] 1556).
  - 5) Oxoniumbase (aus p-Phenetol). HCl (B. 36, 653 C. 1903 [1] 768).
  - 6) Äthylester d.  $\alpha$ -Oxyisovalerian-1-Naphtyläthersäure. Sd. 208°<sub>10</sub> (B. 33, 1388). — \*II, 504.
  - 7) Äthylester d.  $\alpha$ -Oxyisovalerian-2-Naphtyläthersäure. Sd. 212°<sub>13</sub> (B. 33, 1391). — \*II, 522.
  - 8) Äthylester d. Artemisinsäure. Sm. 97—98° (C. 1903 [2] 1377).
  - 9) Benzoat d. 6-Oxy-1-Keto-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol. Sd. 218—219°<sub>11</sub> (B. 39, 1167 C. 1906 [1] 1429).
  - 10) Benzoat d. Oxycampher (aus Campherchinon). Fl. (B. 30, 669).
  - 11) Benzoat d. Verb.  $C_{10}H_{16}O_2$ . Sm. 71° (A. 340, 42 C. 1905 [2] 552).
- $C_{17}H_{20}O_4$
- C 70,8 — H 6,9 — O 22,2 — M. G. 288.
- 1) Di[3,5-Dioxy-2,6-Dimethylphenyl]methan +  $H_2O$  (Methylenbisxylorcin). Sm. 251° (Ar. 244, 568 C. 1907 [1] 547).
  - 2)  $\alpha,4,4'$ -Trimethyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 98—99° (Soc. 91, 543 C. 1907 [2] 66).

- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>**
- 3) Tetramethyläther d.  $\alpha,2,4,6$ -Tetraoxydiphenylmethan. Sm. 79—80° (B. 39, 4021 C. 1907 [1] 262).
  - 4) Di[2-Methoxyphenyläther] d.  $\alpha\beta$ -Dioxypropan. Sm. 99° (J. 1890, 1197). — \*II, 547.
  - 5) Di[2-Methoxyphenyläther] d.  $\alpha\gamma$ -Dioxypropan. Sm. 116—118° (113 bis 114°) (C. 1896 [1] 543; J. 1890, 1197; A. 357, 381 C. 1908 [1] 381). — \*II, 547.
  - 6) cis, cis- $\beta\zeta$ -Dioxy- $\gamma\epsilon$ -Diacetyl- $\delta$ -Phenyl- $\beta\epsilon$ -Heptadiën (cis, cis-Dienolbenzalbisacetylaceton). Sm. 125° (A. 309, 224; G. 30 [1] 217). — \*III, 247.
  - 7) cis, trans- $\beta\zeta$ -Dioxy- $\gamma\epsilon$ -Diacetyl- $\delta$ -Phenyl- $\beta\epsilon$ -Heptadiën (cis, trans-Dienolbenzalbisacetylaceton). Sm. 93—94° (A. 309, 221; G. 30 [1] 215). — \*III, 247.
  - 8) trans, trans- $\beta\zeta$ -Dioxy- $\gamma\epsilon$ -Diacetyl- $\delta$ -Phenyl- $\beta\epsilon$ -Heptadiën (trans, trans-Dienolbenzalbisacetylaceton). Sm. 91° (A. 309, 214; G. 30 [1] 209). — \*III, 247.
  - 9) cis- $\beta$ -Oxy- $\zeta$ -Keto- $\gamma\epsilon$ -Diacetyl- $\delta$ -Phenyl- $\beta$ -Hepten (cis-Ketoenolbenzalbisacetylaceton). Sm. 123° (A. 309, 219; G. 30 [1] 213). — \*III, 247.
  - 10) trans- $\beta$ -Oxy- $\zeta$ -Keto- $\gamma\epsilon$ -Diacetyl- $\delta$ -Phenyl- $\beta$ -Hepten (trans-Ketoenolbenzalbisacetylaceton). Sm. 182—183° (A. 281, 81; 309, 210; B. 31, 1393, 2775; G. 30 [1] 205). — \*III, 247.
  - 11)  $\beta\zeta$ -Diketo- $\gamma\epsilon$ -Diacetyl- $\delta$ -Phenylheptan (Diketobenzalbisacetylaceton). Sm. 163° (A. 309, 225; G. 30 [1] 219). — \*III, 247.
  - 12)  $\alpha$ -[4-Isopropylphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadiën- $\beta\gamma$ -Dicarbonsäure. Sm. 225° u. Zers. Ba + 2H<sub>2</sub>O (B. 38, 3899 C. 1906 [1] 192).
  - 13) Benzoylcamphenilsäure. Sm. 168° (A. 340, 52 C. 1905 [2] 553).
  - 14)  $\beta\delta$ -Lakton d.  $\delta$ -Oxy- $\alpha$ -[4-Isopropylphenyl]- $\delta$ -Methyl- $\alpha$ -Penten- $\beta\gamma$ -Dicarbonsäure. Sm. 197° (B. 38, 3902 C. 1906 [1] 192).
  - 15) Allo- $\alpha$ -[4-Isopropylphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadiën- $\beta\gamma$ -Dicarbonsäure. Sm. 200° (B. 38, 3900 C. 1906 [1] 192).
  - 16) Acetylderivat d. Lakton C<sub>15</sub>H<sub>18</sub>O<sub>3</sub> (aus Artemisin). Sm. 205—206° (C. 1902 [2] 369). — \*III, 457.
  - 17) Äthylester d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-äthyläther-3-Carbonsäure. Sd. 250—260°<sub>30</sub> u. Zers. (A. 294, 277). — \*II, 1084.
  - 18) Acetat d. Desmotroposantonin. Sm. 156° (G. 25 [1] 471; G. 32 [1] 344 C. 1902 [1] 1406; C. 1904 [1] 941). — II, 1790.
  - 19) Acetat d. d-Desmotroposantonin. Sm. 154° (G. 25 [1] 479; C. 1904 [1] 941). — II, 1791.
  - 20) Acetat d. l-Desmotroposantonin. Sm. 154° (B. 31, 3132; G. 28 [2] 538; C. 1904 [1] 941). — \*II, 1046.
  - 21) Acetat d. r-Desmotroposantonin. Sm. 145° (B. 31, 3133; G. 28 [2] 540; 29 [1] 513; C. 1904 [1] 941). — \*II, 1046.
  - 22) Acetat d. l-r-Desmotroposantonin. Sm. 142° (C. 1904 [1] 941).
  - 23) Saures Phtalat d. Camphenilol. Sm. 148,5—149° (A. 366, 74 C. 1909 [2] 214).
  - 24) Saures Phtalat d. Alkohol C<sub>9</sub>H<sub>16</sub>O (aus Pinen). Sm. 107° (Soc. 93, 293 C. 1908 [1] 1628).  
C 67,1 — H 6,6 — O 26,3 — M. G. 304.
- C<sub>17</sub>H<sub>20</sub>O<sub>5</sub>**
- 1) 2,4,5,4'-Tetramethyläther d.  $\alpha,2,4,5,4'$ -Pentaoxydiphenylmethan. Sm. 90° (C. 1909 [2] 1329).
  - 2) 2,4,6,4'-Tetramethyläther d.  $\alpha,2,4,6,4'$ -Pentaoxydiphenylmethan. Sm. 103° (B. 39, 4024 C. 1907 [1] 262).
  - 3) 2,4,3',4'-Tetramethyläther d.  $\alpha,2,4,3',4'$ -Pentaoxydiphenylmethan. Sm. 108° (B. 39, 4031 C. 1907 [1] 264).
  - 4) 2,5,3',4'-Tetramethyläther d.  $\alpha,2,5,3',4'$ -Pentaoxydiphenylmethan. Sm. 132—133° (B. 39, 4030 C. 1907 [1] 264).
  - 5) 3,4,3',4'-Tetramethyläther d.  $\alpha,3,4,3',4'$ -Pentaoxydiphenylmethan + H<sub>2</sub>O. Sm. 95° (B. 39, 4029 C. 1907 [1] 264).
  - 6) Pentamethyläther d. Phloroglucid. Sm. 117—120° (M. 29, 679 C. 1908 [2] 1442).
  - 7) Dimethylester d. 3-Keto-1-Phenylhexahydrobenzol-2[oder 4]-Carbonsäure-5-Methylcarbonsäure. Sm. 139—140° (A. 360, 339 C. 1908 [2] 318).

- C<sub>17</sub>H<sub>20</sub>O<sub>5</sub>** 8) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadien- $\beta\gamma$ -Dicarbonsäure. Sd. 195—200°<sub>10</sub> (Soc. 71, 327). — \*II, 1138.  
 9) Acetat d.  $\alpha$ -Oxysantonin. Sm. 164—165° (G. 27 [2] 92). — \*II, 1128.  
 10) Saures Camphat d. 2-Oxybenzaldehyd. Sm. 168° u. Zers. (Soc. 95, 337 C. 1909 [1] 1563).  
 11) Verbindung (aus d. Säure C<sub>18</sub>H<sub>18</sub>O<sub>9</sub> aus Trimethylbrasilin). Sm. 140° (C. 1900 [1] 1293).
- C<sub>17</sub>H<sub>20</sub>O<sub>6</sub>** C 63,7 — H 6,2 — O 30,0 — M. G. 320.  
 1) Di[2,4,6-Trioxy-3,5-Dimethylphenyl]methan. Sm. 252° u. Zers. (A. 318, 306).  
 2) Dimethyläther d. Methylenbismethylphloroglucin. Sm. 228—229° (A. 329, 282 C. 1904 [1] 796).  
 3) Methyläther d. Cedron. Sm. 298° (M. 20, 785). — \*II, 623.  
 4) Ozonid d. Kohlenw. C<sub>17</sub>H<sub>20</sub> (aus Petroleum) (B. 41, 3706 C. 1908 [2] 2034).  
 5) Methylenbisflicinsäure (A. 329, 290 C. 1904 [1] 796).  
 C 60,7 — H 5,9 — O 33,3 — M. G. 336.
- C<sub>17</sub>H<sub>20</sub>O<sub>7</sub>** 1) Tutin. Sm. 208—209° (Soc. 79, 123). — \*III, 451.  
 2)  $\alpha$ ,2-Lakton d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenyläthanäthyläther- $\beta\beta$ ,2-Tricarbonsäure- $\beta\beta$ -Diäthylester (Diäthylester d. Phtalyloxymalonäthyläthersäure). Fl. Na, Cu + 2H<sub>2</sub>O (A. 242, 46). — II, 2070.
- C<sub>17</sub>H<sub>20</sub>O<sub>8</sub>** C 58,0 — H 5,7 — O 36,3 — M. G. 352.  
 1) Acetypikrotilid. Sm. 202° (B. 12, 685; G. 11, 51). — III, 644.  
 2) Tetramethylester d.  $\beta$ -Phenylpropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sm. 64—65° (A. 360, 344 C. 1908 [2] 318).  
 3) Diäthylester d. Acetylbenzoylweinsäure. Fl. (A. Spl. 5, 282). — II, 1155.  
 4) Triäthylester d. 6-Oxybenzylmethyläther-1,3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 78° (B. 37, 2120 C. 1904 [2] 438).  
 5) Monoacetat d. Pikrocin. Sm. 244—245° (B. 31, 2972). — \*III, 471.  
 C 55,4 — H 5,4 — O 39,1 — M. G. 368.
- C<sub>17</sub>H<sub>20</sub>O<sub>9</sub>** 1) Monoäthylester d. Diacetyliscidinsäure. Sm. 149—151° (Am. 25, 396). — \*II, 1238.
- C<sub>17</sub>H<sub>20</sub>O<sub>10</sub>** C 53,1 — H 5,2 — O 41,7 — M. G. 384.  
 1) Patellarsäure. Sm. oberhalb 100° (J. 1869, 768). — II, 2096.  
 2) Tetraäthylester d. 1,4-Pyron-2,3,5,6-Tetracarbonsäure. Sm. 94° (G. 21, 302). — II, 2094.
- C<sub>17</sub>H<sub>20</sub>N<sub>2</sub>** C 80,9 — H 7,9 — N 11,1 — M. G. 252.  
 1)  $\delta$ -Phenylimido- $\delta$ -Phenylamido- $\beta$ -Methylbutan (Diphenylpentanaminidin). Sm. 111° (J. 1865, 416). — II, 347.  
 2)  $\alpha$ -Phenylimido- $\alpha$ -Diäthylamido- $\alpha$ -Phenylmethan. Sd. 188—189°<sub>10</sub>. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 37, 2682 C. 1904 [2] 521).  
 3) 4-Methylphenyl-6-Äthylidenamido-3-Methylbenzylamin. Sm. 114° (J. pr. [2] 71, 157 C. 1905 [1] 928).  
 4) Phenyl-4-Diäthylamidobenzylidenamin. Sm. 108—109° (B. 38, 526 C. 1905 [1] 738).  
 5) Di[2,4-Dimethylphenyl]formamidin. Sm. 131°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 35, 2500 C. 1902 [2] 436).  
 6)  $\gamma$ -Diphenylhydrazon- $\beta$ -Methylbutan. HJ (M. 21, 166 Anm.).  
 7)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenyl- $\beta\beta$ -Dimethylpropan. Sm. 92° (A. 310, 321). — \*IV, 503.  
 8)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Propylphenyl]äthan. Sm. 92° (B. 21, 2226). — IV, 773.  
 9)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Isopropylphenyl]äthan. Sm. 81—82° (B. 21, 2226). — IV, 773.  
 10)  $\alpha$ -Isoamyliden- $\beta\beta$ -Diphenylhydrazin. Sm. 36—36,5° (B. 39, 3584 C. 1907 [1] 18).  
 11) 3-tert. Butylbenzylidenphenylhydrazin. Sm. 115° (B. 32, 2533). — \*IV, 489.  
 12) Benzyliden-2,4,5-Trimethylbenzylhydrazin. Sm. 89—90° (J. pr. [2] 62, 125). — \*IV, 547.  
 13) 1,3-Di[3-Methylphenyl]tetrahydroimidazol. Sm. 100—101° (B. 34, 1510). — \*IV, 297.



- C<sub>17</sub>H<sub>20</sub>N<sub>2</sub>** 14) **1,3-Di[4-Methylphenyl]tetrahydroimidazol.** Sm. 176° (*B.* **34**, 1509). — \*IV, 297.  
 15) **2-Methyl-1,4-Diphenylhexahydro-1,4-Diazin.** Sm. 100° (*B.* **25**, 3274). — II, 344.  
 16) **1,6-Dimethyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzodiazin.** Sm. 155° (*J. pr.* [2] **73**, 216 *C.* **1906** [1] 1261).  
 17) **Verbindung** (aus Oxyethylencampher). Sm. 124—125° (*A.* **281**, 352). — III, 116.
- C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>** C 72,9 — H 7,1 — N 20,0 — M. G. 280.  
 1) **4,4'-Di[α-Methyl-β-Methylenhydrazido]diphenylmethan.** Sm. 137° (*B.* **41**, 2175 *C.* **1908** [2] 708).  
 2) **αβ-Di[Phenylhydrazon]pentan.** Sm. 162—163° (*B.* **22**, 528). — IV, 759.  
 3) **βγ-Di[Phenylhydrazon]pentan.** Sm. 166—167° (136°) (*B.* **21**, 1414; **22**, 528; *A.* **247**, 221; *Bl.* [4] **5**, 228 *C.* **1909** [1] 1315). — IV, 781.  
 4) **γδ-Di[Phenylhydrazon]-β-Methylbutan.** Sm. 115° (*B.* **30**, 862; **32**, 1202). — IV, 759; \*IV, 490.  
 5) **4-Isopropylidenhydrazido-2,3'-Dimethylazobenzol.** Sm. 125°. HCl (*J. pr.* [2] **78**, 448 *C.* **1909** [1] 358; *J. pr.* [2] **78**, 475 *C.* **1909** [1] 359).  
 6) **2,2'-Azo-4,4'-Di[Dimethylamido]diphenylmethan.** Sm. 213° (*C. r.* **149**, 402 *C.* **1909** [2] 1451).  
 7) **Verbindung** (aus Formaldehyd u. uns-Methylphenylhydrazin). Sm. 217° (*B.* **29**, 1473). — IV, 745.
- C<sub>17</sub>H<sub>20</sub>N<sub>6</sub>** C 66,2 — H 6,5 — N 27,3 — M. G. 308.  
 1) **Di[Phenylazo]trimethylenäthylendiamin.** Sm. 118° (*B.* **33**, 761). — \*IV, 1133.
- C<sub>17</sub>H<sub>20</sub>N<sub>8</sub>** C 60,7 — H 5,9 — N 33,3 — M. G. 336.  
 1) **Bisdiazobenzolpentamethylentetramin.** Sm. 228° u. Zers. (*A.* **288**, 242). — IV, 1493.
- C<sub>17</sub>H<sub>20</sub>J<sub>2</sub>** 1) **4-Isoamylidiphenyljodoniumjodid.** Sm. 118° (*B.* **34**, 3685).
- C<sub>17</sub>H<sub>20</sub>S<sub>2</sub>** 1) **Diäthyläther d. αα-Dimerkaptodiphenylmethan.** Fl. (*B.* **33**, 3168). — \*III, 146.  
 2) **Dibenzyläther d. αγ-Dimerkaptopropan.** Sd. 218—221°<sub>8-9</sub> (*B.* **32**, 1373). — \*II, 639.
- C<sub>17</sub>H<sub>21</sub>N** C 85,3 — H 8,8 — N 5,8 — M. G. 239.  
 1) **α-Phenylamido-α-[4-Isopropylphenyl]äthan.** Sm. 59°; Sd. 200°<sub>15</sub>. HCl (*B.* **38**, 1771 *C.* **1905** [1] 1600).  
 2) **Isoamylidiphenylamin.** Sd. 330—340° (*Bl.* **23**, 3). — II, 342.  
 3) **4-Methylphenyl-4-Isopropylbenzylamin.** Sm. 36°. HCl (*A.* **245**, 293; *C.* **1909** [2] 307). — II, 560.  
 4) **1-Önanthylidenamidonaphtalin** (*A.* **171**, 139). — II, 623.  
 5) **1-Benzylidenamidocamphen.** Sm. 63° (*Soc.* **79**, 650). — \*IV, 73.  
 6) **Benzylidenamidopinen.** Sm. 52—55° (*A.* **268**, 205). — IV, 79.  
 7) **Benzylidencamphenamin** (*B.* **33**, 482).
- C<sub>17</sub>H<sub>21</sub>N<sub>3</sub>** C 76,4 — H 7,9 — N 15,7 — M. G. 267.  
 1) **α-Imidodi[4-Dimethylamidophenyl]methan** (Auramin). Sm. 136°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HJ, Rhodanat, Palmitat, Stearat, Oxalat, Pikrat (D.R.P. 53614, 58198, 58277, 70908, 71320, 77329; *B.* **20**, 2847, 3263; **32**, 1678; **33**, 297; *J. pr.* [2] **50**, 401, 440; *B.* **35**, 2615 *C.* **1902** [2] 593). — IV, 1172; \*IV, 830.  
 2) **α-Imidodi[4-Methylamido-3-Methylphenyl]methan** (Auramin G). Sm. 119—120°. HCl, H<sub>2</sub>SO<sub>4</sub> + C<sub>2</sub>H<sub>5</sub>O, Oxalat, Pikrat (D.R.P. 67478; *B.* **35**, 913 *C.* **1902** [1] 811; *C.* **1903** [1] 399). — \*IV, 832.  
 3) **4-Dimethylamido-1-[4-Äthylamidobenzyliden]amidobenzol** (*B.* **37**, 857 *C.* **1904** [1] 1206).  
 4) **4-Dimethylamido-1-[4-Dimethylamidobenzyliden]amidobenzol.** Sm. 229°. 2HCl + 5H<sub>2</sub>O (*B.* **26**, 1041; **28**, 111, 326; **31**, 2252; *B.* **37**, 858 *C.* **1904** [1] 1206; *C.* **1907** [1] 108). — IV, 596; \*IV, 394.  
 5) **4-[4-Methylamido-3-Methylbenzyliden]amido-1-Dimethylamido-benzol.** Sm. 162° (*B.* **37**, 862 *C.* **1904** [1] 1206).  
 6) **Allyldi[2-Amidobenzyl]amin.** Sm. 104° (*B.* **26**, 2587). — IV, 628.  
 7) **Di[4-Äthylphenyl]guanidin.** Sm. 137—138°. (2HCl, PtCl<sub>4</sub>) (*B.* **17**, 2804). — IV, 1139.

- C<sub>17</sub>H<sub>21</sub>N<sub>3</sub>** 8) Di[2,4 - Dimethylphenyl]guanidin. Sm. 156—158° (B. 9, 1296). — II, 543.  
 9) β-Phenylamido-γ-Phenylhydrazon-β-Methylbutan. Sm. 96—97° (A. 262, 337). — IV, 769.  
 10) 4 - Diäthylamidobenzylidenphenylhydrazin. Sm. 103° (B. 37, 861 C. 1904 [1] 1206).  
 11) 4-Methyl-1-[4-Isopropylbenzyl]amidodiazobenzol. Sm. 79° (B. 22, 930). — IV, 1573.  
 12) 4'-Diäthylamido-4-Methylazobenzol. Sm. 113°. HCl, H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 72, 253 C. 1905 [2] 1449).  
 13) Nitril d. 6-Phenylhydrazon-1-Methyl-4-Isopropenylhexahydrobenzol-2-Carbonsäure. Sm. 113—124° (Soc. 89, 952 C. 1906 [2] 609).
- C<sub>17</sub>H<sub>21</sub>P** 1) Diäthyl-4-Benzylphenylphosphin. Sd. 235°<sub>20</sub> (A. 315, 46).  
 2) Äthylphenyl-2,4,5-Trimethylphenylphosphin. Sd. 352°. (2HCl, PtCl<sub>4</sub>), + HgCl<sub>2</sub> (A. 315, 74). — \*IV, 1182.
- C<sub>17</sub>H<sub>22</sub>O** C 84,3 — H 9,1 — O 6,6 — M. G. 242.  
 1) 3-Keto-4-[4-Isopropylidenphenyl]-1-Methylhexahydrobenzol. Sm. 58° (C. r. 136, 1225 C. 1903 [2] 116).  
 2) Benzyltanacetone. Sd. 180—181°<sub>15</sub> (B. 36, 4370 C. 1904 [1] 455).  
 3) Benzylcampher. Sm. 51—52°; Sd. 220—225°<sub>70</sub> (B. 24 [2] 731; C. r. 129, 1006; 130, 222; Bl. [3] 27, 547; C. 1895 [2] 365; 1896 [2] 590; 1900 [1] 297). — III, 514; \*III, 389.  
 4) Benzylidihydrocarvon. Sm. 69°; Sd. 204—206°<sub>20</sub> (D.R.P. 202720 C. 1908 [2] 1837).  
 5) Benzylidihydropulegon. Sd. 210—215°<sub>25</sub> (D.R.P. 202720 C. 1908 [2] 1837).  
 6) Benzylidendihydroisocampher. Sm. 217° (G. 30 [1] 599). — \*III, 390.  
 7) d-Benzylidenmenthon (3-Keto-4-Isopropyl-2-Benzyliden-1-Methylhexahydrobenzol). Sd. 188—189°<sub>12</sub>. HCl, HBr (B. 29, 1599; C. r. 133, 41; A. 305, 261; B. 37, 234 C. 1904 [1] 725; C. 1904 [2] 1043). — \*III, 140.  
 8) l-Benzylidenmenthon. Fl. (C. r. 133, 43). — \*III, 141.  
 9) isom. l-Benzylidenmenthon. Sm. 47° (C. r. 134, 1438 C. 1902 [2] 280; C. 1904 [2] 1044). — \*III, 141.  
 10) isom. l-Benzylidenmenthon. Sm. 51° (C. r. 134, 1437 C. 1902 [2] 280; C. 1904 [2] 1044). — \*III, 141.  
 11) Benzylidenthujamenthon. Sd. 180—182°<sub>11</sub> (A. 323, 356 C. 1902 [2] 1206).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>** C 79,1 — H 8,5 — O 12,4 — M. G. 258.  
 1) d-Benzylidencampholsäure (C. 1900 [2] 96; C. r. 133, 79). — \*II, 864.  
 2) Benzoat d. 5-Oxy-4-Isopropyl-1-Methyl-1,2,3,4-Tetrahydrobenzol (oder B. d. 6-Oxy-5-Isopropyl-2-Methyl-1,2,3,4-Tetrahydrobenzol). Sd. 200 bis 202°<sub>30</sub> (B. 41, 571 C. 1908 [1] 1176).  
 3) Benzoat d. 1-Oxydekahydronaphtalin. Sm. 68° (C. r. 141, 953 C. 1906 [1] 365).  
 4) Benzoat d. d-Borneol. Sm. 25,5° (B. 22 [2] 575). — III, 471.  
 5) Benzoat d. l-Borneol. Sm. 25,5° (B. 22 [2] 575). — III, 471.  
 6) Benzoat d. d-Fenchylalkohol. Sd. 183—188°<sub>30</sub> (Bl. [3] 19, 414). — \*II, 343.  
 7) Benzoat d. Geraniol. Sd. 194—195°<sub>12</sub> (J. pr. [2] 56, 14; C. 1908 [1] 1042). — \*III, 345.
- C<sub>17</sub>H<sub>22</sub>O<sub>3</sub>** C 74,4 — H 8,0 — O 17,5 — M. G. 274.  
 1) 2-Oxy-3-Keto-2-Benzoyl-4-Isopropyl-1-Methylhexahydrobenzol (Benzoyloxymenthon). Sm. 87°; Sd. 208—210°<sub>12</sub> u. Zers. (C. 1904 [2] 1044).  
 2) isom. Benzoyloxymenthon. Sm. 71—72° (C. 1904 [2] 1045).  
 3) isom. Benzoyloxymenthon. Sm. 100° (C. 1904 [2] 1045).  
 4) 1,8-Diketo-3,3,6,6-Tetramethyl-1,2,3,4,5,6,7,8-Oktahydroxanthron. Sm. 171° (A. 309, 372). — \*III, 583.  
 5) Äthyläther d. Desmotroposantonin. Sm. 168° (G. 25 [1] 474). — II, 1790.  
 6) Äthyläther d. l-Desmotroposantonin. Sm. 82° (B. 31, 3132; G. 28 [2] 536). — \*II, 1046.

- C<sub>17</sub>H<sub>22</sub>O<sub>3</sub>**
- 7) Äthyläther d. rac. Desmotroposantonin. Sm. 106° (B. 31, 3133; G. 28 [2] 540). — \*II, 1046.
  - 8) Äthyläther d. Iso-Desmotroposantonin. Sm. 82° (G. 25 [1] 482). — II, 1791.
  - 9) Rhapontigenin. Sm. 180—181° (Ar. 243, 446 C. 1905 [2] 1365; Ar. 245, 147 C. 1907 [1] 1803).
  - 10) Benzoylcampolsäure. Sm. 163°. Ag (C. r. 144, 299 C. 1907 [1] 1126).
  - 11) Podocarpinsäure. Sm. 187—188°. NH<sub>4</sub> + H<sub>2</sub>O, Na + 7H<sub>2</sub>O, K + 3(4)H<sub>2</sub>O, Ca + 5H<sub>2</sub>O, Ba + 3(8,9,15)H<sub>2</sub>O, Ba + 8H<sub>2</sub>O, Pb + H<sub>2</sub>O, Cu + 10H<sub>2</sub>O, Ag + 2½H<sub>2</sub>O (A. 170, 213; R. 4, 172; Soc. 85, 1242 C. 1904 [2] 1308). — II, 1685.
  - 12) Äthylester d. 3-Keto-4-Benzyl-1-Methylhexahydrobenzol-4-Carbonsäure. Sd. 194°<sub>12</sub> (A. 348, 102 C. 1906 [2] 782).
  - 13) Äthylester d. 2-Acetyl-1-Phenylhexahydrobenzol-2-Carbonsäure. Fl. (Soc. 57, 319). — II, 1685.
  - 14) Äthylester d. γ-Keto-α-Phenyl-δ-Äthyl-α-Penten-δ-Carbonsäure (Ä. d. Diäthyleinnamylessigsäure). Sm. 101—102° (A. 218, 184; Soc. 55, 39). — II, 1685.
  - 15) Monobenzoat d. Camphenglykol. Sm. 88° (A. 340, 31 C. 1905 [2] 551).
  - 16) Salicylat d. d-Borneol. Sm. 44—45°; Sd. 171—173°<sub>5</sub> (C. 1904 [1] 1580; 1904 [2] 1043; D.R.P. 175097 C. 1906 [2] 1589).
  - 17) Salicylat d. Isoborneol. Sd. 171—173°<sub>5</sub> (D.R.P. 175097 C. 1906 [2] 1589).
- C<sub>17</sub>H<sub>22</sub>O<sub>4</sub>**
- C 70,3 — H 7,6 — O 22,1 — M. G. 290.
- 1) Acetylhydrosantonid. Sm. 204—205,5° (J. 1878, 827). — II, 1770.
  - 2) α-[4-Isopropylphenyl]-δ-Methyl-α-Penten-βγ-Dicarbonsäure? Sm. 140° (B. 38, 3902 C. 1906 [1] 192).
  - 3) Phenylloxycampocarbonsäure. Sm. 148° (A. ch. [7] 2, 277). — II, 1871.
  - 4) Acetylpipitzahöinsäure. Sm. 115° (A. 237, 98). — II, 1673.
  - 5) Diäthylester d. α-[4-Isopropylphenyl]äthen-ββ-Dicarbonsäure. Sd. 205—208°<sub>11,5</sub> (B. 31, 2592). — \*II, 1080.
  - 6) Mono-2-Methylphenylester d. d-Campfersäure. Sm. 102° (Soc. 95, 337 C. 1909 [1] 1563).
  - 7) Diacetat d. γε-Dioxy-α-Phenyl-δδ-Dimethyl-α-Penten. Fl. (M. 22, 1123 C. 1902 [1] 471).
- C<sub>17</sub>H<sub>22</sub>O<sub>5</sub>**
- C 66,7 — H 7,2 — O 26,1 — M. G. 306.
- 1) Acetylsantonsäure. Sm. 197—198° (G. 25 [2] 462; 29 [2] 200). — \*II, 1044.
  - 2) isom. Acetylsantonsäure. Sm. 139—140° (J. 1875, 608). — II, 1789.
  - 3) Acetylmetasantonsäure. Sm. 202—203° (G. 25 [2] 470). — \*II, 1045.
  - 4) γ-Commiphorsäure. Sm. 169—172° u. Zers. (Ar. 245, 448 C. 1907 [2] 1913).
  - 5) Myrrholsäure. Sm. 236°. Pb, Cu, Ag (Ar. 245, 438 C. 1907 [2] 1912).
  - 6) Diäthylester d. δ-Keto-α-Phenylpentan-αγ-Dicarbonsäure (D. d. α-Phenyl-α'-Acetylglutarsäure). Sd. 189°<sub>11</sub> (B. 34, 4175 C. 1902 [1] 254).
  - 7) Diäthylester d. α-Keto-α-Phenylpentan-γγ-Dicarbonsäure. Fl. (B. 21, 3453). — II, 1967.
  - 8) Diäthylester d. γ-Keto-α-Phenylbutan-β-Carbonsäure-β-Methylcarbonsäure (D. d. Benzylacetsuccinsäure). Sd. 310° (B. 11, 1058). — II, 1967.
  - 9) Diäthylester d. β-Benzoylbutan-αα-Dicarbonsäure. Fl. (C. 1904 [1] 1258).
  - 10) Propylester d. Filixsäure. Sm. 158° (B. 21, 2964). — II, 1967.
  - 11) Mono[2-Methoxyphenyl]ester d. Campfersäure. Sm. 112° (Soc. 75, 665). — \*II, 554.
- C<sub>17</sub>H<sub>22</sub>O<sub>6</sub>**
- C 63,3 — H 6,8 — O 29,8 — M. G. 322.
- 1) Olivacein + H<sub>2</sub>O. Sm. 156° (J. pr. [2] 68, 50 C. 1903 [2] 513).
  - 2) Olivaceasäure. Sm. 138° (J. pr. [2] 68, 51 C. 1903 [2] 513).
  - 3) Acetoxymparasantonsäure. Sm. 207° (C. 1903 [2] 1377).
  - 4) Äthylester d. αγ-Diketo-α-[4,6-Dioxyphenyl]butan-4,6-Diäthyläther-3-Carbonsäure. Sm. 138—140° (B. 42, 1399 C. 1909 [1] 1885).



- C<sub>17</sub>H<sub>22</sub>O<sub>6</sub>** 5) Triäthylester d.  $\alpha$ -Phenyläthan- $\alpha\beta\beta$ -Dicarbonsäure. Sm. 45–46° (A. 258, 71; B. 29, 1868). — II, 2013.
- 6) Triäthylester d.  $\alpha$ -Phenyläthan- $\beta\beta$ 2-Tricarbonsäure. Sd. 250°<sub>45</sub> (A. 242, 36). — II, 2014.
- C<sub>17</sub>H<sub>22</sub>O<sub>7</sub>** 7) Triacetat d.  $\beta\delta\epsilon$ -Trioxy- $\beta$ -Phenylpentan. Fl. (J. pr. [2] 64, 552).  
C 60,4 — H 6,5 — O 33,1 — M. G. 338.
- 1)  $\eta$ -Oxy- $\beta$ -Methylheptanphenyläther- $\gamma\epsilon\epsilon$ -Tricarbonsäure. Sm. 179 bis 180° u. Zers. (Soc. 69, 1504). — \*II, 367.
- 2) Acetoxyldehydroisophotosantonsäure. Sm. 251° (G. 32 [1] 321 C. 1902 [1] 1405).
- 3) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]äthan- $\alpha$ -Äthyläther-3,4-Methylenäther- $\beta\beta$ -Dicarbonsäure (D. d.  $\beta$ -Äthoxylpiperonylmalonsäure). Na (B. 26, 1878). — II, 2044.
- 4) Diäthylester d.  $\beta$ -Diketo- $\delta$ -[2-Furanyl]heptan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 75° (72°) (A. 303, 244; B. 35, 393 C. 1902 [1] 569). — \*III, 517.
- C<sub>17</sub>H<sub>22</sub>O<sub>8</sub>** C 57,6 — H 6,2 — O 36,2 — M. G. 354.
- 1) Glykoferulasäuremethylketon + 2H<sub>2</sub>O. Sm. 207° (wasserfrei) (B. 18, 3491). — III, 162.
- C<sub>17</sub>H<sub>22</sub>O<sub>9</sub>** C 55,1 — H 5,9 — O 38,9 — M. G. 370.
- 1) 1-Keto-2,3-Dihydro-R-Penten-2,3,3,4-Tetracarbonsäure. Fl. (B. 31, 49). — \*I, 448.
- C<sub>17</sub>H<sub>22</sub>O<sub>10</sub>** C 52,8 — H 5,7 — O 41,4 — M. G. 386.
- 1) Gerbsäure (aus d. Samen v. Pharbitis Nil) (C. 1896 [2] 632).
- 2) Verbindung (aus Cap-Aloë) (J. 1863, 596, 597). — III, 618.
- C<sub>17</sub>H<sub>22</sub>O<sub>11</sub>** C 50,7 — H 5,5 — O 43,8 — M. G. 402.
- 1) Ilizanthin. Sm. 198° (A. 102, 346). — III, 633.
- C<sub>17</sub>H<sub>23</sub>N<sub>2</sub>** C 80,3 — H 8,7 — N 11,0 — M. G. 254.
- 1) 4,4'-Diamido-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 138–139° (A. 356, 130 C. 1907 [2] 1697).
- 2) 4,4'-Diamido-2,6,2',6'-Tetramethyldiphenylmethan. Sm. 205–208° (A. 356, 156 C. 1907 [2] 1699).
- 3) 4,4'-Diamido-3,5,3',5'-Tetramethyldiphenylmethan. Sm. 126° (M. 19, 640). — \*IV, 659.
- 4) 4-Amido-4'-Äthylamido-3,3'-Dimethyldiphenylmethan. Fl. (C. 1900 [1] 1111). — \*IV, 658.
- 5) 4-Amido-4'-Diäthylamidodiphenylmethan. Fl. (C. 1900 [1] 1112).
- 6) 2-Amido-4'-Dimethylamido-3,5-Dimethyldiphenylmethan. Fl. (C. 1900 [1] 1112).
- 7) 4-Methylamido-4'-Dimethylamido-3-Methyldiphenylmethan. Sm. 85° (C. 1900 [1] 1111). — \*IV, 651.
- 8) Di[4-Methylamido-3-Methylphenyl]methan. Sm. 87° (89°) (A. 304, 114; D.R.P. 67478; B. 41, 2152 C. 1908 [2] 703; B. 41, 2112 C. 1908 [2] 696). — \*IV, 658.
- 9) Di[4-Äthylamidophenyl]methan. Sd. 255°<sub>10</sub> (B. 41, 2151 C. 1908 [2] 703).
- 10) Di[4-Dimethylamidophenyl]methan. Sm. 90–91°. 4HCl, (2HCl, PtCl<sub>4</sub>), 2HJ, Pikrat. Lit. bedeutend. — IV, 974; \*IV, 647.
- 11)  $\pi\epsilon$ -Di[Phenylamido]pentan. Sm. 45°; Sd. 260–265°<sub>10</sub>. 2HCl (B. 41, 2167 C. 1908 [2] 706).
- 12)  $\delta\delta$ -Di[Phenylamido]- $\beta$ -Methylbutan. + SO<sub>2</sub> (A. 316, 134).
- 13)  $\alpha\beta$ -Di[2-Methylphenylamido]propan. Sd. 250–265°<sub>70</sub> (B. 25, 3276). — II, 459.
- 14)  $\alpha\beta$ -Di[4-Methylphenylamido]propan. Sd. 276–278°<sub>48</sub> (B. 25, 3277). — II, 488.
- 15)  $\alpha\gamma$ -Di[Methylphenylamido]propan. Sm. 46–47°; Sd. 270–272°<sub>70</sub>. Pikrat (B. 40, 764 C. 1907 [1] 1031).
- 16)  $\alpha\gamma$ -Di[2-Methylphenylamido]propan. Sd. 275–280°<sub>18</sub>. H<sub>2</sub>SO<sub>4</sub> (B. 32, 2255). — \*II, 249.
- 17)  $\alpha\gamma$ -Di[4-Methylphenylamido]propan. Sm. 73° (B. 31, 3247). — \*II, 267.
- 18) Di[Äthylphenylamido]methan. Sm. 76–77° (79°; 145°; Sd. 205°<sub>9</sub> (D.R.P. 156760 C. 1905 [1] 312; B. 40, 763 C. 1907 [1] 1030; B. 41, 1578 C. 1908 [2] 56; B. 41, 2150 C. 1908 [2] 703).
- 19) Di[2,4-Dimethylphenylamido]methan. Sm. 127–128°. (2HCl, PtCl<sub>4</sub>) (Soc. 81, 284 C. 1902 [1] 527; Soc. 91, 1929 C. 1908 [1] 384).

- C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>** 20) Di[2,5-Dimethylphenylamido]methan. Sm. 67—68° (A. 356, 129 C. 1907 [2] 1697).
- 21) isom. Di[2,5-Dimethylphenylamido]methan. Sm. 138°. (2HCl, PtCl<sub>4</sub>+H<sub>2</sub>O) (Soc. 91, 1931 C. 1908 [1] 384).
- 22) Di[Methyl-2-Methylphenylamido]methan. Sd. 212—215°<sub>18</sub> (B. 41, 2153 C. 1908 [2] 703).
- 23) Di[Methyl-4-Methylphenylamido]methan. Sm. 68°; Sd. 215°<sub>10</sub> (B. 41, 2154 C. 1908 [2] 704).
- 24) Phenyl-4-Diäthylamidobenzylamin. Fl. (C. 1900 [1] 1112).
- 25) 2,4-Dimethylphenyl-2-Amido-3,5-Dimethylbenzylamin. Fl. (C. 1900 [1] 496). — \*IV, 418.
- C<sub>17</sub>H<sub>22</sub>N<sub>4</sub>** C 72,3 — H 7,8 — N 19,9 — M. G. 282.
- 1) α-[α-Phenylhydrazido]-β-[α-Phenyl-β-Isopropylidenhydrazon]äthan. Sm. 71—72° (A. 254, 127). — IV, 766.
- C<sub>17</sub>H<sub>28</sub>N** C 84,6 — H 9,5 — N 5,8 — M. G. 241.
- 1) d-Benzylidenbornylamin. Sm. 58—59°. (2HCl, PtCl<sub>4</sub>) (Soc. 75, 1151). — \*IV, 60.
- 2) Benzylidenbornylamin (Gemisch). HCl, (2HCl, PtCl<sub>4</sub>) (A. 269, 353). — IV, 57.
- 3) d-Benzylidenfenchylamin. Sm. 42° (A. 272, 106). — IV, 59.
- 4) l-Benzylidenfenchylamin. Sm. 42°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 269, 363; 276, 320). — IV, 58.
- 5) i-Benzylidenfenchylamin. Fl. (A. 272, 108). — IV, 59.
- 6) Base (aus Oxymethylenecampheranilid). Sm. 38°; Sd. 211—212°<sub>20</sub> (C. 1901 [1] 1025). — \*III, 87.
- C<sub>17</sub>H<sub>23</sub>N<sub>3</sub>** C 75,8 — H 8,5 — N 15,6 — M. G. 269.
- 1) α-Amidodi[4-Dimethylamidophenyl]methan (Leukauramin). Sm. 135° (D.R.P. 64270; B. 20, 3265; 35, 366; B. 35, 375 C. 1902 [1] 588). — IV, 1169; \*IV, 823.
- 2) α-Amidodi[4-Methylamido-3-Methylphenyl]methan (Leukauramin G). Sm. 207—208° (B. 35, 914 C. 1902 [1] 811). — \*IV, 826.
- 3) 2-Amido-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 96° (B. 34, 4314 C. 1902 [1] 323). — \*IV, 825.
- 4) 2,4-Diamido-4'-Diäthylamidodiphenylmethan. Sm. 92° (C. 1900 [1] 1112). — \*IV, 825.
- 5) Propyldi[2-Amidobenzyl]amin. Sm. 112° (B. 26, 2586). — IV, 628.
- C<sub>17</sub>H<sub>24</sub>O** C 83,6 — H 9,8 — O 6,5 — M. G. 244.
- 1) 3-Keto-4-Isopropyl-2-Benzyl-1-Methylhexahydrobenzol (Benzylmenthon). Sd. 177—179°<sub>10</sub> (A. 305, 266; B. 37, 236 C. 1904 [1] 726). — \*III, 134.
- 2) α-Benzylborneol (C. r. 142, 678 C. 1906 [1] 1427).
- 3) tert. β-Benzylborneol. Sd. 169—170°<sub>10-11</sub> (C. r. 142, 680 C. 1906 [1] 1427).
- 4) Benzylisoborneol. Sd. 179—181°<sub>13</sub> (C. r. 142, 678 C. 1906 [1] 1427).
- 5) Benzyl Dihydrocarvol. Sd. 182—183°<sub>10</sub> (A. 305, 269). — \*II, 656.
- 6) d-Benzylfenchol. Sm. 65—66°; Sd. 181—182°<sub>15</sub> (C. r. 148, 1612 C. 1909 [2] 358).
- 7) d-2-Methylphenylfenchol. Sd. 175—177°<sub>14</sub> (C. r. 148, 1612 C. 1909 [2] 358).
- 8) d-4-Methylphenylfenchol. Sd. 180—181°<sub>15</sub> (C. r. 148, 1612 C. 1909 [2] 358).
- 9) Benzylpulegol. Sd. 192—195°<sub>10</sub> (A. 305, 268). — \*II, 656.
- 10) Benzyltanacetylalkohol. Sd. 181—182°<sub>15</sub> (B. 36, 4370 C. 1904 [1] 455).
- 11) Benzyläther d. d-Borneol. Sm. 50—52°; Sd. 215—216°<sub>70</sub> (B. 24 [2] 431). — III, 470.
- 12) Verbindung (aus akt. Benzyliden-m-Methylcyklohexanon). Sm. 84° (C. r. 144, 1221 C. 1907 [2] 406).
- C<sub>17</sub>H<sub>24</sub>O<sub>2</sub>** C 78,5 — H 9,2 — O 12,3 — M. G. 260.
- 1) 2,4-Dibutyl-1,3,5-Trimethylbenzol. Sm. 36°; Sd. 338—339° (B. 30, 1285). — \*III, 212.
- 2) 2,4-Diisobutyl-1,3,5-Trimethylbenzol. Sd. 331—332° (B. 30, 1285). — \*III, 212.
- 3) Äthylester d. 1,1,2-Trimethyl-2-Phenyl-R-Pentamethylen-3-Carbonsäure. Sm. 48—50° (Bl. [3] 13, 903). — III, 167.

$C_{17}H_{24}O_2$ 4) Capronat d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. Sd. 175–177°<sub>20</sub> (Bl. [3] 29, 354 C. 1903 [1] 1222).

5) Benzoat d. d-Menthol. Sm. 82° (J. pr. [2] 63, 57). — \*III, 336.

6) Benzoat d. l-Menthol. Sm. 54° (54,5°); Sd. 180°<sub>15</sub> (A. ch. [6] 7, 479; C. 1902 [2] 1238; J. pr. [2] 55, 16; B. 31, 1778; B. 35, 2474 C. 1902 [2] 441; A. 327, 194 C. 1903 [1] 1396). — III, 467; \*III, 335. $C_{17}H_{24}O_3$ 

C 73,9 — H 8,7 — O 17,4 — M. G. 276.

1) d-7-Äthoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (d-Äthyläthersantonige Säure). Sm. 115,5–116° (118°; 120°). Ba (J. 1880, 895; G. 12, 398; 25 [1] 499; B. 12, 1574; 16, 428). — II, 1670; \*II, 977.2) l-7-Äthoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (l-Äthyläthersantonige Säure). Sm. 120–121° (B. 28 [2] 393). — II, 1671.3) i-7-Äthoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Äthylisosantonige Säure). Sm. 144–145° (B. 16, 428; 28 [2] 393). — II, 1671.4) isom. 7-Äthoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Äthylätherdesmotroposantonige Säure). Sm. 127° (B. 28 [2] 393; G. 25 [1] 535). — II, 1672; \*II, 978.

5) d-Phenyl oxyhomocampholsäure. Sm. 217° (200–202°) (C. 1900 [2] 96; C. r. 133, 79; C. r. 144, 301 C. 1907 [1] 1126). — \*II, 979.

6) Säure (aus Benzylidencampher). Sm. 206° (Bl. [3] 15, 988).

7) Gem. Anhydrid d. Önanthsäure u. l-Isopropylbenzol-4-Carbonsäure. Fl. (A. 91, 103). — II, 1385.

8) Methyl ester d. isom. 7-Methoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (M. d. Methylätherdesmotroposantonigen Säure). Sd. 300–305°<sub>80</sub> (G. 23 [2] 480; 25 [1] 531). — II, 1672.9) Äthylester d.  $\zeta$ -Benzoyl- $\beta$ -Methylhexan- $\epsilon$ -Carbonsäure (Ä. d.  $\beta$ -Benzoyl- $\alpha$ -Isoamylpropionsäure). Sd. 260° (B. 23, 1505). — II, 1670.10) Äthylester d. d-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Ä. d. d-Santonigen Säure). Sm. 116–117° (J. 1880, 895; G. 12, 395; B. 12, 1574; 16, 427). — II, 1670.11) Äthylester d. r-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Ä. d. Isosantonigen Säure). Sm. 125° (G. 12, 400; 25 [1] 524; J. 1880, 895; B. 16, 428). — II, 1671; \*II, 978.

12) Äthylester d. Desmotroposantonigen Säure. Sm. 116–117° (G. 25 [1] 514). — \*II, 978.

13) Äthylester d. Pipitzahoinsäure. Sm. 141° (A. 237, 98). — II, 1673.

14) Menthylester d. 2-Oxybenzol-1-Carbonsäure. Sd. 190°<sub>15</sub> (D.R.P. 171453 C. 1906 [2] 385).15) 5-Benzoat d. 3,5-Dioxy-1,1-Dimethylhexahydrobenzol-3-Äthyl-äther. Sd. 226°<sub>80</sub> (Soc. 91, 74 C. 1907 [1] 1039). $C_{17}H_{24}O_4$ 

C 69,9 — H 8,2 — O 21,9 — M. G. 292.

1) Diisoamyläther d. Dioxymethylbenzol. Fl. (A. 102, 369). — III, 12.

2) Propylbutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 61,5° (C. 1905 [1] 815).

3) Propylisobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 64° (C. 1905 [1] 815).

4) Isopropylbutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 76° (C. 1905 [1] 815).

5) Isopropylisobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm. 80° (C. 1905 [1] 815).

6) Methylenbisdimethylhydroresorcin. Sm. 189° (A. 294, 316; 309, 370). — \*I, 545.

7) Äthylester d. Santonsäure. Sm. 88–89° (94–95°) (J. 1876, 619; B. 13, 2210; G. 8, 332; 29 [2] 225). — II, 1788.

8) Äthylester d. Isosantonsäure. Sm. 76° (G. 25 [2] 473). — \*II, 1047.

9) Äthylester d. Parasantonsäure. Sm. 172° (J. 1878, 826; B. 13, 2210; G. 8, 343; C. 1903 [2] 1446). — II, 1790.

10)  $\alpha$ -Äthylester d. Photosantonsäure (Photosantonid). Sm. 68–69° (J. 1876, 619; B. 18, 2861). — II, 1932.11)  $\beta$ -Äthylester d. Photosantonsäure. Sm. 154–155° (B. 18, 2861). — II, 1932.



- C<sub>17</sub>H<sub>24</sub>O<sub>4</sub>** 12) Diacetat d. 4-Dioxymethyl-5-tert. Butyl-1,3-Dimethylbenzol. Sm. 87° (B. 32, 3648). — \*III, 45.
- C<sub>17</sub>H<sub>24</sub>O<sub>5</sub>** 13) Farbstoff (aus Baumwollsaamenöl) (J. 1861, 943). — III, 651.  
C 66,2 — H 7,8 — O 26,0 — M. G. 308.  
1)  $\alpha$ -Heerabomyrrhol. Sm. 158—165° (Ar. 243, 645 C. 1906 [1] 477).  
2) Acetylisophotosantonsäure. Sm. 183° (B. 18, 2859; 19, 2262; G. 32 [1] 312 C. 1902 [1] 1404). — II, 1933.  
3) Äthylester d.  $\alpha$ -Äskuletintriäthyläthersäure. Sm. 51° (B. 16, 2110). — II, 1950.  
4) Äthylester d.  $\beta$ -Äskuletintriäthyläthersäure. Sm. 75°; Sd. oberhalb 360° (B. 16, 2108). — II, 1951.  
5) Diäthylester d.  $\epsilon$ -Oxypentanphenyläther- $\beta\beta$ -Dicarbonsäure. Sd. 268 bis 270°<sub>130</sub> (B. 26, 2569). — II, 667.  
6) Acetat d. Laserpitin. Sm. 113° (J. 1883, 1361). — III, 635.  
7)  $\alpha\gamma$ -Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[2-Oxyphenyl]- $\beta\beta$ -Dimethylpropan-2-Äthyläther. Sd. 192—193°<sub>17</sub> (M. 21, 1106). — \*II, 698.  
8)  $\alpha\gamma$ -Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[3-Oxyphenyl]- $\beta\beta$ -Dimethylpropan-3-Äthyläther. Sd. 202°<sub>18</sub> (M. 24, 172 C. 1903 [1] 968).  
9)  $\alpha\gamma$ -Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[4-Oxyphenyl]- $\beta\beta$ -Dimethylpropan-4-Äthyläther. Sm. 70° (M. 22, 504).
- 10) Verbindung (aus Heerabol-Myrrha). Sm. 188—197° (Ar. 243, 646 C. 1906 [1] 477).  
C 62,9 — H 7,4 — O 29,6 — M. G. 324.  
1) 4-Isopropylbenzyliden- $\beta$ -Methylglykosid. Sm. 124° (R. 25, 160 C. 1906 [2] 24).  
2)  $\alpha\alpha\gamma\gamma\epsilon\epsilon$ -Hexaacetylptan (Dimethyltrisacetylaceton). Sm. 101° (B. 36, 2179 C. 1903 [2] 372).  
3)  $\alpha$ -Oxyisovalerian-5-Methyl-1,3-Phenylenäthersäure. Fl. (B. 33, 1686).  
4) Diäthylester d.  $\alpha$ -Oxypropion-5-Methyl-1,3-Phenylenäthersäure. Sd. 314—317,5°<sub>764</sub> (B. 33, 1685). — \*II, 581.  
5) Diäthylester d. Campherylmalonsäure. Sm. 82°; Sd. 274°<sub>40</sub> (A. 257, 299). — II, 2041.  
6) Verbindung (aus Acetylaceton u. Formaldehyd). Sm. 181° (A. 323, 109; A. 332, 21 Ann. C. 1904 [1] 1565).  
C 60,0 — H 7,1 — O 32,9 — M. G. 340.
- C<sub>17</sub>H<sub>24</sub>O<sub>7</sub>** 1) Triäthylester d. Ketotrimethyldicyklopentantricarbonsäure. Sd. 219°<sub>30</sub> (Soc. 79, 786; C. 1900 [2] 320).
- C<sub>17</sub>H<sub>24</sub>O<sub>8</sub>** 2) Triäthylester d. Methylglutakonylglutakonsäure. Sd. 224—226° u. ger. Zers. (C. r. 136, 693 C. 1903 [1] 960).  
C 57,3 — H 6,7 — O 36,0 — M. G. 356.
- C<sub>17</sub>H<sub>24</sub>O<sub>9</sub>** 1)  $\alpha\gamma$ - $\eta\epsilon$ -Dilakton d.  $\gamma\eta$ -Dioxynonan- $\alpha\epsilon\epsilon\epsilon$ -Tetracarbonsäure- $\epsilon\epsilon$ -Diäthylester. Sm. 122—123° (B. 42, 1236 C. 1909 [1] 1544).  
C 54,8 — H 6,4 — O 38,7 — M. G. 372.
- C<sub>17</sub>H<sub>24</sub>O<sub>9</sub>** 1) Syringin + H<sub>2</sub>O. Sm. 191—192° (A. 40, 320; C. 1901 [2] 726; J. 1862, 484; 1863, 592; G. 18, 210). — II, 1117; \*III, 451.
- C<sub>17</sub>H<sub>24</sub>O<sub>10</sub>** C 52,6 — H 6,2 — O 41,2 — M. G. 388.  
1) Äthylester d. Tetracetylchinasäure. Sm. 135° (A. 193, 195; B. 22, 1462). — I, 805.  
2) Monäthylester d. Tripropionylschleimsäurelaktone. Sm. 59° (M. 15, 203). — \*I, 438.  
3) Tetraäthylester d.  $\alpha\epsilon$ -Diketopentan- $\alpha\beta\delta\epsilon$ -Tetracarbonsäure. Sm. 80—81° (C. r. 139, 137 C. 1904 [2] 602; Bl. [4] 1, 25 C. 1907 [1] 825).  
C 79,7 — H 9,4 — N 10,9 — M. G. 256.
- C<sub>17</sub>H<sub>24</sub>N<sub>2</sub>** 1) 1-Phenylhydrazon-5-Methyl-3-Isobutyl-1,2,3,4-Tetrahydrobenzol. Sm. 149—151° (A. 288, 338). — IV, 770.  
2) 4-Methylphenylcamphenylamidin. Sm. 114—115° (B. 18, 1633). — IV, 533.  
3) Base (aus Dimethylamidobenzol u.  $\alpha\alpha$ -Dichlordiphenylmethan). HCl, (2HCl, PtCl<sub>4</sub>) (A. 187, 213). — III, 188.  
C 71,8 — H 8,4 — O 19,7 — M. G. 284.
- C<sub>17</sub>H<sub>24</sub>N<sub>4</sub>** 1) Di[2-Amido-4-Dimethylamidophenyl]methan. Sm. 142° (B. 27, 3163; J. pr. [2] 54, 241). — IV, 1277.

- C<sub>17</sub>H<sub>24</sub>N<sub>4</sub>** 2) 4-Methylamido-4'-Dimethylamido-6,2'-Diamido-3-Methyldiphenylmethan. Sm. 155° (D.R.P. 133709 C. 1902 [2] 615). — \*IV, 948.
- 3) α-Citralamido-α-Phenylguanidin. HNO<sub>3</sub>, Pikrat (G. 31 [1] 533). — \*IV, 889.
- C<sub>17</sub>H<sub>25</sub>O<sub>7</sub>** 1) Choloidansäure? (Bl. 38, 133; siehe auch C<sub>10</sub>H<sub>16</sub>O<sub>4</sub> Cholecamphersäure). — I, 727.
- C<sub>17</sub>H<sub>25</sub>O<sub>10</sub>** 1) Verbenalin. Sm. 181,5° (C. 1908 [1] 955).
- C<sub>17</sub>H<sub>25</sub>N** C 83,9 — H 10,3 — N 5,8 — M. G. 243.
- 1) 3-Amido-2-Benzyliden-4-Isopropyl-1-Methylhexahydrobenzol (oder C<sub>17</sub>H<sub>27</sub>ON). Sd. 200—205°<sub>10</sub> (A. 305, 265; C. 1904 [2] 1044). — \*IV, 172.
- 2) 6-Phenylamidomethyl-4-Isopropyl-1-Methyl-1,2,3,4-Tetrahydrobenzol. Sd. 193°<sub>11</sub> (C. 1901 [1] 1026).
- 3) d-Benzylbornylamin. Sd. 184°<sub>14</sub> (313—315°<sub>740</sub>). HCl, (2HCl, PtCl<sub>4</sub>) (A. 269, 352; Soc. 75, 951). — IV, 56; \*IV, 59.
- 4) Benzyl-l-Fenchylamin. Sd. 190—191°<sub>16</sub>. HCl, (2HCl, PtCl<sub>4</sub>) (A. 269, 362). — IV, 58.
- 5) Benzyltanacetylamin. Sd. 185—190°<sub>25</sub> (B. 36, 4371 C. 1904 [1] 455).
- 6) d-Benzylidenmenthylamin. Sm. 42—43° (A. 276, 311). — IV, 43.
- 7) l-Benzylidenmenthylamin. Sm. 69—70° (A. 276, 305). — IV, 42.
- 8) Base (aus d. Base C<sub>17</sub>H<sub>23</sub>N). Sd. 220°<sub>20</sub> (C. 1901 [2] 152). — \*III, 87.
- C<sub>17</sub>H<sub>25</sub>N<sub>3</sub>** C 75,3 — H 9,2 — N 15,5 — M. G. 271.
- 1) α-Phenylecyanamido-ε-[1-Piperidyl]pentan. Sd. 230—232°. Pikrat (B. 40, 3920 C. 1907 [2] 1524).
- 2) α-Phenylimido-αα-Dipiperidylmethan (s-Phenyldipiperidylguanidin). Sm. 84° (B. 28, 983). — IV, 11.
- C<sub>17</sub>H<sub>26</sub>O** C 82,9 — H 10,6 — O 6,5 — M. G. 246.
- 1) 3-Oxy-4-Isopropyl-2-Benzyl-1-Methylhexahydrobenzol (Benzylmenthol). Sm. 111—112°; Sd. 181—183°<sub>10</sub> (A. 305, 263; B. 37, 236 C. 1904 [1] 725). — \*II, 653.
- 2) Isobutyläther d. Turmerol. Fl. (Am. 4, 368; 6, 81). — III, 546.
- 3) Benzyläther d. l-Menthol (C. 1902 [2] 1238).
- 4) Methyl-2-Methyl-5-Oktylphenylketon. Fl. (B. 31, 941). — \*III, 127.
- 5) Butyl-6-Pseudobutyl-2,4-Dimethylphenylketon. Sd. 185—190°<sub>14</sub> (B. 31, 1349). — \*III, 127.
- 6) Hexahydrobenzylidencampher. Sm. 49°; Sd. 184—186°<sub>16</sub> (C. r. 142, 317 C. 1906 [1] 935).
- 7) Verbindung (aus Guttapercha). Sm. 201—204° (C. 1903 [1] 83).
- 8) Verbindung (aus Guttapercha). Sm. 201—204° (C. 1903 [1] 83; C. 1903 [2] 1177).
- C<sub>17</sub>H<sub>26</sub>O<sub>2</sub>** C 77,9 — H 9,9 — O 12,2 — M. G. 262.
- 1) Halepopinolsäure. Sm. 148—149°. Ag (Ar. 245, 159 C. 1907 [2] 147).
- 2) Isocaprinester d. Benzolcarbonsäure. Sd. oberhalb 280° (J. 1864, 338). — II, 1141.
- 3) Acetat d. Betulol. Sd. 142—144°<sub>4</sub> (B. 38, 1638 C. 1905 [1] 1556).
- 4) Acetat d. α-Santalol (siehe auch C<sub>17</sub>H<sub>23</sub>O<sub>2</sub>). Sd. 311—312° (C. 1900 [2] 478). — \*III, 414.
- 5) Acetat d. Alkohol C<sub>15</sub>H<sub>24</sub>O (aus Cascarillöl). Fl. (Ar. 238, 689).
- 6) Benzoat d. γ-Oxymethyl-βζ-Dimethylheptan. Sd. 210—212°<sub>40</sub> (C. 1899 [1] 728; Bl. [3] 21, 489). — \*II, 714.
- C<sub>17</sub>H<sub>26</sub>O<sub>3</sub>** C 73,4 — H 9,3 — O 17,3 — M. G. 278.
- 1) Äthylester d. α-Oxyisovalerian-5-Isopropyl-2-Methylphenyläthersäure. Sd. 280—292°<sub>762</sub> (B. 33, 1271). — \*II, 459.
- 2) Äthylester d. α-Oxyisovalerian-6-Isopropyl-3-Methylphenyläthersäure. Sd. 275—283°<sub>760</sub> (B. 33, 1273). — \*II, 464.
- 3) Äthylester d. Alantolsäure. Sm. 79—80° (A. 285, 362). — II, 1594.
- 4) Äthylester d. Isoalantolsäure (B. 34, 778). — \*II, 939.
- 5) Acetat d. Verb. C<sub>15</sub>H<sub>24</sub>O<sub>2</sub> (aus Santelöl). Sm. 68,5—69,5° (J. r. 24, 688). — III, 549.
- C<sub>17</sub>H<sub>26</sub>O<sub>4</sub>** C 69,4 — H 8,8 — O 21,8 — M. G. 294.
- 1) Acetyldigitogenin (oder C<sub>34</sub>H<sub>52</sub>O<sub>8</sub>). Sm. 178° (B. 24, 342; 32, 2203). — III, 531; \*III, 437.
- 2) Diäthylester d. δδ-Dimethyl-αγγ-Nonatrien-αα-Dicarbonsäure. Sd. 203°<sub>15</sub> (C. 1898 [1] 228). — \*I, 352.

- C<sub>17</sub>H<sub>26</sub>O<sub>4</sub>** 3) Isoamylester d. Campheroxalsäure. Sm. 98,5—99,5° (*Am.* 20, 337). — \*I, 352.
- 4) Diacetat d. 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. Sd. 193—196°<sub>13</sub> (*B.* 36, 231 *C.* 1903 [1] 514).
- 5) Diacetat d. isom. 9-Methyl-3-Isopropenylbicyklo-[1,3,3]-Nonan-5,7-diol. Sd. 194—196°<sub>15</sub> (*B.* 36, 233 *C.* 1903 [1] 514).
- C<sub>17</sub>H<sub>26</sub>O<sub>5</sub>** C 65,8 — H 8,4 — O 25,8 — M. G. 310.
- 1) Diäthylester d. 1-Keto-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sd. 186—188°<sub>20</sub> (*A.* 288, 332). — \*I, 389.
- 2) Diäthylester d. Säure C<sub>13</sub>H<sub>18</sub>O<sub>5</sub> (vom Sm. 77°). Sd. 235—240°<sub>24</sub> (*A.* 309, 368). — \*I, 389.
- C<sub>17</sub>H<sub>26</sub>O<sub>6</sub>** 3) Verbindung (aus Guttapercha oder C<sub>17</sub>H<sub>26</sub>O<sub>5</sub>). Sm. 133° (*C.* 1903 [1] 84). C 57,0 — H 7,2 — O 35,8 — M. G. 358.
- 1) Tetramethylester d. α-Säure C<sub>13</sub>H<sub>18</sub>O<sub>8</sub> (aus Santonsäure) (*G.* 23 [2] 459). — II, 2067.
- 2) Tetramethylester d. β-Säure C<sub>18</sub>H<sub>18</sub>O<sub>8</sub> (aus Santonsäure). Sm. 99 bis 100° (*G.* 23 [2] 458). — II, 2068.
- 3) Tetraäthylester d. α-Penten-ααγγ-Tetracarbonsäure (T. d. Äthyl-dicarboxylglutakonsäure). Sd. 203—204°<sub>11</sub> (*B.* 23, 3181; 30, 962; *Soc.* 63, 881; *Ph. Ch.* 23, 311). — I, 866; \*I, 446.
- 4) Tetraäthylester d. α-Penten-αβγγ-Tetracarbonsäure. Sd. 205—207°<sub>14</sub> (*Soc.* 81, 1214 *C.* 1902 [2] 888).
- 5) Tetraäthylester d. R-Pentamethylen-1,1,2,2-Tetracarbonsäure. Sd. 192—195°<sub>12</sub> (*J. pr.* [2] 64, 400).
- 6) Tetraäthylester d. 1,1-Dimethyl-R-Trimethylen-2,2,3,3-Tetracarbonsäure. Sd. 188—190°<sub>10</sub> (*J. pr.* [2] 75, 499 *C.* 1907 [2] 452).
- 7) αγγ-Triäthylester-α-Butylester d. Propen-ααγγ-Tetracarbonsäure. Fl. (*B.* 22, 1422). — I, 864.
- C<sub>17</sub>H<sub>26</sub>O<sub>9</sub>** C 54,6 — H 6,9 — O 38,5 — M. G. 374.
- 1) Tetraäthylester d. γ-Oxypropenäthyläther-ααγγ-Tetracarbonsäure. Fl. Na (*B.* 27, 3375). — \*I, 447.
- C<sub>17</sub>H<sub>26</sub>O<sub>10</sub>** C 52,3 — H 6,7 — O 41,0 — M. G. 390.
- 1) Pentacetat d. αβδζη-Pentaoxyheptan. Fl. (*J. pr.* [2] 41, 61; *J. r.* 21, 472; *A.* 185, 138). — I, 417.
- C<sub>17</sub>H<sub>26</sub>O<sub>11</sub>** C 50,2 — H 6,4 — O 43,3 — M. G. 406.
- 1) Tetraäthylester d. 2,6-Dioxytetrahydropyran-2,3,5,6-Tetracarbonsäure. Sm. 112° (*Bl.* [4] 1, 24 *C.* 1907 [1] 825).
- C<sub>17</sub>H<sub>26</sub>O<sub>19</sub>** C 38,2 — H 4,9 — O 56,9 — M. G. 534.
- 1) Milchzuckerweinsäure. Ca + H<sub>2</sub>O (*A. ch.* [3] 54, 82). — I, 1064.
- C<sub>17</sub>H<sub>26</sub>N<sub>2</sub>** C 79,1 — H 10,1 — N 10,8 — M. G. 258.
- 1) Dipiperidylmethylbenzol (Benzylidendipiperidin). Sm. 80—81° (*B.* 17, 678; *J. pr.* [2] 36, 130; *M.* 9, 698). — IV, 22.
- C<sub>17</sub>H<sub>27</sub>N** C 83,3 — H 11,0 — N 5,7 — M. G. 245.
- 1) 2-Phenylamidomethyl-4-Isopropyl-1-Methylhexahydrobenzol. Sd. 215°<sub>33</sub> (*C.* 1901 [2] 152).
- C<sub>17</sub>H<sub>27</sub>N<sub>3</sub>** C 74,7 — H 9,9 — N 15,4 — M. G. 273.
- 1) Base (aus β-Camphernitrilsäureamid). Sm. 132—133° (*B.* 33, 2963).
- C<sub>17</sub>H<sub>28</sub>O** C 82,2 — H 11,3 — O 6,4 — M. G. 248.
- 1) s-Oxy-s-Phenyl-ββ-Dimethylnonan. Sd. 179—181°<sub>24</sub> (*B.* 40, 3115 *C.* 1907 [2] 813).
- 2) Ficocerylalkohol. Sm. 198° (*R.* 20, 70).
- 3) Phellylalkohol (Cerin). Sm. 100° (*Z.* 1868, 383). — II, 1067.
- 4) norm. Heptyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 306,7° (*A.* 243, 49). — II, 770.
- 5) Hexahydrobenzylcampher. Sd. 192°<sub>24</sub> (*C. r.* 142, 318 *C.* 1906 [1] 935).
- 6) Önanthylidencampher. Sd. 180—182°<sub>20</sub> (*C. r.* 142, 319 *C.* 1906 [1] 935).
- 7) Verbindung (aus Guttapercha). Sm. 190—197° (*C.* 1903 [1] 83).
- C<sub>17</sub>H<sub>28</sub>O<sub>2</sub>** C 77,3 — H 10,6 — O 12,1 — M. G. 264.
- 1) Methyläther d. Benzoeresinol. Sm. 174° (*B.* 26 [2] 679). — III, 554.
- 2) Methyläther d. Storesinol (*Ar.* 239, 523). — \*III, 425.
- 3) Diisoamyläther d. Dioxymethylbenzol. Sd. 292° (*A.* 102, 364, 365; *B.* 40, 2011 *C.* 1907 [2] 48). — III, 8.
- 4) Diisoamyläther d. 3,5-Dioxy-1-Methylbenzol. Fl. (*Z.* 1867, 561). — II, 961.



- C<sub>17</sub>H<sub>28</sub>O<sub>2</sub>**
- 5)  $\alpha\gamma$ -Di[2-Keto-4-Methylhexahydrophenyl]propan. Sd. 204° (A. 348, 110 C. 1908 [2] 783).
  - 6) Gurjoresin. Sm. 40—43° (Ar. 241, 382 C. 1903 [2] 724).
  - 7) l-Menthylester d. 1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sd. 176°<sub>12</sub> (A. 327, 195 C. 1903 [1] 1396).
  - 8) l-Menthylester d. 1,2,3,4-Tetrahydrobenzol-5-Carbonsäure. Sd. 178°<sub>12</sub> (A. 327, 195 C. 1903 [1] 1396).
  - 9) Acetat d. Atractylol. Fl. (Ar. 241, 30 C. 1903 [1] 712).
  - 10) Acetat d. Caryophyllenhydrat (A. 279, 393). — III, 513.
  - 11) Acetat d. Cedrol. Sd. 157—160°<sub>8</sub> (Bl. [3] 17, 488). — III, 386.
  - 12) Acetat d. Gurjuresinol. Sm. 96° (Ar. 241, 388 C. 1903 [2] 724).
  - 13) Acetat d.  $\alpha$ -Santalol. Sd. 308—310° (Bl. [3] 23, 543). — \*III, 414.
  - 14) Acetat d.  $\beta$ -Santalol. Sd. 316—317° (298°) (Bl. 24, 303; [3] 23, 543). — III, 549; \*III, 414.
- C<sub>17</sub>H<sub>28</sub>O<sub>3</sub>**
- 15)  $\alpha$ -Santalenacetat. Sd. 164—165°<sub>14</sub> (Bl. [3] 23, 541). — \*III, 415.
  - 16)  $\beta$ -Santalenacetat. Sd. 167—168°<sub>14</sub> (Bl. [3] 23, 541). — \*III, 415.
  - C 72,8 — H 10,0 — O 17,2 — M. G. 280.
  - 1) Gratioleretin (J. 1858, 518). — III, 592.
  - 2) Alkohol (aus Grindeliaharz). Sm. 256—257° (C. 1908 [1] 1401).
  - 3) l-Menthylester d.  $\beta$ -Keto- $\gamma$ -Hexen- $\gamma$ -Carbonsäure. Sm. 84—88° (Soc. 85, 51 C. 1904 [1] 360, 788).
- C<sub>17</sub>H<sub>28</sub>O<sub>4</sub>**
- 4) Acetat d. Daucol. Sm. 79° (Ar. 247, 408 C. 1909 [2] 2082).
  - C 68,9 — H 9,5 — O 21,6 — M. G. 296.
  - 1) Lichesterinsäure (Lichenstearinsäure). Sm. 120° (122—123°). Ba + 3H<sub>2</sub>O, Pb, Ag (A. 55, 150; 86, 50; B. 23, 461; J. pr. [2] 57, 303; A. 324, 43 C. 1902 [2] 904). — I, 625.
- C<sub>17</sub>H<sub>28</sub>O<sub>5</sub>**
- 2) Pleopsidsäure. Sm. 131—132°<sub>8</sub>. Ag (A. 327, 317 C. 1903 [2] 508).
  - C 65,4 — H 9,0 — O 25,6 — M. G. 312.
  - 1) Gratioletin (J. 1858, 518). — III, 592.
  - 2) Diäthylester d. Pulegonmalonsäure. Sd. 209—210°<sub>25</sub> (B. 33, 3186 Anm.; A. 345, 170 C. 1908 [1] 1490). — \*III, 383.
  - 3) Verbindung (aus Guttapercha). Sm. 120—125° (C. 1903 [1] 84).
  - C 62,2 — H 8,5 — O 29,3 — M. G. 328.
- C<sub>17</sub>H<sub>28</sub>O<sub>6</sub>**
- 1) Diäthylester d.  $\beta\beta$ -Diketo- $\gamma\gamma$ -Dimethylnonan- $\gamma\gamma$ -Dicarbonsäure (D. d. Diacetyldimethyladipinsäure). Sd. 248—252°<sub>80</sub> (Soc. 59, 571). — I, 822.
  - 2) Diäthylester d.  $\beta\zeta$ -Diketo- $\delta$ -Isobutylheptan- $\gamma\epsilon$ -Dicarbonsäure (D. d. Isoamylidendiacetessigsäure). Sm. 134—135° (A. 288, 331). — \*I, 421.
  - 3) Triäthylester d.  $\zeta$ -Methyl- $\alpha$ -Hepten- $\delta\delta\epsilon$ -Tricarbonsäure. Sd. 290 bis 295° (B. 29, 977). — \*I, 421.
  - 4) Diisobutylester d. 2,6-Dimethyltetrahydro-1,4-Pyron-3,5-Dicarbonsäure. Sd. 218—223°<sub>60</sub> (B. 29, 2053). — \*III, 541.
  - C 59,3 — H 8,1 — O 32,6 — M. G. 344.
- C<sub>17</sub>H<sub>28</sub>O<sub>7</sub>**
- 1) Triäthylester d.  $\delta$ -Keto- $\beta$ -Isopropylpentan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sd. 189—191°<sub>10</sub> (Bl. [3] 19, 199). — \*I, 433.
- C<sub>17</sub>H<sub>28</sub>O<sub>8</sub>**
- C 56,7 — H 7,8 — O 35,5 — M. G. 360.
  - 1) Tetraäthylester d. Pentan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sd. 195—197°<sub>10—11</sub> (B. 23, 3184; 30, 960; Ph. Ch. 23, 311). — I, 861; \*I, 442.
  - 2) Tetraäthylester d. Pentan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Sd. 240—250°<sub>55</sub> (Soc. 67, 114). — \*I, 442.
  - 3) Tetraäthylester d. Pentan- $\alpha\alpha\epsilon\epsilon$ -Tetracarbonsäure. Sd. 259—262°<sub>100</sub>. Na<sub>2</sub> (Soc. 51, 241; 59, 823). — I, 861.
  - 4) Tetraäthylester d. Pentan- $\alpha\beta\gamma\gamma$ -Tetracarbonsäure. Sd. 203—204°<sub>11</sub>. Na (Soc. 73, 1009; B. 33, 3743). — \*I, 442.
  - 5) Tetraäthylester d. Pentan- $\alpha\gamma\gamma\epsilon$ -Tetracarbonsäure. Sd. 215°<sub>13</sub> (B. 24, 283; Soc. 69, 1509). — I, 861; \*I, 441.
  - 6) Tetraäthylester d. Pentan- $\beta\beta\gamma\delta$ -Tetracarbonsäure. Sd. 198—199°<sub>13</sub> (B. 33, 3763).
  - 7) Tetraäthylester d. Pentan- $\beta\beta\delta\delta$ -Tetracarbonsäure. Sd. 191°<sub>13</sub> (A. 256, 182; B. 30, 961; Ph. Ch. 23, 311; Soc. 93, 1785 C. 1909 [1] 153). — I, 861; \*I, 441.
  - 8) Tetraäthylester d.  $\beta$ -Methylbutan- $\alpha\beta\gamma\gamma$ -Tetracarbonsäure. Sd. 202 bis 203°<sub>13</sub> (B. 33, 3763).
  - 9) Tetraäthylester d. Butan- $\alpha\alpha$ -Dicarbonsäure- $\beta$ -Methyldicarbonsäure. Sd. 195—205°<sub>12</sub> (J. pr. [2] 75, 478 C. 1907 [2] 451).

- C<sub>17</sub>H<sub>28</sub>O<sub>8</sub>** 10) Tetraäthylester d.  $\beta\beta$ -Dimethylpropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sd. 218°<sub>14</sub> (190—195°<sub>13</sub>). Na<sub>2</sub> (C. 1899 [1] 921; J. pr. [2] 75, 498 C. 1907 [2] 452). — \*I, 442.
- C<sub>17</sub>H<sub>28</sub>O<sub>9</sub>** 11) Dipropylester d.  $\beta$ -Acetoxyprop- $\alpha\beta\gamma$ -Tricarbonsäure (D. d. Acetylcitronensäure. Sd. 205°<sub>13</sub> (B. 18, 1954). — I, 840.  
C 54,2 — H 7,4 — O 38,3 — M. G. 376.
- C<sub>17</sub>H<sub>28</sub>O<sub>14</sub>** 1) Tetraäthylester d.  $\delta$ -Oxybutanmethyläther- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sd. 210—215°<sub>20</sub> (Soc. 93, 1784 C. 1909 [1] 153; Soc. 95, 1171 C. 1909 [2] 802).  
C 44,7 — H 6,1 — O 49,1 — M. G. 456.
- C<sub>17</sub>H<sub>28</sub>N<sub>2</sub>** 1) Gummi (aus Ammoniakharz) (C. 1897 [2] 979; 1898 [1] 36). — \*I, 593.  
C 78,5 — H 10,8 — N 10,8 — M. G. 260.
- C<sub>17</sub>H<sub>29</sub>N** 1)  $\beta$ -Phenylhydrazonundekan. Fl. (G. 20, 97). — IV, 769.  
2) 2-Diäthylamidomethyl-1-Piperidylmethylbenzol. Sd. 175—180°<sub>20</sub>. (2HCl, PtCl<sub>4</sub>) (B. 31, 428). — \*IV, 413.  
C 82,6 — H 11,7 — N 5,7 — M. G. 247.
- 1)  $\delta$ -[4-Dimethylamidophenyl]- $\beta\zeta$ -Dimethylheptan. Sd. 236°<sub>18</sub> (B. 39, 2165 C. 1906 [2] 233).  
2)  $\delta$ -[4-Diäthylamidophenyl]heptan. Sd. 165°<sub>22</sub> (B. 39, 2167 C. 1906 [2] 234).  
C 81,6 — H 12,0 — O 6,4 — M. G. 250.
- C<sub>17</sub>H<sub>30</sub>O** 1) Champakol. Sm. 86—88° (B. 26 [2] 286).  
2) Äthyläther d. Santalol. Sd. 169—174°<sub>22</sub> (D.R.P. 202352 C. 1908 [2] 1396).
- C<sub>17</sub>H<sub>30</sub>O<sub>2</sub>** 3) Önanthylcampher. Sd. 190°<sub>25</sub> (C. r. 142, 935 C. 1906 [1] 935).  
C 76,7 — H 11,3 — O 12,0 — M. G. 266.
- 1)  $\alpha$ -Hexadekin- $\alpha$ -Carbonsäure. Sm. 44—45°. Ag, Ag + AgNO<sub>3</sub> (B. 33, 3589).  
2) Elaeolsäure. Fl. (J. 1878, 738). — I, 535.  
3) Elaeomargarinsäure. Sm. 48° (Bl. 26, 286; 28, 24; J. 1878, 738; C. 1897 [1] 26; 1904 [2] 949). — I, 535.  
4) Elaeostearinsäure. Sm. 71° (Bl. 26, 286; 28, 24; C. 1897 [1] 26). — I, 535.  
5) Methyl-ester d. Hydnocarpussäure. Sd. 200—203°<sub>19</sub> (Soc. 87, 889 C. 1905 [2] 338).  
6) l-Menthylester d.  $\alpha$ -Hexen- $\alpha$ -Carbonsäure. Sd. 174—175,5°<sub>14</sub> (A. 327, 177 C. 1903 [1] 1396).  
7) l-Menthylester d. Hexahydrobenzolcarbonsäure. Sm. 48°; Sd. 170°<sub>12</sub> (A. 327, 186, 196 C. 1903 [1] 1396).  
C 72,3 — H 10,6 — O 17,0 — M. G. 282.
- C<sub>17</sub>H<sub>30</sub>O<sub>3</sub>** 1) Lichestron. Sm. 83—84° (J. pr. [2] 62, 352).  
2) Anhydrid d. Rocellsäure (A. 117, 341). — I, 690.  
C 63,5 — H 10,0 — O 21,5 — M. G. 298.
- C<sub>17</sub>H<sub>30</sub>O<sub>4</sub>** 1) Säure (aus Chaulmoograsäure). Ag<sub>2</sub> (Soc. 85, 860 C. 1904 [2] 349, 604).  
2) Anhydrid d. Oxyrocellsäure. Sm. 82° (J. pr. [2] 57, 260). — \*I, 371.  
C 65,0 — H 9,5 — O 25,5 — M. G. 314.
- C<sub>17</sub>H<sub>30</sub>O<sub>5</sub>** 1)  $\gamma$ -Ketopentadekan- $\alpha\alpha$ -Dicarbonsäure. Sm. 128°. Ag<sub>2</sub> (Soc. 85, 861 C. 1904 [2] 349, 604; Soc. 91, 573 C. 1907 [2] 72).  
2) Diäthylester d.  $\delta$ -Keto- $\gamma\delta$ -Diäthylheptan- $\gamma\delta$ -Dicarbonsäure (D. d. Tetraäthylacetondicarbonsäure). Sd. 231—232°<sub>180</sub> (A. 261, 179). — I, 772.  
3) Diäthylester d.  $\beta$ -Keto- $\gamma$ -Isoamylhexan- $\gamma\delta$ -Dicarbonsäure. Sd. 295 bis 300° (B. 29, 981). — \*I, 384.  
C 61,8 — H 9,1 — O 29,1 — M. G. 330.
- C<sub>17</sub>H<sub>30</sub>O<sub>6</sub>** 1) Trimethylester d. Undekan- $\alpha\alpha\lambda$ -Tricarbonsäure. Sd. 223—224°<sub>10</sub> (C. 1899 [2] 1016).  
2) Diäthylester d. l-Pelargonäpfelsäure. Sd. 206,8—208,8°<sub>14—15</sub> (Ph. Ch. 36, 143).  
3) Triäthylester d. Oktan- $\beta\beta\zeta$ -Tricarbonsäure. Sd. 227—230°<sub>80</sub> (Soc. 65, 994). — \*I, 413.  
4) Triäthylester d.  $\beta$ -Methylheptan- $\gamma\delta\delta$ -Tricarbonsäure. Sd. 290 bis 295° (B. 29, 976). — \*I, 413.  
5) Triäthylester d.  $\beta$ -Methylheptan- $\gamma\zeta\zeta$ -Tricarbonsäure. Sd. 188 bis 190°<sub>15</sub> (Bl. [3] 33, 908 C. 1905 [2] 756).

- C<sub>17</sub>H<sub>30</sub>O<sub>6</sub>** 6) Triäthylester d.  $\beta$ -Methylheptan- $\delta\delta\epsilon$ -Tricarbonsäure. Sd. 290 bis 295° (B. 29, 976). — \*I, 413.  
 7) Triäthylester d.  $\beta$ -Methylheptan- $\delta\delta\zeta$ -Tricarbonsäure. Sd. 185°<sub>18</sub> (C. 1900 [2] 369).  
 8) Triäthylester d.  $\beta$ -Methylheptan- $\epsilon\epsilon\zeta$ -Tricarbonsäure. Sd. 295–300° (B. 29, 976). — \*I, 413.  
 9) Triäthylester d.  $\beta\beta$ -Dimethylhexan- $\alpha\epsilon\epsilon$ -Tricarbonsäure. Sd. 180 bis 182° (C. r. 142, 998 C. 1906 [1] 1819).  
 10) Triäthylester d.  $\beta\epsilon$ -Dimethylhexan- $\beta\gamma\gamma$ -Tricarbonsäure. Sd. 300 bis 305° (B. 29, 976). — \*I, 413.  
 11) Triacetat d.  $\alpha\beta\delta$ -Trioxy- $\delta$ -Methyldekan. Fl. (J. pr. [2] 49, 53; J. r. 24, 473). — \*I, 149.
- C<sub>17</sub>H<sub>30</sub>O<sub>9</sub>** C 54,0 — H 7,9 — O 38,1 — M. G. 378.  
 1) Jalapinsäure (oder C<sub>68</sub>H<sub>118</sub>O<sub>48</sub>). Sm. bei 120°. Ba, Ba<sub>3</sub> (A. 95, 136; 116, 301; J. 1884, 1447). — III, 595.
- C<sub>17</sub>H<sub>30</sub>O<sub>10</sub>** C 51,8 — H 7,6 — O 40,6 — M. G. 394.  
 1) Säure (aus Castilloa elastica). Ca (B. 37, 4399 C. 1905 [1] 36).
- C<sub>17</sub>H<sub>30</sub>O<sub>15</sub>** C 43,0 — H 6,3 — O 50,6 — M. G. 474.  
 1) Amyloid (H. 17, 365).
- C<sub>17</sub>H<sub>30</sub>O<sub>16</sub>** C 41,6 — H 6,1 — O 52,2 — M. G. 490.  
 1) Maltodextrinsäure. Ca (Soc. 75, 297). — \*I, 590.
- C<sub>17</sub>H<sub>30</sub>N<sub>2</sub>** C 77,9 — H 11,4 — N 10,7 — M. G. 262.  
 1) Dimethylspartein. Sd. 182–193°<sub>18,8</sub> (C. r. 141, 261 C. 1905 [2] 772; Bl. [3] 33, 1268 C. 1906 [1] 246).
- C<sub>17</sub>H<sub>32</sub>O<sub>2</sub>** C 76,1 — H 11,9 — O 11,9 — M. G. 268.  
 1) Asellinsäure (Heptadekylensäure) (B. 26 [2] 538).  
 2) Äthylester d. Cimicinsäure (A. 114, 153). — I, 524.  
 3) l-Menthylester d. Önanthsäure. Sd. 165°<sub>15</sub> (B. 31, 364). — \*III, 334.
- C<sub>17</sub>H<sub>32</sub>O<sub>3</sub>** C 71,8 — H 11,6 — O 16,9 — M. G. 284.  
 1) Myristat d.  $\alpha$ -Oxy- $\beta$ -Ketopropan. Sd. 224–226°<sub>26</sub> (C. r. 138, 1275 C. 1904 [2] 93).
- C<sub>17</sub>H<sub>32</sub>O<sub>4</sub>** C 68,0 — H 10,7 — O 21,3 — M. G. 300.  
 1) p-Acetoxytetradekan-p-Carbonsäure. Sm. 59° (B. 29, 1815). — \*I, 233.  
 2) Pentadekan- $\alpha\alpha$ -Dicarbonsäure (Tetradekylmalonsäure). Sm. 117–118°. Ca, Zn, Cd, Cu, Ag<sub>2</sub> (B. 24, 991). — I, 690.  
 3) Licheströnsäure. Sm. 80° (J. pr. [2] 62, 353; J. pr. [2] 68, 33 C. 1903 [2] 512).  
 4) Roccellsäure. Sm. 132° (130°). K + 2H<sub>2</sub>O, Ca + H<sub>2</sub>O, Ba, Cu, Pb, Ag<sub>2</sub> (A. 61, 78; 117, 332; 295, 264, 298; 313, 317; J. pr. [2] 57, 261; [2] 58, 497; A. 340, 290 C. 1905 [2] 898). — I, 690; \*I, 315.  
 5) Monomethylester d.  $\delta\epsilon$ -Dipropyloktan- $\delta\epsilon$ -Dicarbonsäure. Sm. 77 bis 78° (Soc. 89, 935 C. 1906 [2] 501).  
 6) Diäthylester d. Undekan- $\delta\delta$ -Dicarbonsäure (D. d. Dipropylpimelinsäure). Sd. 224–226°<sub>100</sub> (Soc. 59, 837). — I, 689.  
 7) Diäthylester d.  $\beta\delta$ -Dimethylnonan- $\gamma\eta$ -Dicarbonsäure (D. d. Diisopropylpimelinsäure). Sd. 220–222°<sub>100</sub> (Soc. 59, 840). — I, 689.  
 8) Diäthylester d.  $\beta\delta$ -Dimethylnonan- $\epsilon\epsilon$ -Dicarbonsäure (D. d. Diisomethylmalonsäure). Sd. 278–280° (C. 1899 [2] 22). — \*I, 314.  
 9) Isobutylester d. d- $\alpha$ -Pelargonoxylbittersäure. Sm. 55°; Sd. 315° (Bl. [3] 15, 492). — \*I, 225.  
 10) Diamylester d.  $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sd. 287–291° (Bl. [3] 21, 626). — \*I, 302.  
 11)  $\delta$ -Acetat- $\gamma$ -Isovalerat d.  $\delta$ -Oxy- $\gamma$ -Oxymethyl- $\beta\zeta$ -Dimethylheptan. Sd. 150°<sub>18</sub> (M. 22, 558).
- C<sub>17</sub>H<sub>32</sub>O<sub>5</sub>** C 64,6 — H 10,1 — O 25,3 — M. G. 316.  
 1) Neobransäure. Sm. 128° (J. pr. [2] 73, 170 C. 1906 [1] 1104).  
 2) Oxyrocellsäure. Sm. 128°. Ba, Ag<sub>2</sub> (J. pr. [2] 57, 258; [2] 58, 546; [2] 63, 541; J. pr. [2] 68, 67 C. 1903 [2] 514; J. pr. [2] 73, 135 C. 1906 [1] 1102). — \*I, 371.
- C<sub>17</sub>H<sub>32</sub>O<sub>10</sub>** C 51,5 — H 8,1 — O 40,4 — M. G. 396.  
 1) Maclayin. Sm. 158–165° (Ch. Z. 20, 970). — \*III, 444.  
 2) Sapotiretin (Am. 13, 573). — III, 611.



- C<sub>17</sub>H<sub>32</sub>O<sub>16</sub>** C 41,4 — H 6,5 — O 52,0 — M. G. 492.  
 1) Verbindung + H<sub>2</sub>O (aus Laktose u. Formaldehyd). Sm. 88° (C. 1907 [1] 580; D. R. P. 189036 C. 1908 [1] 73).
- C<sub>17</sub>H<sub>33</sub>N** C 81,3 — H 13,1 — N 5,6 — M. G. 251.  
 1) Nitril d. Margarinsäure (Cetylcyanid). Sm. 53° (J. 1856, 580; 1857, 445; A. 102, 211). — I, 1468.
- C<sub>17</sub>H<sub>33</sub>N<sub>3</sub>** C 73,1 — H 11,8 — N 15,1 — M. G. 279.  
 1) ααα-Tri[1-Hexahydropyridyl]äthan. Sd. 261–263°. 3HCl (B. 20, 3247). — IV, II.  
 2) Tetrapropylglutarimidin. (2HCl, PtCl<sub>4</sub>), (HBr, Br<sub>2</sub>) (B. 23, 2946). — I, 1165.
- C<sub>17</sub>H<sub>34</sub>O** C 80,3 — H 13,4 — O 6,3 — M. G. 254.  
 1) Vitol (Alkohol). Sm. 74° (B. 25 [2] 286). — I, 256.  
 2) Alkohol (aus Cutin). Sm. 55–56° (C. 1909 [2] 458).  
 3) β-Ketoheptadekan (Methylquindekylketon). Sm. 48°; Sd. 319–320° (B. 12, 1671; 15, 1724). — I, 1005.  
 4) α-Ketoheptadekan (Dioktylketon). Sm. 50,5° (Soc. 63, 456). — \*I, 513.  
 5) β-Keto-γ-Heptyldekan (uns-Diheptylacetone). Sd. 300–304° (A. 200, 115). — I, 1005.  
 6) Aldehyd d. Margarinsäure. Sm. 36°. + C<sub>2</sub>H<sub>6</sub>O (Sm. 52°), + NaHSO<sub>3</sub> (Soc. 85, 833 C. 1904 [2] 304, 509).
- C<sub>17</sub>H<sub>34</sub>O<sub>2</sub>** C 75,6 — H 12,6 — O 11,8 — M. G. 270.  
 1) Daturinsäure. Sm. 54,5° (57°); Sd. 223–225°<sub>15</sub>. Na, K, KH, Mg, Ba, Cu, Zn, Pb, Ag (Bl. [3] 5, 96; B. 25 [2] 578; 26 [2] 287; C. 1895 [1] 786; B. 38, 1251 C. 1905 [1] 1138). — I, 444; \*I, 159.  
 2) Kaurinolsäure. Sm. 128–130° (C. 1901 [1] 1228). — \*III, 421.  
 3) Margarinsäure. Sm. 59,5°; Sd. 227°<sub>100</sub>. Ba, Ag (B. 8, 775; 12, 1672; J. 1857, 355; A. 102, 209; Soc. 85, 836 C. 1904 [2] 509). — I, 444.  
 4) Säure (aus Olivenöl) (C. 1902 [1] 178).  
 5) Säure (aus Schweinefett). Sm. 55–56° (B. 36, 2770 C. 1903 [2] 896; C. 1904 [2] 414).  
 6) Methylester d. Palmitinsäure. Sm. 28° (29,5°); Sd. 196°<sub>15</sub> (J. 1853, 502; C. r. 143, 805 C. 1907 [1] 421; B. 39, 3573 C. 1907 [1] 54). — I, 443.  
 7) Äthylester d. Tetradekan-α-Carbonsäure. Sm. 14° (Soc. 87, 1899 C. 1906 [1] 653).  
 8) Äthylester d. Laktarsäure. Sm. 35,5° (Bl. [3] 2, 157). — I, 442.  
 9) Äthylester d. Isocetinsäure. Sm. 21° (J. 1854, 463). — I, 442.  
 10) β-Methylbutylester d. Laurinsäure. Sd. 305–308°<sub>722</sub> (Bl. [3] 15, 284). — \*I, 158.  
 11) norm. Dodekylester d. Valeriansäure. Sd. 170°<sub>10</sub> (D. R. P. 164294 C. 1905 [2] 1700).  
 12) Pentadekylester d. Essigsäure. Sm. 10–11°; Sd. 230°<sub>70</sub> (M. 15, 13). — \*I, 145.
- C<sub>17</sub>H<sub>34</sub>O<sub>3</sub>** C 71,3 — H 11,9 — O 16,8 — M. G. 286.  
 1) λ'μ-Diäthyläther d. λμ-Dioxy-λ'-Oxymethyl-α-Dodeken. Sd. 180°<sub>12</sub> (C. 1907 [1] 873).  
 2) α-Oxyhexadekan-α-Carbonsäure. Sm. 89° (Soc. 85, 838 C. 1904 [2] 509; Soc. 87, 1891 C. 1906 [1] 652).  
 3) Oxymargarinsäure. Sm. 80°. Mg, Ag (B. 8, 775). — I, 579.  
 4) Methylester d. Jalapinolsäure. Sm. 50–51° (J. pr. [2] 57, 449). — \*I, 233.  
 5) Äthylester d. δ-Oxy-γ-Methyltridekan-ν-Carbonsäure. Sm. 22,5° (C. 1897 [1] 419). — \*I, 233.  
 6) Isoamylester d. ε-Oxy-β-γ-Dimethylnonan-ε-Carbonsäure. Sd. 280 bis 290° (A. 142, 17). — I, 578.
- C<sub>17</sub>H<sub>34</sub>O<sub>4</sub>** C 67,6 — H 11,2 — O 21,2 — M. G. 302.  
 1) Dioxyheptadekylsäure. Sm. 114–116°. Ba (B. 26 [2] 539).  
 2) α-Myristat d. αβγ-Trioxypropan. Sm. 68°; Sd. 162° (B. 36, 4342 C. 1904 [1] 434).
- C<sub>17</sub>H<sub>34</sub>O<sub>7</sub>** C 58,3 — H 9,7 — O 32,0 — M. G. 350.  
 1) Rautenölglykose (A. 244, 22). — I, 1050.
- C<sub>17</sub>H<sub>35</sub>Cl** 1) Chlorheptadekan. Sd. 175–177°<sub>15</sub> (Am. 28, 177 C. 1902 [2] 1081).

- C<sub>17</sub>H<sub>36</sub>O** C 79,7 — H 14,1 — O 6,2 — M. G. 256.  
 1) *l*-Oxyheptadekan (Dioktylcarbinol). Sm. 60,5—61° (Soc. 63, 457). — \*I, 77.
- C<sub>17</sub>H<sub>36</sub>O<sub>2</sub>** C 75,0 — H 13,2 — O 11,8 — M. G. 272.  
 1) Dioktyläther d. Dioxymethan. Sd. 289° (A. 240, 200; Bl. [3] 11, 757). — I, 912.
- C<sub>17</sub>H<sub>36</sub>O<sub>3</sub>** C 70,8 — H 12,5 — O 16,7 — M. G. 288.  
 1) *δ*'*ε*-Diisoamyläther d. *δ*'*ε*-Dioxy-*δ*'-Oxymethyl-*β*-Methylpentan. Sd. 178°<sub>25</sub> (C. 1907 [1] 873).
- C<sub>17</sub>H<sub>36</sub>O<sub>4</sub>** C 67,2 — H 11,8 — O 21,0 — M. G. 304.  
 1) Tetraisobutyläther d. Tetraoxymethan (Orthokohlensäuretetraisobutyläther). Sd. 244,9° (A. 205, 253). — I, 316.
- C<sub>17</sub>H<sub>36</sub>O<sub>6</sub>** C 60,7 — H 10,7 — O 28,6 — M. G. 336.  
 1) Hexaäthyläther d. *ααγγεεε*-Hexaoxypentan. Sd. 279—282° (B. 38, 1470 C. 1905 [1] 1501).
- C<sub>17</sub>H<sub>36</sub>O<sub>7</sub>** C 58,0 — H 10,2 — O 31,8 — M. G. 352.  
 1) Triglycerintetraäthyläther. Sd. 250—260°<sub>10</sub> (A. ch. [3] 67, 311). — I, 315.
- C<sub>17</sub>H<sub>37</sub>N** C 80,0 — H 14,5 — N 5,5 — M. G. 255.  
 1) *α*-Amidoheptadekan. Sm. 49°; Sd. 335—340°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 15, 774; 21, 2487; 22, 31). — I, 1139; \*I, 614.
- C<sub>17</sub>H<sub>38</sub>N<sub>2</sub>** C 75,5 — H 14,1 — N 10,4 — M. G. 270.  
 1) Di[Diisobutylamido]methan. Sd. 245—255° u. Zers. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 36, 124). — I, 1151.
- C<sub>17</sub>H<sub>38</sub>N<sub>4</sub>** C 68,4 — H 12,7 — N 18,8 — M. G. 298.  
 1) Base (aus Fleisch) (Bl. 48, 12). — I, 1167.

### C<sub>17</sub>-Gruppe mit drei Elementen.

- C<sub>17</sub>H<sub>4</sub>N<sub>4</sub>Br<sub>6</sub>** 1) Verbindung (aus 3,5-Dibrom-1,2-Diamidobenzol u. 3,3,4,5-Tetrabrom-1,2-Diketo-1,2-Dihydro-R-Penten). Zers. bei 308° (Am. 35, 186 C. 1906 [1] 1011).
- C<sub>17</sub>H<sub>7</sub>O<sub>4</sub>N** C 70,6 — H 2,4 — O 22,1 — N 4,8 — M. G. 289.  
 1) Alizarinblauchinon (D.R.P. 171836 C. 1906 [2] 470).
- C<sub>17</sub>H<sub>7</sub>O<sub>10</sub>N** C 53,0 — H 1,8 — O 41,6 — N 3,6 — M. G. 385.  
 1) *p*-Nitro-9,10-Anthrachinon-1,2,4-Tricarbonsäure. Sm. 308—310° u. Zers. Na, Na<sub>2</sub>, Cu<sub>3</sub> + 12H<sub>2</sub>O, Ag<sub>3</sub> (J. pr. [2] 41, 131). — II, 2086.  
 2) isom. *p*-Nitro-9,10-Anthrachinon-1,2,4-Tricarbonsäure. Sm. 360 bis 370° u. Zers. Na, Na<sub>2</sub>, Cu<sub>3</sub> + 18H<sub>2</sub>O, Ag<sub>3</sub> (J. pr. [2] 41, 135). — II, 2086.
- C<sub>17</sub>H<sub>8</sub>OCl<sub>2</sub>** 1) Dichlorbenzanthon. Sm. 269° (D.R.P. 193959 C. 1908 [1] 1113).  
 2) isom. Dichlorbenzanthon. Sm. 218° (D.R.P. 193959 C. 1908 [1] 1113).
- C<sub>17</sub>H<sub>8</sub>OBr<sub>2</sub>** 1) Dibrombenzanthon. Sm. 257° (D.R.P. 193959 C. 1908 [1] 1113).
- C<sub>17</sub>H<sub>8</sub>O<sub>2</sub>Cl<sub>4</sub>** 1) *p*-Dichlor-2-Naphtylester d. 2,5-Dichlorbenzol-1-Carbonsäure. Sd. 178—180° (G. 28 [1] 158). — \*II, 765.
- C<sub>17</sub>H<sub>8</sub>O<sub>4</sub>Cl<sub>3</sub>** 1) Diacetat d. Di[2,3,5,6-Tetrachlor-4-Oxyphenyl]methan. Sm. 257 bis 258° (A. 349, 95 C. 1906 [2] 1255).
- C<sub>17</sub>H<sub>8</sub>O<sub>4</sub>Br<sub>3</sub>** 1) Diacetat d. Di[2,3,5,6-Tetrabrom-4-Oxyphenyl]methan. Sm. 278 bis 279° (282°) (A. 343, 108 C. 1906 [1] 133; A. 344, 170 C. 1906 [1] 1158).
- C<sub>17</sub>H<sub>8</sub>O<sub>5</sub>Br<sub>4</sub>** 1) Tetrabromcitronfluorescein (Soc. 63, 681). — II, 2026.
- C<sub>17</sub>H<sub>8</sub>O<sub>8</sub>N<sub>2</sub>** C 55,4 — H 2,2 — O 34,8 — N 7,6 — M. G. 368.  
 1) Methyläther d. *p*-Dinitro-3-Oxybrasanchinon. Sm. 253—254° u. Zers. (B. 41, 2801 C. 1908 [2] 1442).
- C<sub>17</sub>H<sub>9</sub>OCl** 1) Chlorbenzanthon. Sm. 176° (D.R.P. 193959 C. 1908 [1] 1113; D.R.P. 205294 C. 1909 [1] 415).
- C<sub>17</sub>H<sub>9</sub>OBr** 1) Brombenzanthon. Sm. 170° (D.R.P. 193959 C. 1908 [1] 1112).
- C<sub>17</sub>H<sub>9</sub>O<sub>2</sub>N** C 78,8 — H 3,5 — O 12,3 — N 5,4 — M. G. 259.  
 1) *α*-Anthrachinolinchinon. Sm. 169° (D.R.P. 189234 C. 1908 [1] 76).  
 2) *β*-Anthrachinolinchinon. Sm. 185°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (A. 201, 349). — IV, 461.  
 3) Verbindung (aus 2-Amido-9,10-Anthrachinon). Sm. 322° (D.R.P. 171939 C. 1906 [2] 573).

- C<sub>17</sub>H<sub>9</sub>O<sub>3</sub>N** C 74,2 — H 3,3 — O 17,4 — N 5,1 — M. G. 275.  
 1) Oxyanthrachinolinchinon. Sm. 208° (A. 276, 24). — IV, 461.  
 2) 1,2-Naphtochinon-3,4-Akridon. Sm. oberhalb 400° (B. 27, 3073). — III, 395.
- C<sub>17</sub>H<sub>9</sub>O<sub>3</sub>Cl<sub>3</sub>** 1) 1-Chlor-2-Naphtylester d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 155—157° (G. 28 [1] 156). — \*II, 894.
- C<sub>17</sub>H<sub>9</sub>O<sub>4</sub>N** C 70,1 — H 3,1 — O 22,0 — N 4,8 — M. G. 291.  
 1) Dioxyanthrachinolinchinon (Alizarinblau). Sm. 270°. HCl, Acetat, Pikrat, Ba + BaO +  $\frac{1}{2}$ H<sub>2</sub>O, + 2NaHSO<sub>3</sub> (Bl. 28, 62; D.R.P. 17695, 23008, 62703; J. 1878, 1190, 1191; Soc. 35, 800; A. 201, 333; B. 11, 1371, 15, 1783; 29, 708). — IV, 461; \*IV, 279.  
 2) Phtalidderivat d. 4-Oxyisocarbostyryl. Sm. 314° (B. 35, 2423 C. 1902 [2] 455). — \*IV, 269.  
 3) Verbindung (aus Hippursäure u. Phtalsäureanhydrid) (A. 275, 1). — II, 1874.
- C<sub>17</sub>H<sub>9</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Diacetat d.  $\alpha$ ,2,3,5,2',3',5'-Heptabrom-4,4'-Dioxydiphenylmethan. Sm. 227—228° (A. 330, 70 C. 1904 [1] 1147).
- C<sub>17</sub>H<sub>9</sub>O<sub>5</sub>N** C 66,4 — H 2,9 — O 26,1 — N 4,6 — M. G. 307.  
 1) Trioxyanthrachinolinchinon (Oxalizarinblau). H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 44, 106). — IV, 462.
- C<sub>17</sub>H<sub>9</sub>O<sub>6</sub>N** C 63,2 — H 2,8 — O 29,7 — N 4,3 — M. G. 323.  
 1) Tetraoxyanthrachinolinchinon (Dioxyalizarinblau) (A. 276, 28; D.R.P. 68113, 71306; J. pr. [2] 44, 103). — IV, 463; \*IV, 279.
- C<sub>17</sub>H<sub>9</sub>O<sub>6</sub>N<sub>3</sub>** C 58,1 — H 2,5 — O 27,4 — N 12,0 — M. G. 351.  
 1) Lakton d.  $\beta$ -Dinitro-1-[ $\alpha$ -Oxy- $\beta$ -Cyan- $\beta$ -(3-Methylphenyl)äthenyl]-benzol-2-Carbonsäure. Sm. 187—188° (B. 28, 1393). — II, 1714.
- C<sub>17</sub>H<sub>9</sub>O<sub>7</sub>N** C 60,2 — H 2,7 — O 33,0 — N 4,1 — M. G. 339.  
 1) Pentaoxyanthrachinolinchinon (Trioxalizarinblau) (J. pr. [2] 44, 104; D.R.P. 71306). — IV, 463; \*IV, 279.  
 2) Alizarinidigblau (Pentaoxyanthrachinolinchinon) (J. pr. [2] 44, 109; A. 276, 29). — IV, 463.
- C<sub>17</sub>H<sub>9</sub>O<sub>8</sub>N** C 57,5 — H 2,5 — O 36,0 — N 3,9 — M. G. 355.  
 1)  $\beta$ -Amido-9,10-Anthrachinon-1,2,4-Tricarbonsäure. Sm. 210° (J. pr. [2] 41, 133). — II, 2086.  
 2) isom.  $\beta$ -Amido-9,10-Anthrachinon-1,2,4-Tricarbonsäure. Sm. 255° (J. pr. [2] 41, 137). — II, 2087.
- C<sub>17</sub>H<sub>9</sub>O<sub>8</sub>N<sub>3</sub>** C 53,3 — H 2,3 — O 33,4 — N 11,0 — M. G. 383.  
 1) 3-Oxy-4-Keto-1-[2,4,6-Trinitrobenzyliden]-1,4-Dihydronaphtalin. Sm. 260° (C. 1907 [1] 1131).
- C<sub>17</sub>H<sub>9</sub>NBr<sub>6</sub>** 1)  $\beta$ -Hexabrom-4-Methylphenyl-1-Naphtylamin. Sm. 185° (J. pr. [2] 64, 511 C. 1902 [1] 258).
- C<sub>17</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>** C 74,5 — H 3,6 — O 11,7 — N 10,2 — M. G. 274.  
 1) 1-Phtalylmethyl-2,3-Benzdiazin. Sm. 260° (B. 30, 3034). — IV, 952.  
 2) 1,4-Naphtochinon-4-Methylphenazin (B. 23, 2797). — III, 376.  
 3) Methylenindigo = (C<sub>17</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>)<sub>x</sub> (C. 1903 [2] 835).  
 4) Anhydrid d. Kyklothraustinsäure. Sm. 196° (M. 7, 288). — IV, 1050.
- C<sub>17</sub>H<sub>10</sub>O<sub>3</sub>N<sub>2</sub>** C 70,4 — H 3,4 — O 16,5 — N 9,7 — M. G. 290.  
 1) 5-Keto-3-Phenyl-4,5-Dihydroisoxazol-2-Indolindigo (C. r. 148, 353 C. 1909 [1] 1098).  
 2) Amidooxyanthrachinolinchinon (Alizarinblauamid). Sm. 255° (A. 201, 342; 276, 24). — IV, 462.  
 3) Nitro-meso-Ketodihydrophenonaphtakridin. Sm. 304° (B. 26, 2596). — IV, 464.  
 4) Carbindirubin. Sm. 297—299° (B. 35, 2425 C. 1902 [2] 456). — \*IV, 716.
- C<sub>17</sub>H<sub>10</sub>O<sub>3</sub>N<sub>4</sub>** C 64,2 — H 3,1 — O 15,1 — N 17,6 — M. G. 318.  
 1) Carbonat d.  $\alpha$ -Oximido- $\alpha$ -Phenyllessigsäurenitril. Sm. 190° u. Zers. (J. pr. [2] 66, 367 C. 1902 [2] 1501).
- C<sub>17</sub>H<sub>10</sub>O<sub>3</sub>Br<sub>2</sub>** 1) 1-Naphtylester d. 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure. Sm. 155° (B. 26, 1463). — II, 1505.  
 2) 2-Naphtylester d. 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure. Sm. 191° (B. 26, 1464). — II, 1505.



- C<sub>17</sub>H<sub>10</sub>O<sub>3</sub>S** 1) 1-Thionaphten-2-[4-Methylcumaran]indigo. Sm. 257° (B. 41, 4293 C. 1909 [1] 382).
- C<sub>17</sub>H<sub>10</sub>O<sub>4</sub>N<sub>2</sub>** C 66,7 — H 3,3 — O 20,9 — N 9,1 — M. G. 306.  
 1) Di[1,2-Phtalylamido]methan (Methylendiphtalimid). Sm. 226° (B. 23, 1002). — II, 1806.  
 2) 2-Phtalylmethylbenzimidazol-5-Carbonsäure (A. 273, 320). — IV, 1065.  
 3) 2,3-Di[2-Furanyl]-1,4-Benzdiazin-6-Carbonsäure. Sm. 245° u. Zers. (B. 23, 3626). — III, 729.  
 4) Verbindung (aus 4-Nitro-1-Methylacetyl-amido-9,10-Anthrachinon (D.R.P. 192201 C. 1908 [1] 571).
- C<sub>17</sub>H<sub>10</sub>O<sub>4</sub>Br<sub>3</sub>** 1) Diacetat d. 2,3,5,2',3',5'-Hexabrom-4,4'-Dioxydiphenylmethan. Sm. 215° (A. 330, 68 C. 1904 [1] 1147).  
 2) Diacetat d. 2,4,6,2',4',6'-Hexabrom-4,4'-Dioxydiphenylmethan. Sm. 224° (A. 356, 172 C. 1907 [2] 1700).
- C<sub>17</sub>H<sub>10</sub>O<sub>4</sub>S** 1) Benzanthrionsulfonsäure (D.R.P. 176018 C. 1906 [2] 1787).
- C<sub>17</sub>H<sub>10</sub>O<sub>5</sub>N<sub>2</sub>** C 63,4 — H 3,1 — O 24,8 — N 8,7 — M. G. 322.  
 1) Benzoat d. 5-Nitro-4-Nitroso-1-Oxynaphtalin. Sm. 210° (B. 32, 3529). — \*II, 719.  
 2) Benzoat d. 8-Nitro-4-Nitroso-1-Oxynaphtalin. Sm. 194° (B. 32, 3529). — \*II, 719.
- C<sub>17</sub>H<sub>10</sub>O<sub>5</sub>Cl<sub>4</sub>** 1) Diacetat d. 3,5,3',5'-Tetrachlor-4,4'-Dioxydiphenylketon. Sm. 196 bis 197° (A. 362, 229 C. 1908 [2] 944).
- C<sub>17</sub>H<sub>10</sub>O<sub>5</sub>Br<sub>4</sub>** 1) Diacetat d. 3,5,3',5'-Tetrabrom-4,4'-Dioxydiphenylketon. Sm. 192 bis 193° (A. 302, 132; A. 362, 227 C. 1908 [2] 943). — III, 199.
- C<sub>17</sub>H<sub>10</sub>O<sub>6</sub>N<sub>2</sub>** C 60,3 — H 3,0 — O 28,4 — N 8,3 — M. G. 338.  
 1) 3-Oxy-4-Keto-1-[2,4-Dinitrobenzyliden]-1,4-Dihydronaphtalin. Sm. 238—240° (C. 1907 [1] 1131).
- C<sub>17</sub>H<sub>10</sub>O<sub>6</sub>Br<sub>2</sub>** 1) Dibromfukugetin. Sm. 280° (Soc. 85, 60 C. 1904 [1] 380, 729).
- C<sub>17</sub>H<sub>10</sub>O<sub>7</sub>N<sub>2</sub>** C 57,6 — H 2,8 — O 31,6 — N 7,9 — M. G. 354.  
 1) Parabanbenzol-4-Carbonsäure. K<sub>2</sub>, Ba, Ag<sub>2</sub> (B. 11, 979). — II, 1272.  
 2) 1-Naphtylester d. 3,5-Dinitro-2-Oxybenzol-1-Carbonsäure. Sm. 192° (B. 26, 1465). — II, 1511.  
 3) 2-Naphtylester d. 3,5-Dinitro-2-Oxybenzol-1-Carbonsäure. Sm. 254° (B. 26, 1465). — II, 1511.
- C<sub>17</sub>H<sub>10</sub>O<sub>7</sub>Br<sub>4</sub>** 1) Äthyläther d. p-Tetrabrom-3,5,7-Trioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron + 4H<sub>2</sub>O. Sm. 135° u. Zers. (M. 5, 668; 18, 706, 708; Soc. 69, 794). — III, 683; \*III, 496.
- C<sub>17</sub>H<sub>10</sub>O<sub>8</sub>Br<sub>4</sub>** 1) Äthyläther d. Tetrabrommyricetin. Sm. 146° (Soc. 85, 62 C. 1904 [1] 381, 729).
- C<sub>17</sub>H<sub>10</sub>O<sub>8</sub>N<sub>2</sub>** C 52,8 — H 2,6 — O 37,3 — N 7,3 — M. G. 386.  
 1) Dinitrocitrakonfluorescein. (NH<sub>4</sub>)<sub>2</sub>, Ba + BaO, Pb (Soc. 63, 683). — II, 2026.
- C<sub>17</sub>H<sub>10</sub>O<sub>10</sub>Br<sub>4</sub>** 1) Verbindung (aus Quercinpentaacetat) (A. 238, 375). — III, 589.
- C<sub>17</sub>H<sub>10</sub>O<sub>11</sub>N<sub>4</sub>** C 45,7 — H 2,2 — O 39,5 — N 12,6 — M. G. 446.  
 1) γ-Keto-αε-Di[β-Dinitro-2-Oxyphenyl]-αδ-Pentadien. Zers. bei 240° (B. 40, 3458 C. 1907 [2] 1412).
- C<sub>17</sub>H<sub>10</sub>NCl** 1) meso-Chlorphenonaphtakridin. Sm. 165° (B. 26, 2596). — IV, 464.
- C<sub>17</sub>H<sub>11</sub>ON** C 83,3 — H 4,5 — O 6,5 — N 5,7 — M. G. 245.  
 1) Oximidochrysofluoren. Sm. 190° (202° u. Zers.) (B. 29, 827; A. 335, 133 C. 1904 [2] 1134).  
 2) 2-[1-Naphtyl]benzisoxazol (Naphtylindoxazen). Sm. 92—93° (B. 28, 1873). — IV, 465.  
 3) 1-Phenyl-α-Naphtoxazol. Sm. 122° (B. 15, 1816). — II, 1179.  
 4) 2-Phenyl-β-Naphtoxazol. Sm. 120° (136°). (2HCl, PtCl<sub>4</sub>) (B. 15, 1817; 16, 1937). — II, 1180.  
 5) 3-[2-Furanyl]-β-Naphtochinolin. Sm. 94° (B. 27, 2028). — IV, 464.  
 6) 6-Oxy-1,2-Naphtakridin. Sm. 212°. HCl (B. 39, 2445 C. 1906 [2] 888).  
 7) 7-Oxy-1,2-Naphtakridin. Sm. 322°. HCl (B. 37, 3080 C. 1904 [2] 1474; B. 39, 2624 C. 1906 [2] 1204).  
 8) 3'-Oxy-1,2-Naphtakridin. Sm. 300—301°. HCl, Na (B. 39, 2439 C. 1906 [2] 887).

- C<sub>17</sub>H<sub>11</sub>ON** 9) 1,2-Naphtakridon. Sm. 383° (*B.* 39, 4339 *C.* 1907 [1] 348; *A.* 355, 351 *C.* 1907 [2] 1509).  
 10) 2,1-Naphtakridon. Sm. oberhalb 360° (*A.* 355, 349 *C.* 1907 [2] 1509).  
 11) meso-Ketodihydrophenonaphtakridin. Sm. 304—305° (*B.* 26, 2590). — *IV*, 464.  
 12) α-Naphtophenanthricon. Sm. 332,5° (*A.* 335, 126 *C.* 1904 [2] 1133).  
 13) β-Naphtophenanthricon. Sm. 338° (*A.* 335, 128 *C.* 1904 [2] 1133).
- C<sub>17</sub>H<sub>11</sub>ON<sub>3</sub>** *C* 74,7 — *H* 4,1 — *O* 5,8 — *N* 15,4 — *M. G.* 273.  
 1) 3-Keto-2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 252° (255°) (*B.* 23, 503; 32, 2971; *C.* 1908 [2] 1588). — *IV*, 1393; \**IV*, 833.  
 2) Nitril d. 2-Oxy-1-Phenylazonaphtalin-1<sup>3</sup>-Carbonsäure. Sm. 186° (*C.* 1902 [2] 938). — \**IV*, 1055.  
 3) Nitril d. 2-Oxy-1-Phenylazonaphtalin-1<sup>4</sup>-Carbonsäure. Sm. 236° (*C.* 1902 [2] 938). — \**IV*, 1055.
- C<sub>17</sub>H<sub>11</sub>OC<sub>2</sub>** 1) Pheno-α-Naphtoxanthoxoniumchlorid. + FeCl<sub>3</sub> (*B.* 34, 3304). — \**III*, 385.
- C<sub>17</sub>H<sub>11</sub>OB<sub>2</sub>** 1) 2-Bromphenyl-1-Naphtylketon. Sm. 89° (*M.* 16, 208). — *III*, 254.  
 2) Phenyl-*p*-Brom-1-Naphtylketon. Sm. 100,5° (98°) (*J. pr.* [2] 35, 508; *J.* 1886, 1651). — *III*, 254.  
 3) Verbindung (aus Cinnamylidenacetophenon). Sm. 80—90° (*C.* 1903 [2] 945).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>N** *C* 78,1 — *H* 4,2 — *O* 12,3 — *N* 5,4 — *M. G.* 261.  
 1) Dioxy-β-Anthrachinolin. Sm. 270° (*B.* 29, 708).  
 2) 2-Methylanthrapyridon (D.R.P. 212204 *C.* 1909 [2] 667).  
 3) Phenylnaphtylcarbazolcarbonsäure. Sm. 325°. *Mg Ba* (*B.* 29, 268). — *IV*, 458.  
 4) Laktone d. 1-[α-Oxy-β-Cyan-β-(2-Methylphenyl)äthenyl]benzol-2-Carbonsäure. Sm. 191—192° (*B.* 33, 2823). — \**II*, 1150.  
 5) Laktone d. 1-[α-Oxy-β-Cyan-β-(3-Methylphenyl)äthenyl]benzol-2-Carbonsäure. Sm. 144—145° (*B.* 28, 1392). — *II*, 1714.  
 6) Laktam d. 10-Acetylamidophenanthren-9-Carbonsäure. Sm. 145° (*Soc.* 87, 698 *C.* 1905 [2] 245).  
 7) Nitril d. 2-Benzoxylinden-3-Carbonsäure. Sm. 123° (*Soc.* 93, 179 *C.* 1908 [1] 1276).  
 8) Nitril d. 3-[4-Methylphenyl]-2,1-Benzpyron-4-Carbonsäure (3-*p*-Tolyl-4-Cyanisocumarin). Sm. 193—195° (*B.* 29, 2546; *B.* 40, 1208 *C.* 1907 [1] 1258). — \**II*, 1150.  
 9) Verbindung (aus 1-Methylacetyl-amido-9,10-Anthrachinon) (D.R.P. 192201 *C.* 1908 [1] 571).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>** *C* 70,6 — *H* 3,8 — *O* 11,1 — *N* 14,5 — *M. G.* 289.  
 1) 2-[2-Nitrophenyl]-peri-Naphtimidazol. Sm. 177° (*B.* 42, 3679 *C.* 1909 [2] 1664).  
 2) 2-[3-Nitrophenyl]-peri-Naphtimidazol. Zers. bei 184° (*B.* 42, 3680 *C.* 1909 [2] 1664).  
 3) 2-[4-Nitrophenyl]-peri-Naphtimidazol. Zers. oberhalb 180° (*B.* 42, 3680 *C.* 1909 [2] 1664).  
 4) Verbindung (aus trim. Benzoylcyamid). Sm. 365° u. Zers. (*B.* 40, 1660 *C.* 1907 [1] 1575).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>N<sub>5</sub>** *C* 64,3 — *H* 3,5 — *O* 10,1 — *N* 22,1 — *M. G.* 317.  
 1) *p*-[4-Nitrophenyl]azo-peri-Naphtimidazol (*A.* 365, 88 *C.* 1909 [1] 1410).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>Cl** 1) Benzoat d. 4-Chlor-1-Oxynaphtalin. Sm. 100—101° (*B.* 40, 748 *C.* 1907 [1] 957).  
 2) Benzoat d. 1-Chlor-2-Oxynaphtalin. Sm. 101° (*C.* 1895 [1] 834; *B.* 40, 750 *C.* 1907 [1] 957).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>Br** 1) Laktone d. α-Brom-β-Oxy-αβ-Diphenyl-αγ-Butadien-β-Carbonsäure. Sm. 128,5° (*A.* 306, 172). — \**II*, 1017.  
 2) Benzoat d. 4-Brom-1-Oxynaphtalin. Sm. 105—106° (*B.* 40, 749 *C.* 1907 [1] 957).  
 3) Benzoat d. 1-Brom-2-Oxynaphtalin (*B.* 40, 750 *C.* 1907 [1] 957).
- C<sub>17</sub>H<sub>11</sub>O<sub>3</sub>N** *C* 73,6 — *H* 4,0 — *O* 17,3 — *N* 5,1 — *M. G.* 277.  
 1) Oxim d. Dicumarylketon. Sm. 222—223° u. Zers. (*B.* 34, 775). — \**III*, 534.

- C<sub>17</sub>H<sub>11</sub>O<sub>3</sub>N** 2) 1-[4-Methylcumaran]-2-Indolindigo. Sm. 286°. 2 + C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (B. 41, 4294 C. 1909 [1] 382).
- 3) 1,2-Dioxy-3,4-Naphtakridon. Sm. oberhalb 350° (B. 27, 3074). — III, 395.
- 4) Methyläther d. Oxyphenonaphtoxazon. Sm. 270—271° (B. 36, 1812 C. 1903 [2] 206). — \*IV, 278.
- 5) Acetylchrysophansäureimid (A. 183, 223). — III, 452.
- 6) Benzoat d. 1-Oximido-2-Keto-1,2-Dihydronaphtalin (1-Nitroso-2-Naphtylester d. Benzolcarbonsäure). Sm. 114° (B. 15, 1817). — II, 1149.
- 7) Benzoat d. 2-Oximido-1-Keto-1,2-Dihydronaphtalin (2-Nitroso-1-Naphtylester d. Benzolcarbonsäure). Sm. 162° (189—190° u. Zers.) (B. 8, 1022; 15, 1816; B. 36, 4169 C. 1904 [1] 287). — II, 1149.
- 8) Verbindung (aus d. α,2-Imid d. αβ-Diphenyläthan-α,2,2'-Tricarbonsäure). Sm. 263° (B. 27, 2494). — II, 2025.
- C<sub>17</sub>H<sub>11</sub>O<sub>3</sub>Cl** 1) Oxoniumchlorid d. 4,5'-Dioxy-2,3-Indenobenzpyran-4,5'-Methylenäther. + FeCl<sub>3</sub> (Soc. 93, 1105 C. 1908 [2] 608).
- C<sub>17</sub>H<sub>11</sub>O<sub>3</sub>Br** 1) 2<sup>3,4</sup>-Methylenäther d. 6-Brom-1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 223—224° (B. 31, 725). — \*III, 189.
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>N** C 69,6 — H 3,7 — O 21,8 — N 4,8 — M. G. 293.
- 1) 3,4-Methylenäther d. 2,3-Diketo-4-Phenyl-5-[3,4-Dioxyphenyl]-2,3-Dihydropyrrrol. Sm. 237—238° (Soc. 85, 1608 C. 1909 [2] 2172).
- 2) 3,4-Methylenäther d. 5-Keto-4-[3,4-Dioxybenzyliden]-2-Phenyl-4,5-Dihydrooxazol. Sm. 197,4° (B. 42, 1188 C. 1909 [1] 1712).
- 3) 3,4-Methylenäther d. 5-Keto-4-[3,4-Dioxybenzyliden]-3-Phenyl-4,5-Dihydroisoxazol. Sm. 208—209° (C. r. 146, 639 C. 1908 [1] 1703).
- 4) 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin-4'-Carbonsäure. Sm. 270—271° (B. 27, 3072). — III, 394.
- 5) 4-Phenylamido-1,2-Naphtochinon-4'-Carbonsäure. Sm. 252° (B. 27, 3073). — III, 395.
- 6) 2-Phenylchinolin-3,4-Dicarbonsäure + 2H<sub>2</sub>O. Sm. 193—194°. Ag<sub>2</sub> (J. pr. [2] 57, 471). — \*IV, 269.
- 7) 2-Phenylchinolin-4,8-Dicarbonsäure. Sm. oberhalb 300° u. Zers. Mg + H<sub>2</sub>O, Ag<sub>2</sub> (A. 281, 2). — IV, 451.
- 8) 4-Phenylchinolin-?-Dicarbonsäure. Ba + 4H<sub>2</sub>O (B. 18, 2708). — IV, 451.
- 9) α,2'-Lakton d. α-Oxy-αβ-Diphenyläthan-α,2,2'-Tricarbonsäure-α,2-Imid. Sm. 239—241° (B. 27, 2501). — II, 2056.
- 10) 2-Naphtylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 166° (B. 35, 3418 C. 1902 [2] 1314).
- 11) Benzoat d. 5-Nitro-1-Oxynaphtalin. Sm. 109° (B. 40, 3271 C. 1907 [2] 1074).
- 12) Benzoat d. 1-Nitro-2-Oxynaphtalin. Sm. 142° (B. 16, 1935). — II, 1149.
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>N<sub>3</sub>** C 63,5 — H 3,4 — O 19,9 — N 13,1 — M. G. 321.
- 1) 1-[2,4-Dinitrobenzyliden]amidonaphtalin. Sm. 202° (B. 35, 1267 C. 1902 [1] 1102; M. 23, 558 C. 1902 [2] 742; B. 40, 3231 C. 1907 [2] 814). — \*III, 23.
- 2) 2-[2,4-Dinitrobenzyliden]amidonaphtalin. Sm. 197—199° (B. 40, 3232 C. 1907 [2] 814).
- 3) 2,6-Di[p-Nitrophenyl]pyridin. Sm. 110—111° (B. 30, 1501). — IV, 455.
- 4) 2,6-Di[p-Nitrophenyl]pyridin. Sm. 210—220° (B. 30, 1501). — II, 455.
- 5) Aldehyd d. 1-[3-Nitrophenyl]azo-2-Oxynaphtalin-1'-Carbonsäure. Sm. 208° (B. 39, 2756 C. 1906 [2] 1322).
- 6) Nitril d. αδ-Di[4-Nitrophenyl]-αγ-Butadien-α-Carbonsäure. Sm. 276° (B. 34, 3109).
- 7) Verbindung (aus Dizimthydroxamsäure) (A. 178, 222). — II, 1408.
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>Cl** 1) 3-Acetoxyphenyläther d. 3-Chlor-2-Oxy-1-Ketoinden. Sm. 97—98° (B. 32, 922). — \*III, 136.
- 2) Benzoat d. 3-Chlor-7-Oxy-4-Methyl-1,2-Benzpyron. Sm. 163° (B. 34, 358). — \*II, 1041.
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Diacetat d. α-Chloridi[3,5-Dichlor-4-Oxyphenyl]methan. Sm. 93° (A. 362, 233 C. 1908 [2] 944).



- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>Br** 1) 3-Acetoxyphenyläther d. 2-Brom-3-Oxy-1-Ketoinden. Sm. 105° (B. 33, 2422). — \*III, 137.
- C<sub>17</sub>H<sub>11</sub>O<sub>6</sub>N** C 66,0 — H 3,6 — O 25,9 — N 4,5 — M. G. 309.
- 1) 3-Benzoyl-1,4-Diketo-1,2,3,4-Tetrahydroisochinolin-3<sup>2</sup>-Carbonsäure. Sm. noch nicht bei 265° (B. 35, 2423 C. 1902 [2] 456). — \*IV, 268.
- 2) 2-[4-Oxyphenyl]amido-1,4-Naphtochinon-2<sup>3</sup>-Carbonsäure. Sm. 278° u. Zers. (B. 32, 83). — \*III, 276.
- 3) 1-Naphtylester d. 5-Nitro-2-Oxybenzol-1-Carbonsäure (B. 26, 1464). — II, 1509.
- 4) 2-Naphtylester d. 5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 201° (B. 26, 1465). — II, 1509.
- C<sub>17</sub>H<sub>11</sub>O<sub>6</sub>N<sub>3</sub>** C 60,5 — H 3,3 — O 23,7 — N 12,5 — M. G. 337.
- 1) 4-[2,4-Dinitrobenzyliden]amido-1-Oxynaphtalin. Sm. 216° u. Zers. (B. 40, 3233 C. 1907 [2] 814).
- 2) 5-[2,4-Dinitrobenzyliden]amido-1-Oxynaphtalin. Sm. 219° (B. 40, 3234 C. 1907 [2] 815).
- 3) 3-[2,4-Dinitrobenzyliden]amido-2-Oxynaphtalin. Sm. 204° u. Zers. (B. 40, 3233 C. 1907 [2] 814).
- 4) 5-[2,4-Dinitrobenzyliden]amido-2-Oxynaphtalin. Sm. 201° u. Zers. (B. 40, 3234 C. 1907 [2] 815).
- 5) 7-[2,4-Dinitrobenzyliden]amido-2-Oxynaphtalin. Zers. bei 189° (B. 40, 3232 C. 1907 [2] 814).
- 6) 8-[2,4-Dinitrobenzyliden]amido-2-Oxynaphtalin. Sm. 216° u. Zers. + C<sub>6</sub>H<sub>6</sub> (B. 40, 3235 C. 1907 [2] 815).
- 7) Dimethylenäther d. 3-Oxy-5,6-Di[3,4-Dioxyphenyl]-1,2,4-Triazin. Sm. 248°. Na (A. 339, 273, 280 C. 1905 [2] 47).
- 8) 2-[2,4-Dinitrophenyl]-1,2-Dihydro-β-Naphtoxazol. Sm. 201–202° (B. 40, 3234 C. 1907 [2] 815).
- 9) 4-Oxy-1-[2-Nitrophenyl]azonaphtalin-3-Carbonsäure. Sm. 200° u. Zers. (Soc. 91, 1260 C. 1907 [2] 1078).
- 10) 4-Oxy-1-[3-Nitrophenyl]azonaphtalin-3-Carbonsäure. Sm. 220–225° u. Zers. (Soc. 91, 1261 C. 1907 [2] 1078).
- 11) 4-Oxy-1-[4-Nitrophenyl]azonaphtalin-3-Carbonsäure. Sm. 242° u. Zers. (Soc. 91, 1260 C. 1907 [2] 1078).
- 12) 4-Oxy-1-[4-Nitrophenyl]azonaphtalin-1<sup>3</sup>-Carbonsäure. Sm. 260° u. Zers. (Soc. 91, 1259 C. 1907 [2] 1078).
- 13) 1-Naphtylamid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. 268° (Am. 36, 301 C. 1906 [2] 1420).
- 14) 2,4-Dinitro-1-Naphtylamid d. Benzolcarbonsäure. Sm. 252° (A. 208, 329). — II, 1168.
- C<sub>17</sub>H<sub>11</sub>O<sub>6</sub>Cl** 1) Chlorid d. 2,5-Dioxy-9,10-Anthrachinon-2,5-Dimethyläther-1-Carbonsäure (Dimethylrheinchlorid) (Soc. 95, 1094 C. 1909 [2] 623).
- C<sub>17</sub>H<sub>11</sub>O<sub>6</sub>Br** 1) 3',4'-Methylenäther-5-Methyläther d. p-Brom-5-Oxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 240–241° (B. 30, 302). — \*III, 533.
- C<sub>17</sub>H<sub>11</sub>O<sub>6</sub>N** C 62,8 — H 3,4 — O 29,5 — N 4,3 — M. G. 325.
- 1) 2-Keto-5,6-Dioxy-1-[4-Nitrocinnamyliden]-1,2-Dihydrobenzofuran. Sm. 265° (B. 37, 826 C. 1904 [1] 1152).
- 2) Benzoat d. 7[?]-Nitro-6-Oxy-4-Methyl-1,2-Benzpyron. Sm. 166 bis 167° (B. 40, 2734 C. 1907 [2] 328).
- C<sub>17</sub>H<sub>11</sub>O<sub>6</sub>N<sub>3</sub>** C 57,8 — H 3,1 — O 27,2 — N 11,9 — M. G. 353.
- 1) p-Trinitro-1-Benzylaphtalin (Bl. 26, 5). — II, 281.
- 2) 3,5-Dinitro-2-[1-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 226° u. Zers. (150–151°) (M. 22, 393; G. 33 [2] 328 C. 1904 [1] 278).
- 3) 3,5-Dinitro-2-[2-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 238 bis 239° (210° u. Zers.). Ba (M. 22, 395; G. 33 [2] 329 C. 1904 [1] 278).
- C<sub>17</sub>H<sub>11</sub>O<sub>8</sub>N<sub>3</sub>** C 53,1 — H 2,8 — O 33,2 — N 10,9 — M. G. 385.
- 1) Äthylester d. 2,4-Dinitro-9,10-Anthrachinon-1-Amidoameisensäure (D.R.P. 171588 C. 1906 [2] 468).
- 2) Äthylester d. 1,3-Dinitro-9,10-Anthrachinon-2-Amidoameisensäure (D.R.P. 171588 C. 1906 [2] 468).
- C<sub>17</sub>H<sub>11</sub>O<sub>9</sub>N<sub>5</sub>** C 47,6 — H 2,6 — O 33,5 — N 16,3 — M. G. 429.
- 1) 2,4-Dinitrophenyläther d. 2,4-Dinitrophenylpyridoniumhydroxyd. Sm. 142–143° (A. 333, 302 C. 1904 [2] 1147).

- C<sub>17</sub>H<sub>11</sub>O<sub>12</sub>N<sub>7</sub>** C 40,4 — H 2,2 — O 38,0 — N 19,4 — M. G. 405.  
 1) Pentanitrodiphenylamid d. Pseudo-Itakonsäure (A. 85, 40, 41). — II, 418.
- C<sub>17</sub>H<sub>11</sub>NC<sub>2</sub>** 1) 1-[2,5-Dichlorbenzyliden]amidonaphtalin. Sm. 111—112° (A. 299, 348). — \*III, 23.
- C<sub>17</sub>H<sub>11</sub>NBr<sub>4</sub>** 1) p-Tetrabrom-4-Methylphenyl-1-Naphtylamin. Sm. 162° (J. pr. [2] 64, 510 C. 1902 [1] 258).  
 2) isom. p-Tetrabrom-4-Methylphenyl-1-Naphtylamin. Sm. 212° (J. pr. [2] 64, 511 C. 1902 [1] 258).  
 3) p-Tetrabrom-4-Methylphenyl-2-Naphtylamin. Sm. 168—169° (B. 16, 2080; 28, 337). — II, 603.
- C<sub>17</sub>H<sub>11</sub>NS** 1) 1-Phenyl-α-Naphtthiazol. Sm. 102,5—103°. Pikrat (B. 20, 1798). — II, 1180.  
 2) 2-Phenyl-β-Naphtthiazol. Sm. 107°. (2HCl, PtCl<sub>4</sub>) (B. 20, 1803; D. R. P. 55878). — II, 1180; \*II, 741.
- C<sub>17</sub>H<sub>12</sub>ON<sub>2</sub>** C 78,4 — H 4,6 — O 6,2 — N 10,8 — M. G. 260.  
 1) 2-Keto-3-Phenyl-1,2-Dihydro-α-Naphtimidazol (β-Phenylnaphtylenharnstoff). Sm. 238° (B. 27, 2773). — IV, 919.  
 2) 2-Phenylamido-α-Naphtoxazol. Sm. 232—233°. Pikrat (B. 22, 3241). — II, 865.  
 3) 2-Phenylamido-β-Naphtoxazol. Sm. 167—168°. Pikrat (B. 21, 419). — II, 885.  
 4) 5-Oxy-10-Methyl-αβ-Naphtophenazin (Methyl-α-Naphteurhodol). Zers. bei 265° (B. 19, 443; Soc. 63, 1385). — IV, 1063.  
 5) Methyläther d. 5-Oxy-αβ-Naphtophenazin. Sm. 176—177° (B. 24, 2173). — IV, 1054.  
 6) Methyläther d. 6-Oxy-αβ-Naphtophenazin. Sm. 158° (B. 26, 619). — IV, 1054.  
 7) 7-Methylrosindon[9] (ms-Methylisorosindon). Sm. 212—214°. HCl, HBr (B. 31, 2479). — \*IV, 708.  
 8) ms-Methylrosindon. Zers. bei 100° (B. 30, 395). — IV, 1055.  
 9) Methylrosindon. Sm. 257—259° (B. 24, 2171). — IV, 1055.  
 10) 5-Imido-9-Methyl-7,12-Naphtophenoxazin. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 40, 2081 C. 1907 [2] 151).  
 11) 3'-Amido-6-Oxy-1,2-Naphtakridin. Sm. 218—220°. HCl (B. 39, 2446 C. 1906 [2] 888).  
 12) 3'-Amido-7-Oxy-1,2-Naphtakridin. Sm. 180°. HCl (B. 39, 2441 C. 1906 [2] 887).  
 13) Acetylchindolin. Sm. 177—178° (B. 39, 3940 C. 1907 [1] 119).  
 14) Acetylchindolin. Sm. 185° (B. 30, 3021). — IV, 1038.  
 15) Base (aus 2-Chlor-4-Methylehinolin). Sm. 213° (B. 25, 2710). — IV, 316.  
 16) Nitril d. β-Methoxyl-β-Phenyl-α-[2-Cyanphenyl]äthen-α-Carbonsäure. Sm. 140—143° (B. 27, 835). — II, 1977.  
 17) Nitril d. α-Keto-αγ-Diphenylpropan-ββ-Dicarbonsäure. Sm. 100° (Am. 22, 191). — \*II, 1150.  
 18) Nitril d. 1-Benzoyl-1,2-Dihydrochinolin-2-Carbonsäure. Sm. 154 bis 155° (B. 38, 1610 C. 1905 [1] 1563; B. 40, 3737 Anm. C. 1907 [2] 1608).  
 19) Nitril d. 2-Benzoyl-1,2-Dihydroisochinolin-1-Carbonsäure. Sm. 125 bis 126° (B. 38, 3427 C. 1905 [2] 1598).  
 20) Nitril d. 1-Keto-3-[4-Methylphenyl]-1,2-Dihydroisochinolin-4-Carbonsäure (3-p-Tolyl-4-Cyanisocarbostyryl). Sm. 290—292° (B. 29, 2549; B. 40, 1208 C. 1907 [1] 1258). — \*II, 1100.  
 21) Verbindung (aus Benzoylchlorid u. Acetonitril). Sm. 204° (J. pr. [2] 58, 157).  
 22) Verbindung (aus 3,4-Dioxy-1,2-Diketotetrahydronaphtalin u. salzs. 3,4-Diamido-1-Methylbenzol) (B. 25, 1178). — IV, 1063.  
 23) Verbindung (aus d. Verb. C<sub>17</sub>H<sub>12</sub>ON<sub>2</sub>). Sm. 169—170°. HCl (B. 25, 1179). — IV, 1063.
- C<sub>17</sub>H<sub>12</sub>ON<sub>4</sub>** C 70,8 — H 4,2 — O 5,6 — N 19,4 — M. G. 288.  
 1) 4-Ureido-1-Phenylazonaphtalin. Sm. 253° (C. r. 143, 343 C. 1906 [2] 1055).  
 2) 3-[2-Oxy-1-Naphtyl]azoindazol. Sm. 250—251° (250—257°) (A. 305, 354; B. 32, 1783). — \*IV, 1081.

- C<sub>17</sub>H<sub>12</sub>OCl<sub>2</sub>** 1)  $\gamma$ -Keto- $\alpha$ -Di[3-Chlorphenyl]- $\alpha$ - $\delta$ -Pentadien. Sm. 123° (B. 31, 1512; C. 1899 [2] 187; J. pr. [2] 60, 156). — \*III, 191.
- 2)  $\gamma$ -Keto- $\alpha$ -Di[4-Chlorphenyl]- $\alpha$ - $\delta$ -Pentadien. Sm. 193° (B. 39, 2997 C. 1906 [2] 1429).
- C<sub>17</sub>H<sub>12</sub>OBr<sub>4</sub>** 1) 1,2,3,5-Tetrabrom-4-Keto-1,2-Diphenyl-R-Pentamethylen. Sm. 130° (Soc. 85, 1479 C. 1905 [1] 172).
- C<sub>17</sub>H<sub>12</sub>OJ<sub>2</sub>** 1)  $\gamma$ -Keto- $\alpha$ -Di[4-Jodphenyl]- $\alpha$ - $\delta$ -Pentadien. Sm. 254—255° (B. 39, 3001 C. 1906 [2] 1430).
- C<sub>17</sub>H<sub>12</sub>OS** 1) Benzoat d. 1-Merkaptonaphtalin. Sm. 116—117° (117—118°). Sd. 262°<sub>15</sub> (B. 22, 823; Bl. [3] 29, 764 C. 1903 [2] 621). — II, 1149.
- 2) Benzoat d. 2-Merkaptonaphtalin. Sm. 108°; Sd. 267°<sub>15</sub> (B. 22, 825). — II, 1149.
- C<sub>17</sub>H<sub>12</sub>OS<sub>3</sub>** 1) 2,6-Dimerkapto-4-Keto-3,5-Diphenyl-1,4-Phenthiophen. Sm. 165°. + CHCl<sub>3</sub>, + (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>O, + C<sub>6</sub>H<sub>6</sub>, (NH<sub>4</sub>)<sub>2</sub>, Na<sub>2</sub> + 2C<sub>2</sub>H<sub>5</sub>O, K<sub>2</sub> + 12H<sub>2</sub>O, Ba + 12H<sub>2</sub>O (B. 37, 1602 C. 1904 [1] 1444; B. 38, 2890 C. 1905 [2] 1433).
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>** C 73,9 — H 4,3 — O 11,6 — N 10,1 — M. G. 276.
- 1) 1-Nitroso-2-[2-Oxybenzyliden]amidonaphtalin. Sm. 270° (A. 286, 162).
- 2) 1-[3-Nitrobenzyliden]amidonaphtalin. Sm. 102—103° (G. 23 [2] 222, 519). — III, 31.
- 3) 2-[2-Nitrobenzyliden]amidonaphtalin. Sm. 91° (B. 36, 594 C. 1903 [1] 725).
- 4) 2-[3-Nitrobenzyliden]amidonaphtalin. Sm. 90° (B. 36, 593 C. 1903 [1] 724).
- 5) 2-[4-Nitrobenzyliden]amidonaphtalin. Sm. 120—121° (G. 23 [2] 223, 519). — III, 31.
- 6) 8-Nitro-1-Benzylidenamidonaphtalin. Sm. 128° (Soc. 63, 1061). — III, 31.
- 7) 2-Benzoylazo-1-Oxynaphtalin. Sm. 180—182° (A. 340, 109 C. 1905 [2] 323).
- 8) 4-Benzoylazo-1-Oxynaphtalin. Sm. 220° (A. 340, 108 C. 1905 [2] 323).
- 9) 3-Oxy-2-[2-Oxy-1-Naphtyl]indazol. Sm. 258° (226—227°) (B. 42, 1698 C. 1909 [2] 208).
- 10) 2-Phthalylmethyl-5-Methylbenzimidazol. Sm. noch nicht bei 330° (A. 273, 319). — IV, 893.
- 11)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 103° (117°). HCl, (2HCl, 3HgCl<sub>2</sub>), (2HCl, TlCl<sub>3</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 36, 1667 C. 1903 [2] 48; B. 39, 2750 C. 1906 [2] 1203). — \*IV, 273.
- 12)  $\alpha$ -[3-Nitrophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 139° (233°). HCl, (2HCl, PtCl<sub>4</sub> + 1½H<sub>2</sub>O), HNO<sub>3</sub>, Pikrat (B. 16, 2009; 23, 3645; B. 39, 2750 C. 1906 [2] 1203). — IV, 454.
- 13)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 164—165° (B. 20, 2047). — IV, 454.
- 14)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 162°. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (B. 36, 1669 C. 1903 [2] 49). — \*IV, 273.
- 15)  $\alpha$ -[3-Nitrophenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 131—132° (B. 21, 1429). — IV, 455.
- 16)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 221°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, Pikrat (B. 36, 1670 C. 1903 [2] 49). — \*IV, 273.
- 17)  $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Chinolyl]äthen. Sm. 127°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (B. 38, 3719 C. 1906 [1] 54).
- 18)  $\alpha$ -Phenyl- $\beta$ -[6-Nitro-2-Chinolyl]äthen. Sm. 192°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 38, 3722 C. 1906 [1] 54).
- 19)  $\alpha$ -Phenyl- $\beta$ -[8-Nitro-2-Chinolyl]äthen. Sm. 142°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 38, 3715 C. 1906 [1] 53).
- 20) 6-Methyl-2,3-Difuranyl-1,4-Benzdiazin. Sm. 170° (B. 25, 2844). — IV, 1064.
- 21) 4-Amido-1-Anthrapyridon (D.R.P. 194253 C. 1908 [1] 1013).
- 22) 5-Amido-1-Anthrapyridon (D.R.P. 194253 C. 1908 [1] 1013).
- 23) 3,6-Diphenyl-1,2-Diazin-4-Carbonsäure. Sm. 220—221° (B. 40, 4604 C. 1908 [1] 266).



- $C_{17}H_{12}O_2N_2$  24) **2,3-Diphenyl-1,4-Diazin-5-Carbonsäure**. Sm. 175—176°. K, Ag +  $H_2O$  (Soc. 63, 1305). — IV, 1049.
- 25) **Lakton d. 5-Methyl-3-[2-Oxyphenyl]-1-Phenylpyrazol-4-Carbonsäure** (C. 1906 [1] 139, 1436).
- 26) **Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure**. Sm. 205—206° (209—210°) (B. 23, 3135; A. 336, 216 C. 1904 [2] 1732). — II, 1479.
- 27) **Acetat d. Oxychindolin** (B. 39, 3939 C. 1907 [1] 119).
- 28) **Benzoat d. 3-[4-Oxyphenyl]-1,2-Diazin**. Sm. 179—180° (B. 34, 3262). — \*IV, 632.
- $C_{17}H_{12}O_2N_4$  C 67,1 — H 3,9 — O 10,5 — N 18,4 — M. G. 304.
- 1) **2,2'-Bisazo-4,4'-Diacetyldiphenylmethan**. Zers. bei 300° (C. r. 146, 1408 C. 1908 [2] 511).
- 2) **4,4'-Di[5-Phenyl-1,2,4-Oxdiazolyl]methan** (Malonendiazoximdibenzeyl). Sm. 175° (B. 29, 1171). — \*II, 759.
- $C_{17}H_{12}O_2Br_2$  1) **2-Oxy-1-[3,5-Dibrom-4-Oxybenzyl]naphtalin**. Sm. 168—169° (B. 38, 3307 C. 1905 [2] 1588).
- $C_{17}H_{12}O_2Br_4$  1) **3,3,5,5-Tetrabrom-2,6-Diphenyl-2,3,5,6-Tetrahydro-1,4-Pyron**. Sm. 165—171° (C. 1909 [2] 833).
- 2) **isom. 3,3,5,5-Tetrabrom-2,6-Diphenyl-2,3,5,6-Tetrahydro-1,4-Pyron**. Sm. 197—200° (C. 1909 [2] 833).
- $C_{17}H_{12}O_2S$  1) **2-Merkaptobenzol-2-Naphtyläther-1-Carbonsäure**. Sm. 200—201° (B. 37, 4527 C. 1905 [1] 167).
- $C_{17}H_{12}O_3N_2$  C 69,9 — H 4,1 — O 16,4 — N 9,6 — M. G. 292.
- 1) **2-Oxy-1-[4-Nitrophenyl]imidomethylnaphtalin**. Sm. 222° (C. 1905 [1] 447).
- 2) **2-[4-Nitrobenzyliden]amido-1-Oxynaphtalin**. Sm. 187° (B. 31, 2259). — \*III, 24.
- 3) **4-[2-Nitrobenzyliden]amido-1-Oxynaphtalin**. Sm. 148° (C. 1907 [1] 108).
- 4) **4-[3-Nitrobenzyliden]amido-1-Oxynaphtalin**. Sm. 184° (C. 1907 [1] 108).
- 5) **4-[4-Nitrobenzyliden]amido-1-Oxynaphtalin**. Sm. 171° (B. 31, 2258; C. 1907 [1] 108; Soc. 93, 536 C. 1908 [1] 536). — \*III, 24.
- 6) **1-[2-Nitrobenzyliden]amido-2-Oxynaphtalin**. Sm. 123° (C. 1907 [1] 108).
- 7) **1-[3-Nitrobenzyliden]amido-2-Oxynaphtalin**. Sm. 105° (C. 1907 [1] 108).
- 8) **1-[4-Nitrobenzyliden]amido-2-Oxynaphtalin**. Sm. 174°. HCl (B. 31, 2258; C. 1907 [1] 108; Soc. 93, 1918 C. 1909 [1] 280). — \*III, 24.
- 9) **N-1-Naphtyl-3-Nitrobenzaldoxim**. Sm. 147° (J. pr. [2] 78, 79 C. 1908 [2] 712).
- 10) **3,4-Methylenäther d. 1-[3,4-Dioxyphenyl]azo-2-Oxynaphtalin**. Sm. 156—158° (G. 39 [2] 319 C. 1909 [2] 1803).
- 11) **3,4-Methylenäther d. 4-[3,4-Dioxyphenyl]azo-1-Oxynaphtalin**. Sm. 157° (G. 39 [2] 318 C. 1909 [2] 1803).
- 12) **3-[2-Methylphenyl]azo-2-Oxy-1,4-Naphtochinon**. Sm. 205°.  $NH_4$  (B. 30, 2128). — IV, 1481.
- 13) **3-[4-Methylphenyl]azo-2-Oxy-1,4-Naphtochinon**. Sm. 205° u. Zers. (B. 30, 2128). — IV, 1481.
- 14) **1-[4-Oxyphenyl]azonaphtalin-1<sup>3</sup>-Carbonsäure**. Sm. 212° u. Zers. Na (Soc. 37, 747; A. 251, 195). — IV, 1470.
- 15) **2-[4-Oxyphenyl]azonaphtalin-2<sup>3</sup>-Carbonsäure**. Sm. 233° (A. 251, 196). — IV, 1470.
- 16) **2-Oxy-1-Phenylazonaphtalin-1<sup>2</sup>-Carbonsäure**. Sm. 268° (272° u. Zers.) (C. 1902 [2] 938; B. 35, 3469 C. 1902 [2] 1316). — \*IV, 1055.
- 17) **2-Oxy-1-Phenylazonaphtalin-1<sup>3</sup>-Carbonsäure**. Sm. 235° (243°). K +  $2H_2O$ , Ba +  $3\frac{1}{2}H_2O$  (B. 14, 2035; C. 1902 [2] 938). — IV, 1463; \*IV, 1055.
- 18) **2-Oxy-1-Phenylazonaphtalin-1<sup>4</sup>-Carbonsäure**. Sm. 301° u. Zers. (C. 1902 [2] 938). — \*IV, 1055.
- 19) **4-Oxy-1-Phenylazonaphtalin-3-Carbonsäure**. Sm. 194° u. Zers. (B. 39, 3610 C. 1907 [1] 46).
- 20) **1-Oxy-2-Phenylazonaphtalin-2<sup>3</sup>-Carbonsäure**. Zers. bei 260° (B. 24, 1599). — IV, 1463.
- 21) **3-Oxy-2-Phenylazonaphtalin-2-Carbonsäure**. Sm. 232° (B. 26, 2898; B. 34, 4164 C. 1902 [1] 318). — IV, 1473; \*IV, 1060.

- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>** 22) **Kyklothraustinsäure.** Sm. 252°. Ca + 4H<sub>2</sub>O, Ba + xH<sub>2</sub>O (*M.* 7, 283; 8, 198). — IV, 1049.
- 23) **2-Nitroso-1-Naphtylester d. Phenylamidoameisensäure.** Sm. 119 bis 120° u. Zers. (*B.* 22, 3106). — II, 862.
- 24) **4-Nitroso-1-Naphtylester d. Phenylamidoameisensäure.** Sm. 170° (*B.* 22, 3106). — II, 861.
- 25) **1-Nitroso-2-Naphtylester d. Phenylamidoameisensäure.** Sm. 126 bis 127° (*B.* 22, 3106). — II, 881.
- 26) **Benzoat d. 4-Oxy-1-Benzoylpyrazol.** Sm. 109° (*A.* 313, 10). — \*IV, 314.
- 27) **Benzoat d. 3-Keto-6-[4-Oxyphenyl]-2,3-Dihydro-1,2-Diazin.** Sm. 254° (*B.* 34, 3260). — \*IV, 633.
- 28) **Diphenylamid d. Krokonsäure** (*B.* 19, 772). — II, 420.
- 29) **2-Nitro-1-Naphtylamid d. Benzolcarbonsäure.** Sm. 174,5° (*A.* 208, 327; *B.* 15, 1815; 17, 111). — II, 1168.
- 30) **4-Nitro-1-Naphtylamid d. Benzolcarbonsäure.** Sm. 224° (*A.* 208, 325; *B.* 15, 1814). — II, 1168.
- 31) **5-Nitro-2-Naphtylamid d. Benzolcarbonsäure.** Sm. 181,5° (*B.* 25, 2078). — II, 597.
- 32) **8-Nitro-2-Naphtylamid d. Benzolcarbonsäure.** Sm. 162° (*B.* 25, 2081). — II, 597.
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>N<sub>4</sub>** C 63,7 — H 3,7 — O 15,0 — N 17,5 — M. G. 320.
- 1) **1,3-Diphenylharnsäure.** Sm. noch nicht bei 306° (*C.* 1906 [2] 1404; *Soc.* 91, 1341 *C.* 1907 [2] 1065).
- 2) **Verbindung** (aus Chinolin u.  $\alpha$ -Oximido-4-Nitrophenylelessigsäurenitril). Sm. 172° (*J. pr.* [2] 66, 371 *C.* 1902 [2] 1502).
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>N<sub>6</sub>** C 58,6 — H 3,4 — O 13,8 — N 24,1 — M. G. 348.
- 1)  **$\alpha\beta$ -Di[4-Keto-3,4-Dihydro-5-Chinazolyl]harnstoff** (*C.* 1906 [1] 1362).
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>Br<sub>2</sub>** 1)  **$\gamma$ -Keto- $\alpha\delta$ -Di[5-Brom-2-Oxyphenyl]- $\alpha\delta$ -Pentadien.** Sm. 188° u. Zers. (*B.* 40, 3459 *C.* 1907 [2] 1412).
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>Br<sub>4</sub>** 1) **2,3,4,5-Tetrabrom-2,5-Dimethyltetrahydrofuran-3-Carbonsäure** (*Soc.* 57, 953). — III, 713.
- C<sub>17</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>** C 66,2 — H 3,9 — O 20,8 — N 9,1 — M. G. 308.
- 1) **Methylisatoid.** Sm. 219° u. Zers. (*B.* 15, 2094; *B.* 40, 1296 *C.* 1907 [1] 1426). — II, 1603.
- 2) **2-[Methyl-3-Nitrobenzoyl]amido-1-Oxybenzol.** Sm. 105° (*Am.* 23, 36).
- 3) ***p*-Nitro-4-[2-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin.** Sm. 240° (*B.* 17, 1136). — III, 394.
- 4) ***p*-Nitro-4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin.** Sm. 241° (*B.* 17, 1136). — III, 394.
- 5) **2-[2-Nitro-4-Methylphenyl]amido-1,4-Naphtochinon** (*B.* 23, 2797). — III, 376.
- 6) **3-Nitro-4-[1-Naphtyl]amidobenzol-1-Carbonsäure.** Na (*B.* 23, 3457). — II, 1286.
- 7) **3-Nitro-4-[2-Naphtyl]amidobenzol-1-Carbonsäure.** Na (*B.* 23, 3456). — II, 1286.
- 8) **4-Nitrobenzyläther d. 2-Oximido-1-Keto-1,2-Dihydronaphtalin.** Sm. 199° (*B.* 36, 4169 *C.* 1904 [1] 287).
- 9) **1,3-Diphenylpyrazol-4,5-Dicarbonsäure.** Zers. bei 190°. Ba (*B.* 26, 114). — IV, 951.
- 10) **1,5-Diphenylpyrazol-3,4-Dicarbonsäure +  $\frac{1}{3}$ H<sub>2</sub>O.** Sm. 217–218°. NH<sub>4</sub>, Ca + 2H<sub>2</sub>O, Ba + H<sub>2</sub>O (*B.* 22, 175). — IV, 952.
- 11) ***p*-Nitro-*p*-Amidonaphtylester d. Benzolcarbonsäure.** Sm. 158° (*A.* 208, 332). — II, 1149.
- C<sub>17</sub>H<sub>12</sub>O<sub>4</sub>N<sub>4</sub>** C 60,7 — H 3,6 — O 19,0 — N 16,7 — M. G. 336.
- 1) **Nitril d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta$ -Carbonsäure.** Sm. 219–221° (*G.* 32 [2] 361 *C.* 1903 [1] 629).
- 2) **Di[Carbonylphenylhydrazid] d. Malonsäure.** Sm. 205° (*B.* 21, 1241). — IV, 702.
- C<sub>17</sub>H<sub>12</sub>O<sub>4</sub>Br<sub>2</sub>** 1) **Dimethyläther d. 6,8-Dibrom-5,7-Dioxy-2-Phenyl-1,4-Benzpyron.** Sm. 253° (*B.* 37, 3167 *C.* 1904 [2] 1059).
- C<sub>17</sub>H<sub>12</sub>O<sub>4</sub>Br<sub>4</sub>** 1) **Diacetat d. 3,5,3',5'-Tetrabrom-4,4'-Dioxydiphenylmethan.** Sm. 168 bis 169° (*B.* 36, 1886 *C.* 1903 [2] 291; *A.* 330, 67 *C.* 1904 [1] 1147).

- C<sub>17</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** C 63,0 — H 3,7 — O 24,7 — N 8,6 — M. G. 324.
- 1)  $\gamma$ -Keto- $\alpha$ -Di[3-Nitrophenyl]- $\alpha$ -Pentadien. Sm. 239° (237°) (B. 31, 1512; C. 1899 [2] 187; J. pr. [2] 60, 153). — \*III, 191.
  - 2)  $\gamma$ -Keto- $\alpha$ -Di[4-Nitrophenyl]- $\alpha$ -Pentadien. Sm. 254° (248°) (B. 31, 1512; C. 1899 [2] 187; J. pr. [2] 60, 155). — \*III, 191.
  - 3) 4-Nitro-1-Methylacetylamido-9,10-Antrachinon (D.R.P. 192201 C. 1908 [1] 571).
  - 4) Dimethylenäther d. 2-Keto-4,5-Di[3,4-Dioxyphenyl]-2,3-Dihydroimidazol. Sm. 291° (A. 339, 266 C. 1905 [2] 47).
  - 5) Anhydrid d. Methenyldianthranilelessigsäure. Sm. 302° u. Zers. (C. 1902 [2] 122).
- C<sub>17</sub>H<sub>12</sub>O<sub>5</sub>N<sub>4</sub>** C 58,0 — H 3,4 — O 22,7 — N 15,9 — M. G. 352.
- 1) 5-Keto-3-Methyl-4-[2,4-Dinitrobenzyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 160° (B. 37, 1870 C. 1904 [1] 1604).
  - 2) 3-Nitrobenzoat d. 4-Oximido-5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 194° (B. 41, 4067 C. 1909 [1] 187).
- C<sub>17</sub>H<sub>12</sub>O<sub>5</sub>Br<sub>2</sub>** 1) Monacetat d. *p*-Dibrom-1,7-Dioxyxanthonmonäthyläther. Sm. 186 bis 190° (M. 16, 319). — III, 206.
- C<sub>17</sub>H<sub>12</sub>O<sub>5</sub>Br<sub>3</sub>** 1)  $\alpha$ -Verbindung (aus Isoamylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Sm. 150° (Am. 34, 432 C. 1906 [1] 29).
- 2)  $\beta$ -Verbindung (aus Isoamylalkohol u. 3,4,5,6-Tetrabrom-1,2-Benzochinon). Sm. 177° (Am. 34, 433 C. 1906 [1] 29).
- C<sub>17</sub>H<sub>12</sub>O<sub>6</sub>N<sub>2</sub>** C 60,0 — H 3,5 — O 28,2 — N 8,2 — M. G. 340.
- 1) Äthylester d. 2-Nitro-9,10-Antrachinon-1-Amidoameisensäure (D.R.P. 167410 C. 1906 [1] 1066).
  - 2) Äthylester d. 1-Nitro-9,10-Antrachinon-2-Amidoameisensäure (D.R.P. 167410 C. 1906 [1] 1066).
  - 3) Äthylester d. 3-Nitro-9,10-Antrachinon-2-Amidoameisensäure (D.R.P. 167410 C. 1906 [1] 1066).
- C<sub>17</sub>H<sub>12</sub>O<sub>6</sub>N<sub>4</sub>** C 55,4 — H 3,3 — O 26,1 — N 15,2 — M. G. 368.
- 1) 1-Amidonaphtalin + 2,4,6-Trinitro-1-Methoxybenzol. Sm. 245° (Soc. 89, 594 C. 1906 [2] 32).
  - 2) *p*-Trinitro-4-Methylphenyl-1-Naphtylamin. Sm. 245° (J. pr. [2] 64, 508 C. 1902 [1] 257).
  - 3) 1<sup>2</sup>-Methyläther d. 2-Oxy-1-[4,6-Dinitro-2-Oxyphenyl]azonaphtalin. Sm. 291° u. Zers. (Soc. 91, 1478 C. 1907 [2] 1501).
  - 4) 1<sup>3</sup>-Methyläther d. 2-Oxy-1-[4,6-Dinitro-3-Oxyphenyl]azonaphtalin. Sm. 257° (Soc. 89, 928 C. 1906 [2] 511).
  - 5) 1<sup>4</sup>-Methyläther d. 2-Oxy-1-[2,3-Dinitro-4-Oxyphenyl]azonaphtalin. Sm. 277—278° (Soc. 81, 994 C. 1902 [2] 697). — \*IV, 1047.
  - 6) 1<sup>4</sup>-Methyläther d. 2-Oxy-1-[3,5-Dinitro-4-Oxyphenyl]azonaphtalin. Sm. 226° (Soc. 91, 1480 C. 1907 [2] 1502).
- C<sub>17</sub>H<sub>12</sub>O<sub>6</sub>Br<sub>4</sub>** 1) Tetrabrompyrotartrylfluorescein (B. 17, 1281). — III, 299.
- C<sub>17</sub>H<sub>12</sub>O<sub>7</sub>N<sub>2</sub>** C 57,3 — H 3,4 — O 31,4 — N 7,9 — M. G. 356.
- 1)  $\gamma$ -Keto- $\alpha$ -Di[3-Nitro-2-Oxyphenyl]- $\alpha$ -Pentadien. Sm. 231—232° u. Zers. (B. 40, 3455 C. 1907 [2] 1411).
  - 2)  $\gamma$ -Keto- $\alpha$ -Di[4-Nitro-2-Oxyphenyl]- $\alpha$ -Pentadien. Sm. 204° u. Zers. (B. 40, 3457 C. 1907 [2] 1412).
  - 3)  $\gamma$ -Keto- $\alpha$ -Di[5-Nitro-2-Oxyphenyl]- $\alpha$ -Pentadien. Sm. 212—214° u. Zers. (B. 40, 3456 C. 1907 [2] 1412).
- C<sub>17</sub>H<sub>12</sub>O<sub>7</sub>Br<sub>2</sub>** 1) 2<sup>3</sup>,7-Dimethyläther d. *p*-Dibrom-3,5,7-Trioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (D. d. Dibromquercetin). Zers. bei 250° (Soc. 67, 499). — III, 605.
- C<sub>17</sub>H<sub>12</sub>O<sub>7</sub>Br<sub>4</sub>** 1) Tetrabromevernsäure. Sm. 161° (A. 155, 56). — II, 1766.
- C<sub>17</sub>H<sub>12</sub>O<sub>7</sub>S** 1) Benzolsulfonat d. 7-Oxy-1,2-Benzpyron-4-Carbonsäuremethylester. Sm. 171,5° (B. 34, 384). — \*II, 1170.
- C<sub>17</sub>H<sub>12</sub>O<sub>7</sub>S<sub>8</sub>** 1) 4-Keto-3,5-Diphenyl-1,4-Thiopyran-2,6-Disulfonsäure. Sm. 261°. Na<sub>2</sub> + 2C<sub>2</sub>H<sub>5</sub>O, Ba + 12H<sub>2</sub>O, Ag<sub>2</sub> (B. 41, 4042 C. 1909 [1] 83).
- C<sub>17</sub>H<sub>12</sub>O<sub>8</sub>N<sub>2</sub>** C 54,8 — H 3,2 — O 34,4 — N 7,5 — M. G. 372.
- 1)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxy- $\alpha$ -Di[*p*-Nitrophenyl]methan-2,2'-Dicarbonsäure-2'-Äthylester (L. d. Dinitrobenzhydroidicarbonsäuremonäthylester). Sm. 146—148° (A. 242, 242). — II, 1973.



- C<sub>17</sub>H<sub>12</sub>O<sub>8</sub>N<sub>4</sub>** C 51,0 — H 3,0 — O 32,0 — N 14,0 — M. G. 400.
- 1) **Malonyldi-4-Nitrosamidobenzol-1-Carbonsäure.** Zers. oberhalb 350° (*M.* 26, 333 *C.* 1905 [1] 1147).
- C<sub>17</sub>H<sub>12</sub>NCl** 1) **1-Chlor-2-Benzylidenamidonaphtalin.** Sm. 98—99° (*Soc.* 77, 1217). — \*III, 23.
- 2) **1-[ $\alpha$ -Chlorbenzyliden]amidonaphtalin.** Sm. 60° (*B.* 19, 984). — II, 1167.
- 3) **2-[ $\alpha$ -Chlorbenzyliden]amidonaphtalin.** Sm. 68° (*B.* 19, 983). — II, 1168.
- 4) **4-Chlor-2,6-Diphenylpyridin.** Sm. 72° (*B.* 42, 2023 *C.* 1909 [2] 291).
- C<sub>17</sub>H<sub>12</sub>NBr** 1) **1-Brom-2-Benzylidenamidonaphtalin.** Sm. 93—94° (*Soc.* 77, 1216). — \*III, 23.
- C<sub>17</sub>H<sub>12</sub>N<sub>2</sub>S** 1) **2-Thiocarbonyl-3-Phenyl-1,2-Dihydro- $\alpha$ -Naphtimidazol.** Sm. 142° (*B.* 26, 188). — IV, 919.
- C<sub>17</sub>H<sub>12</sub>N<sub>4</sub>Br<sub>2</sub>** 1) **Nitril d. 5-[ $\alpha$  $\beta$ -Dibrom- $\beta$ -Phenyläthyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure.** Sm. 147°. — IV, 1165.
- C<sub>17</sub>H<sub>12</sub>N<sub>4</sub>Br<sub>4</sub>** 1) **Nitril d.  $\alpha\gamma$ -Di[ $\beta$ -Dibrom-4-Amidophenyl]propan- $\beta\beta$ -Dicarbonsäure.** Sm. 279—281° (*G.* 35 [1] 126 *C.* 1905 [1] 1384).
- C<sub>17</sub>H<sub>12</sub>Cl<sub>2</sub>J<sub>2</sub>** 1)  **$\gamma\gamma$ -Dichlor- $\alpha\delta$ -Di[4-Chlorphenyl]- $\alpha\delta$ -Pentadien.** Sm. 146—147° (*B.* 39, 3002 *C.* 1906 [2] 1430).
- C<sub>17</sub>H<sub>12</sub>Cl<sub>4</sub>Br<sub>2</sub>** 1)  **$\gamma\gamma$ -Dichlor- $\delta\delta$ -Dibrom- $\alpha\delta$ -Di[4-Chlorphenyl]- $\alpha$ -Penten.** Sm. 124 bis 125° (*B.* 39, 2999 *C.* 1906 [2] 1429).
- C<sub>17</sub>H<sub>13</sub>ON** C 82,6 — H 5,3 — O 6,5 — N 5,6 — M. G. 247.
- 1) **2-Oxy-1-Phenylimidomethylnaphtalin.** Sm. 99° (87°) (*B.* 32, 286; *Bl.* [3] 25, 375; *B.* 37, 4488 *C.* 1905 [1] 249; *C.* 1905 [1] 447). — \*III, 70.
- 2) **4-Oxy-1-Phenylimidomethylnaphtalin.** Sm. 133° (*B.* 32, 285). — \*III, 70.
- 3) **2-Oxy-1-[1-Naphtylimido]methylbenzol.** Sm. 53°. HCl (*Soc.* 93, 1916 *C.* 1909 [1] 280).
- 4) **4-Oxy-1-[2-Naphtylimido]methylbenzol.** Sm. 220° (*A.* 241, 356). — III, 85.
- 5) **1-[2-Oxybenzyliden]amidonaphtalin.** Sm. 45,5° (*Soc.* 95, 443 *C.* 1909 [1] 1654).
- 6) **1-[3-Oxybenzyliden]amidonaphtalin** (*C.* 1899 [2] 1078).
- 7) **2-[2-Oxybenzyliden]amidonaphtalin.** Sm. 121° (*A.* 241, 351). — III, 73.
- 8) **4-Benzylidenamido-1-Oxynaphtalin.** Sm. 137° (*C.* 1907 [1] 107).
- 9) **1-Benzylidenamido-2-Oxynaphtalin.** Sm. 129° (*C.* 1907 [1] 107).
- 10) **4-[4-Methylphenyl]imido-1-Keto-1,4-Dihydronaphtalin.** Sm. 95° (*B.* 39, 1039 *C.* 1906 [1] 1349).
- 11) **2-Amidophenyl-1-Naphtylketon.** Sm. 140,5° (*B.* 29, 827; *B.* 35, 4277 *C.* 1903 [1] 333; *A.* 340, 254 *C.* 1905 [2] 486). — III, 254.
- 12)  **$\alpha$ -Oximidophenyl-1-Naphtylmethan** (Oxim d. Phenyl-1-Naphtylketon). Sm. 140—142° (73°) (*M.* 5, 200; *A.* 247, 181; *Bl.* [4] 3, 917 *C.* 1908 [2] 1357). — III, 254.
- 13)  **$\alpha$ -Oximidophenyl-2-Naphtylmethan.** Sm. 174—176° (*A.* 247, 181). — III, 255.
- 14) **N-1-Naphtylbenzaldoxim.** Sm. 106,5° (*J. pr.* [2] 78, 76 *C.* 1908 [2] 712).
- 15) **Äthyläther d. Phenanthranil.** Sm. 110° (*Soc.* 87, 699 *C.* 1905 [2] 245).
- 16) **2-[ $\beta$ -Phenyläthenyl]-5-Phenyloxazol.** Sm. 62°. HCl (*B.* 29, 2102). — IV, 456.
- 17) **3-Phenyl-5-[ $\beta$ -Phenyläthenyl]isoxazol?** Sm. 126—127° (*B.* 36, 1498 *C.* 1903 [1] 1351).
- 18) **2-Keto-1,6-Diphenyl-1,2-Dihydropyridin.** Sm. 144—146° (*B.* 29, 1677; *G.* 26 [2] 346). — IV, 376.
- 19) **4-Keto-2,6-Diphenyl-1,4-Dihydropyridin.** Sm. 176—178°. K (*B.* 42, 2021 *C.* 1909 [2] 291).
- 20) **isom. 4-Keto-2,6-Diphenyl-1,4-Dihydropyridin.** Sm. 267° (*B.* 23, 3736; *B.* 42, 2021 *C.* 1909 [2] 291). — III, 304.
- 21) **3-[ $\beta$ -Phenylakroyl]indol** (3-Cinnamoylindol). Sm. 229—231° (*B.* 23, 1360). — IV, 375.

- C<sub>17</sub>H<sub>13</sub>ON** 22)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[2-Chinolyl]äthen (Salicyläthylenchinolin). Sm. 209°. HCl + H<sub>2</sub>O (B. 27, 1981). — IV, 454.
- 23)  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 258—259° u. Zers. HCl + 1½ H<sub>2</sub>O (B. 16, 2009; 22, 286; 27, 1982). — IV, 454.
- 24)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 215° (B. 21, 1429, 2172). — IV, 455.
- 25)  $\alpha$ -[3-Oxyphenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 254—255° (B. 21, 2170). — IV, 455.
- 26)  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 248—249° (B. 21, 1427). — IV, 455.
- 27) 3-Benzoyl-2-Methylchinolin. Sm. 61—62° (B. 42, 717 C. 1909 [1] 1246).
- 28) 6-Benzoyl-2-Methylchinolin. Sm. 67—68°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), H<sub>2</sub>CrO<sub>7</sub> (A. 242, 323). — IV, 375.
- 29) 8-Benzoyl-2-Methylchinolin. Sm. 107—108° (B. 18, 2406). — IV, 375.
- 30) meso-Oxydihydrophenonaphtakridin. Sm. 345° (B. 27, 2845). — IV, 456.
- 31) Aldehyd d. 4-Phenylamidonaphtalin-1-Carbonsäure (C. 1899 [2] 927).
- 32) Nitril d.  $\gamma$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure + H<sub>2</sub>O. Sm. 162—163° (J. pr. [2] 55, 347; B. 33, 2009).
- 33) Amid d. 2-Phenylaphtalin-2<sup>2</sup>-Carbonsäure (A. d. Chrysensäure). Sm. 169,5° (A. 311, 270). — \*II, 878.
- 34) Phenylamid d. Naphtalin-1-Carbonsäure. Sm. 160° (B. 1, 42; 15, 3065; J. pr. [2] 41, 310). — II, 1445.
- 35) Phenylamid d. Naphtalin-2-Carbonsäure. Sm. 170° (A. 180, 323). — II, 1454.
- 36) 1-Naphtylamid d. Benzolcarbonsäure. Sm. 159—160° (156°; 161 bis 162° (A. 208, 324; 279, 150; B. 15, 1814; 18, 1477; 20, 1798; Soc. 71, 1202). — II, 1167.
- 37) 2-Naphtylamid d. Benzolcarbonsäure. Sm. 157° (141—143°; 162 bis 163°) (B. 14, 59; 18, 1585; A. 279, 152; Soc. 71, 1203). — II, 1168; \*II, 732.
- C<sub>17</sub>H<sub>13</sub>ON<sub>3</sub>** C 74,2 — H 4,7 — O 5,8 — N 15,3 — M. G. 275.
- 1) 4-Furalamidoazobenzol. Sm. 129—130° (G. 28 [1] 243). — IV, 1358.
- 2) 4-Benzoylamido-2-Phenyl-1,3-Diazin. Sm. 141° (B. 30, 2031). — IV, 1167.
- 3) 9-Amido-2-Oxy-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. oberhalb 360°. HCl (B. 38, 1818 C. 1905 [1] 1655).
- 4) 9-Amido-6-Oxy-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 260°. Na (B. 38, 1820 C. 1905 [1] 1655).
- 5) Acetylmethylindophenazin. Sm. 204° (B. 29, 201). — IV, 1190.
- 6) Anhydro-3-Methyl-5-[2-Amidophenyl]-1-Phenylpyrazol-4-Carbonsäure. Sm. 261° (B. 18, 2262). — IV, 1165.
- 7) Nitril d. 5-Keto-1-Phenyl-3-Benzyl-4,5-Dihydropyrazol-4-Carbonsäure. Sm. 173° (Soc. 91, 1903 C. 1908 [1] 251).
- 8) Amid d. 2,3-Diphenyl-1,4-Diazin-5-Carbonsäure. Sm. 197—198° (Soc. 63, 1307). — IV, 1049.
- 9) Verbindung (aus Chinolin u.  $\alpha$ -Oximido- $\alpha$ -Phenylelessigsäurenitril). Sm. 66° (J. pr. [2] 66, 362 C. 1902 [2] 1501).
- C<sub>17</sub>H<sub>13</sub>ON<sub>5</sub>** C 67,3 — H 4,3 — O 5,3 — N 23,1 — M. G. 303.
- 1) 5-Phenyl-3-[5-Methyl-1-Phenyl-1,2,4-Triazolyl-3]-1,2,4-Oxdiazol. Sm. 166—167° (B. 22, 1751). — IV, 1115.
- 2) 5-Methyl-3-[1,5-Diphenyl-1,2,4-Triazolyl-3]-1,2,4-Oxdiazol. Sm. 152—153° (B. 22, 1753). — IV, 1164.
- 3) 7-Phenylhydrazon-2-Phenyl-4,7-Benzpyrantriazol-2,1,3<sup>2</sup> (Anhydrid d. Nitrosopyromekonsäurediphenylhydrazon). Sm. 242° (C. 1902 [1] 1109). — \*IV, 518.
- C<sub>17</sub>H<sub>13</sub>OCl** 1) 3-Chlor-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 128° (Soc. 51, 428). — III, 251.
- C<sub>17</sub>H<sub>13</sub>OCl<sub>3</sub>** 1)  $\gamma$ -Chlor- $\gamma$ -Oxy- $\alpha$ -Di[4-Chlorphenyl]- $\alpha\delta$ -Pentadien. Sm. 101—102° (B. 40, 2705 C. 1907 [2] 331).
- C<sub>17</sub>H<sub>13</sub>OBr** 1)  $\alpha$ -Keto- $\alpha$ -[4-Bromphenyl]- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadien. Sm. 149,5° (B. 39, 1920 C. 1906 [2] 125).

- C<sub>17</sub>H<sub>13</sub>OBr<sub>3</sub>** 1) Tribromdihydrocinnamylidenacetophenon. Sm. 129° u. Zers. (C. 1903 [2] 945).
- C<sub>17</sub>H<sub>18</sub>OBr<sub>5</sub>** 1) ? - Pentabrom - 2,3,5,6 - Tetramethyldiphenylketon. Sm. 224—225° (A. ch. [6] 1, 515). — III, 238.
- C<sub>17</sub>H<sub>13</sub>OBr<sub>7</sub>** 1) Verbindung (aus 2,2'-Dioxy-3,5,3',5'-Tetramethyldiphenylmethan). Sm. 190° (A. 353, 353 C. 1907 [2] 400).
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>N** 1) C 77,6 — H 4,9 — O 12,2 — N 5,3 — M. G. 263.
- 1) Benzyläther d. 1-Nitroso-2-Oxynaphtalin. Sm. 98° (B. 16, 634). — II, 1050.
  - 2) 2,6-Dioxy-1-Phenylimidomethylnaphtalin. Sm. 215—235° (A. 357, 343 C. 1908 [1] 355).
  - 3) 2,7-Dioxy-1-Phenylimidomethylnaphtalin. Sm. 195—196° (A. 357, 343 C. 1908 [1] 355).
  - 4) 4,8-Dioxy-1-Phenylimidomethylnaphtalin. Sm. 195—196° (A. 357, 342 C. 1908 [1] 355).
  - 5) 1-Imido-5-Oxy-3-Keto-2,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 151—152° (A. 284, 257). — III, 320.
  - 6) 2-Benzoylamido-1-Oxynaphtalin. Sm. 189° (191°) (B. 41, 420 C. 1908 [1] 1049; A. 359, 378 C. 1908 [1] 1774).
  - 7) 4-Benzoylamido-1-Oxynaphtalin. Sm. 228—229° (B. 29, 2954). — \*II, 741.
  - 8) 8-Benzoylamido-1-Oxynaphtalin. Sm. 193—194° (B. 39, 3332 C. 1906 [2] 1615).
  - 9) 1-Benzoylamido-2-Oxynaphtalin. Sm. 232—233° (245°; 248—250°) (B. 16, 1935; B. 41, 421 C. 1908 [1] 1049; J. pr. [2] 78, 87, 92 C. 1908 [2] 713; J. pr. [2] 80, 139 C. 1909 [2] 1325). — II, 1149.
  - 10) 3-Benzoylamido-2-Oxynaphtalin. Sm. 233,5° (B. 39, 3024 C. 1906 [2] 1432).
  - 11) 5-Benzoylamido-2-Oxynaphtalin. Sm. 152° (D.R.P. 173 522 C. 1906 [2] 931; B. 39, 3025 C. 1906 [2] 1432).
  - 12) 4-[2-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 240° (B. 15, 287, 689; D.R.P. 79 954). — III, 393; \*III, 282.
  - 13) 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 246° (B. 15, 287, 686, 1969). — III, 393.
  - 14) Methyläther d. 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 150—151° (B. 15, 282). — III, 393.
  - 15) 2-Benzylamido-1,4-Naphtochinon. Sm. 154° (Soc. 57, 403; B. 32, 2102). — III, 169; \*III, 276.
  - 16) 2-[2-Methylphenyl]amido-1,4-Naphtochinon. Sm. 140—142° (B. 15, 689). — III, 376.
  - 17) 2-[4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 200° (B. 15, 687, 688; Soc. 37, 642). — III, 376.
  - 18) ? - Oxy - ? - Phenyl - 1,4 - Naphtochinonmethylimid (A. 226, 39). — III, 460.
  - 19) N-1-Naphtyl-2-Oxybenzaldoxim. Sm. 153° (J. pr. [2] 78, 78 C. 1908 [2] 712).
  - 20) Benzyläther d. 1-Oximido-2-Keto-1,2-Dihydronaphtalin. Sm. 101° (B. 39, 4171 C. 1907 [1] 228).
  - 21) γ-Phtalylamido-α-Phenylpropen (Styrylphtalimid). Sm. 153° (B. 26, 1857). — II, 1806.
  - 22) 4-Oxy-2-Keto-3-Phenyl-5-Benzyliden-2,5-Dihydropyrrol? Sm. 226 bis 227° (A. 284, 258). — III, 320.
  - 23) 2,3-Diketo-4-Phenyl-5-[2-Methylphenyl]-2,3-Dihydropyrrol. Sm. 165—166° (Soc. 95, 990 C. 1909 [2] 436).
  - 24) 2,3-Diketo-4-Phenyl-5-[3-Methylphenyl]-2,3-Dihydropyrrol. Sm. 150° (Soc. 95, 1606 C. 1909 [2] 2172).
  - 25) 2,3-Diketo-4-Phenyl-5-[4-Methylphenyl]-2,3-Dihydropyrrol. Sm. 200° (Soc. 95, 1606 C. 1909 [2] 2172).
  - 26) 3,4-Methylenäther d. 3-[3,4-Dioxybenzyliden]-2-Methylindol. HCl (B. 37, 323 C. 1904 [1] 668).
  - 27) Methylenäther d. 2-Methyl-3-[3,4-Dioxybenzyliden]pseudoindol. HCl (B. 38, 2651 C. 1905 [2] 630).
  - 28) Benzoylmethyläther d. 8-Oxychinolin. Sm. 130° (D.R.P. 92 755). — \*IV, 185.



- $C_{17}H_{13}O_2N$  29)  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 249°. HCl + H<sub>2</sub>O (B. 36, 4331 C. 1904 [1] 449; B. 39, 2751 C. 1906 [2] 1203).
- 30)  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[4-Chinolyl]äthen. HCl, (2HCl, PtCl<sub>4</sub>) (B. 36, 4331 C. 1904 [1] 449).
- 31) 2-Keto-3-Benzoyl-4-Methyl-1,2-Dihydrochinolin. Sm. 264° (Ar. 240, 136 C. 1902 [1] 818). — \*IV, 223.
- 32)  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]äthen- $\alpha^2$ -Carbonsäure. Sm. 151°. Ag (B. 40, 1206 C. 1907 [1] 1257).
- 33) 3-Phenylamidonaphtalin-2-Carbonsäure. Sm. 235–237°. Na + 1½ H<sub>2</sub>O (B. 25, 2741). — II, 1458.
- 34) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure. Sm. 205–206° (208°) (D.R.P. 145189 C. 1903 [2] 1097; B. 39, 3239 C. 1906 [2] 1419; A. 355, 348 C. 1907 [2] 1508).
- 35) 2-Phenylamidonaphtalin-2<sup>2</sup>-Carbonsäure. Sm. 208–209° (212°) (D.R.P. 145189 C. 1903 [2] 1097; J. pr. [2] 75, 279 C. 1907 [2] 409; A. 355, 350 C. 1907 [2] 1509).
- 36) 2,5-Diphenylpyrrol-3-Carbonsäure. Sm. 216° (B. 21, 1491, 3060). — IV, 449.
- 37) Benzylidenchinolin-4-Carbonsäure. Sm. 218° (B. 18, 310; A. 270, 339). — IV, 347.
- 38) 6-Methyl-2-Phenylchinolin-4-Carbonsäure. Sm. 228°. Pb, Cu, Ag (2HCl, PtCl<sub>4</sub>) (A. 242, 296). — IV, 448.
- 39) 7-Methyl-2-Phenylchinolin-4-Carbonsäure. Sm. 212–214° (B. 41, 3888 C. 1909 [1] 298).
- 40) 8-Methyl-2-Phenylchinolin-4-Carbonsäure. Sm. 245°. Cu + H<sub>2</sub>O, Ag + H<sub>2</sub>O (A. 242, 298). — IV, 448.
- 41) 3-Allyl- $\beta$ -Naphtochinolin-1-Carbonsäure. Sm. 289° (B. 27, 2023). — IV, 448.
- 42) Methylbetain d. 2-Phenylchinolin-4-Carbonsäure + H<sub>2</sub>O. Sm. 220 bis 221° u. Zers. (wasserfrei) (A. 276, 284). — IV, 445.
- 43) Benzylbetain d. Chinolin-4-Carbonsäure + 3H<sub>2</sub>O. Sm. 83–84° (190° u. Zers. wasserfrei) (B. 18, 364; A. 270, 336). — IV, 347.
- 44) Inn. Anhydrid d.  $\alpha$ -Phenylacetylamido- $\beta$ -Phenylakrylsäure. Sm. 105° (B. 31, 2239; A. 307, 166). — \*II, 857.
- 45) Methylester d. 2-Phenylchinolin-4-Carbonsäure. Sm. 61° (58°) (A. 282, 106; M. 28, 39 C. 1907 [1] 1265). — IV, 445.
- 46) Methylester d. 3-Phenylchinolin-4-Carbonsäure. Sm. 73° (B. 39, 984 C. 1906 [1] 1357).
- 47) 1-Naphtylester d. Phenylamidoameisensäure. Sm. 178,5° (177°) (B. 18, 2340, 2431). — II, 858.
- 48) 2-Naphtylester d. Phenylamidoameisensäure. Sm. 155° (B. 18, 2431; J. pr. [2] 41, 320). — II, 878.
- 49) 2-Naphtylester d. 4-Amidobenzol-1-Carbonsäure. Sm. 171° (B. 35, 3418 C. 1902 [2] 1314).
- 50) Acetat d. 2-[3-Oxyphenyl]chinolin. Sm. 92° (M. 13, 68). — IV, 426.
- 51) Acetat d. 2-[4-Oxyphenyl]chinolin. Sm. 123° (M. 8, 131). — IV, 426.
- 52) Benzoat d. 4-Oxy-2-Methylchinolin. Sm. 129°. (2HCl, PtCl<sub>4</sub>) (B. 21, 1970). — IV, 311.
- 53) Nitril d.  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\gamma$ -Carbonsäure ( $\beta$ -Cyan diphenacyl). Sm. 118° (B. 36, 2415 C. 1903 [2] 500).
- 54) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[3-Acetoxyphenyl]akrylsäure. Sm. 75–76° (B. 34, 3086).
- 55) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[4-Acetoxyphenyl]akrylsäure. Sm. 121–122° (B. 34, 3085).
- 56) Nitril d.  $\gamma$ -Benzoxyl- $\alpha$ -Phenylpropen- $\gamma$ -Carbonsäure. Sm. 72–73° (Soc. 95, 1406 C. 1909 [2] 1228).
- 57) Nitril d.  $\beta$ -Oxy- $\alpha$ -Benzoyl- $\beta$ -Phenylakrylmethyläthersäure. Sm. 117–118° (J. pr. [2] 58, 154). — \*II, 1099.
- 58) Nitril d.  $\alpha$ -Cinnamoyloxyphenylessigsäure. Sm. 47–48° (Soc. 95, 1408 C. 1909 [2] 1228).
- 59) Acetylderivat d. Benzoylphenylessigsäurenitril. Sm. 99° (J. pr. [2] 55, 314 Anm.). — \*II, 1003.
- 60) Nitril d. 3-[4-Methylphenyl]-3,4-Dihydro-2,1-Benzpyron-4-Carbonsäure? Sm. 157° (B. 40, 1207 C. 1907 [1] 1257).

- C<sub>17</sub>H<sub>13</sub>O<sub>2</sub>N** 61) Phenylamid d. 1-Oxynaphtalin-2-Carbonsäure. Sm. 154° (A. 346, 363 C. 1906 [2] 336).  
 62) Phenylamid d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 243–244° (B. 25, 2744; 30, 2589). — II, 1691; \*II, 989.  
 63) Phenylacetylamid d. Phenylpropionsäure. Sm. 209–210° (Soc. 95, 991 C. 1909 [2] 436).  
 64) 2-Naphtylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 188–189°. Na + 5H<sub>2</sub>O (Soc. 95, 445 C. 1909 [1] 1654).  
 65) Methylimid d. αβ-Diphenyläthen-αβ-Dicarbonsäure (M. d. Diphenylmaleinsäure). Sm. 158° (B. 26, 2478). — II, 1897.  
 66) Verbindung (aus d. Säure C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>N). Sm. 223° (B. 20, 2684). — III, 839.
- C<sub>17</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>** C 70,1 — H 4,5 — O 11,0 — N 14,4 — M. G. 291.  
 1) 4-Benzoylamido-1-Nitrosamidonaphtalin (Soc. 91, 1320 C. 1907 [2] 1076).  
 2) 2-Phenylsemicarbazon-1-Keto-1,2-Dihydronaphtalin. Sm. 250–251° (A. 334, 200 C. 1904 [2] 835).  
 3) 4-Benzoylamido-1-Diazonaphtalin. Salze, siehe (Soc. 91, 1317 C. 1907 [2] 1075).  
 4) Dibenzoylderivat d. 4-Amidopyrazol. Sm. 173° (A. 323, 283 C. 1902 [2] 1101). — \*IV, 755.  
 5) 4-Methyl-6-[3-Nitrophenyl]-2-Phenyl-1,3-Diazin. Sm. 137–138° (Soc. 83, 1375 C. 1904 [1] 164, 450).  
 6) 5-[β-Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 178°. + C<sub>2</sub>H<sub>6</sub>O, Cu + 2½ H<sub>2</sub>O, Ag + 1½ H<sub>2</sub>O. — IV, 1170.  
 7) Acetat d. 3-Oxy-5,6-Diphenyl-1,2,4-Triazin. Sm. 154° (A. 339, 254 C. 1905 [2] 46).  
 8) Acetat d. 6-Oxy-2-Phenyl-4-[2-Pyridyl]-1,3-Diazin. Sm. 150° (B. 34, 4246 C. 1902 [1] 209). — \*IV, 851.  
 9) Amid d. 2-Oxy-1-Phenylazonaphtalin-1<sup>3</sup>-Carbonsäure (B. 14, 2036). — IV, 1463.  
 10) Phenylamid d. 4-Oxy-1-Naphtylazoameisensäure. Sm. 235° u. Zers. (A. 334, 197 C. 1904 [2] 835).  
 11) 2-Naphtylamid d. 4-Oxyphenylazoameisensäure. Sm. 189–190° (B. 38, 837 C. 1905 [1] 868).
- C<sub>17</sub>H<sub>13</sub>O<sub>2</sub>N<sub>5</sub>** C 64,0 — H 4,1 — O 10,0 — N 21,9 — M. G. 319.  
 1) p-Nitro-3-Methyl-1,4-Diphenylpyrazol. Sm. oberhalb 300° (B. 36, 528 C. 1903 [1] 642). — \*IV, 950.  
 2) 4,6-Di[Benzoylamido]-1,3,5-Triazin. Sm. 207–208° (C. 1907 [2] 706).  
 3) Nitril d. Methyl-4-[α-Cyan-4-Nitrobenzyliden]amidophenylamidoessigsäure. Sm. 195° (B. 37, 2638 C. 1904 [2] 519).
- C<sub>17</sub>H<sub>13</sub>O<sub>2</sub>Cl** 1) Oxoniumchlorid d. 2-[β-2-Oxyphenyläthenyl]benzpyran. + FeCl<sub>3</sub> (B. 41, 3002 C. 1908 [2] 1186).  
 2) Oxoniumchlorid d. 7-Oxy-2,3-Indenobenzpyran-7-Methyläther. + FeCl<sub>3</sub> (Soc. 93, 1102 C. 1908 [2] 608).
- C<sub>17</sub>H<sub>13</sub>O<sub>2</sub>Br** 1) p-Brom-3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 172° u. Zers. (B. 18, 184). — III, 251.  
 2) δ-Brom-αδ-Diphenyl-αγ-Butadien-α-Carbonsäure. Sm. 213–214° u. Zers. Na + 2½ H<sub>2</sub>O, K + 2½ H<sub>2</sub>O (A. 306, 215). — \*II, 877.  
 3) p-Brom-αδ-Diphenyl-αγ-Butadien-α-Carbonsäure. Sm. 200–201° (J. pr. [2] 68, 534 C. 1904 [1] 452).  
 4) Laktone d. α-Brom-δ-Oxy-αδ-Diphenyl-β-Buten-β-Carbonsäure. Sm. 130° u. Zers. (A. 306, 185). — \*II, 1013.
- C<sub>17</sub>H<sub>13</sub>O<sub>3</sub>N** C 73,1 — H 4,7 — O 17,2 — N 5,0 — M. G. 279.  
 1) p-Nitro-4-Oxy-1-Benzylnaphtalin. Zers. bei 80–90° (G. 33 [2] 477 C. 1904 [1] 655).  
 2) Phtalylamidomethyl-4-Methylphenylketon. Sm. 175–176° (B. 31, 2132). — \*III, 117.  
 3) 3-[2-Methylphenyl]amido-2-Oxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 172° (A. 286, 74). — III, 385.  
 4) 3-[4-Methylphenyl]amido-2-Oxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 188° (A. 286, 74). — III, 385.  
 5) 1-Acetylamido-2-Methyl-9,10-Anthrachinon. Sm. 176–177° (B. 16, 699). — III, 450.

- C<sub>17</sub>H<sub>13</sub>O<sub>3</sub>N** 6) 1-Methylacetylamiðo-9,10-Anthrachinon (D.R.P. 192201 C. 1908 [1] 571).
- 7)  $\alpha$ -Oximido-2-Oxyphenyl-2-[p-Oxynaphtyl]methan. Sm. 187—188° (A. 257, 91). — III, 256.
- 8)  $\alpha$ -Oximido-2-Oxyphenyl-2-[p-Oxynaphtyl]methan. Sm. 195—196° (A. 257, 94). — III, 255.
- 9) Oxim d. Oxalylðibenzylketon? Sm. 183—184° u. Zers. (A. 284, 263). — III, 320.
- 10) 7-Benzoylamido-4-Methyl-1,2-Benzpyron. Sm. 249—250° (B. 32, 3697). — \*II, 964.
- 11) Methyläther d. 2,3-Diketo-4-Phenyl-5-[4-Oxyphenyl]-2,3-Dihydro-pyrrol. Sm. 254—255° u. Zers. (Soc. 95, 1607 C. 1909 [2] 2172).
- 12) Methyläther d. 5-Keto-4-[4-Oxybenzyliden]-2-Phenyl-4,5-Dihydro-oxazol. Sm. 156,5° (A. 337, 296 C. 1905 [1] 379).
- 13) Methyläther d. 5-Keto-4-[4-Oxybenzyliden]-3-Phenyl-4,5-Dihydro-isoxazol. Sm. 164° (C. r. 146, 639 C. 1908 [1] 1703).
- 14) Anhydro-2-[3,4-Dioxybenzoyl]methylisochinolinammoniumhydr-oxyd + 2H<sub>2</sub>O (Pyrokatechinglykoisochinolin). HCl + 1/2 H<sub>2</sub>O (B. 27, 1970).
- 15) 2-[4-Oxyphenyl]amidonaphtalin-2<sup>3</sup>-Carbonsäure. Sm. 276° (J. pr. [2] 75, 281 C. 1907 [2] 409).
- 16) 4-Oxy-6-Methyl-2-Phenylchinolin-3-Carbonsäure. Zers. bei 250° (B. 19, 1542). — IV, 448.
- 17) 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure ( $\alpha$ -Phenylchininsäure). Sm. 237°. Ag, (2HCl, PtCl<sub>4</sub>) (A. 249, 105; 282, 106). — IV, 447.
- 18) 8-Methoxyl-2-Phenylchinolin-4-Carbonsäure. Sm. 216°. Na + 6H<sub>2</sub>O, Pb + H<sub>2</sub>O, Cu + 2H<sub>2</sub>O, Ag, HCl + 2H<sub>2</sub>O (A. 249, 107; 282, 85, 91). — IV, 447.
- 19) Säure (aus 2-Methylindol u. Phtalsäureanhydrid). Sm. oberhalb 200° (A. 242, 381; B. 37, 1223 C. 1904 [1] 1272). — III, 221.
- 20) Laktam d. 10-Acetylamiðo-9-Oxy-9,10-Dihydrophenanthren-9-Carbonsäure. Sm. 190—192° u. Zers. (Soc. 87, 695 C. 1905 [2] 244).
- 21) 1,4-Anhydrid d. 6-Oxy-1-Methyl-2-Phenylchinolinammonium-4-Carbonsäure. Sm. 243° (A. 282, 104). — IV, 447.
- 22) Methylester d. 6-Oxy-2-Phenylchinolin-4-Carbonsäure. Sm. 148° (A. 282, 106). — IV, 447.
- 23) Methylester d. 2-Oxy-3-Phenylchinolin-4-Carbonsäure. Sm. 258 bis 259° (B. 41, 484 C. 1908 [1] 1065).
- 24) Acetat d. 4-Oxybenzaldehyðindogenid. Sm. 223—224° (Soc. 95, 799 C. 1909 [2] 31).
- 25) 7-Benzoat d. 2,7-Dioxy-4-Methylchinolin. Sm. 288° (B. 32, 3701). — \*IV, 201.
- 26) Methylphenylamid d. 1,2-Benzpyron-3-Carbonsäure. Sm. 139 bis 140° (D.R.P. 172724 C. 1906 [2] 724).
- 27) Carminsäureanilid. Sm. 189—190° u. Zers. (B. 27, 2983). — II, 2097.
- 28)  $\alpha$ -Benzoyläthylimid d. Benzol-1,2-Dicarbonsäure (Phtalimidopropio-phenon). Sm. 85° (87—88°) (B. 22, 3251; B. 41, 249 C. 1908 [1] 730). — III, 141.
- 29)  $\beta$ -Benzoyläthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 130—131° (B. 41, 244 C. 1908 [1] 729).
- 30) 4-Benzoylphenylimid d. Bernsteinsäure. Sm. 175° (A. 311, 148). — \*III, 148.
- 31) Verbindung (aus d. Amidoameisensäureäthylester u. Benzoylchlorid). Sm. 190° (B. 26, 928). — II, 1181.
- C<sub>17</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>** C 66,4 — H 4,2 — O 15,6 — N 13,8 — M. G. 307.
- 1) 2-Nitrobenzyl-2-Naphtylnitrosamin. Sm. 102° (J. pr. [2] 52, 415). — \*II, 333.
- 2) 2-[4-Nitro-2-Methylphenyl]azo-1-Oxynaphtalin. Sm. 245° (B. 28, 853, 1125; 30, 515). — IV, 1436.
- 3) 4-[4-Nitro-2-Methylphenyl]azo-1-Oxynaphtalin. Zers. bei 245 bis 247° (B. 28, 853, 1125). — IV, 1436.
- 4) 1[oder 4]-Oxim d. 3-[2-Methylphenyl]azo-2-Oxy-1,4-Naphtochinon. Zers. bei 210—212° (B. 30, 2128). — IV, 1481.



- C<sub>17</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>** 5) 1[oder 4]-Oxim d. 3-[4-Methylphenyl]azo-2-Oxy-1,4-Naphtochinon. Sm. 176—178° u. Zers. (B. 30, 2128). — IV, 1481.  
 6) 5-Keto-3-Methyl-4-[2-Nitrobenzyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 154° (B. 37, 1870 C. 1904 [1] 1601).  
 7) 2-Acetylamido-3-[4-Nitrophenyl]chinolin. Sm. 219—220° (B. 31, 1291). — IV, 1025.  
 8) 7-Methylhydroxyd d. 10-Nitro- $\alpha\beta$ -Naphtophenazin. Chlorid, Nitrat (B. 31, 3096). — \*IV, 704.  
 9) Anhydrid d. Phenylimidoessigsäure-2-Carbonsäure- $\alpha$ -Acetylphenylhydrazid. Sm. 260—262° (A. 332, 238 C. 1904 [2] 38).  
 10) Benzoat d. 4-Oximido-5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 169—170° (B. 41, 4067 C. 1909 [1] 187).  
 11) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Acetylamidophenyl]akrylsäure. Sm. 214—215° (B. 31, 1291). — \*II, 874.  
 12) Azid d. 3,4-Dioxyphenanthrendimethyläther-9-Carbonsäure. Zers. bei 85° (B. 40, 2041 C. 1907 [2] 162).  
 13) Verbindung (aus 5-Nitrofurant-2-Carbonsäure). Sm. 218° (Am. 27, 203 C. 1902 [1] 908). — \*III, 505.  
 14) Verbindung (aus d. Verb. C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>). Na (B. 40, 1661 C. 1907 [1] 1576).  
 15) Verbindung (aus d. Verb. C<sub>24</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>). Sm. 208—210° (B. 40, 1665 C. 1907 [1] 1576).
- C<sub>17</sub>H<sub>13</sub>O<sub>3</sub>Br** 1)  $\beta$ -Oxy- $\alpha$ -[4-Brombenzoyl]- $\alpha$ -Benzoylpropen. Sm. 105—106° (A. 291, 89). — III, 319.  
 2) 2<sup>3</sup>-Methyläther d. 6-Brom-1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 254—255° (B. 31, 725). — \*III, 189.  
 3)  $\alpha$ -Brom- $\delta$ -Keto- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 137° u. Zers. (A. 306, 173). — \*II, 1017.  
 4) Acetat d.  $\gamma$ -Keto- $\gamma$ -[5-Brom-2-Oxyphenyl]- $\alpha$ -Phenylpropen. Sm. 115 bis 116° (B. 31, 2952). — \*III, 181.  
 5) Acetat d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[5-Brom-2-Oxyphenyl]propen. Sm. 133,5—135° (B. 29, 246). — III, 247.  
 6) Acetat d. Bromdioxymethylphenanthren. Sm. 166° (A. 297, 214). — \*III, 672.  
 7) Monacetat d. Bromdioxymethylphenanthrenmonomethyläther. Sm. 166° (A. 297, 214).  
 8) Benzoat d.  $\gamma$ -Keto- $\alpha$ -[5-Brom-2-Oxyphenyl]- $\alpha$ -Buten. Sm. 123° (B. 29, 1893). — \*III, 131.
- C<sub>17</sub>H<sub>13</sub>O<sub>3</sub>Br<sub>2</sub>** 1) Acetat d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[5-Brom-2-Oxyphenyl]propan. Sm. 158—160° (B. 29, 246). — III, 229.  
 2) Acetat d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[5-Brom-2-Oxyphenyl]propan. Sm. 121—122° (B. 31, 2952). — \*III, 167.
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>N** C 69,2 — H 4,4 — O 21,7 — N 4,7 — M. G. 295.  
 1)  $\gamma$ -Keto- $\beta$ -Benzoyl- $\alpha$ -[3-Nitrophenyl]- $\alpha$ -Buten. Sm. 111—112° (Soe. 83, 1377 C. 1904 [1] 164, 450).  
 2) *p*-Nitro-1,2,4-Trimethyl-9,10-Anthrachinon. Sm. 195—200° (J. pr. [2] 41, 130). — III, 457.  
 3) isom.-*p*-Nitro-1,2,4-Trimethyl-9,10-Anthrachinon (J. pr. [2] 41, 134). — III, 457.  
 4) 4<sup>3</sup>-Methyläther d. 5-Keto-4-[3,4-Dioxybenzyliden]-3-Phenyl-4,5-Dihydroisoxazol. Sm. 213° (C. r. 146, 639 C. 1903 [1] 1703).  
 5) Pyrogallolglykoisochinolin. HCl, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (B. 27, 1971). — IV, 375.  
 6)  $\delta$ -Phenyl- $\alpha$ -[3-Nitrophenyl]- $\alpha\gamma$ -Butadien- $\beta$ -Carbonsäure. Sm. 156,5° (A. 306, 156). — \*II, 878.  
 7)  $\delta$ -Phenyl- $\alpha$ -[4-Nitrophenyl]- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 259° u. Zers. Na + 2H<sub>2</sub>O (B. 37, 1123 C. 1904 [1] 1210; A. 336, 215 C. 1904 [2] 1732).  
 8)  $\alpha$ -Cyan- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure (B. 23, 114). — II, 1890.  
 9)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oximido- $\alpha\alpha$ -Diphenylmethan-2,2'-Dicarbonsäure-2'-Äthylester. Sm. 146—149° (A. 242, 251). — II, 1976.  
 10) Methylester d.  $\alpha$ -Phtalylamidophenylessigsäure. Sm. 99° (B. 37, 1689 C. 1904 [1] 1524).

- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>N** 11) **Methylester d. 3-Benzoxylindol-2-Carbonsäure.** Sm. 160° (*B.* 34, 1854; D.R.P. 131400 *C.* 1902 [1] 1343).  
 12) **Äthylester d. 3-Phtalylamidobenzol-1-Carbonsäure.** Sm. 152° (*B.* 18, 216). — **II**, 1813.  
 13) **Äthylester d. 4-Phtalylamidobenzol-1-Carbonsäure** (*A.* 303, 279). — **\*II**, 1057.  
 14) **Äthylester d. 9,10-Anthrachinon-2-Amidoameisensäure** (D.R.P. 167410 *C.* 1906 [1] 1066).  
 15) **Phenylester d. α-Phtalylamidopropionsäure.** Sm. 99° (*M.* 25, 778 *C.* 1904 [2] 1121).  
 16) **Phenylamid d. 4-Keto-7-Methyl-3,4-Dihydro-1,2-Benzpyron-3-Carbonsäure.** Sm. 202° (*A.* 367, 228 *C.* 1909 [2] 1236).  
 17) **1-Naphtylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure.** Sm. 163° (D.R.P. 53315). — **\*II**, 1112.  
 18) **2-Naphtylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure.** Sm. 216° (D.R.P. 53315). — **\*II**, 1112.  
 19) **α,2-Imid d. αβ-Diphenyläthan-α,2,2'-Tricarbonsäure.** Sm. 242° (*B.* 27, 2493). — **II**, 2025.  
 20) **4-Propionoxylphenylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 158° (*C.* 1897 [1] 49). — **\*II**, 1056.  
 21) **4-Benzoxylphenylimid d. Bernsteinsäure.** Sm. 215° (*C.* 1897 [1] 49). — **\*II**, 718.
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>** *C* 73,2 — *H* 4,0 — *O* 19,8 — *N* 13,0 — *M. G.* 323.  
 1) **2,4-Dinitro-1-Benzylamidonaphtalin.** Sm. 139° (*B.* 41, 3936 *C.* 1909 [1] 25).  
 2) **2,4-Dinitrobenzyl-1-Naphtylamin.** Sm. 164° (*B.* 35, 1266 *C.* 1902 [1] 1102; *M.* 23, 549 *C.* 1902 [2] 742).  
 3) **4,6-Dinitro-3-[1-Naphtyl]amido-1-Methylbenzol.** Sm. 182° (*B.* 33, 2508). — **\*II**, 332.  
 4) **1<sup>2</sup>-Methyläther d. 2-Oxy-1-[4-Nitro-2-Oxyphenylazo]naphtalin.** Sm. 269° (*C.* 1901 [2] 97). — **\*IV**, 1047.  
 5) **8-[2-Nitrophenyl]azo-4,6-Dimethyl-1,2-Benzpyron.** Sm. 240–250° u. Zers. (*C.* 1906 [1] 344; *Soc.* 89, 15 *C.* 1906 [1] 934).  
 6) **8-[3-Nitrophenyl]azo-4,6-Dimethyl-1,2-Benzpyron.** Sm. 212° (*C.* 1906 [1] 344; *Soc.* 89, 15 *C.* 1906 [1] 934).  
 7) **8-[4-Nitrophenyl]azo-4,6-Dimethyl-1,2-Benzpyron.** Sm. 229° (*C.* 1906 [1] 344; *Soc.* 89, 16 *C.* 1906 [1] 934).  
 8) **3-Methyl-1-Phenyl-5-[2-Nitrophenyl]pyrazol-4-Carbonsäure.** Sm. 218° u. Zers. *Ag.* (*B.* 18, 2260). — **IV**, 948.  
 9) **3-Methyl-1-Phenyl-5-[4-Nitrophenyl]pyrazol-4-Carbonsäure.** Sm. 202° (*B.* 18, 2258). — **IV**, 949.  
 10) **5-Methyl-1-Phenyl-3-[3-Nitrophenyl]pyrazol-4-Carbonsäure.** Sm. 207–208°. 3 + C<sub>6</sub>H<sub>6</sub> (*C.* 1906 [1] 1354).  
 11) **5-Methyl-1-Phenyl-3-[4-Nitrophenyl]pyrazol-4-Carbonsäure.** Sm. 209,5–210°. 3 + C<sub>6</sub>H<sub>6</sub> (*C.* 1906 [1] 1354).  
 12) **4-Benzoylamido-5-Keto-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure.** Sm. 185–190° u. Zers. (*B.* 24, 1261). — **IV**, 713.  
 13) **Methylester d. 5-Benzoxyl-1-Phenyl-1,2,3-Triazol-4-Carbonsäure.** Sm. 104–105° (*A.* 335, 77 *C.* 1904 [2] 1230).  
 14) **Benzoat d. 3-Oxy-5-Methyl-1-[3-Nitrophenyl]pyrazol.** Sm. 130° (*A.* 358, 150 *C.* 1908 [1] 854).
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>N<sub>5</sub>** *C* 58,1 — *H* 3,7 — *O* 18,2 — *N* 19,9 — *M. G.* 351.  
 1) **2-Amido-1-[4,6-Dinitro-2-Methylphenylazo]naphtalin.** Sm. 117° (*A.* 339, 223 *C.* 1905 [1] 1382).  
 2) **4-[2,4-Dinitrobenzyliden]amido-3-Methyl-5-Phenylpyrazol.** Sm. 240°. + C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (*B.* 40, 673 *C.* 1907 [1] 969).
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>Cl** 1) **Oxoniumchlorid d. 7,4',5'-Trioxy-4,3-Indenobenzpyran-7-Methyläther.** + FeCl<sub>3</sub> + H<sub>2</sub>O (*Soc.* 93, 1151 *C.* 1908 [2] 613).  
 2) **Diacetat d. 5-Chlor-3,6-Dioxyphenanthren.** Sm. 152–156° (*B.* 34, 1558).
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>Br** 1) **3,5-Dimethyläther d. 2-Brom-3,5-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran.** Sm. 223° (*B.* 32, 2264). — **\*III**, 532.  
 2) **8-Brom-3,4-Dioxyphenanthren-3,4-Dimethyläther-9-Carbonsäure.** Sm. 228–229° (*B.* 39, 3119 *C.* 1906 [2] 1330).

- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>Br** 3)  $\alpha\gamma$ -Lakton d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylpropan- $\beta\gamma$ -Dicarbonsäure ( $\gamma$ -Diphenyl- $\beta$ -Bromparakonsäure). Sm. 166,5° u. Zers. (171—172° u. Zers.) (B. 28, 3192; A. 308, 104). — \*II, 1145.
- 4) Acetat d.  $\beta$ -Brom- $\beta$ -Oxy- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 101 bis 102° (B. 23, 3378). — III, 297.
- 5) Diacetat d. 5-Brom-3,6-Dioxy-pentanthren. Sm. 159° (B. 34, 1548).
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>Br<sub>3</sub>** 1) Dimethyläther d. 3,6,8-Tribrom-5,7-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 174—175° u. Zers. (B. 37, 3167 C. 1904 [2] 1059).
- C<sub>17</sub>H<sub>13</sub>O<sub>5</sub>N** C 65,6 — H 4,2 — O 25,7 — N 4,5 — M. G. 311.
- 1) ?-[4-Methylphenyl]amido-5,6,8-Trioxy-1,4-Naphtochinon (D.R.P. 127766 C. 1902 [1] 340).
- 2)  $\alpha$ -Benzoylamido- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure (Piperonalhippursäure). Sm. 235° u. Zers. (B. 42, 1189 C. 1909 [1] 1712).
- 3) Säure + H<sub>2</sub>O (aus  $\alpha\beta$ -Diphenyläthan- $\alpha,2,2'$ -Tricarbonsäure- $\alpha,2$ -Imid). Sm. 128—130°. NH<sub>4</sub> (B. 27, 2500). — II, 2056.
- 4) Amid d. 2,5-Dioxy-9,10-Anthrachinon-2,5-Dimethyläther-1-Carbonsäure (Dimethylrheinamid). Sm. 287° (Soc. 95, 1094 C. 1909 [2] 623).
- 5) Verbindung (aus d. Säure C<sub>6</sub>H<sub>5</sub>O<sub>3</sub>N<sub>2</sub> u. Benzylalkohol). Sm. 267° (J. pr. [2] 73, 42 C. 1906 [1] 827).
- C<sub>17</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>** C 60,2 — H 3,8 — O 23,6 — N 12,4 — M. G. 339.
- 1) 1<sup>4</sup>-Methyläther d. 2-Oxy-1-[3-Nitro-2,4-Dioxyphenylazo]naphtalin. Sm. 234—235° (Soc. 81, 999 C. 1902 [2] 698). — \*IV, 1050.
- 2) 1<sup>2</sup>-Methyläther d. 2-Oxy-1-[5-Nitro-2,4-Dioxyphenylazo]naphtalin. Zers. bei 240—250° (Soc. 77, 1173; C. 1901 [2] 96; Soc. 87, 1201 C. 1905 [2] 1246). — \*IV, 1048.
- 3) 1<sup>2</sup>-Methyläther d. 2-Oxy-1-[4-Nitro-2,5-Dioxyphenylazo]naphtalin ? (Soc. 79, 1079).
- 4) Dimethylenäther d. 3-Keto-5,6-Di[3,4-Dioxyphenyl]-2,3,4,5-Tetrahydro-1,2,4-Triazin. Sm. 285° u. Zers. (A. 339, 288 C. 1905 [2] 48).
- 5) Lakton d.  $\delta$ -Phenylazo- $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha$ -[4-Nitrophenyl]butan- $\delta$ -Carbonsäure. Sm. 218° u. Zers. (B. 35, 1864 C. 1902 [2] 41). — \*IV, 1061.
- 6) Methylester d. 7-Nitro-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin-3<sup>2</sup>-Carbonsäure. Sm. 175° (C. 1908 [2] 181).
- C<sub>17</sub>H<sub>13</sub>O<sub>5</sub>N<sub>5</sub>** C 55,6 — H 3,5 — O 21,8 — N 19,1 — M. G. 367.
- 1) 5-Keto-4-[4-Nitrophenyl]azo-1-Phenyl-4,5-Dihydropyrazol-3-Methylcarbonsäure. Sm. 196° u. Zers. (B. 34, 85). — \*IV, 1080.
- 2)  $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -[5-Keto-1-Phenyl-4,5-Dihydropyrazolyl-3]-essigsäure. Sm. 205° u. Zers. (B. 34, 87). — \*IV, 1080.
- C<sub>17</sub>H<sub>13</sub>O<sub>5</sub>Br** 1) Diacetat d. 7-Brom-2,3-Dioxyxanthen. Sm. 146° (B. 38, 2882 C. 1905 [2] 1099).
- 2) Verbindung (aus 1,2,4-Trioxybenzol u. d. Aldehyd d. 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure). Sm. 242—245° (B. 38, 2882 C. 1905 [2] 1100).
- C<sub>17</sub>H<sub>13</sub>O<sub>6</sub>N** C 62,4 — H 4,0 — O 29,3 — N 4,3 — M. G. 327.
- 1)  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3-Acetoxyphenyl]akrylsäure. Sm. 254° (B. 39, 3123 C. 1906 [2] 1332).
- 2) Gem. Anhydrid d. Essigsäure u. 3-Nitro-4-Methyldiphenylketon-2'-Carbonsäure. Sm. 145—146° (A. 299, 312). — \*II, 1005.
- 3) Anhydro-3-Acetylamido-1,2-Naphtochinon-4-Methyldicarbonsäure-monoäthylester. Sm. 234° u. Zers. (B. 32, 265). — \*II, 1181.
- C<sub>17</sub>H<sub>13</sub>O<sub>6</sub>N<sub>3</sub>** C 57,5 — H 3,7 — O 27,0 — N 11,8 — M. G. 355.
- 1) 2,4,5-Trinitro-1-Methylbenzol + Naphtalin. Sm. 88—89° (A. 215, 378). — II, 182.
- 2) 2,4,6-Trinitro-1-Methylbenzol + Naphtalin. Sm. 97—98° (A. 215, 378). — II, 182.
- 3)  $\beta$ -Trinitro-1-Methylbenzol + Naphtalin. Sm. 100° (A. 215, 378). — II, 182.
- 4) 3,5-Dinitro-2,4,6-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure (Phthalidnitromesidil). Sm. 242° (B. 15, 1018). — II, 1806.
- C<sub>17</sub>H<sub>13</sub>O<sub>7</sub>N<sub>3</sub>** C 54,0 — H 3,5 — O 30,2 — N 11,3 — M. G. 371.
- 1) ?-Trinitro-2-Oxy-1-Methylbenzol + Naphtalin. Sm. 106° (B. 17, 271). — II, 183.



- C<sub>17</sub>H<sub>13</sub>O<sub>7</sub>N<sub>3</sub>** 2) **2,4,6-Trinitro-3-Oxy-1-Methylbenzol** + Naphtalin. Sm. 126—127° (B. 15, 1862). — II, 183.
- 3) **Dimethyläther d. p-Dinitro-2,5-Di[4-Oxyphenyl]oxazol** (B. 32, 2209). — \*II, 1031.
- 4) **β-[p-Dinitro-4-Methylphenoxy]äthylimid d. Benzol-1,2-Dicarbon-säure**. Sm. 88° (B. 24, 193). — II, 1801.
- 5) **Acetat d. γ-Oximido-β-Nitro-α-Keto-γ-[4-Nitrophenyl]-α-Phenylpropan**. Sm. 158° u. Zers. (A. 328, 230 C. 1903 [2] 999).
- C<sub>17</sub>H<sub>13</sub>O<sub>10</sub>Br** 1) **Verbindung** (aus Quercinpentaacetat) (A. 238, 375). — III, 589.
- C<sub>17</sub>H<sub>13</sub>O<sub>11</sub>N<sub>3</sub>** C 46,9 — H 3,0 — O 40,5 — N 9,6 — M. G. 435.
- 1) **α-Nitrat-βγ-Di[4-Nitrobenzoat] d. αβγ-Trioxypentan**. Sm. 139° (B. 41, 1120 C. 1908 [1] 2017).
- C<sub>17</sub>H<sub>13</sub>NCl<sub>2</sub>** 1) **4,4-Dichlor-2,6-Diphenyl-1,4-Dihydropyridin**. Sm. 120° (B. 42, 2023 C. 1909 [2] 292).
- C<sub>17</sub>H<sub>13</sub>NBr<sub>2</sub>** 1) **αβ-Dibrom-α-Phenyl-β-[2-Chinolyl]äthan**. Sm. 173—174° (B. 16, 2009). — IV, 454.
- C<sub>17</sub>H<sub>13</sub>NS** 1) **Thiophenyl-1-Naphtylmethylamin**. Sm. 132—133° (B. 23, 2466). — II, 867.
- 2) **1-Naphtylamid d. Benzolthiocarbonsäure**. Sm. 147,5° (B. 11, 1760; 20, 1897). — II, 1294.
- C<sub>17</sub>H<sub>13</sub>N<sub>2</sub>Cl** 1) **Chlormethylat d. αβ-Naphtophenazin + H<sub>2</sub>O. + AuCl<sub>3</sub>** (B. 30, 393; D.R.P. 112116). — IV, 1051; \*IV, 704.
- C<sub>17</sub>H<sub>13</sub>N<sub>2</sub>Br** 1) **Brommethylat d. αβ-Naphtophenazin** (B. 30, 393). — IV, 1051.
- C<sub>17</sub>H<sub>13</sub>N<sub>2</sub>J** 1) **Jodmethylat d. αβ-Naphtophenazin** (B. 26, 180; 30, 393). — IV, 1051.
- C<sub>17</sub>H<sub>13</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) **7-Chlormethylat d. 9-Chlor-5-Amido-αβ-Naphtophenazin. 2 + PtCl<sub>4</sub>** (B. 34, 1096). — \*IV, 858.
- C<sub>17</sub>H<sub>13</sub>N<sub>3</sub>S<sub>2</sub>** 1) **4,5-Disulfid d. 2-Amido-1-[4,5-Dimerkapto-2-Methylphenyl]azo-naphtalin** (B. 40, 4424 C. 1908 [1] 28).
- C<sub>17</sub>H<sub>13</sub>N<sub>8</sub>S<sub>3</sub>** 1) **5-Cinnamylidenhydrosulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Di-hydro-1,3,4-Thiodiazol**. Sm. 173° (B. 29, 2137). — IV, 684.
- C<sub>17</sub>H<sub>13</sub>N<sub>4</sub>Br** 1) **p-Brom-3-Methyl-1,4-Diphenylbipyrazol** (B. 36, 528 C. 1903 [1] 642). — \*IV, 950.
- C<sub>17</sub>H<sub>14</sub>ON<sub>2</sub>** C 77,9 — H 5,3 — O 6,1 — N 10,7 — M. G. 262.
- 1) **2-Benzylnitrosamidonaphtalin**. Sm. 111—112° (A. 241, 360). — II, 603.
- 2) **4-Methylphenyl-1-Naphtylnitrosamin**. Sm. 102° (J. pr. [2] 64, 503 C. 1902 [1] 257).
- 3) **4-Nitroso-1-[4-Methylphenyl]amidonaphtalin**. Sm. 161° (J. pr. [2] 64, 504 C. 1902 [1] 257).
- 4) **8-Amido-2-Benzylidenamido-1-Oxynaphtalin**. HCl (B. 39, 3338 C. 1906 [2] 1617).
- 5) **s-Phenyl-1-Naphtylharnstoff**. Sm. 222—223° (P. Ch. S. Nr. 229). — \*II, 334.
- 6) **s-Phenyl-2-Naphtylharnstoff**. Sm. 220—221° (B. 21, 2567; Soc. 79, 107). — II, 617.
- 7) **uns-Phenyl-2-Naphtylharnstoff**. Sm. 189—190° (B. 23, 425). — II, 617.
- 8) **1[oder 2]-Benzoylamido-2[oder 1]-Amidonaphtalin**. Sm. oberhalb 280° (B. 18, 801). — IV, 919.
- 9) **1-Benzoylamido-4-Amidonaphtalin**. Sm. 186° (187°). HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Oxalat (A. 208, 326; Soc. 91, 1316 C. 1907 [2] 1075). — IV, 922.
- 10) **4-[2-Furanoyl]amido-1-Phenylamidobenzol**. Sm. 129° (A. 255, 190). — IV, 598.
- 11) **7-Benzylidenhydrazido-2-Oxynaphtalin**. Sm. 233° (J. pr. [2] 78, 151 C. 1908 [2] 949).
- 12) **α-Benzoyl-α-[1-Naphtyl]hydrazin**. Sm. 120,5° (Am. 25, 489). — \*IV, 613.
- 13) **α-Benzoyl-β-[1-Naphtyl]hydrazin** (1-Naphtylhydrazid d. Benzolcarbon-säure). Sm. 184° (B. 24, 4185). — IV, 927.
- 14) **α-Benzoyl-β-[2-Naphtyl]hydrazin** (2-Naphtylhydrazid d. Benzolcarbon-säure). Sm. 154—155° (A. 253, 26). — IV, 930.
- 15) **β-Furyl-α-Diphenylhydrazin**. Sm. 90° (A. 258, 247). — IV, 765.
- 16) **2-Oxy-1-Phenylhydrazonmethylnaphtalin**. Sm. 205° (195°) (B. 32, 286; Bl. [3] 25, 375; C. 1905 [1] 447). — \*IV, 495.

- C<sub>17</sub>H<sub>14</sub>ON<sub>2</sub>** 17) **4-Oxy-1-Phenylhydrazonmethylnaphtalin.** Sm. 119,5° (*B.* 32, 285). — \*IV, 495.
- 18) **1-Oxy-2-Phenylhydrazonmethylnaphtalin.** Sm. 115–116° (*M.* 30, 279 *C.* 1909 [1] 1881).
- 19) **2-Methylphenylhydrazon-1-Keto-1,2-Dihydronaphtalin.** Sm. 134,5° (*Am.* 22, 383). — \*IV, 1043.
- 20) **4-Methylphenylhydrazon-1-Keto-1,4-Dihydronaphtalin.** Sm. 118,5° (*Am.* 22, 378). — \*IV, 525.
- 21) **1-[4-Oxy-3-Methylphenyl]azonaphtalin.** Sm. 154,5° (*Am.* 25, 493). — \*IV, 1041.
- 22) **1-[6-Oxy-3-Methylphenyl]azonaphtalin.** Sm. 102–104° (*A.* 365, 311 *C.* 1909 [1] 1865).
- 23) **2-[6-Oxy-3-Methylphenyl]azonaphtalin.** Sm. 167° (*A.* 365, 312 *C.* 1909 [1] 1865).
- 24) **2-Oxy-1-[2-Methylphenylazo]naphtalin.** Sm. 131° (132°) (*B.* 19, 2491; 20, 1580; *G.* 30 [2] 174). — IV, 1435.
- 25) **isom. 2-Oxy-1-[2-Methylphenylazo]naphtalin.** Sm. 115° (*G.* 30 [2] 174).
- 26) **2-Oxy-1-[3-Methylphenylazo]naphtalin.** Sm. 141° (*C.* 1902 [2] 938; *M.* 27, 273 *C.* 1906 [2] 510). — \*IV, 1045.
- 27) **2-Oxy-1-[4-Methylphenylazo]naphtalin.** Sm. 134–135° (133–133,5°) (*B.* 19, 2490; 20, 1580; 28, 1221; 30, 80; *A.* 313, 117; *G.* 30 [2] 175). — IV, 1435.
- 28) **isom. 2-Oxy-1-[4-Methylphenylazo]naphtalin.** Sm. 134° (*G.* 30 [2] 175).
- 29) **4-Oxy-1-[2-Methylphenylazo]naphtalin.** Sm. 144–146° (*B.* 19, 2488). — IV, 1435.
- 30) **4-Oxy-1-[4-Methylphenylazo]naphtalin.** Sm. 208°. HCl, HBr (*B.* 19, 2486). — IV, 1435.
- 31) **1-Oxy-2-[2-Methylphenylazo]naphtalin (Mono-2-Methylphenylhydrazon d. 1,2-Naphtochinon).** Sm. 156° (*B.* 19, 2492). — IV, 804.
- 32) **1-Oxy-2-[4-Methylphenylazo]naphtalin (Mono-4-Methylphenylhydrazon d. 1,2-Naphtochinon).** Sm. 145° (*B.* 19, 2491; *B.* 42, 1385 *C.* 1909 [1] 1710). — IV, 810.
- 33) **Methyläther d. 4-Oxy-1-Phenylazonaphtalin.** Sm. 83° (*B.* 17, 3028; *Soc.* 93, 845 *C.* 1908 [1] 2149). — IV, 1427.
- 34) **Methyläther d. 1-Oxy-2-Phenylazonaphtalin.** Sm. 95° (102–103°) (*Am.* 22, 382; *B.* 42, 1383 *C.* 1909 [1] 1709). — \*IV, 1043.
- 35) **3-Acetyl-1,5-Diphenylpyrazol.** Sm. 88° (*B.* 26, 1890). — IV, 952.
- 36) **5-Keto-3-Methyl-4-Benzyliden-1-Phenyl-4,5-Dihydropyrazol.** Sm. 106–107° (*A.* 238, 179). — IV, 958.
- 37) **1-Acetyl-4,5-Diphenylimidazol.** Sm. 149,5° (*B.* 40, 2635 *C.* 1907 [2] 339).
- 38) **2-Benzoyl-1-Methyl-5-Phenylimidazol.** Sm. 168° (*B.* 38, 1535 *C.* 1905 [1] 1560).
- 39) **3-Keto-4-Phenyl-6-Benzyl-2,3-Dihydro-1,2-Diazin.** Sm. 215° (*A.* 306, 222). — \*IV, 699.
- 40) **3-Keto-6-Phenyl-4-Benzyliden-2,3,4,5-Tetrahydro-1,2-Diazin.** Sm. 177° (*A.* 306, 162). — \*IV, 699.
- 41) **6-Oxy-4-Phenyl-2-Benzyl-1,3-Diazin.** Sm. 233° (*B.* 22, 1623). — IV, 1040.
- 42) **6-Oxy-4-Phenyl-2-[4-Methylphenyl]-1,3-Diazin.** Sm. oberhalb 290° (*B.* 23, 3826). — IV, 1040.
- 43) **6-Oxy-5-Methyl-2,4-Diphenyl-1,3-Diazin.** Sm. 256° (*J. pr.* [2] 39, 197; [2] 42, 16). — IV, 1192.
- 44) **Methyläther d. 3-Oxy-2,5-Diphenyl-1,4-Diazin (Methylisocindileucin).** Sm. 115° (*B.* 18, 2242; *B.* 38, 1533 *C.* 1905 [1] 1560). — III, 121.
- 45) **Methyläther d. Indileucin.** Sm. 191–192° (*B.* 17, 979). — II, 1622.
- 46) **Phenyläther d. 6-Oxy-3-[4-Methylphenyl]-1,2-Diazin.** Sm. 135° (*B.* 34, 3832 *C.* 1902 [1] 52). — \*IV, 635.
- 47) **2-[4-Acetylamidophenyl]chinolin.** Sm. 189° (*M.* 8, 126). — IV, 1024.
- 48) **4-Methyl-2-[2-Formylamidophenyl]chinolin.** Sm. 107° (*B.* 26, 1352; 32, 3232). — IV, 1029; \*IV, 691.

- C<sub>17</sub>H<sub>14</sub>ON<sub>2</sub>** 49) 7-Benzoylamido-2-Methylchinolin. Sm. 172—173° (*J. pr.* [2] 71, 51 *C.* 1905 [1] 457).  
 50) 3-[ $\alpha$ -Oximidobenzyl]-2-Methylchinolin. Sm. 230—231° (*B.* 42, 718 *C.* 1909 [1] 1246).  
 51) Inn. Anhydrid d. Chinolinphenacyloxim. Sm. 72°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr (*Ar.* 240, 695 *C.* 1903 [1] 402). — \*IV, 180.  
 52) Inn. Anhydrid d. Isochinolinphenacyloxim. Sm. 121°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*Ar.* 240, 703 *C.* 1903 [1] 403). — \*IV, 193.  
 53) Methylhydroxyd d.  $\alpha\beta$ -Naphthophenazin. Sm. 175° u. Zers. Chlorid + H<sub>2</sub>O, Chlorid + AuCl<sub>3</sub>, Bromid, Jodid (*B.* 26, 180; 30, 393). — IV, 1051.  
 54) 1-Methyl-3-Phenylchinolinnoxazol. Sm. 134—135°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (*A.* 282, 382). — IV, 908.  
 55) Nitril d. 2-Acetylamido- $\alpha\beta$ -Diphenyläthen-4-Carbonsäure. Sm. 220° (*B.* 41, 2295 *C.* 1908 [2] 599).  
 56) Nitril d.  $\beta$ -Benzoylimido- $\beta$ -[4-Methylphenyl]propionsäure. Sm. 179° (*J. pr.* [2] 52, 113). — \*II, 970.  
 57) Phenylamid d. 1-Phenylpyrrol-2-Carbonsäure. Sm. 136° (*B.* 35, 2530 *C.* 1902 [2] 452). — \*IV, 75.  
 58) Phenylamid d. 3-Methylchinolin-4-Carbonsäure. Sm. 238—239° (*B.* 40, 1091 *C.* 1907 [1] 1268).  
 59) Verbindung ( $\alpha$ -Dibenzalacetonylhydroxylaminnoxim). Sm. 176° u. Zers. (*C.* 1906 [1] 136).  
**C<sub>17</sub>H<sub>14</sub>ON<sub>4</sub>** C 70,4 — H 4,8 — O 5,5 — N 19,3 — M. G. 290.  
 1) 4,4'-Di[Methylcyanamidophenyl]keton. Sm. 236° (*B.* 37, 2673 *C.* 1904 [2] 443).  
 2) 4-Furalhydrazidoazobenzol. Sm. 133° (*J. pr.* [2] 78, 379 *C.* 1909 [1] 356).  
 3) 3-Acetylamido-5,6-Diphenyl-1,2,4-Triazin. Sm. 151° (*A.* 302, 310). — IV, 1294.  
 4) Monophenylhydrazon d. 1,4-Diketotetrahydronaphtopyrazol. Sm. 272° u. Zers. (*B.* 32, 2298). — \*IV, 664.  
 5) Harnstoff (aus 2-Phenylazopyrrol u. Phenylisocyanat). Sm. 108—110° (*C.* 1901 [1] 1323). — \*IV, 1075.  
 6) Amid d. 5-[ $\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 198° — IV, 1170.  
**C<sub>17</sub>H<sub>14</sub>OBr<sub>2</sub>** 1)  $\delta\epsilon$ -Dibrom- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Penten. Sm. 163° u. Zers. (*B.* 36, 1498 *C.* 1903 [1] 1351).  
 2) Dibromdihydrocinnamylidenacetophenon. Sm. 104° (*C.* 1903 [2] 945).  
**C<sub>17</sub>H<sub>14</sub>OBr<sub>4</sub>** 1)  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenylpentan. Sm. 208—211° (*B.* 14, 2461; *A.* 223, 143; *C.* 1903 [1] 399). — III, 252.  
**C<sub>17</sub>H<sub>14</sub>OS** 1) S-1-Naphtyläther d. Merkaptooxymethylbenzol. Sm. 48—49° (*B.* 27 [2] 880). — III, 10; \*III, 6.  
 2) S-2-Naphtyläther d. Merkaptooxymethylbenzol. Sm. 49° (*B.* 27 [2] 881). — III, 10.  
 3)  $\alpha$ -Oxydiphenyl-2-Thiänylmethan. Sm. 125° (*C. r.* 146, 643 *C.* 1908 [1] 1785; *Bl.* [4] 5, 734 *C.* 1909 [2] 711).  
**C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>** C 73,4 — H 5,0 — O 11,5 — N 10,1 — M. G. 278.  
 1) 2-Nitrobenzyl-1-Naphtylamin. Sm. 97° (*Bl.* [3] 27, 1057 *C.* 1902 [2] 1509).  
 2) 3-Nitrobenzyl-1-Naphtylamin. Sm. 94° (*Bl.* [3] 27, 1060 *C.* 1902 [2] 1510).  
 3) 4-Nitrobenzyl-1-Naphtylamin. Sm. 126—127° (*Bl.* [3] 27, 1061 *C.* 1902 [2] 1510).  
 4) 2-Nitrobenzyl-2-Naphtylamin. Sm. 162°. HCl (*J. pr.* [2] 52, 410; *Bl.* [3] 27, 1058 *C.* 1902 [2] 1510). — \*II, 333.  
 5) 3-Nitrobenzyl-2-Naphtylamin. Sm. 80° (*Bl.* [3] 27, 1060 *C.* 1902 [2] 1510).  
 6) 4-Nitrobenzyl-2-Naphtylamin. Sm. 121,5° (*Bl.* [3] 27, 1063 *C.* 1902 [2] 1510).  
 7) Benzyl-4-Nitro-1-Naphtylamin (4-Nitro-1-Benzylamidonaphtalin). Sm. 156° (*C.* 1901 [1] 237).  
 8) p-Nitro-4-Methylphenyl-1-Naphtylamin. Sm. 114° (*J. pr.* [2] 64, 506 *C.* 1902 [1] 257).



- $C_{17}H_{14}O_2N_2$  9) isom. *p*-Nitro-4-Methylphenyl-1-Naphtylamin. Sm. 188° (*J. pr.* [2] 64, 507 *C.* 1902 [1] 257).
- 10) 2-Oxybenzyl-2-Naphtylnitrosamin. Sm. 165° u. Zers. (*A.* 241, 352). — II, 742.
- 11) 4-Oxybenzyl-2-Naphtylnitrosamin. Sm. 142° (*A.* 241, 358). — II, 754.
- 12)  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[1-Naphtyl]harnstoff. Sm. 126° (*J. pr.* [2] 78, 79 *C.* 1908 [2] 712).
- 13)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Phenylpropionylharnstoff. Sm. 192° (*Soc.* 95, 1609 *C.* 1909 [2] 2172).
- 14) 2,4-Di[Furalamido]-1-Methylbenzol. Zers. bei 120—125°. (2HCl, PtCl<sub>4</sub>) (*A.* 201, 360). — IV, 607.
- 15) 1-Benzyläther d. 1,2-Dioximido-1,2-Dihydronaphtalin. Sm. 168° (*B.* 39, 4171 *C.* 1907 [1] 228; *B.* 40, 4348 *C.* 1908 [1] 31).
- 16) 7-[2-Oxybenzyliden]hydrazido-2-Oxynaphtalin. Sm. 223° (*J. pr.* [2] 78, 151 *C.* 1908 [2] 949).
- 17) 1,3-Diketo-2-[ $\alpha$ -Phenylhydrazonäthyl]-2,3-Dihydroinden. Sm. 184 bis 185° (*B.* 27, 106). — IV, 788.
- 18) 2,6-Dioxy-1-Phenylhydrazonmethylnaphtalin. Sm. 230° u. Zers. (*A.* 357, 344 *C.* 1908 [1] 355).
- 19) 2-Oxy-1-[2-Oxymethylphenylazo]naphtalin. Sm. 185° (*B.* 27, 1086). — IV, 1451.
- 20) 2-Oxy-1-[3-Oxymethylphenylazo]naphtalin. Sm. 127° (*B.* 38, 2063 *C.* 1905 [2] 237).
- 21) 4-Oxy-1-[2-Oxymethylphenylazo]naphtalin. Sm. 182° (*B.* 27, 1086). — IV, 1451.
- 22) Methyläther d. 1-Phenylazo-2,4-Dioxynaphtalin. Sm. 174—175° (*B.* 17, 1812). — IV, 1449.
- 23) 3-Methyläther d. 1-[3,4-Dioxyphenyl]azonaphtalin. Sm. 125° (*C.* 1908 [1] 128).
- 24) 3-Methyläther d. 2-[3,4-Dioxyphenyl]azonaphtalin. Sm. 92—94° (*C.* 1908 [1] 128).
- 25) 3'-[ $\alpha$ -Phenylhydrazonäthyl]-1,2-Benzpyron (Ph. d.  $\alpha$ -Acetylcumarin). Sm. 181—182° (186°) (*G.* 27 [2] 500; *B.* 31, 733). — \*IV, 464.
- 26) 8-Phenylazo-4,6-Dimethyl-1,2-Benzpyron. Sm. 199—200° (*C.* 1906 [1] 344; *Soc.* 89, 15 *C.* 1906 [1] 934).
- 27) 1,3-Dioximido-2,2-[1,2-Xylylen]-2,3-Dihydroinden. Sm. 215° (*B.* 40, 3891 *C.* 1907 [2] 1495).
- 28) 5-Keto-4-[4-Oxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihidropyrazol. Sm. 226° (*B.* 33, 866). — \*IV, 637.
- 29) 2-Acetyl-3-Keto-1,5-Diphenyl-2,3-Dihidropyrazol. Sm. 65—66° (*Soc.* 85, 1496 *C.* 1905 [1] 173).
- 30) 5-Keto-4-Benzoyl-3-Methyl-1-Phenyl-4,5-Dihidropyrazol. Sm. 116 bis 117° (u. 86°). Na (*A.* 266, 127; *B.* 28, 705; *B.* 36, 526 *C.* 1903 [1] 641; *B.* 41, 2669 *C.* 1908 [2] 1363). — IV, 550; \*IV, 360.
- 31) 3,5-Diketo-4-Benzyliden-1-[4-Methylphenyl]tetrahydropyrazol. Sm. 253° (*B.* 30, 1021). — IV, 808.
- 32) Methyläther d. 5-Keto-4-[4-Oxybenzyliden]-2-Phenyl-4,5-Dihydroimidazol. Sm. 283° (*A.* 337, 298 *C.* 1905 [1] 379).
- 33) 3,4-Diketo-2-Äthyliden-1,3-Di[4-Methylphenyl]tetrahydroimidazol. Sm. 274—275° (*B.* 33, 620, 1301). — \*II, 209.
- 34) 6-Oxy-4-Phenyl-2-[ $\alpha$ -Oxybenzyl]-1,3-Diazin. Sm. 218° (*B.* 23, 2951). — IV, 1041.
- 35) 5[oder 6]-Methyl-2-Furanyl-1-Furylbenzimidazol (Tolufurfuraldehydin). Sm. 128,5°. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (*B.* 11, 595, 1658). — IV, 620.
- 36) 8-Oxy-*p*-Benzoylamidomethylechinolin. Sm. 186° (*A.* 343, 251 *C.* 1906 [1] 925).
- 37) Methyläther d. 5-Benzoylamido-8-Oxychinolin. Sm. 268—269° (*J. pr.* [2] 48, 27). — IV, 912.
- 38) Methyläther d. 3-Acetyl-2-[2-Oxyphenyl]-1,4-Benzdiazin. Sm. 136 bis 137° u. Zers. (*B.* 40, 2721 *C.* 1907 [2] 326).
- 39) Pseudobase (aus 4-Acetylamido-1,2-Naphtochinon u. 4-Amido-3-Oxy-1-Methylbenzol). Zers. bei 160° (*B.* 40, 2089 *C.* 1907 [2] 153).
- 40) Methylat d. Pseudobase  $C_{16}H_{11}O_2N_2$ . Sm. 170° u. Zers. (*B.* 40, 2087 *C.* 1907 [2] 152).

- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** 41) **3-Amido-4-[1-Naphtyl]amidobenzol-1-Carbonsäure.** Zers. bei 90° (B. 23, 3458). — II, 1275.  
 42) **5-Methyl-1,3-Diphenylpyrazol-4-Carbonsäure.** Sm. 194° (B. 18, 933). — IV, 949.  
 43) **3-Methyl-1,5-Diphenylpyrazol-4-Carbonsäure.** Sm. 205°. K, Ag (B. 18, 313). — IV, 948.  
 44) **5-Phenyl-1-[2-Methylphenyl]pyrazol-3-Carbonsäure.** Sm. 170—171° (B. 26, 1884). — IV, 891.  
 45) **5-Phenyl-1-[4-Methylphenyl]pyrazol-3-Carbonsäure.** Sm. 194—195° (B. 26, 1881). — IV, 892.  
 46) **3,6-Diphenyl-4,5-Dihydro-1,2-Diazin-4-Carbonsäure.** Sm. 205—206° (B. 40, 4602 C. 1908 [1] 265).  
 47) **Äthylester d. 2-Phenyl-1,4-Benzdiazin-3-Carbonsäure.** Sm. 65 bis 66° (C. r. 144, 213 C. 1907 [1] 1035).  
 48) **Phenylester d. 2-Naphtylhydrazidoameisensäure** (Bl. [3] 23, 54). — \*IV, 614.  
 49) **Benzoat d. 3-Oxy-5-Methyl-1-Phenylpyrazol.** Sm. 64—65° (A. 338, 278 C. 1905 [1] 1160).  
 50) **Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol.** Sm. 75—76° (A. 266, 125; 293, 44; J. pr. [2] 54, 202; [2] 55, 145). — IV, 513; \*IV, 329.  
 51) **Phenylamid d.  $\gamma$ -Cyan- $\beta$ -Keto- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure.** Sm. 145° (Soc. 91, 1903 C. 1908 [1] 251).  
 52) **Phenylamid d. 2-Oxy-3-Methylchinolin-4-Carbonsäure.** Sm. 314 bis 315° (B. 40, 1094 C. 1907 [1] 1269).  
 53) **Phenylimid d.  $\beta$ -Phenylamidoglutakonsäure.** Sm. 275° u. Zers. (B. 23, 3764). — II, 420.  
 54) **Phenylimid d. Phenylamidomethylmaleinsäure.** Sm. 158—160° (157°) (B. 22, 3351; A. 295, 60; B. 35, 1627 C. 1902 [1] 1273). — II, 441; \*II, 232.  
 55) **Anhydroderivat d.  $\alpha\gamma$ -Di[2-Amidophenyl]propan- $\beta\beta$ -Dicarbonsäure.** Zers. bei 350—360° (B. 20, 441). — II, 1893.  
 56) **Verbindung (aus Indigo).** Sm. 209° u. Zers. (B. 42, 1569 C. 1909 [1] 1934).
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>** C 66,7 — H 4,6 — O 10,4 — N 18,3 — M. G. 306.  
 1) **8-Nitro-P-[4-Methylphenyl]azo-2-Amidonaphtalin.** Sm. 253° (Soc. 89, 1509 C. 1906 [2] 1765).  
 2) **4-Phenylhydrazon-1-Acetyl-5-Keto-3-Phenyl-4,5-Dihydropyrazol.** Sm. 199° (J. pr. [2] 52, 33). — IV, 1490.  
 3) **3,5-Di[Benzoylamido]pyrazol.** Sm. 207—208° (B. 37, 3525 C. 1904 [2] 1314).  
 4) **4-Phenylazo-5-Methyl-1-Phenylpyrazol-3-Carbonsäure.** Sm. 206 bis 207° u. Zers. (A. 278, 283). — IV, 1490.  
 5) **Phenylamid d. 4-Oximido-1,4-Dihydronaphtalin-1-Hydrazoncarbonsäure.** Sm. 242° (A. 343, 198 C. 1906 [1] 838).
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>6</sub>** C 61,1 — H 4,2 — O 9,6 — N 25,1 — M. G. 334.  
 1) **4,4'-Di[Acetylamido]-2,2'-Bisazodiphenylmethan.** Sm. oberhalb 300° (C. r. 146, 1409 C. 1908 [2] 511).
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>Br<sub>2</sub>** 1)  **$\gamma\delta$ -Dibrom- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure.** Sm. 180—181° (174°) u. Zers. (A. 306, 209; J. pr. [2] 68, 527 C. 1904 [1] 451; B. 37, 1124 C. 1904 [1] 1210; A. 336, 227 C. 1904 [2] 1733). — \*II, 875.  
 2)  **$\alpha\delta$ -Dibrom- $\alpha\delta$ -Diphenyl- $\beta$ -Buten- $\beta$ -Carbonsäure.** Sm. 194° u. Zers. (A. 306, 182). — \*II, 876.  
 3) **Methylester d.  $\alpha\beta$ -Dibrom- $\gamma\gamma$ -Diphenylcrotonsäure.** Sm. 79—80° (Am. 19, 647). — \*II, 875.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** C 69,4 — H 4,8 — O 16,3 — N 9,5 — M. G. 294.  
 1) **4-Amido-1-Acetylmethylamido-9,10-Anthrachinon** (D.R.P. 194253 C. 1908 [1] 1013).  
 2) **5-Amido-1-Acetylmethylamido-9,10-Anthrachinon** (D.R.P. 194253 C. 1908 [1] 1013).  
 3) **Methyläther d. 3,5-Diketo-4-[4-Oxybenzyliden]-1-Phenyltetrahydropyrazol.** Sm. 246° (B. 30, 1018). — IV, 955.  
 4) **2,4,5-Triketo-1,3-Di[2-Methylphenyl]tetrahydroimidazol** (Di-o-Tolylparabansäure). Sm. 202,5—203,5° (J. pr. [2] 41, 82; B. 12, 1856). — II, 467.

- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>** 5) **2,4,5-Triketo-1,3-Di[4-Methylphenyl]tetrahydroimidazol**(Di-p-Tolyl-parabansäure). Sm. 144° (B. 10, 1590; 11, 977; 31, 138). — II, 502; \*II, 276.
- 6) **3-Formyl-2,5-Diketo-1-Methyl-4,4-Diphenyltetrahydroimidazol**. Sm. 162–163° (B. 41, 1390 C. 1908 [1] 2104).
- 7) **1[oder 3]-Acetyl-2,5-Diketo-4,4-Diphenyltetrahydroimidazol**. Sm. 215–217° (B. 41, 1386 C. 1908 [1] 2103).
- 8) **3,6-Diketo-2-Benzoyl-1-Phenylhexahydro-1,2-Diazin**. Sm. 185° (B. 26, 677). — IV, 703.
- 9) **α-Oxy-α-[2-Nitrophenyl]-β-[2-Chinolyl]äthan**. Sm. 168°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 36, 1668 C. 1903 [2] 49). — \*IV, 265.
- 10) **α-Oxy-α-[4-Nitrophenyl]-β-[2-Chinolyl]äthan**. Sm. 160°. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (B. 20, 2046). — IV, 454.
- 11) **5-Methyl-3-[2-Oxyphenyl]-1-Phenylpyrazol-4-Carbonsäure**. Sm. 160° u. Zers. (C. 1906 [1] 1436).
- 12) **2-Keto-6-Methyl-1-[4-Methylphenyl]-1,2-Dihydro-1,4-Benzdiazin-3-Carbonsäure**. Sm. 194°. Ba + 4½ H<sub>2</sub>O, Zn + 2H<sub>2</sub>O (B. 39, 1321 C. 1906 [1] 1738).
- 13) **2-Keto-7-Methyl-1-[4-Methylphenyl]-1,2-Dihydro-1,4-Benzdiazin-3-Carbonsäure**. Sm. 193°. Ba + 1½ H<sub>2</sub>O (B. 39, 1323 C. 1906 [1] 1738).
- 14) **1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-4-Äthyl-β-Carbonsäure**. Sm. 210°. Ca + H<sub>2</sub>O, Ag (B. 18, 804). — IV, 718.
- 15) **αγ-Lakton d. α-Benzoylamido-β-Phenylamido-γ-Oxypropen-α-Carbonsäure** (Benzoylamidophenylamidotetransäure). Sm. 191–192° (A. 312, 143). — \*II, 749.
- 16) **1,2<sup>2</sup>-Anhydrid d. 5[oder 6]-Methyl-2-[3,4-Dimethoxyphenyl]benzimidazol-2<sup>2</sup>-Carbonsäure** (Toluylendimethoxyphthalamidon). Sm. 228°. + C<sub>2</sub>H<sub>5</sub>O (B. 24, 629; 25, 1990). — IV, 618.
- 17) **Äthylester d. δζ-Dicyan-ε-Keto-α-Phenyl-αγ-Hexadien-ζ-Carbonsäure**. Sm. 159–160° (B. 41, 2404 C. 1908 [2] 858).
- 18) **Äthylester d. 3,5-Diphenyl-1,2,4-Oxdiazol-5<sup>2</sup>-Carbonsäure**. Fl. (B. 18, 2466). — II, 1815.
- 19) **Äthylester d. 1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-4-Carbonsäure**. Sm. 115° (B. 41, 3260 C. 1908 [2] 1432).
- 20) **Nitril d. β-[2-Furanyl]-α-[4-Diacetylamidophenyl]akrylsäure**. Sm. 203–204° (B. 23, 2855). — III, 713.
- 21) **2-Methylphenylimid d. 3-Acetylamidobenzol-1,2-Dicarbonsäure**. Sm. 214–215° (C. 1909 [1] 1758).
- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>N<sub>4</sub>** C 63,3 — H 4,3 — O 14,9 — N 17,4 — M. G. 322.
- 1) **4-[4-Nitrobenzyliden]amido-5-Keto-1-Methyl-3-Phenyl-4,5-Dihydropyrazol**. Zers. bei 250° (A. 352, 200 C. 1907 [1] 1050).
- 2) **5-[4-Nitro-2-Acetylamidophenyl]amidochinolin**. Sm. 215° (J. pr. [2] 77, 486 C. 1908 [2] 75).
- 3) **8-[4-Nitro-2-Acetylamidophenyl]amidochinolin**. Sm. 172° (J. pr. [2] 77, 478 C. 1908 [2] 73).
- 4) **4-Nitrophenylhydrazon d. Verb. C<sub>11</sub>H<sub>9</sub>O<sub>2</sub>N**. Sm. 200° u. Zers. (C. 1905 [2] 627).
- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>Br<sub>2</sub>** 1) **3,4-Methylenäther d. γδ-Dibrom-β-Keto-α-Phenyl-δ-[3,4-Dioxyphenyl]butan**. Sm. 135° (M. 22, 758). — \*III, 173.
- 2) **Trimethyläther d. p-Dibrom-1,5,6-Trioxyphenanthren**. Sm. 139 bis 141° (140–142°) (B. 33, 183; B. 40, 3351 C. 1907 [2] 921). — \*II, 627.
- 3) **Trimethyläther d. p-Dibrom-3,4,6-Trioxyphenanthren**. Sm. 122 bis 123° (B. 35, 4407 C. 1903 [1] 342; B. 35, 4411 C. 1903 [1] 343).
- 4) **Acetat d. βγ-Dibrom-α-Keto-α-Phenyl-γ-[2-Oxyphenyl]propan**. Sm. 134–135° (B. 29, 235). — III, 228.
- 5) **Acetat d. βγ-Dibrom-α-Keto-α-Phenyl-γ-[3-Oxyphenyl]propan**. Sm. 170–171° (B. 29, 235). — III, 229.
- 6) **Acetat d. βγ-Dibrom-α-Keto-α-Phenyl-γ-[4-Oxyphenyl]propan**. Sm. 148° (B. 29, 236). — III, 229.
- 7) **Acetat d. βγ-Dibrom-α-Keto-γ-Phenyl-α-[2-Oxyphenyl]propan**. Sm. 105–107° (B. 31, 1758). — \*III, 167.



- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>Br<sub>4</sub>** 1) 4-Benzoat d. *p*-Dibrom-3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]benzol-3-Methyläther. Sm. 113° (B. 21, 1395). — II, 1150.
- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>S** 1) 1-Benzylnaphtalinsulfonsäure. K + H<sub>2</sub>O, Pb (B. 26, 5). — II, 281.  
2) 2-Naphtylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 125° (B. 34, 2999).
- C<sub>17</sub>H<sub>14</sub>O<sub>4</sub>N<sub>2</sub>** C 65,8 — H 4,5 — O 20,6 — N 9,0 — M. G. 310.  
1) 2,4-Dinitro-1-Methylbenzol + Naphtalin. Sm. 60–61° (A. 215, 380). — II, 182.  
2) Acetylfurfurin. Sm. 250° (B. 10, 1189; J. pr. [2] 27, 315). — III, 722.  
3)  $\gamma$ -Phenylhydrazon- $\alpha$ -[3,4-Dioxyphenyl]propen-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 155° (B. 28, 1192). — IV, 718.  
4) 4-Acetoxybenzol-3-Akrylsäure. Sm. 167–169° (B. 37, 4126 C. 1904 [2] 1735).  
5) 3-Nitro-2,4,6-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure (Nitrophthalmesidil). Sm. 210° (B. 15, 1018). — II, 1806.  
6) Diacetat d. 7,8-Dioxy-2-Methyl-5,10-Naphtdiazin. Sm. 160° (B. 24, 1338). — IV, 1010.  
7) 4-Benzoat d. 4-Oximido-3-[4-Oxyphenyl]-4,5-Dihydroisoxazol-3-Methyläther. Sm. 143° (A. 358, 66 C. 1908 [1] 650).  
8) Phenylhydrazid d. 4-Keto-7-Methyl-3,4-Dihydro-1,2-Benzpyron-3-Carbonsäure. Sm. 232° (A. 367, 230 C. 1909 [2] 1237).  
C 60,3 — H 4,1 — O 18,9 — N 16,6 — M. G. 335.
- C<sub>17</sub>H<sub>14</sub>O<sub>4</sub>N<sub>4</sub>** 1)  $\epsilon$ -[3-Nitrophenyl]imido- $\alpha$ -[3-Nitrophenyl]amido- $\alpha\gamma$ -Pentadien. HBr (J. pr. [2] 70, 39 C. 1904 [2] 1235).  
2)  $\epsilon$ -[4-Nitrophenyl]imido- $\alpha$ -[4-Nitrophenyl]amido- $\alpha\gamma$ -Pentadien. HBr (J. pr. [2] 70, 28 C. 1904 [2] 1234).  
3) 5-Ureido-2,4,6-Triketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 217° u. Zers. (C. 1906 [2] 1404; Soc. 91, 1341 C. 1907 [2] 1065).  
4) Methylester d. 5-[ $\alpha$ -Cyan-4-Nitrobenzyliden]imido-5-Methylamido-benzol-1-Carbonsäure. Sm. 200–201° (B. 42, 2755 C. 1909 [2] 818).  
5) Verbindung (aus 4-Nitrobenzaldehyd u. ?-Phenylazo- $\beta$ -Amidocrotonsäure-äthylester). Sm. 176–177° (B. 34, 3603). — \*IV, 461.  
6) Verbindung (aus 5-Keto-1-Phenyl-4,5-Dihydro-1,2,3-Triazol-4-Carbonsäure). Sm. 168° (A. 335, 91 C. 1904 [2] 1231).  
C 55,7 — H 3,8 — O 17,5 — N 22,9 — M. G. 366.
- C<sub>17</sub>H<sub>14</sub>O<sub>4</sub>N<sub>6</sub>** 1) Imid d.  $\alpha$ -[4-Nitrophenyl]azo- $\beta$ -Phenylhydrazonpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 175° (B. 34, 90). — \*IV, 1064.
- C<sub>17</sub>H<sub>14</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Methylenester d. *p*-Chlor-1-Methylbenzol-2-Carbonsäure. Sd. 125°<sub>15</sub> (C. r. 134, 717 C. 1902 [1] 975).  
2) Methylenester d. *p*-Chlor-1-Methylbenzol-3-Carbonsäure. Sd. 130 bis 132°<sub>20</sub> (C. r. 134, 717 C. 1902 [1] 975).  
3) Methylenester d. *p*-Chlor-1-Methylbenzol-4-Carbonsäure. Sd. 135 bis 136°<sub>20</sub> (C. r. 134, 717 C. 1902 [1] 975).  
4) Methylenester d. Phenylchloroessigsäure. Sd. 138–140°<sub>15</sub> (C. r. 134, 717 C. 1902 [1] 975).
- C<sub>17</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>2</sub>** 1) *p*-Dibrom-2,2'-Dimethyldiphenylmethan-5,5'-Dicarbonsäure. Sm. 172–173° (Ar. 245, 583 C. 1908 [1] 526).  
2) 2-Acetate d. 5,5'-Dibrom-2,2'-Dioxydiphenylketon. Sm. 105–107° (B. 39, 2361 C. 1906 [2] 526).  
3) Diacetat d. 3,5-Dibrom- $\alpha$ ,4-Dioxydiphenylmethan. Sm. 109° (A. 334, 384 C. 1904 [2] 1052).  
4)  $\alpha$ -Benzoat d. *p*-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3,4-Methylenäther. Sm. 142–143° (C. 1903 [1] 970).  
5) 2-Acetate-5-Benzoat d. 3,6-Dibrom-2,5-Dioxy-1,4-Dimethylbenzol. Sm. 162–163° (B. 35, 439 C. 1902 [1] 641).
- C<sub>17</sub>H<sub>14</sub>O<sub>4</sub>S** 1)  $\gamma$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha\delta$ -Pentadien-*p*-Sulfonsäure. Sm. 140° u. Zers. Na + 4H<sub>2</sub>O (B. 36, 1493 C. 1903 [1] 1350).
- C<sub>17</sub>H<sub>14</sub>O<sub>5</sub>N<sub>2</sub>** C 62,6 — H 4,3 — O 24,5 — N 8,6 — M. G. 326.  
1)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Oxy-3-Diazoanhydrid-4-Methoxyphenyl]-akrylsäure. Zers. bei 145° (B. 35, 4408 C. 1903 [1] 343). — \*IV, 1127.  
2)  $\alpha$ -Phenylamido- $\alpha$ -Phenylimido- $\beta$ -Ketopropan-2',2''-Dicarbonsäure (Pyrotraubendianthranilsäure). Sm. 295° (B. 30, 1190). — \*II, 786.  
3) Tartranilbenzamsäure. Sm. 245–246° u. Zers. (A. 232, 163). — II, 1266.

- $C_{17}H_{14}O_5N_2$  4) Phenylamidoformiat d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha$ -[2-Furanyl]äthan (Ph. d.  $\alpha$ -Furoinoxim). Sm.  $56^\circ$  (B. 38, 81 C. 1905 [1] 533).
- 5) Phenylamidoformiat d. isom.  $\beta$ -Oximido- $\alpha$ -Oxy- $\alpha$ -[2-Furanyl]äthan (Ph. d.  $\beta$ -Furoinoxim). Sm.  $120^\circ$  (B. 38, 81 C. 1905 [1] 533).
- $C_{17}H_{14}O_5N_4$  C 57,6 — H 4,0 — O 22,6 — N 15,8 — M. G. 354.
- 1) Amid d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta$ -Carbonsäure. Sm.  $230$ — $231^\circ$  (G. 32 [2] 360 C. 1903 [1] 629).
- $C_{17}H_{14}O_6N_2$  C 59,6 — H 4,1 — O 28,1 — N 8,2 — M. G. 342.
- 1) 2,2'-Dinitro-4,4'-Diacetyldiphenylmethan. Sm.  $151^\circ$  (C. r. 146, 1325 C. 1908 [2] 416).
- 2) 2-Keto-5,6-Dioxy-1-[3-Nitro-4-Dimethylamidobenzyliden]-1,2-Dihydrobenzofuran. Sm. oberhalb  $250^\circ$  (B. 37, 824 C. 1904 [1] 1152).
- 3) Malonyldi-2-Amidobenzol-1-Carbonsäure. Sm.  $242^\circ$  u. Zers.  $Na_2 + 3H_2O$ ,  $Ag_2$  (M. 26, 329 C. 1905 [1] 1147).
- 4) Malonyldi-3-Amidobenzol-1-Carbonsäure (Malondibenzamsäure). Zers. bei  $258$ — $259^\circ$  (A. 232, 144; M. 26, 330 C. 1905 [1] 1147). — II, 1265.
- 5) Malonyldi-4-Amidobenzol-1-Carbonsäure. Zers. bei  $276^\circ$  (M. 26, 329 C. 1905 [1] 1147).
- 6) Methenyldianthranilelessigsäure. Sm.  $190^\circ$  (C. 1902 [2] 122).
- 7) Äthylester d.  $\alpha\beta$ -Di[4-Nitrophenyl]akrylsäure. Sm.  $164^\circ$  (B. 42, 3598 C. 1909 [2] 1804).
- 8) Äthylester d. 4-Nitrobenzoximidophenylelessigsäure. Sm.  $112$ — $113^\circ$  (B. 42, 1936 C. 1909 [2] 200).
- 9) Äthylester d. isom. 4-Nitrobenzoximidophenylelessigsäure. Sm.  $137$  bis  $138^\circ$  (B. 42, 1936 C. 1909 [2] 200).
- $C_{17}H_{14}O_6N_4$  C 55,1 — H 3,8 — O 25,9 — N 15,1 — M. G. 370.
- 1) 1-Amidonaphthalin + 2,4,6-Trinitro-1-Methylbenzol. Sm.  $141,5^\circ$  (Soc. 79, 530).
- 2) 2-Amidonaphthalin + 2,4,6-Trinitro-1-Methylbenzol. Sm.  $113,5^\circ$  (Soc. 79, 530).
- 3) 2,4-Diketo-5,5-Di[ $\beta$ -Nitrobenzyl]tetrahydroimidazol. Sm.  $285^\circ$  u. Zers. (G. 26 [1] 202). — \*II, 871.
- 4) Acetat d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Methylphenyl]benzimidazol. Sm.  $139,5^\circ$  (Soc. 93, 1673 C. 1908 [2] 1922).
- $C_{17}H_{14}O_6Br_2$  1) 3,4-Methylenäther-2',4',6'-Trimethyläther d.  $\beta$ -Dibrom-3,4,2',4',6'-Pentaoxydiphenylketon. Sm.  $159^\circ$  (A. 199, 51). — III, 209.
- $C_{17}H_{14}O_6Br_4$  1) Verbindung (aus Espartoharz) (Soc. 41, 94). — I, 1080.
- $C_{17}H_{14}O_7N_2$  C 57,0 — H 3,9 — O 31,3 — N 7,8 — M. G. 358.
- 1) Phenylhydrazon d. 5-Oxy-1-Methylbenzol-2-Ketocarbonsäure-3,4-Dicarbonsäure. Phenylhydrazinsalz (B. 42, 1625 C. 1909 [1] 1880).
- 2) Dimethylester d. 4-[3-Nitrobenzoyl]amidobenzol-1,2-Dicarbonsäure. Sm.  $147^\circ$  (C. 1906 [2] 117).
- 3) Dimethylester d. 4-[4-Nitrobenzoyl]amidobenzol-1,2-Dicarbonsäure. Sm.  $202^\circ$  (C. 1906 [2] 117).
- 4) Diacetat d. Acetyl-5,6-Dioxy-1,4-Diketotetrahydronaphtopyrazol. Sm.  $173^\circ$  (B. 32, 2299). — \*IV, 664.
- $C_{17}H_{14}O_7N_4$  C 52,8 — H 3,6 — O 29,0 — N 14,5 — M. G. 386.
- 1) 1-Amidonaphthalin + 2,4,6-Trinitro-1-Oxybenzylmethyläther. Sm.  $75^\circ$  (Soc. 79, 532).
- 2)  $\beta$ -Dinitro-1-[3-Nitrobenzoyl]-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm.  $184$ — $185^\circ$  (B. 25, 1270). — IV, 204.
- 3) Äthylester d. 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol-1<sup>2</sup>-Carbonsäure. Sm.  $216^\circ$  (Soc. 95, 1041 C. 1909 [2] 518).
- 4) Äthylester d. 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol-1<sup>3</sup>-Carbonsäure. Sm.  $146^\circ$  (Soc. 95, 1042 C. 1909 [2] 518).
- 5) Äthylester d. 4,7-Dinitro-6-Oxy-2-Methyl-1-Phenylbenzimidazol-1<sup>4</sup>-Carbonsäure. Sm.  $242^\circ$  u. Zers. (Soc. 95, 1042 C. 1909 [2] 518).
- 6) 6-Acetat d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Oxyphenyl]benzimidazol-1<sup>2</sup>-Methyläther. Sm.  $162$ — $163^\circ$  (Soc. 93, 1674 C. 1908 [2] 1922).
- $C_{17}H_{14}O_8N_2$  C 54,5 — H 3,7 — O 34,2 — N 7,5 — M. G. 374.
- 1)  $\alpha\gamma$ -Di[2-Nitrophenyl]propan- $\beta\beta$ -Dicarbonsäure (B. 20, 436; R. 6, 89). — II, 1893.
- 2)  $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta\beta$ -Dicarbonsäure (B. 20, 434). — II, 1893.

- C<sub>17</sub>H<sub>14</sub>O<sub>8</sub>N<sub>2</sub>** 3) *p*-Dinitro-2,2'-Dimethyldiphenylmethan-5,5'-Dicarbonsäure. Sm. 284° (*Ar.* 245, 583 *C.* 1908 [1] 526).  
 4) Di[4-Oxy-3-Carboxylphenylamid] d. Malonsäure. Sm. 262—263° (*G.* 36 [2] 736 *C.* 1907 [1] 1122).
- C<sub>17</sub>H<sub>14</sub>O<sub>9</sub>N<sub>2</sub>** C 52,3 — H 3,6 — O 36,9 — N 7,2 — M. G. 390.  
 1) Di[4-Nitrobenzoat] d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 137° (*A.* 335, 285 *C.* 1904 [2] 1285).
- C<sub>17</sub>H<sub>14</sub>O<sub>10</sub>N<sub>2</sub>** C 50,2 — H 3,4 — O 39,4 — N 6,9 — M. G. 406.  
 1) Dimethylester d. Dioxymalondi[2-Nitrophenyläther]säure. Sm. 131° (*B.* 40, 3156 *C.* 1907 [2] 980).  
 2) Dimethylester d. Dioxymalondi[3-Nitrophenyläther]säure. Sm. 100° (*B.* 40, 3157 *C.* 1907 [2] 980).  
 3) Dimethylester d. Dioxymalondi[4-Nitrophenyläther]säure. Sm. 175° (*B.* 40, 3158 *C.* 1907 [2] 980).  
 4) isom. Dimethylester d. Dioxymalondi[4-Nitrophenyläther]säure. Sm. 136° (*B.* 40, 3159 *C.* 1907 [2] 980).
- C<sub>17</sub>H<sub>14</sub>O<sub>10</sub>N<sub>4</sub>** C 47,0 — H 3,2 — O 36,8 — N 12,9 — M. G. 414.  
 1) *p*-Tetranitro- $\alpha\alpha$ -Di[4-Methylphenyl]propionsäure + xH<sub>2</sub>O. NH<sub>4</sub>, Ba, Zn, Ag (*B.* 15, 1478). — II, 1472.
- C<sub>17</sub>H<sub>14</sub>NCl** 1) Chlormethylat d. Base C<sub>16</sub>H<sub>11</sub>N (aus Morphin). 2 + PtCl<sub>4</sub> (*B.* 34, 1163). — \*III, 668.
- C<sub>17</sub>H<sub>14</sub>NBr** 1) *p*-Brom-4-Methylphenyl-1-Naphtylamin. Sm. 220° (*J. pr.* [2] 64, 510 *C.* 1902 [1] 258).
- C<sub>17</sub>H<sub>14</sub>NJ** 1) Jodmethylat d. Fluorencinolin + H<sub>2</sub>O. Zers. bei 241° (*B.* 35, 3278 *C.* 1902 [2] 1261). — \*IV, 272.
- C<sub>17</sub>H<sub>14</sub>N<sub>3</sub>Cl<sub>2</sub>** 1)  $\varepsilon$ -[3-Chlorphenyl]imido- $\alpha$ -[3-Chlorphenyl]amido- $\alpha\gamma$ -Pentadien. Sm. 109°. HCl (*A.* 336, 322 *C.* 1904 [2] 1149).  
 2)  $\varepsilon$ -[4-Chlorphenyl]imido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha\gamma$ -Pentadien. Sm. 108—110° u. Zers. (141°). HCl (*A.* 333, 319 *C.* 1904 [2] 1149; *A.* 338, 139 *C.* 1905 [1] 455).
- C<sub>17</sub>H<sub>14</sub>N<sub>3</sub>S** 1) *s*-Phenyl-1-Naphtylthioharnstoff. Sm. 162—163° (158—159°) (*J.* 1858, 350; *B.* 15, 1414; 21, 1869). — II, 609.  
 2) *s*-Phenyl-2-Naphtylthioharnstoff. Sm. 165° (155—157°; 182—183°) (*B.* 15, 1417; 25, 1468; *C.* 1900 [2] 531; 1901 [2] 198). — II, 619.  
 3) 5-Thiocarbonyl-3-Methyl-4-Benzyliden-1-Phenyl-4,5-Dihydropyrazol. Sm. 183—184° (*A.* 361, 277 *C.* 1908 [2] 521).
- C<sub>17</sub>H<sub>14</sub>N<sub>3</sub>Cl** 1) Chlormethylat d. 9-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 264° (*B.* 38, 1813 *C.* 1905 [1] 1655).  
 2) 7-Chlormethylat d. 10-Amido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl<sub>4</sub>, +AuCl<sub>3</sub> (*B.* 31, 3096). — \*IV, 867.  
 3) 3-Chlormethylat d. 3-Phenyl- $\beta$ -Naphtisotriazol. Sm. 183° u. Zers. + ClJ (*A.* 255, 345). — IV, 1171.
- C<sub>17</sub>H<sub>14</sub>N<sub>3</sub>J** 1) 3-Jodmethylat d. 3-Phenyl- $\beta$ -Naphtisotriazol. Sm. 196° u. Zers. (*A.* 255, 345). — IV, 1171.
- C<sub>17</sub>H<sub>14</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) Nitril d.  $\alpha\gamma$ -Di[*p*-Chlor-4-Amidophenyl]propan- $\beta\beta$ -Dicarbonsäure. Sm. 200—201° (*G.* 35 [1] 124 *C.* 1905 [1] 1384).
- C<sub>17</sub>H<sub>14</sub>N<sub>4</sub>S** 1) *s*-Di[4-Cyanmethylphenyl]thioharnstoff. Sm. 191° (*B.* 39, 4375 *C.* 1907 [1] 337).  
 2) Amid d. 5-[ $\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 182—183°. + C<sub>2</sub>H<sub>6</sub>O. — IV, 1170.
- C<sub>17</sub>H<sub>14</sub>Cl<sub>2</sub>Br<sub>2</sub>** 1)  $\gamma\gamma$ -Dichlor- $\delta\delta$ -Dibrom- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Penten. Sm. 153° u. Zers. (*B.* 39, 2990 *C.* 1906 [2] 1428).
- C<sub>17</sub>H<sub>16</sub>ON** C 81,9 — H 6,0 — O 6,4 — N 5,6 — M. G. 249.  
 1) d-2-Oxy-1-[ $\alpha$ -Amidobenzyl]naphtalin. Sm. 137°. HCl (*G.* 36 [2] 392 *C.* 1906 [2] 1614; *G.* 36 [2] 668 *C.* 1907 [1] 1042).  
 2) l-2-Oxy-1-[ $\alpha$ -Amidobenzyl]naphtalin. Sm. 136—137°. HCl (*G.* 36 [2] 392 *C.* 1906 [2] 1614; *G.* 36 [2] 668 *C.* 1907 [1] 1042).  
 3) r-2-Oxy-1-[ $\alpha$ -Amidobenzyl]naphtalin. Sm. 125° u. Zers. HCl, (HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), Pikrat (*G.* 31 [1] 385; *G.* 33 [1] 2 *C.* 1903 [1] 924; *G.* 36 [2] 392 *C.* 1906 [2] 1614; *G.* 36 [2] 666 *C.* 1907 [1] 1042).  
 4) 2-Oxy-1-[2-Naphtyl]amidomethylbenzol. Sm. 147°. HCl (*A.* 241, 352). — II, 742.  
 5) 4-Oxy-1-[2-Naphtyl]amidomethylbenzol. Sm. 117° (*A.* 241, 357). — II, 754.



- C<sub>17</sub>H<sub>15</sub>ON** 6)  $\alpha$ -Oxy- $\alpha$ -[2-Naphtyl]amido- $\alpha$ -Phenylmethan. HCl (B. 35, 989 C. 1902 [1] 870). — \*III, 23.
- 7) 4-Amidophenyl-[4-Oxy-1-Naphtyl]methan. Sm. 174—175°. HCl (M. 23, 982 C. 1903 [1] 238).
- 8) Methyläther d. 1-[4-Oxyphenyl]amidonaphtalin. Sm. 110° (D.R.P. 80669). — \*II, 400.
- 9) Methyläther d. 2-[2-Oxyphenyl]amidonaphtalin. Sm. 68° (J. pr. [2] 75, 273 C. 1907 [2] 408).
- 10) Methyläther d. 2-[4-Oxyphenyl]amidonaphtalin. Sm. 104° (J. pr. [2] 75, 273 C. 1907 [2] 408).
- 11) Methyläther d. 7-Phenylamido-2-Oxynaphtalin. Sm. 137—138° (B. 26, 3088). — II, 886.
- 12)  $\delta$ -Benzoylamido- $\alpha$ -Keto- $\alpha$ -Phenylbutan. Sm. 125—126° (B. 41, 519 C. 1908 [1] 1164).
- 13)  $\epsilon$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\gamma$ -Pentadiën. Sm. 131° (135°) (B. 28, 1730; C. 1906 [2] 1842; 1908 [2] 711). — III, 251.
- 14) isom.  $\epsilon$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\gamma$ -Pentadiën. Sm. 139—140° (C. 1908 [2] 711).
- 15)  $\gamma$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\delta$ -Pentadiën. Sm. 164—165° (G. 27 [2] 270).
- 16) isom.  $\gamma$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\delta$ -Pentadiën. Sm. 142—144° (151°) (G. 27 [2] 268; 29 [2] 394; C. 1903 [1] 399). — \*III, 190.
- 17) 2-[ $\alpha$ -Oximidobenzyl]naphtalin. Sm. 133° (Bl. [4] 3, 738 C. 1908 [2] 600).
- 18) 2-Keto-3-Methyl-1,5-Diphenyl-2,3-Dihydropyrrol. Sm. 128—130° (Bl. [3] 19, 395). — \*IV, 208.
- 19) 2-Äthyl-4,5-Diphenyloxazol. Sm. 32° (Soc. 63, 473). — IV, 444.
- 20) 3-Acetyl-1-Methyl-2-Phenylindol. Sm. 136° (A. 253, 21). — IV, 424.
- 21) 3-Keto-1-Benzyliden-2-Äthyl-1,3-Dihydroisoindol (Benzalphaltäthylimidin). Sm. 75—77° (B. 18, 2435). — II, 1709.
- 22)  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Chinolyl]äthan. Sm. 131°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 73, 386 C. 1906 [2] 246).
- 23)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[4-Chinolyl]äthan. Sm. 180—181° (B. 21, 2168). — IV, 444.
- 24)  $\alpha$ -[3-Oxyphenyl]- $\beta$ -[4-Chinolyl]äthan. Sm. 209° (B. 21, 2171). — IV, 444.
- 25)  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[4-Chinolyl]äthan. Sm. 175—177°. HBr (B. 21, 1428, 2171). — IV, 444.
- 26) 4-Oxy-5,8-Dimethyl-3-Phenylchinolin. Sm. 254—256° (C. 1900 [1] 123). — \*IV, 266.
- 27) 7-Oxy-2-Äthyl-4-Phenylchinolin. Sm. 251° (B. 36, 4018 C. 1904 [1] 293).
- 28) Methyläther d. 6-Oxy-4-Phenyl-2-Methylchinolin. Sm. 76°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 28, 1046). — IV, 435.
- 29) Methyläther d. 4-Oxy-6-Methyl-3-Phenylchinolin. Sm. 117° (M. 27, 992 C. 1907 [1] 349).
- 30) Methyläther d. 4-[4-Oxybenzyl]isochinolin. Fl. (2HCl, PtCl<sub>4</sub>) (A. 326, 292 C. 1903 [1] 929). — \*IV, 260.
- 31) Äthyläther d. 4-[2-Oxyphenyl]chinolin. Sm. 80—81°. Pikrat (B. 26, 719; 27, 3041; J. pr. [2] 61, 32, 39). — IV, 429; \*IV, 258.
- 32) Äthyläther d. 1-Oxy-3-Phenylisochinolin. Sm. 45—46°. (2HCl, PtCl<sub>4</sub>) (B. 19, 835). — IV, 431.
- 33) Phenyläther d. 1-Oxy-3-Äthylisochinolin. Fl. Pikrat (B. 27, 2240). — IV, 332.
- 34) Homocapocinchen + xH<sub>2</sub>O. Sm. 184—185° (wasserfrei). HBr + H<sub>2</sub>O (B. 20, 2682; J. pr. [2] 61, 26). — III, 839; \*III, 635.
- 35) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[2-Oxyphenyl]akryläthyläthersäure. Sm. 82° (B. 34, 3087).
- 36) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akryläthyläthersäure. Sm. 72° (B. 34, 3087).
- 37) Nitril d.  $\gamma$ -Keto- $\alpha\beta$ -Diphenylbutan- $\alpha$ -Carbonsäure. Sm. 193° (M. 19, 411). — \*II, 1014.
- 38) Verbindung (aus  $\gamma$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\delta$ -Pentadiën vom Sm. 142 bis 144). Sm. 110—111° (G. 29 [2] 399). — \*III, 190.

$C_{17}H_{15}ON_3$ 

C 73,6 — H 5,4 — O 5,8 — N 15,2 — M. G. 277.

- 1)  $\beta$ -[1-Naphtyl]amido- $\alpha$ -Phenylharnstoff. Sm. 192°. — IV, 926.
- 2)  $\alpha$ -Phenyl- $\beta$ -[2-Amido-1-Naphtyl]harnstoff. Sm. noch nicht bei 335° (B. 22, 1377). — IV, 919.
- 3)  $\alpha$ -Phenyl- $\beta$ -[8-Amido-1-Naphtyl]harnstoff. Sm. 304° (A. 365, 149 C. 1909 [1] 1822).
- 4)  $\alpha$ -Phenyl- $\beta$ -[1-Amido-2-Naphtyl]harnstoff. Sm. noch nicht bei 270° (B. 23, 502). — IV, 919.
- 5) 2,4-Diamido-1-Benzoylamidonaphtalin. HCl,  $H_2SO_4$  (A. 208, 331). — IV, 1162.
- 6) Methyläther d. 2-Amido-1-[2-Oxyphenyl]azonaphtalin. Sm. 129° (Soc. 59, 697). — IV, 1415.
- 7) Methyläther d. 2-Oxyphenylhydrazimido- $\beta$ -Naphtalin. Sm. 133° (B. 18, 3130). — IV, 1575.
- 8) 5-Amido-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 153°. HCl (B. 36, 525 C. 1903 [1] 641). — \*IV, 769.
- 9) 5-Acetylrimido-1,3-Diphenyl-4,5-Dihdropyrazol. Sm. 149° (J. pr. [2] 58, 139). — \*IV, 814.
- 10) 4-Benzylidenamido-5-Keto-3-Methyl-1-Phenyl-4,5-Dihdropyrazol. Sm. 186° (A. 238, 191). — IV, 1108.
- 11) 4-Benzylidenamido-3-Keto-5-Methyl-1-Phenyl-2,3-Dihdropyrazol. Sm. 248° (A. 350, 297 C. 1907 [1] 735).
- 12) 4-Benzylidenamido-5-Keto-1-Methyl-3-Phenyl-4,5-Dihdropyrazol. Sm. 227° (C. 352, 199 C. 1907 [1] 1050).
- 13) Äthyläther d. 6-Oxy-2-Phenyl-4-[2-Pyridyl]-1,3-Diazin. Sm. 120°. (2HCl, PtCl<sub>4</sub>) (B. 34, 4245 C. 1902 [1] 209). — \*IV, 851.
- 14) 3-Keto-2-Äthyl-5,6-Diphenyl-2,3-Dihydro-1,2,4-Triazin. Sm. 105° (A. 283, 29; A. 339, 245 C. 1905 [2] 46).
- 15) 6-Oxy-2,4-Di[4-Methylphenyl]-1,3,5-Triazin. Sm. oberhalb 290° (PINNER, Imidoäther 185). — IV, 1192.
- 16) Monoacetylderivat d. 2-[ $\beta$ -2-Amidophenyläthenyl]benzimidazol. Sm. oberhalb 285° (C. 1904 [1] 103).
- 17) Monoacetylderivat d. 2-[ $\beta$ -4-Amidophenyläthenyl]benzimidazol (C. 1904 [1] 103).
- 18) 4-Oxy-3-Phenylhydrazonmethyl-2-Methylchinolin. HCl (B. 21, 1974). — IV, 372.
- 19) Verbindung (aus 4-Amido-1-Phenylhydrazonmethylbenzol u. Acetessigester). Sm. 195° (J. pr. [2] 56, 110). — IV, 753.

 $C_{17}H_{15}ON_5$ 

C 66,9 — H 4,9 — O 5,2 — N 22,9 — M. G. 305.

- 1)  $\alpha$ -Oximido-4,4'-Di[Methylecyanamidophenyl]methan. Sm. 173° (B. 37, 2674 C. 1904 [2] 443).
- 2) 3-Oximidoamidomethyl-5-[ $\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol. Sm. 203—204° u. Zers. — IV, 1170.
- 3) 2-[ $\alpha$ -Semicarbazonäthyl]-3-Phenyl-1,4-Benzdiazin. Sm. 243° (B. 35, 3318 C. 1902 [2] 1110). — \*IV, 697.

 $C_{17}H_{15}OCl$ 

- 1)  $\epsilon$ -Chlor- $\gamma$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Penten. Sm. 84—95° (B. 36, 2375 C. 1903 [2] 495).
- 2)  $\gamma$ -Chlor- $\gamma$ -Oxy- $\alpha\delta$ -Diphenyl- $\alpha\delta$ -Pentadien. Sm. 56° (B. 40, 2698 C. 1907 [2] 331).
- 3) Hydrochlorid d. Dibenzalaceton (B. 37, 3288 C. 1904 [2] 1038).

 $C_{17}H_{15}OBr$ 

- 1) Hydrobromid d. Dibenzalaceton. Sm. 100° (B. 36, 3537 C. 1903 [2] 1368).
- 2) isom. Hydrobromid d. Dibenzalaceton. Sm. 119—121° (B. 37, 3365 C. 1904 [2] 1122).

 $C_{17}H_{15}OBr_3$ 

- 1)  $\alpha\beta\epsilon$ -Tribrom- $\gamma$ -Keto- $\alpha\delta$ -Diphenylpentan. Sm. 134—137° (B. 37, 3368 C. 1904 [2] 1123).

 $C_{17}H_{15}O_2N$ 

C 77,0 — H 5,7 — O 12,0 — N 5,3 — M. G. 265.

- 1) Methylenäther d.  $\gamma$ -[2-Methylphenyl]imido- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 94—95° (92,5°) (B. 37, 1699 C. 1904 [1] 1497; B. 41, 2380 C. 1908 [2] 890).
- 2) Methylenäther d.  $\gamma$ -[3-Methylphenyl]imido- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 95° (B. 37, 1699 C. 1904 [1] 1497).
- 3) Methylenäther d.  $\gamma$ -[4-Methylphenyl]imido- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 138° (139,5—140,5°) (B. 37, 1700 C. 1904 [1] 1497; B. 41, 2380 C. 1908 [2] 890).

- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N** 4) 2-Oxy-1-[ $\alpha$ -Amido-2-Oxybenzyl]naphtalin. HCl (*G.* 33 [1] 15 *C.* 1903 [1] 925).
- 5) **p-Acetylamido-10-Oxy-2-Methylantracen.** Sm. 170° (*B.* 16, 705). — II, 903.
- 6) **Methyläther d. 9[oder 10]-Acetylamido-3-Oxyphenanthren.** Sm. 150° (*A.* 321, 287 *C.* 1902 [2] 58).
- 7)  **$\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[3-Acetylamidophenyl]propen.** Sm. 104° (*C.* 1906 [2] 1761).
- 8)  **$\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Acetylamidophenyl]propen.** Sm. 179° (*C.* 1906 [2] 1762).
- 9)  **$\gamma$ -Keto- $\gamma$ -[2-Acetylamidophenyl]- $\alpha$ -Phenylpropen.** Sm. 165° (*B.* 28, 2500). — III, 246.
- 10)  **$\gamma$ -Keto- $\alpha$ -[3-Benzoylamidophenyl]- $\alpha$ -Buten.** Sm. 125° (*B.* 23, 1885). — III, 161.
- 11)  **$\gamma$ -Keto- $\alpha$ -[4-Benzoylamidophenyl]- $\alpha$ -Buten.** Sm. 207° (*C.* 1906 [2] 1324).
- 12) **Methyl-2-Cinnamylamidophenylketon.** Sm. 91° (*B.* 26, 1394). — III, 124.
- 13) **p-Amido-1,2,4-Trimethyl-9,10-Anthrachinon.** Sm. 154—155° (*J. pr.* [2] 41, 138). — III, 457.
- 14) **Acetonphenanthrenchinonimid (Acetonylamidophenanthron).** Sm. bei 130° u. Zers. (*Soc.* 41, 270; 75, 1032). — III, 448; \*III, 322.
- 15) **4-[4-Methylphenyl]amido-7-Methyl-1,2-Benzpyron.** Sm. 252° (*A.* 367, 243 *C.* 1909 [2] 1238).
- 16) **Äthyläther d. 5-[oder 6]-Oxy-3-Keto-1-Benzyliden-1,3-Dihydroisochinolin.** Sm. 160—162° (*B.* 34, 3739 *C.* 1902 [1] 39).
- 17) **Äthyläther d. 4-Oxy-1-Keto-3-Phenyl-1,2-Dihydroisochinolin.** Sm. 183° (*B.* 37, 1691 *C.* 1904 [1] 1524).
- 18) **Äthyläther d. 6[oder 7]-Oxy-1-Keto-3-Phenyl-1,2-Dihydroisochinolin.** Sm. 161° (*B.* 34, 3744 *C.* 1902 [1] 40). — \*IV, 259.
- 19) **Phenacylhydroxyd d. Isochinolin.** Bromid, Nitrat (*M.* 9, 680). — IV, 300.
- 20) **6,9-Diacetyl-3-Methylcarbazol.** Sm. 131° (*B.* 40, 385 *C.* 1907 [1] 824).
- 21)  **$\gamma$ -Cyan- $\beta\gamma$ -Diphenylbuttersäure.** Sm. 161,5° (*C.* 1908 [1] 1777; 1908 [2] 1600).
- 22)  **$\alpha$ -Cyan- $\beta\beta'$ -Diphenylisobuttersäure.** Sm. 188—189° u. Zers. (*B.* 25, 3027; *Soc.* 95, 164 *C.* 1909 [1] 1312). — II, 1470.
- 23) **3-Isopropyl- $\beta$ -Naphtochinolin-1-Carbonsäure.** Sm. 266° (*B.* 27, 2022). — IV, 423.
- 24) **Lakton d. 1-[1,2,3,4-Tetrahydro-1-Chinolyl]oxymethylbenzol-2-Carbonsäure.** Sm. 164—165° (*B.* 29, 183). — IV, 195.
- 25) **Lakton d. 1-[1,2,3,4-Tetrahydro-2-Isochinolyl]oxymethylbenzol-2-Carbonsäure.** Sm. 170° (*B.* 29, 2039). — IV, 202.
- 26) **Laktam d. 10-Äthylamido-9-Oxy-9,10-Dihydrophenanthren-9-Carbonsäure.** Sm. 207° (*Soc.* 87, 694 *C.* 1905 [2] 244).
- 27) **Methylester d. Akridin-5-Äthyl- $\beta$ -Carbonsäure.** Sm. 95°. HJ, Pikrat, Methylsulfat (*B.* 39, 2425 *C.* 1906 [2] 802).
- 28) **Äthylester d. Diphenylcyanessigsäure.** Sm. 59° (*B.* 22, 1537). — II, 1465.
- 29) **Äthylester d. 10-Amidophenanthren-9-Carbonsäure.** Sm. 185° u. Zers. (*Soc.* 87, 694 *C.* 1905 [2] 244).
- 30) **Äthylester d. Phenanthren-2-Amidoameisensäure.** Sm. 125° (*A.* 321, 320 *C.* 1902 [2] 60).
- 31) **Äthylester d. Phenanthren-3-Amidoameisensäure.** Sm. 120—121° (123°) (*B.* 34, 3534; *A.* 321, 318 *C.* 1902 [2] 60).
- 32) **Äthylester d. Phenanthren-9-Amidoameisensäure.** Sm. 156—158° (*B.* 34, 1466; *B.* 35, 2728 *C.* 1902 [2] 643).
- 33) **Acetat d. syn- $\gamma$ -Oximido- $\alpha\gamma$ -Diphenylpropen.** Sm. 135° (*A.* 351, 184 *C.* 1907 [1] 1419).
- 34) **Nitril d.  $\alpha$ -Phenyl- $\beta$ -[2,5-Dioxyphenyl]akryl-2,5-Dimethyläthersäure.** Sm. 69° (*B.* 40, 2353 *C.* 1907 [2] 309).
- 35) **Imid d.  $\alpha\beta$ -Diphenylpropan- $\alpha\gamma$ -Dicarbonsäure.** Sm. 162—163° (*B.* 33, 2009). — \*II, 1098.



- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N** 36) Phenylimid d.  $\beta$ -Phenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 223° (*Am.* 20, 513). — \*II, 1071.
- 37) 4-Methylphenylimid d.  $\alpha$ -Phenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 138 bis 139° (*Soc.* 85, 1367 *C.* 1904 [2] 1646; *A.* 354, 143 *C.* 1907 [2] 694).
- 38) 3,5-Dimethylbenzylimid d. Benzol-1,2-Dicarbonsäure (Mesitylphtalimid). Sm. 157° (*B.* 25, 3011). — II, 1806.
- 39) 2,4,5-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure (Phtal-pseudocumidid). Sm. 148° (*B.* 17, 1802). — II, 1806.
- 40) 2,4,6-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure (Phtal-mesidil). Sm. 171° (*B.* 15, 1017). — II, 1806.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N<sub>8</sub>** C 69,6 — H 5,1 — O 11,9 — N 14,3 — M. G. 293.
- 1) Oxalyldi[2-Methylphenyl]guanidin. Sm. 206–207,5° (*B.* 12, 1856). — II, 467.
- 2) Oxalyldi[4-Methylphenyl]guanidin. Sm. 188,5° (*B.* 10, 1589). — II, 489.
- 3) 1<sup>3</sup>-Methyläther d. 2-Oxy-1-[4-Amido-2-Oxyphenylazo]naphtalin. Sm. oberhalb 300° (*C.* 1901 [2] 97). — \*IV, 1048.
- 4) 4-[2-Oxybenzyliden]amido-5-Keto-1-Methyl-3-Phenyl-4,5-Dihydropyrazol. Zers. bei 230° (*A.* 352, 200 *C.* 1907 [1] 1050).
- 5) 4-Oximido-5-Keto-3-Methyl-1-Diphenylmethyl-4,5-Dihydropyrazol. Sm. 182° u. Zers. + C<sub>2</sub>H<sub>6</sub>O (*J. pr.* [2] 67, 174 *C.* 1903 [1] 874). — \*IV, 328.
- 6) 5-Keto-4-[4-Dimethylamidophenyl]imido-3-Phenyl-4,5-Dihydroisoxazol. Sm. 164–165° u. Zers. (*C. r.* 146, 639 *C.* 1908 [1] 1703; *Bl.* [4] 3, 955 *C.* 1908 [2] 1690).
- 7) 6-[4-Methylbenzoyl]-2-[4-Methylphenyl]-1,2,3,5-Oxtriazin. Sm. 208° (*R.* 16, 340). — IV, 1119.
- 8) 5-Benzoyl-2-[2,4-Dimethylphenyl]-1,2,3,6-Oxtriazin (*R.* 16, 317). — \*IV, 770.
- 9) 5-[4-Methylbenzoyl]-2-[4-Methylphenyl]-1,2,3,6-Oxtriazin. Zers. bei 125° (*R.* 16, 323). — \*IV, 770.
- 10) 5-[4-Methylbenzoyl]-2-Benzyl-1,2,3,6-Oxtriazin. Zers. bei 115° (*R.* 16, 325). — \*IV, 770.
- 11) 2-[2-Acetylformylamidophenyl]-5[oder 6]-Methylbenzimidazol + 2H<sub>2</sub>O. Sm. 254° u. Zers. (wasserfrei) (*B.* 32, 1471). — \*IV, 842.
- 12) Phenylhydrazon d. 4-Oxy-1-Keto-3-Acetyl-1,2-Dihydroisochinolin. Sm. 250° (*B.* 33, 2633). — \*IV, 529.
- 13) 3-Methyl-5-[4-Amidophenyl]-1-Phenylpyrazol-4-Carbonsäure. Sm. 251° (*B.* 18, 2259). — IV, 1165.
- 14) Äthylester d. 1,4-Diphenyl-1,2,3-Triazol-5-Carbonsäure. Sm. 134 bis 135° (*Am.* 20, 393; *B.* 35, 4048). — IV, 1165.
- 15) Äthylester d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 134 bis 135° (*B.* 35, 4048 *C.* 1903 [1] 169). — \*IV, 817.
- 16) Äthylester d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 164 bis 165° (*B.* 22, 800). — IV, 1164.
- 17) Acetat d. 3-Oxy-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 112–113° (*Soc.* 73, 370). — IV, 1158.
- 18) Acetat d. 3-Oxy-1-Phenyl-5-[3-Methylphenyl]-1,2,4-Triazol. Sm. 70° (*Soc.* 71, 214). — IV, 1161.
- 19) Acetat d. 3-[2-Methylphenyl]hydrazon-2-Oxypseudindol (o-Tolylhydrazon d. Acetylisatin). Sm. 167° (*B.* 28, 544). — IV, 803.
- 20) Acetat d. 3-Methylphenylhydrazon-2-Oxypseudindol. Sm. 145° (*B.* 28, 2527). — IV, 696.
- 21) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[4-Dimethylamidophenyl]akrylsäure. Sm. 245° (*B.* 35, 3578 *C.* 1902 [2] 1384).
- 22) Phenylimid d.  $\alpha$ -Phenylhydrazonpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 183–184° (*B.* 35, 1629 *C.* 1902 [1] 1274). — \*IV, 466.
- 23)  $\beta$ -Phenylhydrazonpropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 150–152° u. Zers. (*B.* 21, 2685). — IV, 767.
- 24) Benzolazohomophtaläthylimid. Sm. 139° (*B.* 20, 2498). — IV, 1475.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N<sub>5</sub>** C 63,5 — H 4,7 — O 10,0 — N 21,8 — M. G. 321.
- 1) 2-Oximido-3,4-Di[Phenylhydrazon]-3,4-Dihydro-1,2-Pyran (Diphenylhydrazon d. Nitrosopyromekonsäure). Sm. 165° (*C.* 1902 [1] 1108). — \*IV, 518.

- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N<sub>5</sub>** 2) isom. Diphenylhydrazon d. Nitrosopyromekonsäure. Sm. 197° (C. 1902 [1] 1108). — \*IV, 518.  
 3) 5-Nitro-4-Phenylazo-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 132° (A. 338, 211 C. 1905 [1] 1157).  
 4) 2-Methyl-3-[α-4-Nitrophenylhydrazon]-1,4-Benzdiazin. Sm. 264° (B. 35, 3312 C. 1902 [2] 1109). — \*IV, 630.  
 5) Acetat d. 3-Amidooximidomethyl-1,5-Diphenyl-1,2,4-Triazol. Sm. 176—177° u. Zers. (B. 22, 1753). — IV, 1164.  
 6) Benzoat d. 3-Oximidoamidomethyl-5-Methyl-1-Phenyl-1,2,4-Triazol. Sm. 183—183,5° (B. 22, 1751). — IV, 1115.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>Cl** 1) Benzoat d. 3-Chlor-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 64 bis 65° (B. 26, 1835; A. 288, 83). — II, 855; \*II, 719.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>Cl<sub>3</sub>** 1) Benzoat d. βββ-Trichlor-α-Oxy-α-[2,5-Dimethylphenyl]äthan. Sm. 112,5—113,5° (C. r. 141, 202 C. 1905 [2] 753).
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>Br** 1) Methyläther d. α-[oder β]-Brom-γ-Keto-δ-Phenyl-α-[4-Oxyphenyl]-α-Buten. Sm. 85° (M. 22, 756). — \*III, 185.  
 2) Äthyläther d. γ-Keto-γ-Phenyl-α-[5-Brom-2-Oxyphenyl]propen. Sm. 98—100° (B. 29, 246). — III, 247.  
 3) 2-Brom-1-Phenyl-1,2,3,4-Tetrahydronaphtalin-3-Carbonsäure. Sm. 204—205° (A. 306, 231). — \*II, 876.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>Br<sub>3</sub>** 1) Äthyläther d. βγ-Dibrom-α-Keto-α-Phenyl-γ-[5-Brom-2-Oxyphenyl]-propan. Sm. 165° (B. 29, 247). — III, 229.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>J** 1) Lakton d. β-Jod-γ-Oxy-α-δ-Diphenylbutan-α-Carbonsäure. Sm. 106° (C. 1908 [2] 316).
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>N** C 72,6 — H 5,3 — O 17,0 — N 5,1 — M. G. 281.  
 1) γ-Keto-γ-[5-Acetylamido-2-Oxyphenyl]-α-Phenylpropen. Sm. 190° (B. 37, 2826 C. 1904 [2] 704).  
 2) 3,4-Methylenäther d. γ-Oximido-δ-Phenyl-α-[3,4-Dioxyphenyl]-α-Buten. Sm. 137° (M. 22, 759). — \*III, 186.  
 3) 3-Acetylphenylamido-1,2-Benzpyron (3-Acetylphenylcumarin). Sm. 155 bis 156° (G. 19, 57). — II, 1633.  
 4) Dimethyläther d. 2,5-Di[4-Oxyphenyl]oxazol. Sm. 145°. HCl (B. 29, 2100; 32, 2208; Soc. 95, 585 C. 1909 [1] 1991). — IV, 433; \*II, 1031.  
 5) Dimethyläther d. 3-Phenyl-5-[3,5-Dioxyphenyl]isoxazol. Sm. 82° (83°) (B. 35, 3904 C. 1903 [1] 27; B. 36, 2301 C. 1903 [2] 577).  
 6) 6,7-Dimethyläther d. 2,6,7-Trioxy-3-Phenylchinolin. Sm. 261° (B. 33, 1830). — \*IV, 257.  
 7) 7,8-Dimethyläther d. 2,7,8-Trioxy-3-Phenylchinolin. Sm. 247—248° (B. 33, 1818). — \*IV, 257.  
 8) Äthyläther d. 6[oder 7]-Oxy-1-Keto-4-Benzyl-2,3-Benzoxazin. Sm. 112° (B. 34, 3739 C. 1902 [1] 39).  
 9) α-[3-Benzoylamidophenyl]propen-β-Carbonsäure. Sm. 190—191° (B. 23, 1900).  
 10) β-[2-Benzoylamidophenyl]propen-4-Carbonsäure. Sm. 182°. — II, 1429.  
 11) α-Phenylacetylamido-β-Phenylakrylsäure. Sm. 186° (B. 31, 2239; A. 307, 166). — \*II, 857.  
 12) 5-Cinnamylidenamido-2-Oxy-1-Methylbenzol-3-Carbonsäure. Zers. bei 175° (G. 38 [1] 17 C. 1908 [1] 828).  
 13) 5-Cinnamylidenamido-3-Oxy-1-Methylbenzol-4-Carbonsäure. Zers. bei 174° (G. 38 [1] 18 C. 1908 [1] 828).  
 14) α-Oximido-α-[9-Fluorenyl]essigsäure. Sm. 137—138° (B. 35, 761 C. 1902 [1] 814).  
 15) 5-Keto-1,3-Diphenyltetrahydropyrrol-2-Carbonsäure. Sm. 147°. Ag (B. 35, 520 C. 1902 [1] 658). — \*IV, 174.  
 16) 1,1-Dimethyl-3-Phenyl-2,4-Benzoxazin-6-Carbonsäure (Phenylcumazonsäure). Sm. 219—220°. H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (B. 16, 2585). — II, 1587.  
 17) 3-[β-Oxypropyl]-β-Naphtochinolin-1-Carbonsäure. Sm. 234° (B. 27, 2028). — IV, 423.  
 18) Lakton d. α-Acetylamido-6-Oxy-3-Methyldiphenylessigsäure. Sm. 214—216° (B. 31, 2819). — \*II, 997.  
 19) Oximlakton d. β-Oximido-α-[4-oder 5-Äthoxyphenyl]-β-Phenyläthan-α<sup>2</sup>-Carbonsäure. Sm. 164,5—166° (B. 34, 3743 C. 1902 [1] 40).

- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>N** 20) Phenylamidoformiat d. 1-[ $\alpha$ -Oxyäthyl]benzfuran. Sm. 126° (*B.* 36, 2869 *C.* 1903 [2] 833).
- 21) Phenylamid d.  $\gamma$ -Oxy- $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -Buten- $\beta$ -Carbonsäure. Sm. 126° (*B.* 37, 4634 *C.* 1905 [1] 238).
- 22)  $\alpha$ -Phenylamid d. Mesakonsäure- $\beta$ -Phenylester. Sm. 114—115° (*A.* 359, 192 *C.* 1908 [1] 1532).
- 23)  $\beta$ -Phenylamid d. Mesakonsäure- $\alpha$ -Phenylester. Sm. 121° (*A.* 359, 191 *C.* 1908 [1] 1532).
- 24) Mono-[ $\gamma$ -Phenylpropenylamid] d. Benzol-1,2-Dicarbonsäure (Styryl-phtalamidsäure). Sm. 132°. Ag (*B.* 26, 1857). — II, 1796.
- 25) Benzylidenamid d.  $\alpha$ -Acetoxylphenylelessigsäure. Sm. 123° (*B.* 25, 1683). — III, 36.
- 26) 2-Acetylphenylamid d.  $\beta$ -Oxy- $\beta$ -Phenylakrylsäure. Sm. 74—75° (*Ar.* 240, 137 *C.* 1902 [1] 818). — \*III, 95.
- 27) 2-Acetylphenylamid d. isom.  $\beta$ -Oxy- $\beta$ -Phenylakrylsäure. Sm. 104° (*Ar.* 240, 138 *C.* 1902 [1] 818). — \*III, 95.
- 28) 2-Acetylphenylamid d. Benzoylessigsäure. Sm. 176° (*Ar.* 240, 138 *C.* 1902 [1] 818). — \*III, 96.
- 29)  $\gamma$ -Phenoxypropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 88° (*B.* 24, 2633). — II, 1803.
- 30)  $\beta$ -[4-Methylphen]oxyläthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 135° (*B.* 24, 191). — II, 1801.
- 31) Ketolakton-1-Naphtylimid d.  $\beta$ -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 153° (*A.* 295, 120). — \*II, 336.
- 32) Ketolakton-2-Naphtylimid d.  $\beta$ -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 186° (*A.* 295, 120). — \*II, 341.
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>N<sub>3</sub>** C 66,0 — H 4,8 — O 15,5 — N 13,6 — M. G. 309.
- 1) 5<sup>4</sup>,6<sup>4</sup>-Dimethyläther d. 3-Oxy-5,6-Di[4-Oxyphenyl]-1,2,4-Triazin. Sm. 261—262° u. Zers. Na (*A.* 339, 269, 280 *C.* 1905 [2] 47).
- 2) Methyläther d. 6-[4-Oxybenzoyl]-2-Benzyl-1,2,3,5-Oxtriazin. Sm. 190° (*R.* 16, 342). — IV, 1120.
- 3) Methyläther d. 5-[4-Oxybenzoyl]-2-Benzyl-1,2,3,6-Oxtriazin. Zers. bei 117° (*R.* 16, 328). — \*IV, 771.
- 4) Methyläther d. 5-[4-Oxybenzoyl]-2-[4-Methylphenyl]-1,2,3,6-Oxtriazin (*R.* 16, 327). — \*IV, 771.
- 5) 4,6-Di[Acetylamido]-1-Phenylbenzoxazol. Sm. 277—278° (*B.* 32, 1429). — \*II, 740.
- 6) 4-Acetylamido-1-[4-Acetylamidophenyl]benzoxazol. Sm. 278—279° (*B.* 32, 1432). — \*II, 791.
- 7) Nitril d.  $\gamma$ -[4-Methoxylphenyl]amido- $\alpha$ -[3-Nitrophenyl]propen- $\gamma$ -Carbonsäure. Sm. 106° (*B.* 25, 2057). — II, 1425.
- 8) Phenylimid d.  $\beta$ -Phenylnitrosamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 204° (*B.* 21, 1388). — II, 440.
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>N<sub>5</sub>** C 60,5 — H 4,4 — O 14,2 — N 20,8 — M. G. 337.
- 1) 4-Nitrophenylhydrazon d. Verb. C<sub>11</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>. Sm. 202° u. Zers. (*C.* 1905 [2] 627).
- 2) Amid d. Methyl-4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amidophenylamido-essigsäure. Sm. 229° (*B.* 37, 2638 *C.* 1904 [2] 519).
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>Cl** 1) Oxoniumchlorid d. 2-[2,4-Dioxyphenyl]benzpyran-2,4-Dimethyläther. HCl + 2H<sub>2</sub>O, + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (*Soc.* 93, 1114 *C.* 1908 [2] 609).
- 2) Äthylester d.  $\alpha$ -Benzoyl- $\alpha$ -[4-Chlorphenyl]essigsäure. Sm. 97—98° (91°) (*J. pr.* [2] 62, 565; *J. pr.* [2] 67, 387 *C.* 1903 [1] 1357).
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>Br** 1) Äthyläther d. 2[oder 3]-Brom-6-Oxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 98—99° (*B.* 32, 330). — \*III, 559.
- 2) Äthyläther d. 4-Brom-6[oder 7]-Oxy-3-Phenyl-3,4-Dihydro-2,1-Benzpyron. Sm. 103° (*B.* 34, 3741 *C.* 1902 [1] 40).
- 3) Acetat d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[5-Brom-2-Oxyphenyl]propan. Sm. 67° (*B.* 31, 719). — \*III, 167.
- 4) Verbindung (aus d. Lakton d. 1-[ $\alpha\beta$ -Dibrom- $\alpha$ -Oxy- $\beta$ -Phenyläthyl]benzol-2-Carbonsäure). Sm. 149° (*B.* 17, 2527). — II, 1708.
- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>N** C 68,7 — H 5,0 — O 21,5 — N 4,7 — M. G. 297.
- 1) Äthyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]propen. Sm. 89—90° (*Soc.* 85, 463 *C.* 1904 [1] 1079, 1438).



- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>N** 2) 5,6-Dioxy-2-Keto-1-[4-Dimethylamidobenzyliden]-1,2-Dihydrobenzofuran. Sm. 203° (281°) (*B.* 29, 2434; *B.* 37, 823 *C.* 1904 [1] 1151). — \*III, 532.
- 3) 3<sup>2</sup>,8-Dimethyläther d. 2,7,8-Trioxy-3-[2-Oxyphenyl]chinolin. Sm. 255—256° (*B.* 33, 179). — \*IV, 257.
- 4) Methyläther d. 3-Acetyl-4-Keto-2-Phenyl-3,4-Dihydro-1,3-Benzoxazin. Sm. 91° (*Soc.* 91, 268 *C.* 1907 [1] 1262).
- 5)  $\alpha$ -Benzoylamido- $\beta$ -[4-Methoxyphenyl]akrylsäure. Sm. 225° u. Zers. (*A.* 337, 296 *C.* 1905 [1] 379).
- 6) 9-Oximido-4-[ $\alpha$ -Oxyisopropyl]fluoren-1-Carbonsäure (*A.* 229, 150). — II, 1900.
- 7) 2,6-Dimethyl-4-[ $\beta$ -Phenyläthenyl]pyridin-3,5-Dicarbonsäure + 2H<sub>2</sub>O. Sm. 218—219° (241° wasserfrei). K<sub>2</sub> + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (*A.* 231, 8; *B.* 19, 196). — IV, 403.
- 8) Säure (aus d. Laktone C<sub>19</sub>H<sub>19</sub>O<sub>4</sub>N). Sm. 91—93° (*Soc.* 87, 446 *C.* 1905 [1] 1639).
- 9) Methylster d.  $\beta$ -Phenylamidoformoxyl- $\alpha$ -Phenylakrylsäure. Sm. 133—134° (*C.* 1900 [1] 122). — \*II, 956
- 10) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 59° (*G.* 36 [2] 275 *C.* 1906 [2] 1499).
- 11) Äthylester d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -Phenylakrylsäure. Sm. 86° (*J. pr.* [2] 61, 182). — \*II, 874.
- 12) Äthylester d. 4-[3,4-Dioxybenzyliden]amidobenzol-3,4-Methylenäther-1-Carbonsäure. Sm. 109° (*C.* 1908 [1] 1541).
- 13) Äthylester d. Dibenzoylamidoameisensäure. Sm. 103° (*B.* 26, 928). — II, 1181.
- 14) 7-Acetat d. 6,7-Dioxy-1-Keto-2-Phenyl-1,3-Dihydroisindol-6-Methyläther. Sm. 161° (*M.* 30, 495 *C.* 1909 [2] 1339).
- 15) Benzoat d. Oxymethyl-4-Acetylamidophenylketon. Sm. 200—201° (*B.* 33, 2646). — \*III, 103.
- 16) Nitril d.  $\alpha$ -[4-Methoxybenzoxyl]-4-Methoxyphenylessigsäure. Sm. 69—70° (*Soc.* 95, 1407 *C.* 1909 [2] 1228).
- 17) Mono[ $\alpha$ -Benzoyläthylamid] d. Benzol-1,2-Dicarbonsäure (Propiophenonphthalamidsäure). Sm. 140°. Ag + H<sub>2</sub>O (*B.* 22, 3252). — III, 141.
- 18) 4-Benzoylphenylmonamid d. Oxalsäuremonoäthylester. Sm. 112° (*A.* 311, 148). — \*III, 148.
- 19) Benzylimid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 128—132° (*R.* 15, 284 Anm.). — \*II, 1161.
- 20)  $\alpha$ -Benzylisomid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 99—100° (*R.* 15, 284). — \*II, 1161.
- 21)  $\beta$ -Benzylisomid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 80—82° (*R.* 15, 286). — \*II, 1161.
- 22) Benzylimid d. 4,5-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (Benzylimid d. m-Hemipinsäure). Sm. 225° (*M.* 9, 334). — II, 1999.
- 23) 4-Methylbenzoylmethylmonamid d. Benzol-1,2-Dicarbonsäure (4-Methylacetophenon- $\alpha$ -Phtalaminsäure). Sm. 165°. Cu (*B.* 31, 2133). — \*III, 117.
- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>N<sub>3</sub>** C 62,8 — H 4,6 — O 19,7 — N 12,9 — M. G. 325.
- 1) Methylenäther d.  $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Nitro-3,4-Dioxyphenyl]- $\alpha$ -Buten. Sm. 197° (*B.* 24, 622). — IV, 774.
- 2) 4-Benzylamidophenylalloxan. Sm. 205—206° (*C.* 1900 [2] 789). — \*II, 1123.
- 3) Nitril d.  $\alpha\delta$ -Dinitro- $\beta\gamma$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 180 bis 215° u. Zers. (*R.* 23, 291 *C.* 1905 [1] 89).
- 4) Nitril d. isom.  $\alpha\delta$ -Dinitro- $\beta\gamma$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 110,5° u. Zers. (*R.* 23, 291 *C.* 1905 [1] 89).
- 5) 1-Phenylamid d. 4-Oxy-1-Diazobenzol-1-Carbonsäure-2- $\beta$ -Crotonsäure. Sm. 150° (*B.* 40, 2736 *C.* 1907 [2] 329).
- 6)  $\alpha$ -Acetylphenylhydrazid d. Phenylimidoessigsäure-2-Carbonsäure. Sm. 268° (*A.* 332, 238 *C.* 1904 [2] 38).
- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>N<sub>5</sub>** C 57,8 — H 4,2 — O 18,1 — N 19,8 — M. G. 353.
- 1) *s*-[2,4-Dinitrophenyl]imido- $\alpha$ -Phenylhydrazido- $\alpha\gamma$ -Pentadien. Sm. 140° u. Zers. (*A.* 333, 327 *C.* 1904 [2] 1150).
- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>Br** 1) Dimethyläther d. 3-Brom-7,8-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 110° (*B.* 36, 4243 *C.* 1904 [1] 382).

- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>Br** 2) Dimethyläther d. 3-Brom-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 160° u. Zers. (B. 38, 2179 C. 1905 [2] 258).
- 3)  $\alpha$ -Benzoat d.  $\alpha$ -Oxyäthyl-3-Brom-4-Oxyphenylketon-4-Methyläther. Sm. 116° (B. 37, 1548 C. 1904 [1] 1437).
- C<sub>17</sub>H<sub>15</sub>O<sub>5</sub>N** C 65,2 — H 4,8 — O 25,6 — N 4,4 — M. G. 313.
- 1) 2<sup>3</sup>,6-Dimethyläther d. 3-Oximido-6-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 164—166° u. Zers. (B. 37, 2348 C. 1904 [2] 230).
- 2) 2<sup>3</sup>,6-Dimethyläther d. 3-Oximido-6-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 153—154° u. Zers. (B. 37, 958 C. 1904 [1] 1160).
- 3) 2<sup>4</sup>,6-Dimethyläther d. 3-Oximido-6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 157—158° u. Zers. (B. 37, 783 C. 1904 [1] 1159).
- 4) 2<sup>2</sup>,7-Dimethyläther d. 3-Oximido-7-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 195° u. Zers. (B. 37, 4157 C. 1904 [2] 1658).
- 5) 2<sup>3</sup>,7-Dimethyläther d. 3-Oximido-7-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 160° u. Zers. (B. 37, 4160 C. 1904 [2] 1658).
- 6) 2<sup>4</sup>,7-Dimethyläther d. 3-Oximido-7-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 170° u. Zers. (B. 37, 4162 C. 1904 [2] 1659).
- 7) 5,7-Dimethyläther d. 3-Oximido-5,7-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 175—177° u. Zers. (B. 37, 2804 C. 1904 [2] 712).
- 8) 7,8-Dimethyläther d. 3-Oximido-7,8-Dioxy-2-Phenyl-2,3-Dihydro-1,4-Benzpyron. Sm. 166° u. Zers. (B. 37, 2807 C. 1904 [2] 713).
- 9) 2<sup>3</sup>,2-Dimethyläther d. 3-Oximido-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 159° u. Zers. (B. 38, 2180 C. 1905 [2] 258).
- 10)  $\alpha$ -[4-Äthoxyphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure. Sm. 158° (A. 322, 152 C. 1902 [2] 282).
- 11)  $\alpha$ -Benzoylamido- $\beta$ -Benzoxylpropionsäure. Sm. 124° (H. 56, 298 C. 1908 [2] 684).
- 12) Methylester d.  $\beta$ -Phenyl- $\alpha$ -[4-Nitrobenzoyl]propionsäure. Sm. 57° (Soc. 49, 446). — II, 1713.
- 13) Dimethylester d. 4-Benzoylamidobenzol-1,2-Dicarbonsäure. Sm. 132—132,5° (C. 1906 [2] 117).
- 14) Dimethylester d.  $\alpha$ -Oxidodiphenylmethan-2,4'-Dicarbonsäure. Sm. 190° (A. 309, 109). — \*II, 1148.
- 15) Äthylester d. Benzoxylbenzoylamidoameisensäure. Sm. 72—73° (Am. 20, 50). — \*II, 757.
- 16) Äthylester d. 3-Nitro-4-Methyldiphenylketon-2'-Carbonsäure. Sm. 122° (A. 299, 311). — \*II, 1005.
- 17) Äthylester d. 2,4,9-Triketo-2,3,4,9-Tetrahydro-1-Äthyl- $\beta\beta$ -Naphtindol-3-Carbonsäure. Sm. 195° u. Zers. Na, Cu, Äthylaminsalz (B. 32, 919; 33, 568). — \*II, 1180.
- 18) Phenylester d. Benzoylamidoacetoxylessigsäure. Sm. 171—173° (H. 20, 421). — \*II, 748.
- 19) 4-[2-Nitrobenzoat] d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 60—62° (D.R.P. 189333 C. 1908 [1] 185).
- 20) 4-[3-Nitrobenzoat] d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 71—72° (D.R.P. 189333 C. 1908 [1] 185).
- 21) 4-[4-Nitrobenzoat] d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 80,5° (D.R.P. 67923; H. 32, 607). — \*II, 774.
- 22)  $\alpha$ -Monamid d.  $\alpha\beta$ -Diphenyläthan- $\alpha\alpha\beta$ -Tricarbonsäure. Sm. 190° (B. 23, 116). — II, 2025.
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>N<sub>3</sub>** C 59,8 — H 4,4 — O 23,5 — N 12,3 — M. G. 341.
- 1) Methyläther d.  $\beta$ -[4-Nitrophenyl]azo- $\alpha\gamma$ -Diketo- $\alpha$ -[2-Oxyphenyl]-butan. Sm. 150° (B. 40, 2719 C. 1907 [2] 325).
- 2)  $\beta$ -Dinitro-1-Benzoyl-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 169 bis 170° (B. 25, 1268). — IV, 204.
- 3)  $\beta$ -Nitro-1-[3-Nitrobenzoyl]-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 163—164° (B. 25, 1270). — IV, 204.

- C<sub>17</sub>H<sub>15</sub>O<sub>5</sub>N<sub>3</sub>** 4)  $\delta$ -Phenylhydrazon- $\alpha$ -[3-Nitrophenyl]butan- $\alpha\delta$ -Oxyd- $\beta$ -Carbonsäure (Phenylhydrazid d. 3-Nitrophenylparakonsäure). Sm. 130—132° u. Zers. (R. 6, 19). — IV, 717.
- 5) Äthylester d. 4-Nitrophenylazobenzoylessigsäure. Sm. 114° (B. 21, 2124; B. 35, 926 C. 1902 [1] 807; Bl. [4] 1, 731 C. 1907 [2] 1167). — IV, 1473; \*IV, 1059.
- 6) Äthylester d. Phenylazo-3-Nitrobenzoylessigsäure. Sm. 134—135° (B. 35, 933 C. 1902 [1] 808). — \*IV, 1059.
- 7) Äthylester d. Phenylazo-4-Nitrobenzoylessigsäure. Sm. 126—127° u. Zers. (B. 35, 932 C. 1902 [1] 808). — \*IV, 1059.
- 8) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitro-2-Oxybenzyliden]hydrazin. Sm. 156° (150°) (A. 305, 190; B. 37, 3913 C. 1904 [2] 1593; B. 37, 3931 C. 1904 [2] 1596).
- 9) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxybenzyliden]hydrazin. Sm. 166—167° (165—166°) (A. 305, 188; B. 37, 3913 C. 1904 [2] 1593; B. 37, 3931 C. 1904 [2] 1595).
- 10) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3-Nitro-4-Oxybenzyliden]hydrazin (B. 37, 3932 C. 1904 [2] 1596).
- 11) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -[3-Nitrophenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 149—150° (A. 365, 332 C. 1909 [1] 1867).
- 12) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 164,5° (A. 365, 335 C. 1909 [1] 1867).
- 13) Benzhydroxylamid d.  $\beta$ -Benzoximido- $\beta$ -Amidopropionsäure. Sm. 165° (B. 27 [2] 261). — II, 1209.
- C<sub>17</sub>H<sub>15</sub>O<sub>5</sub>Br** 1) 9-Brom-1,3,8-Tribrom-2,4,5,7-Tetramethylfluoron (M. 25, 681 C. 1904 [2] 1145).
- 2) 6-Acetat d.  $\beta$ -Brom-2,4,6-Trioxydiphenylketon-2,4-Dimethyläther (A. d. Bromhydrotocoin). Sm. 166° (A. 199, 61). — III, 203.
- C<sub>17</sub>H<sub>15</sub>O<sub>5</sub>Br<sub>5</sub>** 1) Pentamethyläther d. Pentabromphloroglucid. Sm. 200—202° (M. 29, 683 C. 1908 [2] 1443).
- C<sub>17</sub>H<sub>15</sub>O<sub>5</sub>J** 1) Diacetat d. 4-Jodosodiphenylketon. Sm. 168° (B. 38, 3454 C. 1905 [2] 1587).
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>N** C 62,0 — H 4,6 — O 29,2 — N 4,2 — M. G. 329.
- 1)  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3,4-Dimethoxyphenyl]akrylsäure. Sm. 225° (B. 33, 1816). — \*II, 1095.
- 2)  $\alpha$ -Phenyl- $\beta$ -[6-Nitro-3,4-Dimethoxyphenyl]akrylsäure. Sm. 219° (B. 33, 1829). — \*II, 1095.
- 3) 3,4-Dioxy-1-[4-Carboxylphenyl]imidomethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opiananthranilsäure). Sm. 231° (B. 29, 2035). — \*II, 1120.
- 4) Benzoylderivat d. Säure C<sub>10</sub>H<sub>11</sub>O<sub>5</sub>N. Sm. 138° (A. 325, 338 C. 1903 [1] 771).
- 5) Äthylester d.  $\alpha$ -Benzoxyl-2-Nitrophenylelessigsäure. Sm. 72° (B. 39, 2337 C. 1906 [2] 512).
- 6) Acetat d. Nitrolapachol. Sm. 166—170° (G. 12, 359). — III, 399.
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>N<sub>3</sub>** C 57,1 — H 4,2 — O 26,9 — N 11,8 — M. G. 357.
- 1) Methyläther d.  $\alpha$ -[2,4-Dinitrophenyl]- $\beta$ -[4-Acetylamido-3-Oxyphenyl]äthen. Sm. 227° (B. 42, 3101 C. 1909 [2] 1229).
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>N<sub>5</sub>** C 53,0 — H 3,9 — O 24,9 — N 18,2 — M. G. 385.
- 1) 2-Amidonaphthalin + 2,4,6-Trinitro-1-Methylamidobenzol. Sm. 132,5 bis 133° (B. 33, 109). — \*II, 330.
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>Cl** 1) Diäthylester d. 3-Chlor-1,2-Naphtochinon-4-Methyldicarbonsäure. Sm. 97°. Na, Ba (B. 33, 2414). — \*II, 1181.
- 2) Diäthylester d. 3-Chlor-1,4-Naphtochinon-2-Methyldicarbonsäure. Sm. 82—83° (B. 32, 265). — \*II, 1180.
- 3) Diäthylester d.  $\beta$ -Chlor-1,4-Naphtochinon- $\beta$ -Methyldicarbonsäure. Sm. 86° (B. 33, 2403). — \*II, 1181.
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>Br** 1) 3,4-Methylenäther-2',4',6'-Trimethyläther d.  $\beta$ -Brom-3,4,2',4',6'-Pentaoxydiphenylketon. Sm. 190—192° (A. 199, 50). — III, 209.
- 2) Diäthylester d. 3-Brom-1,2-Naphtochinon-4-Methyldicarbonsäure. Sm. 96—97° (B. 32, 264). — \*II, 1181.
- 3) Diäthylester d. 3-Brom-1,4-Naphtochinon-2-Methyldicarbonsäure. Sm. 102° (B. 32, 262; 33, 572). — \*II, 1180.



- C<sub>17</sub>H<sub>15</sub>O<sub>7</sub>N** C 59,2 — H 4,3 — O 32,5 — N 4,0 — M. G. 345.
- 1) Papaverinsäuremethylbetain + H<sub>2</sub>O. Sm. 192—194° (wasserfrei). Ba + 6H<sub>2</sub>O, Ag, HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 8H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O) (M. 14, 521, 597; B. 36, 1851; M. 24, 693 C. 1903 [2] 1281; M. 24, 714 C. 1904 [1] 218). — IV, 177; \*IV, 132.
  - 2) 3-Methylester d. 2-[3,4-Dimethoxybenzoyl]pyridin-3,4-Dicarbon-säure (β-M. d. Papaverinsäure). Sm. 153° (156,5°) (M. 13, 698; 17, 497; 18, 465; M. 23, 334 C. 1902 [2] 201). — IV, 176; \*IV, 131.
  - 3) 4-Methylester d. 2-[3,4-Dimethoxybenzoyl]pyridin-3,4-Dicarbon-säure (γ-M. d. Papaverinsäure). Sm. 196° u. Zers. (M. 17, 495; 18, 465; M. 23, 336 C. 1902 [2] 201). — IV, 176; \*IV, 131.
  - 4) β-[2-Nitrophenyl]äther d. 2-Acetoxybenzol-1-Carbonsäure-β-Oxy-äthylester. Sm. 80° (J. pr. [2] 27, 217, 218). — II, 1493.
  - 5) α-Nitrat-β-γ-Dibenzoat d. αβγ-Trioxypuran. Sm. 68—69° (B. 41, 1120 C. 1908 [1] 2017).
- C<sub>17</sub>H<sub>15</sub>O<sub>7</sub>N<sub>5</sub>** C 50,9 — H 3,7 — O 27,9 — N 17,5 — M. G. 401.
- 1) Äthyläther d. s-Cinnamyliden-2,4,6-Trinitro-3-Oxyphenylhydrazin. Sm. 200—201° (G. 25 [2] 504). — III, 62.
- C<sub>17</sub>H<sub>15</sub>O<sub>7</sub>Cl<sub>3</sub>** 1) Trichloraloin + xH<sub>2</sub>O (Z. 1871, 700). — III, 617.
- C<sub>17</sub>H<sub>15</sub>O<sub>7</sub>Br<sub>3</sub>** 1) Tribromaloin (A. 77, 212). — III, 617.
- C<sub>17</sub>H<sub>15</sub>O<sub>8</sub>N** C 56,5 — H 4,1 — O 35,4 — N 3,9 — M. G. 361.
- 1) Corydilsäure + 2H<sub>2</sub>O (Corydilinsäure). Sm. 228°. Ag<sub>3</sub> (Soc. 71, 663; Soc. 81, 155 C. 1902 [1] 356; Ar. 243, 189 C. 1905 [2] 56). — \*III, 650.
- C<sub>17</sub>H<sub>15</sub>O<sub>8</sub>N<sub>3</sub>** C 52,4 — H 3,8 — O 32,9 — N 10,8 — M. G. 389.
- 1) Benzoat d. 2,5,6-Trinitro-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 140° (G. 30 [2] 367). — \*II, 718.
- C<sub>17</sub>H<sub>15</sub>NJ<sub>2</sub>** 1) 4-Methylphenyl-[6-Methyl-8-Chinolyl]jodoniumjodid. Sm. 157° u. Zers. (B. 38, 1810 C. 1905 [1] 1651).
- C<sub>17</sub>H<sub>15</sub>N<sub>2</sub>Cl** 1) ?-Chlor-α-Phenylamido-ε-Phenylimido-αγ-Pentadiën. Sm. 129° u. Zers. HCl + H<sub>2</sub>O (B. 23, 1479; A. 339, 197 C. 1905 [1] 1407; B. 38, 1653 C. 1905 [1] 1528). — II, 447.
- 2) 5-Chlor-3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 50° (B. 34, 1308). — \*IV, 621.
- C<sub>17</sub>H<sub>15</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Isochinolin + ββγ-Trichlor-α-Phenylamidopropan. + AuCl<sub>3</sub> (Ar. 240, 706 C. 1903 [1] 403; Ar. 241, 120 C. 1903 [1] 1023). — \*IV, 192.
- C<sub>17</sub>H<sub>15</sub>N<sub>3</sub>J** 1) Jodäthylat d. Chindolin. Sm. 222—223°. + J<sub>3</sub> (B. 39, 3941 C. 1907 [1] 119).
- C<sub>17</sub>H<sub>15</sub>N<sub>3</sub>S** 1) β-Phenylamido-α-[1-Naphtyl]thioharnstoff. Sm. 183° u. Zers. (Soc. 61, 1019). — IV, 681.
- 2) β-Phenylamido-α-[2-Naphtyl]thioharnstoff. Sm. 190—191° (Soc. 61, 1019). — IV, 681.
  - 3) β-[1-Naphtyl]amido-α-Phenylthioharnstoff. Sm. 220° (B. 32, 1086). — \*IV, 612.
  - 4) β-[2-Naphtyl]amido-α-Phenylthioharnstoff. Sm. 202° (184—184,5°) (B. 24, 4180; 32, 1087; Soc. 61, 1020). — IV, 929; \*IV, 615.
  - 5) 1-Amido-8-[β-Phenylthioureido]naphtalin. Sm. 238° (A. 365, 144 C. 1909 [1] 1822).
  - 6) α-Amido-β-Phenyl-α-[1-Naphtyl]thioharnstoff. Sm. 135° (B. 24, 4190; 32, 1086). — IV, 927; \*IV, 612.
- C<sub>17</sub>H<sub>15</sub>N<sub>4</sub>Cl** 1) 5-Chlor-4-[2-Methylphenyl]azo-3-Methyl-1-Phenylpyrazol. Sm. 97° (94°) (D.R.P. 153861 C. 1904 [2] 680; A. 338, 203 C. 1905 [1] 1157).
- 2) 5-Chlor-4-[4-Methylphenyl]azo-3-Methyl-1-Phenylpyrazol. Sm. 118° (A. 338, 205 C. 1905 [1] 1157).
  - 3) 5-Chlor-4-Phenylazo-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 107°. 2 + AgNO<sub>3</sub> (A. 338, 207 C. 1905 [1] 1157).
  - 4) 3-Chlor-4-Phenylazo-5-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 103° (A. 338, 235 C. 1905 [1] 1159).
  - 5) Chlormethylat d. 4-Methylphenylpseudoazimidochinolin. Sm. 225° (J. pr. [2] 60, 78). — \*IV, 949.
- C<sub>17</sub>H<sub>15</sub>N<sub>4</sub>J** 1) Jodmethylat d. 4-Methylphenylpseudoazimidochinolin. Sm. 268° (J. pr. [2] 60, 77). — \*IV, 949.
- C<sub>17</sub>H<sub>15</sub>ON<sub>2</sub>** C 77,3 — H 6,0 — O 6,0 — N 10,6 — M. G. 264.
- 1) ε-Phenylimido-α-Phenylamido-δ-Oxy-αγ-Pentadiën (Furfuranilin). HCl, HBr, HNO<sub>3</sub> (A. 156, 199; 201, 355; 239, 352; B. 15, 232; B. 38, 3826 C. 1906 [1] 49; B. 38, 4123 C. 1906 [1] 468). — III, 723.

- $C_{17}H_{16}ON_2$  2)  $\alpha$ -Imido- $\alpha$ -[4-Methylbenzoyl]methylenamido- $\alpha$ -[4-Methylphenyl]-methan. Sm. 240° (B. 34, 3028). — \*IV, 572.
- 3) 2-Phenylimido-3-Phenylamido-1-Keto-R-Pentamethylen? HCl (B. 35, 3215 C. 1902 [2] 1251).
- 4)  $\beta\delta$ -Di[Phenylimido]- $\gamma$ -Ketopentan? Sm. 157,5° (B. 34, 3053).
- 5)  $\gamma$ -Benzoylhydrazon- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 157° (J. pr. [2] 50, 306). — III, 160.
- 6)  $\gamma$ -Acetylphenylhydrazon- $\alpha$ -Phenylpropen. Sm. 149—150° (B. 41, 4233 C. 1909 [1] 183).
- 7) Phenylhydrazon d. 1-Keto-2-Acetyl-2,3-Dihydroinden. Sm. 169 bis 170° (A. 347, 119 C. 1906 [2] 776).
- 8) 2-Phenylhydrazon-4,7-Dimethyl-1,2-Dihydrobenzpyran. Sm. 99 bis 100° (Soc. 93, 529 C. 1908 [1] 1932).
- 9) 2-Phenylhydrazon-3-Äthyl-1,2-Benzpyron. Sm. 115° (B. 24, 3463). — IV, 698.
- 10) 3-Keto-2-Methyl-4-Phenyl-5-Benzyl-2,3-Dihydropyrazol. Sm. 237 bis 238° (A. 296, 11) — IV, 1033.
- 11) 3-Keto-5-Methyl-2-Phenyl-1-Benzyl-2,3-Dihydropyrazol. Sm. 119° (J. pr. [2] 55, 153). — IV, 511.
- 12) 5-Keto-3-Äthyl-1,4-Diphenyl-4,5-Dihydropyrazol. Sm. 197° (B. 36, 2244 C. 1903 [2] 435).
- 13) 5-Keto-3-Methyl-1-Phenyl-4-Benzyl-4,5-Dihydropyrazol. Sm. 136° (u. 147,5°) (Am. 16, 442; B. 34, 1307; J. pr. [2] 54, 205; [2] 55, 152; A. 339, 156 C. 1905 [1] 1401). — IV, 941; \*IV, 622.
- 14) 5-Keto-1-Diphenylmethyl-3-Methyl-4,5-Dihydropyrazol. Sm. 195° (J. pr. [2] 67, 173 C. 1903 [1] 874). — \*IV, 328.
- 15) 2-Keto-1-Äthyl-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. 260° (A. 368, 229 C. 1909 [2] 1468).
- 16) 2-Keto-1,3-Dimethyl-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. 185° (B. 40, 4803 C. 1908 [1] 373; A. 368, 206 C. 1909 [2] 1466).
- 17) 3-Keto-2-[4-Dimethylamidobenzyliden]-2,3-Dihydroindol. Sm. 226—227° (C. 1903 [1] 34). — \*IV, 678.
- 18) 2-Keto-3-[4-Dimethylamidobenzyliden]-2,3-Dihydroindol. Sm. 194 bis 195° (C. r. 149, 133 C. 1909 [2] 832).
- 19) Äthyläther d. 4-Phenylamido-2-Oxychinolin. Sm. noch nicht bei 270° (B. 26, 2230). — IV, 910.
- 20) 3-Keto-2-[ $\beta$ -Phenyläthenyl]-6[oder 7]-Methyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 185—186° (B. 25, 954). — IV, 1034.
- 21) 1-Keto-2-Äthyl-4-Benzyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 106° (B. 29, 1434). — \*II, 1004.
- 22) Äthyläther d. 4-Oxy-1-Benzyl-2,3-Benzdiazin. Sm. 84—86° (B. 29, 1435). — IV, 1027.
- 23) 2-Acetylamido-3,7-Dimethylakridin. Sm. 258° (270°) (B. 36, 1026 C. 1903 [1] 1269; Soc. 85, 529 C. 1904 [1] 676, 1525). — \*IV, 678.
- 24) Äthylhydroxyd d. Chindolin. Jodid, Pikrat (B. 39, 3941 C. 1907 [1] 119).
- 25) Base (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl u. Formaldehyd) oder  $C_{18}H_{18}ON_2$ . (2HCl, PtCl<sub>4</sub>) (B. 25, 1939). — IV, 982.
- 26) N-Anhydrid d.  $\alpha$ -Äthylhydrazon- $\alpha$ - $\beta$ -Diphenyläthan- $\beta^2$ -Carbonsäure. Sm. 142° (B. 38, 3847 C. 1906 [1] 38).
- 27) Nitril d.  $\gamma$ -[2-Benzoylamidophenyl]buttersäure. Sm. 128° (B. 40, 1842 C. 1907 [2] 39).
- 28) Nitril d.  $\gamma$ -[4-Methoxyphenyl]amido- $\alpha$ -Phenyl- $\alpha$ -Propen- $\gamma$ -Carbonsäure. Sm. 126—127° (B. 25, 2057). — II, 1425.
- 29) Amid d.  $\beta$ -Cyan- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure (Dibenzyleyanacetamid). Sm. 165° (G. 26 [1] 198; 26 [2] 225; A. 340, 344 C. 1905 [2] 892). — \*II, 1097.
- 30) 2,4,5-Trimethylphenyleyanamid d. Benzolcarbonsäure. Sm. 94° (C. 1908 [2] 1585).
- 31) Verbindung (aus Diamidodiphenylmethan) (C. 1906 [1] 1414).  
C 69,9 — H 5,5 — O 5,5 — N 19,1 — M. G. 292.
- 1) 4-Nitroso-5-Methylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 89°. HCl (B. 40, 4482 C. 1908 [1] 137).

- C<sub>17</sub>H<sub>16</sub>ON<sub>4</sub>** 2) **5-Keto-4-Phenylhydrazon-3-Methyl-1-[4-Methylphenyl]-4,5-Dihydropyrazol.** Sm. 187° (*Soc.* 59, 342; *A.* 338, 206 *C.* 1905 [1] 1157). — *IV*, 807.
- 3) **5-Oxy-4-Phenylazo-5-Methyl-1-[2-Methylphenyl]pyrazol.** Sm. 130°. Na, HCl (*A.* 338, 233 *C.* 1905 [1] 1159).
- 4) **5-Oxy-4-Phenylazo-5-Methyl-1-[4-Methylphenyl]pyrazol.** Sm. 169°. Na, HCl (*A.* 338, 233 *C.* 1905 [1] 1159).
- 5) **5-Keto-4-[2-Methylphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol.** Sm. 183° (185°) (*D.R.P.* 153861 *C.* 1904 [2] 680; *A.* 338, 204 *C.* 1905 [1] 1157).
- 6) **5-Keto-4-[4-Methylphenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol.** Sm. 136—137° (141°) (*Soc.* 83, 1124 *C.* 1903 [2] 23, 791; *A.* 338, 205 *C.* 1905 [1] 1157). — *\*IV*, 1079
- 7) **4-Phenylazo-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-1,3-Oxyd** (4-Azobenzolantipyrin). Sm. 174° (*B.* 39, 1954 *C.* 1906 [2] 346).
- 8) **5-[γ-Phenylhydrazonpropyl]-3-Phenyl-1,2,4-Oxdiazol.** Sm. 126° (*B.* 22, 2417). — *IV*, 691.
- 9) **Methylhydroxyd d. 4-Methylphenylpseudoazimidochinolin.** Chlorid, Bichromat (*J. pr.* [2] 60, 78, 79). — *\*IV*, 949.
- C<sub>17</sub>H<sub>16</sub>OCl<sub>2</sub>** 1) **Dihydrochlorid d. Dibenzalacetone** (*B.* 36, 1473 *C.* 1903 [1] 1348; *B.* 36, 2376 *C.* 1903 [2] 495; *B.* 36, 3543 *C.* 1903 [2] 1369; *B.* 37, 3290 *C.* 1904 [2] 1040).
- C<sub>17</sub>H<sub>16</sub>OBr<sub>2</sub>** 1) **γδ-Dibrom-β-Keto-α-Phenyl-δ-[4-Methylphenyl]butan.** Sm. 106° (*M.* 22, 751). — *\*III*, 175.
- 2) **isom. γδ-Dibrom-β-Keto-α-Phenyl-δ-[4-Methylphenyl]butan.** Sm. 70—89° (*M.* 22, 752). — *\*III*, 175.
- 3) **Dihydrobromid d. Dibenzalacetone** (*B.* 36, 3539 *C.* 1903 [2] 1369).
- 4) **isom. Dihydrobromid d. Dibenzalacetone.** Sm. 124—126° u. Zers. (*B.* 36, 3541 *C.* 1903 [2] 1369; *B.* 37, 3364 *C.* 1904 [2] 1122).
- C<sub>17</sub>H<sub>16</sub>OS** 1) **Verbindung** (aus 2,6-Dimerkapto-4-Keto-3,5-Diphenyl-1,4-Phenthiofen). Sm. 136,5° (*B.* 37, 1609 *C.* 1904 [1] 1444; *B.* 38, 2892 *C.* 1905 [2] 1433). *C* 72,9 — *H* 5,7 — *O* 11,4 — *N* 10,0 — *M. G.* 280.
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 1) **α-Acetylimido-α-Acetylphenylamido-α-Phenylmethan** (Diacetylbenzenylphenylamidin). Sm. 128—130° (*J. pr.* [2] 54, 120). — *IV*, 845.
- 2) **2,7-Di[Acetylamido]fluoren.** Zers. bei 250° (*A.* 203, 101) — *IV*, 993.
- 3) **αβ-Di[Benzoylamido]propen.** Sm. 142° (*B.* 38, 1168 *C.* 1905 [1] 1143; *B.* 40, 1892 *C.* 1907 [2] 140).
- 4) **1-Methylamido-8-Dimethylamido-9,10-Anthrachinon** (*D.R.P.* 144634 *C.* 1903 [2] 751).
- 5) **Methylenäther d. γ-Phenylhydrazon-α-[3,4-Dioxyphenyl]-α-Buten.** Sm. 158—160° (*B.* 24, 620). — *IV*, 774.
- 6) **Methylenäther d. isom. γ-Phenylhydrazon-α-[3,4-Dioxyphenyl]-α-Buten.** Sm. 163° (*B.* 24, 620). — *IV*, 774.
- 7) **Dehydroacetylpaonolphenylhydrazon.** Sm. 206° u. Zers. (*B.* 25, 1299). — *IV*, 772.
- 8) **αγ-Propylenäther d. Di[4-Oxybenzyliden]hydrazin.** Sm. oberhalb 360° (*A.* 357, 376 *C.* 1908 [1] 358).
- 9) **Methyläther d. 4-Oxy-3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihydropyrazol.** Sm. 155° (*B.* 36, 1137 *C.* 1903 [1] 1254). — *\*IV*, 603.
- 10) **2-Benzoyl-5-Keto-3-Methyl-1-Phenyltetrahydropyrazol.** Sm. 162° (*B.* 26, 105). — *IV*, 489.
- 11) **Methyläther d. 5-Oxy-2-Keto-1-Methyl-4,5-Diphenyl-2,5-Dihydroimidazol.** Sm. 152° (*A.* 368, 203 *C.* 1909 [2] 1465).
- 12) **Äthyläther d. 5-Oxy-2-Keto-4,5-Diphenyl-2,5-Dihydroimidazol.** Sm. 185° (*A.* 368, 190 *C.* 1909 [2] 1464).
- 13) **2,4-Diketo-5,5-Dibenzyltetrahydroimidazol.** Sm. 208—209° (*G.* 26 [1] 201). — *\*II*, 871.
- 14) **2,4-Diketo-1,3-Di[2-Methylphenyl]tetrahydroimidazol.** Sm. 273 bis 275° u. Zers. (*B.* 25, 2275). — *II*, 469.
- 15) **2,4-Diketo-1,3-Di[4-Methylphenyl]tetrahydroimidazol.** Sm. 175° (*B.* 25, 2289). — *II*, 506.
- 16) **2,5-Diketo-1-Äthyl-4,4-Diphenyltetrahydroimidazol.** Sm. 155° (*B.* 41, 1386 *C.* 1908 [1] 2103; *A.* 368, 231 *C.* 1909 [2] 1468).



- $C_{17}H_{16}O_2N_2$  17) **2,5-Diketo-1,3-Dimethyl-4,4-Diphenyltetrahydroimidazol.** Sm. 197 bis 198° (B. 41, 170 C. 1908 [1] 847; B. 41, 1380 C. 1908 [1] 2103; C. 1908 [1] 1837).
- 18) **2-Keto-1,3-Dimethyl-4,5-Diphenyltetrahydroimidazol-4,5-Oxyd.** Sm. 197—198° (B. 41, 170 C. 1908 [1] 847).
- 19) **Methyläther d. 3-Keto-6-[4-Oxyphenyl]-2-Phenyl-2,3,4,5-Tetrahydro-1,2-Diazin.** Sm. 103° (B. 34, 3258). — \*IV, 619.
- 20) **3,6-Diketo-2-Benzyl-1-Phenylhexahydro-1,2-Diazin.** Sm. 159° (B. 26, 678). — IV, 703.
- 21) **2,5-Diketo-1-Phenyl-4-[2-Methylphenyl]hexahydro-1,4-Diazin.** Sm. 165—166° (J. pr. [2] 40, 443). — II, 469.
- 22) **2,5-Diketo-1-Phenyl-4-[4-Methylphenyl]hexahydro-1,4-Diazin.** Sm. 220—221° (B. 23, 1999). — II, 505.
- 23) **1-Keto-2-[4-Acetylamidomethylphenyl]-1,3-Dihydroisindol (4-Acetylamidobenzylphthalamidin).** Sm. 226—227° (B. 23, 344). — IV, 640.
- 24) **1-Allylphenylhydrazonmethylbenzol-2-Carbonsäure.** Sm. 160° (B. 24, 2352). — IV, 696.
- 25) **Äthylester d. Azobenzol-4-Akrylsäure.** Sm. 101—102° (C. r. 135, 1118 C. 1903 [1] 286). — \*IV, 1056.
- 26) **Phenylamid d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Buten- $\beta$ -Carbonsäure.** Sm. 156° (B. 35, 2509 C. 1902 [2] 438).
- 27) **Diphenylamid d. Pseudoitakonsäure.** Sm. 185° (A. 77, 282; 254, 148; B. 14, 2789; 15, 1641). — II, 418.
- 28) **Diphenylamid d. Citrakonsäure.** Sm. 175,5° (B. 14, 2789; 15, 1641). — II, 418.
- 29) **Diphenylamid d. Mesakonsäure.** Sm. 185,7° (B. 14, 2789; 15, 1461). — II, 419.
- 30) **Phenylimid d.  $\alpha$ -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure.** Sm. 186,5 bis 187° (B. 35, 1628 C. 1902 [1] 1273).
- 31) **isom. Phenylimid d.  $\alpha$ -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure.** Sm. 134° (B. 35, 1628 C. 1902 [1] 1273).
- 32) **Phenylimid d.  $\beta$ -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure.** Sm. 135° (B. 21, 1386; A. 261, 143). — II, 440.
- 33) **4-Dimethylamidobenzylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 104 bis 105° (D. R. P. 134979 C. 1902 [2] 1084). — \*IV, 411.
- 34)  **$\beta$ -Methylphenylamidoäthylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 104—105° (B. 24, 2199). — II, 1800.
- 35)  **$\beta$ -[2-Methylphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 153° (B. 24, 2194). — II, 1800.
- 36)  **$\beta$ -[4-Methylphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 96° (B. 24, 2195). — II, 1800.
- 37)  **$\beta$ -Phenylamidopropylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 93° (B. 24, 2630). — II, 1802.
- 38)  **$\gamma$ -Phenylamidopropylimid d. Benzol-1,2-Dicarbonsäure.** Sm. 87 bis 89° (B. 23, 1168). — II, 1802.
- 39) **Cinnamylidenhydrazid d.  $\alpha$ -Oxyphenylessigsäure.** Sm. 180° (B. 34, 2798). — \*III, 47.
- $C_{17}H_{16}O_2N_4$  C 66,2 — H 5,2 — O 10,4 — N 18,2 — M. G. 308.
- 1)  **$\alpha\beta$ -Di[Benzoylhydrazon]propan (Methylglyoxalbenzoylosazon).** Sm. 251 bis 252° u. Zers. (B. 31, 34). — \*II, 810.
- 2)  **$\alpha$ -Phenylazo- $\alpha$ -Acetylphenylhydrazon- $\beta$ -Ketopropan.** Sm. 102° (J. pr. [2] 64, 225).
- 3) **1-Methyl-4,5-Diphenylacetylendiurein.** Sm. 340° u. Zers. (A. 368, 250 C. 1909 [2] 1566).
- 4) **4-Phenylazo-3,5-Diketo-4-Äthyl-1-Phenyltetrahydropyrazol.** Sm. 188° (B. 41, 3872 C. 1909 [1] 297).
- 5) **Äthylester d. 1,5-Diphenyl-1,2,3-Triazol-4-Amidoameisensäure.** Sm. 179° (B. 39, 3924 C. 1907 [1] 115).
- 6) **Phenylhydrazid d. 5-Keto-1-Phenyl-4,5-Dihydropyrazol-4-Methylcarbonsäure.** Zers. bei 186—190° (192—194°) (A. 339, 377 C. 1905 [2] 32; A. 363, 357 C. 1909 [1] 154).
- 7) **Di[Benzylidenhydrazid] d. Methandicarbonsäure.** Sm. 226° (J. pr. [2] 51, 188). — III, 40.

- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>Br<sub>2</sub>** 1) Methyläther d.  $\gamma\delta$ -Dibrom- $\beta$ -Keto- $\alpha$ -Phenyl- $\delta$ -[4-Oxyphenyl]butan. Sm. 116—117° u. Zers. (M. 22, 756). — \*III, 172.  
 2) Äthyläther d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha$ -[p-Oxyphenyl]- $\gamma$ -Phenylpropan. Sm. 150° (B. 25, 3535). — III, 228.  
 3) Dimethyläther d. 9,10-Dibrom-5,6-Dioxy-3-Methyl-9,10-Dihydrophenanthren. Sm. 126—127° (B. 39, 3114 C. 1906 [2] 1329).  
 4)  $\beta\gamma$ -Dibrom- $\alpha\delta$ -Diphenylvaleriansäure. Sm. 172° u. Zers. (A. 319, 216 C. 1902 [1] 108). — \*II, 872.  
 5) Benzcat d. 3,5-Dibrom-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 97 bis 98,5° (G. 19, 472). — II, 1147.  
 6) Benzcat d. 2,6-Dibrom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 88 bis 90° (80—81°) (G. 22 [2] 585; M. 24, 72 C. 1903 [1] 767). — II, 1148.
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>Br<sub>4</sub>** 1) 3, 6, 3', 6'-Tetrabrom-4,4'-Dioxy-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 234° (B. 28, 2909, 2914, 2921; 29, 1112, 2338; 34, 4270, 4274, 4281; A. 301, 275; B. 34, 4270 C. 1902 [1] 308; A. 356, 133 C. 1907 [2] 1698). — \*II, 606.  
 2) 3,5,3',5'-Tetrabrom-4,4'-Dioxy-2,6,2',6'-Tetramethyldiphenylmethan. Sm. 246° (173—175°) (A. 344, 193 C. 1906 [1] 1160; A. 356, 155 C. 1907 [2] 1699).  
 3) 2, 6, 2', 6'-Tetrabrom-4,4'-Dioxy-3,5,3',5'-Tetramethyldiphenylmethan. Sm. 232° (A. 302, 85; A. 356, 134 C. 1907 [2] 1698). — \*II, 607.
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>S** 1) Äthylester d.  $\beta$ -Merkapto- $\beta$ -Phenylakrylphenyläthersäure. Sm. 95 bis 96° (Soc. 77, 1181). — \*II, 962.
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>S<sub>2</sub>** 1) Dibenzcat d.  $\alpha\gamma$ -Dimerkaptopropan. Fl. (B. 32, 1371).
- C<sub>17</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** 1) C 68,9 — H 5,4 — O 16,2 — N 9,4 — M. G. 296.  
 1)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[3-Nitro-4-Dimethylamidophenyl]propen. Sm. 130—131° (B. 35, 3577 C. 1902 [2] 1384).  
 2)  $\gamma$ -Keto- $\gamma$ -[3-Nitrophenyl]- $\alpha$ -[4-Dimethylamidophenyl]propen. Sm. 165° (B. 33, 3529). — \*III, 180.  
 3)  $\alpha\beta$ -Dibenzoyl- $\alpha\beta$ -Dimethylharnstoff. Sm. 162—163° (B. 41, 1388 C. 1908 [1] 2103).  
 4) 2,2'-Di[Acetylamido]diphenylketon. Sm. 168° (154°) (B. 23, 2578; 31, 3033; A. 283, 171; J. pr. [2] 59, 438; J. pr. [2] 65, 338 C. 1902 [1] 1352). — III, 184; \*III, 148.  
 5) 2,3'-Di[Acetylamido]diphenylketon. Sm. 167° (B. 23, 2578; A. 283, 173). — III, 184.  
 6) 2,4'-Di[Acetylamido]diphenylketon. Sm. 128—129° (170°) (B. 23, 2578; J. pr. [2] 65, 312 C. 1902 [1] 1350). — III, 184; \*III, 149.  
 7) 3,3'-Di[Acetylamido]diphenylketon. Sm. 226—227° (A. 194, 360; 283, 170). — III, 185.  
 8) 3,4'-Di[Acetylamido]diphenylketon. Sm. 218° (B. 27, 2294; 29, 1264). — III, 185.  
 9) 4,4'-Di[Acetylamido]diphenylketon. Sm. 235° (B. 23, 2578; A. 283, 170). — III, 185.  
 10) Methyläther d.  $\gamma$ -Phenylhydrazon- $\alpha\beta$ -Diketo- $\alpha$ -[2-Oxyphenyl]butan. Sm. 146,5° (B. 40, 2722 C. 1907 [2] 326).  
 11) Äthylfurfurin. Fl. (2HCl, PtCl<sub>4</sub>), HJ (J. 1855, 559). — III, 722.  
 12) s-Dicumaranylharnstoff. Sm. 205° (B. 39, 495 C. 1906 [1] 932).  
 13) 2-Oxy-4,5-Diketo-2-Äthyl-1,3-Diphenyltetrahydroimidazol. Sm. 160° (B. 33, 1301). — \*II, 209.  
 14) Methyläther d. 2-Oxy-4,5-Diketo-2-Methyl-1,3-Diphenyltetrahydroimidazol. Sm. 223—224° (B. 33, 1300). — \*II, 208.  
 15) Dimethyläther d. 2-Keto-4,5-Di[4-Oxyphenyl]-2,3-Dihydroimidazol. Sm. 284° (A. 284, 25; A. 339, 265 C. 1905 [2] 46). — III, 227.  
 16) 1-[3-Nitrobenzoyl]methyl-1,2,3,4-Tetrahydrochinolin. Sm. 145° (B. 30, 576). — IV, 195.  
 17) 1-[3-Nitrobenzoyl]-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 114° (B. 25, 1269). — IV, 204.  
 18) p-Nitro-1-Benzoyl-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 149° (B. 25, 1268). — IV, 204.  
 19) Methylester d. 3-Phenylamido-2-Keto-1,2,3,4-Tetrahydrochinolin-3-Carbonsäure. Sm. 171° (B. 35, 516 C. 1902 [1] 658).

- C<sub>17</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** 20) Äthylester d. Benzoylphenylhydrazonessigsäure. Sm. 67—68° (*C. r.* 144, 570 *C.* 1907 [1] 1492).
- 21) Äthylester d. Phenylazobenzoylessigsäure. Sm. 65° (65—67°) (*B.* 21, 2120; *B.* 35, 924 *C.* 1902 [1] 806). — *IV*, 1472; \**IV*, 1059.
- 22) Acetat d. anti- $\alpha$ -Oximido-2-Acetylamidodiphenylmethan. Sm. 218° (*B.* 24, 2383). — *III*, 191.
- 23) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[2-Oxybenzyliden]hydrazin. Sm. 133° (*B.* 17, 3006). — *IV*, 759.
- 24) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[4-Oxybenzyliden]hydrazin. Sm. 148° (*B.* 36, 3975 *C.* 1904 [1] 163).
- 25) Amid d.  $\alpha$ -Benzoylamido- $\beta$ -[4-Methoxyphenyl]akrylsäure. Sm. 187° (*A.* 337, 297 *C.* 1905 [1] 379).
- 26) Di[Phenylamid] d.  $\beta$ -Ketopropan- $\alpha$ -Dicarbonsäure. Sm. 155° u. Zers. (*B.* 33, 3443). — \**II*, 221.
- 27) Di[Methylphenylamid] d. Mesoxalsäure. Sm. 172° (*Soc.* 83, 43 *C.* 1903 [1] 442).
- 28) Di[4-Methylphenylamid] d. Mesoxalsäure. Sm. 187° (*Am.* 16, 383). — \**II*, 281.
- 29)  $\beta$ -[2-Methoxyphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 118—119° (*B.* 27, 929). — *II*, 1800.
- 30) Hydrazid d. 5,6-Dioxyphenanthrendimethyläther-1-Carbonsäure. Sm. 194—195° (*B.* 40, 1999 *C.* 1907 [2] 157).
- 31) Hydrazid d. 3,4-Dioxyphenanthrendimethyläther-9-Carbonsäure. Sm. 207—208° (*B.* 40, 2041 *C.* 1907 [2] 162).
- 32) 4-Benzylidenhydrazid d. Benzol-1,4-Dicarbonsäure-1-Äthylester. Sm. 195° (*J. pr.* [2] 54, 80). — \**III*, 33.
- C<sub>17</sub>H<sub>16</sub>O<sub>8</sub>N<sub>4</sub>** C 63,0 — H 4,9 — O 14,8 — N 17,3 — M. G. 324.
- 1)  $\beta$ -[4-Nitrophenyl]azo- $\gamma$ -Methylimido- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Buten? Sm. 155° (*B.* 32, 2643). — \**IV*, 1074.
- 2)  $\gamma$ -Semicarbazon- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[2-Nitrophenyl]propen. Sm. 111° (*B.* 35, 1072 *C.* 1902 [1] 930). — \**III*, 184.
- 3)  $\gamma$ -Semicarbazon- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[3-Nitrophenyl]propen. Sm. 140° (*B.* 35, 1072 *C.* 1902 [1] 930). — \**III*, 184.
- 4)  $\gamma$ -Semicarbazon- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[4-Nitrophenyl]propen. Sm. 200° (*B.* 35, 1073 *C.* 1902 [1] 930). — \**III*, 184.
- 5)  $\alpha$ -[oder  $\gamma$ ]-Semicarbazon- $\beta$ -Oximido- $\alpha$ -[oder  $\gamma$ ]-Keto- $\alpha$ - $\delta$ -Diphenylbutan. Zers. bei 220° (*B.* 34, 1487). — \**III*, 243.
- 6) Äthylester d.  $\beta$ -Phenylazo- $\beta$ -Phenylhydrazon- $\alpha$ -Ketoäthan- $\alpha$ -Carbonsäure. Sm. 144—145° (*Bl.* [3] 31, 96 *C.* 1904 [1] 581).
- 7) Äthylester d. Formazylglyoxalsäure. Sm. 105—106° (*B.* 27, 151; *J. pr.* [2] 64, 207). — *IV*, 1228.
- 8) Acetat d. 4-Phenylamido-3-Oxy-5-Keto-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 170° (*C.* 1901 [1] 936). — \**IV*, 900.
- 9) Acetat d. 4-[4-Methylphenyl]amido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 146—147° (*C.* 1901 [1] 936). — \**IV*, 900.
- 10) Amid d.  $\alpha$ -[4-Acetylamidophenyl]azo- $\alpha$ -Benzoylessigsäure. Sm. 252° (*B.* 39, 3863 *C.* 1907 [1] 102).
- C<sub>17</sub>H<sub>16</sub>O<sub>8</sub>N<sub>6</sub>** C 58,0 — H 4,5 — O 13,6 — N 23,9 — M. G. 352.
- 1) 7-Nitro-3-Acetylamido-4-Phenylhydrazon-2-Methyl-3-4-Dihydro-1,3-Benziazin. Sm. 315° (*C.* 1908 [2] 180).
- C<sub>17</sub>H<sub>16</sub>O<sub>8</sub>Cl<sub>2</sub>** 1) Diäthyläther d. Di[ $p$ -Chlor- $p$ -Oxyphenyl]keton. Sm. 122—123° (*B.* 28, 2873). — *III*, 200.
- C<sub>17</sub>H<sub>16</sub>O<sub>8</sub>Br<sub>2</sub>** 1) Diäthyläther d. 5,5'-Dibrom-2,2'-Dioxydiphenylketon. Sm. 99—100° (*B.* 38, 1492 *C.* 1905 [1] 1406; *B.* 39, 2361 *C.* 1906 [2] 526).
- 2)  $\alpha$  $\beta$ -Dibrom- $\alpha$ -Oxy- $\beta$ -Phenylpropion-[3-Methylphenyläther]säure. Sm. 109° (*G.* 20, 510). — *II*, 1577.
- 3)  $\alpha$  $\beta$ -Dibrom- $\alpha$ -Oxy- $\beta$ -Phenylpropion-[4-Methylphenyläther]säure. Sm. 124—125° (*G.* 20, 510). — *II*, 1577.
- 4) 5-Benzozat d. 3,4-Dioxy-1-[ $\beta$  $\gamma$ -Dibrompropyl]benzol-3-Methyläther. Sm. 97° (*B.* 23 [2] 204). — \**II*, 720.
- 5) 5-Benzozat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol-2-Methyläther. Sm. 120° (*B.* 28, 2905). — \**II*, 721.
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>** C 65,4 — H 5,1 — O 20,5 — N 9,0 — M. G. 312.
- 1) Dinitroretenfluoren. Sm. bei 245° (*A.* 229, 145). — *II*, 253.



- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>**
- 2) Dimethyläther d. 2,5-Diketo-4,4-Di[4-Oxyphenyl]tetrahydroimidazol. Sm. 232° (B. 42, 1800 C. 1909 [2] 204).
  - 3) Methyläther d. 4-Acetylamido-3-Oxy-9-Keto-5,7-Dimethylphenoxazin. Sm. 256° (B. 41. 4214 C. 1909 [1] 279).
  - 4) αα-Di[Benzoylamido]propionsäure. Sm. 172° u. Zers. (B. 14, 1599 bis 1600). — II, 1192.
  - 5) d-αβ-Di[Benzoylamido]propionsäure. Sm. 171—172° (B. 40, 1065 C. 1907 [1] 1318).
  - 6) l-αβ-Di[Benzoylamido]propionsäure (B. 40, 1066 C. 1907 [1] 1319).
  - 7) r-αβ-Di[Benzoylamido]propionsäure. Sm. 195—197° (188—189°; 205 bis 207°). Ba (H. 19, 331; B. 34, 1183; J. pr. [2] 70, 181 C. 1904 [2] 1397; B. 40, 1064 C. 1907 [1] 1319). — II, 1191.
  - 8) α-Phenylhydrazon-α-Phenylpropan-γγ-Dicarbonsäure. Sm. 120° u. Zers. (B. 18, 3325). — IV, 718.
  - 9) 5[oder 6]-Methyl-2-[3,4-Dimethoxyphenyl]benzimidazol-2<sup>2</sup>-Carbonsäure. Zers. bei 237°. Ca (B. 24, 627). — IV, 618.
  - 10) Dimethylester d. Phenylimidophenylamidomethan-4,4'-Dicarbonsäure. Sm. 240° (C. 1902 [2] 955).
  - 11) Äthylester d. 1-[β-Nitro-α-Amido-β-Phenyläthenyl]benzol-2-Carbonsäure. Sm. 154—155° (B. 18, 2441). — II, 1710.
  - 12) Äthylester d. 2-Oxybenzyliden-2-Aldehydophenylkohlenensäurehydrazon. Sm. 114—115° (B. 31, 2808). — \*III, 55.
  - 13) Äthylester d. αβ-Dibenzoylhydrazin-α-Carbonsäure. Sm. 130° (J. pr. [2] 70, 276 C. 1904 [2] 1544).
  - 14) Äthylester d. 6-Acetoxyazobenzol-3-Carbonsäure. Sm. 137° (J. pr. [2] 78, 405 C. 1909 [1] 363).
  - 15) Diacetat d. 2',4'-Dioxy-2-Methylazobenzol. Sm. 74—75° (B. 15, 2825). — IV, 1444.
  - 16) Diacetat d. 2',4'-Dioxy-4-Methylazobenzol. Sm. 98° (B. 15, 2821). — IV, 1444.
  - 17) Acetylderivat d. Verb. C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>. Zers. oberhalb 265° (B. 37, 371 C. 1904 [2] 1565).
  - 18) α-Acetat-β-Benzoat d. β-Oximido-β-Amido-α-Oxy-α-Phenyläthan. Sm. 165° (B. 18, 1078). — II, 1554.
  - 19) Dibenzoylderivat d. β-Oxyäthylharnstoff. Sm. 129° (R. 13, 488).
  - 20) Phenylamid d. Bernsteinsäuremonophenylamid-3-Carbonsäure. Sm. 252° (G. 15, 549). — II, 1265.
  - 21) 1-Phenylamid d. Benzol-1-Carbonsäure-3-Amidoketocarbonsäure-äthylester. Sm. 180° (A. 232, 137). — II, 1264.
  - 22) Phenylimidomethoxymethylphenylmonamid d. Oxalsäuremonomethylester. Sm. 131—133° (Soc. 91, 970 C. 1907 [2] 448). C 60,0 — H 4,7 — O 18,8 — N 16,5 — M. G. 340.
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>N<sub>4</sub>**
- 1) αγ-Dibenzoximido-αγ-Diamidopropan (Malonendibenzoyldiamidoxim). Sm. 183—185° u. Zers. (B. 29, 1170). — \*II, 758.
  - 2) 8-Nitro-1,4,5-Tri[Methylamido]-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 751).
  - 3) 3,5-Diketo-1-Phenylhexahydro-1,2,4-Triazin-4-Phenylamidoessigsäure. Sm. 176° (B. 36, 3890 C. 1904 [1] 28).
  - 4) Di[4-Oxybenzylidenhydrazid] d. Methandicarbonsäure. Sm. 163 (J. pr. [2] 51, 189). — III, 86.
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>N<sub>6</sub>**
- 1) αγ-Dinitro-αγ-Di[4-Methylphenylazo]propan. Sm. 199° (B. 25, 1712). — IV, 1384.
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>Br<sub>2</sub>**
- 1) Verbindung (aus ?-Brom-8-Oxy-5,7-Dimethylfluoron). Sm. 99—100° (M. 25, 330 C. 1904 [1] 1495).
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>S**
- 1) Cinnamylidenacetophenonhydrosulfonsäure. K (B. 37, 4053 C. 1904 [2] 1649).
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>S<sub>2</sub>**
- 1) Merkaptoessigdiphenylmethylenäthersäure. Sm. 175—176° u. Zers. (B. 21, 483). — III, 180.
- C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>N<sub>2</sub>**
- 1) β-Keto-αα-Di[4-Nitrobenzyl]propan. Sm. 108,5—109,5° (B. 37, 1993 C. 1904 [2] 26).
  - 2) β-Keto-αγ-Di[4-Nitrobenzyl]propan. Sm. 136—138° (B. 37, 1993 C. 1904 [2] 26).

- C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>N<sub>2</sub>** 3) **2-Dinitro-5-Isopropyl-2-Methyldiphenylketon** (*J. pr.* [2] 35, 499).  
 4) **Dimethyläther d. s-Di[4-Oxybenzoyl]harnstoff**. Sm. 205—207° u. Zers. (*Am.* 35, 308 *C.* 1906 [1] 1545).  
 5) **3,4-Dioxy-1-Benzoylhydrazonmethylbenzoldimethyläther-2-Carbonsäure** (Opiansäurebenzoylhydrazon). Sm. 227° u. Zers. (*B.* 34, 1016).  
 6) **Äthoxymethenyldi[2-Amidobenzol-1-Carbonsäure]**. Sm. 223°. Ag (*B.* 19, 2656). — II, 1251.  
 7) **4-Acetoxy-4'-Äthoxylazobenzol-3-Carbonsäure**. Sm. 158,5° (*C.* 1908 [2] 310).  
 8) **Methylester d. 3'-Nitro-4-Dimethylamidodiphenylketon-2-Carbonsäure**. Sm. 163° (140°) (*A.* 307, 310; *Bl.* [3] 25, 512). — \*II, 1002.  
 9) **Dimethylester d. αβ-Diphenylharnstoff-3,4-Dicarbonsäure**. Sm. 138° (corr.) (*C.* 1906 [2] 117).  
 10) **Dimethylester d. s-Diphenylharnstoff-3,3'-Dicarbonsäure**. Sm. 223° u. Zers. (*A.* 291, 324). — \*II, 788.  
 11) **Dimethylester d. s-Diphenylharnstoff-4,4'-Dicarbonsäure**. Sm. 246° u. Zers. (*A.* 291, 332). — \*II, 790.  
 12) **Di[4-Acetylamidophenylester] d. Kohlensäure**. Sm. 200° (*C.* 1897 [1] 469; *D.R.P.* 85803). — \*II, 404.  
 13) **Acetat d. N-Acetyl-3-Nitrophenyl-2-Oxybenzylamin**. Sm. 99° (*B.* 32, 2061). — \*II, 427.  
 14) **Acetat d. N-Acetyl-4-Nitrophenyl-2-Oxybenzylamin**. Sm. 79° (*B.* 32, 2061). — \*II, 427.  
 15) **Phenylmonamid d. β-[2-Nitrophenyl]propan-αγ-Dicarbonsäure**. Sm. 129° (*B.* 36, 2674 *C.* 1903 [2] 948).  
 16) **Phenylmonamid d. β-[3-Nitrophenyl]propan-αγ-Dicarbonsäure**. Sm. 160°. Ag (*Am.* 28, 54 *C.* 1902 [2] 703).  
 17) **Phenylmonamid d. β-[4-Nitrophenyl]propan-αγ-Dicarbonsäure**. Sm. 120—121°. Ag (*Am.* 28, 58 *C.* 1902 [2] 703).
- C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>N<sub>4</sub>** *C* 57,3 — H 4,5 — O 22,5 — N 15,7 — M. G. 356.  
 1) **4,7-Dinitro-6-Oxy-2-Methyl-1-[2,4,5-Trimethylphenyl]benzimidazol**. Sm. 237° (*Soc.* 93, 1677 *C.* 1908 [2] 1923).  
 2) **4,7-Dinitro-6-Oxy-2-Methyl-1-[2,4,6-Trimethylphenyl]benzimidazol**. Sm. 183° (*Soc.* 95, 1047 *C.* 1909 [2] 519).  
 3) **Äthyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Methylphenyl]benzimidazol**. Sm. 153° (*Soc.* 93, 1673 *C.* 1908 [2] 1922).  
 4) **Äthyläther d. 4,7-Dinitro-6-Oxy-2-Methyl-1-[4-Methylphenyl]benzimidazol**. Sm. 176,5° (*Soc.* 93, 1674 *C.* 1908 [2] 1922).
- C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>Br<sub>4</sub>** 1) **Pentamethyläther d. Tetrabromphloroglucid**. Sm. 228—229° (*M.* 29, 685 *C.* 1908 [2] 1443).
- C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>S** 1) **Dibenzalacetonyldihydrosulfat** (*B.* 36, 1481 *C.* 1903 [1] 1349).
- C<sub>17</sub>H<sub>16</sub>O<sub>6</sub>N<sub>2</sub>** *C* 59,3 — H 4,6 — O 27,9 — N 8,1 — M. G. 344.  
 1) **2-Dinitro-αα-Di[4-Methylphenyl]propionsäure**. Sm. 129° u. Zers. *Ba* (*B.* 15, 1476). — II, 1471.  
 2) **α-Phenylhydrazontetraoxyphenylessig-β-Dimethyläther-β-Methylenäthersäure** (Apionylglyoxylsäurephenylhydrazon). Sm. 169—170° (*G.* 20, 697). — IV, 727.  
 3) **Benzoat d. 3,5-Dinitro-2-Oxy-4-Isopropyl-1-Methylbenzol**. Sm. 98 bis 100° (*G.* 20, 186). — II, 1147.  
 4) **Benzoat d. 2,6-Dinitro-3-Oxy-4-Isopropyl-1-Methylbenzol**. Sm. 127 bis 128° (*G.* 20, 142). — II, 1148.
- C<sub>17</sub>H<sub>16</sub>O<sub>6</sub>N<sub>4</sub>** *C* 54,8 — H 4,3 — O 25,8 — N 15,1 — M. G. 372.  
 1) **2,2'-Dinitro-4,4'-Di[Acetylamido]diphenylmethan**. Sm. 229° (*C. r.* 146, 1325 *C.* 1908 [2] 416).  
 2) **3,3'-Dinitro-4,4'-Di[Acetylamido]diphenylmethan**. Sm. 259—260° (*B.* 25, 303; 33, 257). — IV, 975; \*IV, 648.  
 3) **α-[Acetyl-4-Nitrophenyl]amido-α-[5-Nitro-2-Acetylamidophenyl]methan**. Sm. 210—211° (*B.* 35, 741 *C.* 1902 [1] 753). — \*IV, 409.  
 4) **2,2'-Dinitro-4,4'-Di[α-Oximidoäthyl]diphenylmethan**. Sm. 224° (*C. r.* 146, 1325 *C.* 1908 [2] 416).  
 5) **αβ-Di[4-Oxyphenylhydrazon]propan-α<sup>3</sup>β<sup>3</sup>-Dicarbonsäure**. Sm. 192° (*C.* 1900 [1] 205; *B.* 33, 645). — \*II, 900.  
 6) **α-Phenylhydrazon-3,5-Dinitro-2,4,6-Trimethylphenylessigsäure**. Sm. 202° u. Zers. (*A.* 264, 144). — IV, 698.

- C<sub>17</sub>H<sub>16</sub>O<sub>6</sub>N<sub>4</sub>** 7) Methylester d. ?-Dimethylphenylazo-2,4-Dinitrophenyllessigsäure. Sm. 159° (B. 22, 326). — IV, 1465.
- C<sub>17</sub>H<sub>16</sub>O<sub>7</sub>N<sub>2</sub>** C 56,7 — H 4,4 — O 31,1 — N 7,8 — M. G. 360.
- 1) Diäthyläther d. 3,3'-Dinitro-4,4'-Dioxydiphenylketon. Sm. 132° (G. 34 [1] 384 C. 1904 [2] 111).
- 2) 3-[6-Oxy-3-Methylcarboxyphenylamid] d. 4-Oxybenzol-1-Carbonsäure-3-Amidoessigsäure? Sm. noch nicht bei 280° (A. 325, 334 C. 1903 [1] 771).
- C<sub>17</sub>H<sub>16</sub>O<sub>8</sub>N<sub>4</sub>** C 50,5 — H 4,0 — O 31,7 — N 13,8 — M. G. 404.
- 1) 3,3'-Dinitrodiphenylmethan-4,4'-Di[Amidoessigsäure]. Sm. 164° u. Zers. (J. pr. [2] 77, 358 C. 1908 [1] 1694).
- C<sub>17</sub>H<sub>16</sub>O<sub>9</sub>N<sub>6</sub>** C 45,5 — H 3,6 — O 32,1 — N 18,8 — M. G. 448.
- 1) 3,5,3',5'-Tetranitro-4,4'-Di[Dimethylamido]diphenylketon. Sm. 202° (G. 34 [1] 383 C. 1904 [2] 111).
- C<sub>17</sub>H<sub>16</sub>O<sub>10</sub>Cl<sub>2</sub>** 1) Pentaacetat d. 4,6-Dichlor-2,3,5-Trioxyl-1-Dioxymethylbenzol. Sm. 143° (A. 363, 234 C. 1909 [1] 164).
- C<sub>17</sub>H<sub>16</sub>O<sub>11</sub>N<sub>2</sub>** C 48,1 — H 3,8 — O 41,5 — N 6,6 — M. G. 424.
- 1) Methylenharnstoffgallussäure (D. R. P. 171788 C. 1906 [2] 469).
- C<sub>17</sub>H<sub>16</sub>NCl** 1) Chlormethylat d. 4-Methyl-2-Phenylchinolin. 2 + PtCl<sub>4</sub> (B. 18, 35). — IV, 436.
- 2) Chlormethylat d. 2-Methyl-4-Phenylchinolin. 2 + PtCl<sub>4</sub> (B. 28, 1039). — IV, 434.
- 3) Chlormethylat d. Base C<sub>16</sub>H<sub>13</sub>N (aus Morphin). 2 + PtCl<sub>4</sub> (B. 34, 1163).
- 4) Chloräthylat d. 2-Phenylchinolin + 2H<sub>2</sub>O. 2 + PtCl<sub>4</sub> (B. 19, 1199). — IV, 425.
- C<sub>17</sub>H<sub>16</sub>NJ** 1) Jodmethylat d. 2-Benzylchinolin. Zers. bei 220° (B. 37, 3400 C. 1904 [2] 1318).
- 2) Jodmethylat d. 1-Benzylisochinolin. Sm. 247—248° (B. 37, 3398 C. 1904 [2] 1317).
- 3) Jodmethylat d. 4-Benzylisochinolin. Sm. 188° (A. 326, 295 C. 1903 [1] 929). — \*IV, 260.
- 4) Jodmethylat d. 4-Methyl-2-Phenylchinolin. Sm. 185° u. Zers. (B. 18, 34). — IV, 436.
- 5) Jodmethylat d. 2-Methyl-4-Phenylchinolin. Sm. 205° u. Zers. (B. 28, 1039). — IV, 434.
- 6) Jodäthylat d. 2-Phenylchinolin. Sm. 195° (B. 19, 1200). — IV, 425.
- 7) Jodäthylat d. 3-Phenylchinolin. Sm. 228° (B. 41, 483 C. 1908 [1] 1065).
- 8) Jodäthylat d. 6-Phenylchinolin + 1(2)H<sub>2</sub>O. Sm. 169° (wasserfrei) (A. 230, 18). — IV, 430.
- 9) Jodmethylat d. Base C<sub>16</sub>H<sub>13</sub>N (aus Morphin) (B. 34, 1163). — \*III, 668.
- C<sub>17</sub>H<sub>16</sub>N<sub>2</sub>S** 1) Benzyläther d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sd. 246°<sub>10</sub> (A. 331, 237 C. 1904 [1] 1221).
- 2) 2-Merkapto-1-Äthyl-4,5-Diphenylimidazol. Sm. noch nicht bei 240° (A. 284, 26). — III, 224.
- 3) Äthyläther d. 2-Merkapto-4,5-Diphenylimidazol. Sm. 181—182° (A. 284, 16). — III, 224.
- C<sub>17</sub>H<sub>16</sub>N<sub>3</sub>Cl** 1) 5-Phenylhydrazon-α-[4-Chlorphenyl]amido-αγ-Pentadien. Sm. 119° u. Zers. (A. 353, 385 C. 1907 [2] 411).
- 2) 5-Chlor-β-Amido-3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 100° (B. 34, 1308).
- C<sub>17</sub>H<sub>16</sub>N<sub>4</sub>Cl<sub>2</sub>** 1) 2,2-Dichlor-1,3-Di[Phenylhydrazon]-R-Pentamethylen + 2H<sub>2</sub>O. Sm. 84° (B. 22, 1260). — IV, 782.
- 2) Chlormethylat d. 5-Chlor-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 164° (B. 39, 1956 C. 1906 [2] 346).
- C<sub>17</sub>H<sub>16</sub>N<sub>4</sub>S** 1) α-Phenyl-β-[4-Methyl-2-Chinolyl]thioharnstoff (B. 33, 1896). — \*IV, 815.
- 2) α-Phenyl-β-[2-Methyl-4-Chinolyl]amidothioharnstoff. Sm. 139° (B. 33, 1899). — \*IV, 815.
- 3) Anhydroacetylderivat d. α-Imido-α-Phenylamido-α'-Merkapto-α'-[4-Methylphenyl]imidodimethylamin. Sm. 185° (A. 361, 313 C. 1908 [2] 881).
- 4) 5-Merkapto-4-[2-Methylphenyl]azo-3-Methyl-1-Phenylpyrazol. Sm. 136° (A. 338, 205 C. 1905 [1] 1157).



- C<sub>17</sub>H<sub>16</sub>N<sub>4</sub>S** 5) **5-Merkapto-4-[4-Methylphenyl]azo-3-Methyl-1-Phenylpyrazol.** Sm. 123° (A. 338, 206 C. 1905 [1] 1157).
- 6) **5-Merkapto-4-Phenylazo-3-Methyl-1-[4-Methylphenyl]pyrazol.** Sm. 116°. Hg, HgCl (A. 338, 210 C. 1905 [1] 1157).
- 7) **Methyläther d. 5-Merkapto-4-Phenylazo-3-Methyl-1-Phenylpyrazol.** Sm. 63° (A. 338, 196 C. 1905 [1] 1156).
- 8) **4-Phenylazo-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-1,3-Sulfid** (4-Azobenzolthiopyrin). Sm. 216° (B. 39, 1955 C. 1906 [2] 346).
- C<sub>17</sub>H<sub>16</sub>N<sub>4</sub>S<sub>4</sub>** 1) **Methylenäther d. 5-Merkapto-3-Phenyl-2,3-Dihydro-1,3,4-Thio-diazol.** Sm. 123—124° (J. pr. [2] 65, 476 C. 1902 [2] 28). — \*IV, 303.
- C<sub>17</sub>H<sub>17</sub>ON** C 81,3 — H 6,8 — O 6,3 — N 5,6 — M. G. 251.
- 1) **4-Oxy-1-Phenylimidomethyl-1,2,3,4-Tetrahydronaphtalin.** Sm. 189° (A. 357, 333 C. 1908 [1] 354).
- 2) **γ-Keto-γ-[4-Dimethylamidophenyl]-α-Phenylpropen.** Sm. 165° (B. 40, 3902 C. 1907 [2] 1516).
- 3) **γ-Keto-γ-Phenyl-α-[4-Dimethylamidophenyl]propen.** Sm. 114°. HCl (B. 35, 3576 C. 1902 [2] 1384; C. 1906 [2] 1762).
- 4) **γ-Benzoylamido-α-Phenyl-α-Buten.** Sm. 136—137° (B. 36, 3002 C. 1903 [2] 949).
- 5) **α-Phenylamido-β-Benzoyl-α-Buten.** Sm. 120° (B. 22, 3278). — III, 166.
- 6) **γ-Oximido-αε-Diphenyl-α-Penten.** Sm. 95—105° (A. 330, 234 C. 1904 [1] 945).
- 7) **γ-Oximido-δ-Phenyl-α-[4-Methylphenyl]-α-Buten?** Sm. 147° (M. 22, 753). — \*III, 186.
- 8) **6-[α-Oximidobenzyl]-1,2,3,4-Tetrahydronaphtalin.** Sm. 142° (B. 35, 2514 C. 1902 [2] 451).
- 9) **isom. 6-[α-Oximidobenzyl]-1,2,3,4-Tetrahydronaphtalin.** Sm. 116° (B. 35, 2514 C. 1902 [2] 452).
- 10) **d-1-1-Benzoylamido-2-Methyl-2,3-Dihydroinden.** Sm. 151° (Soc. 83, 917 C. 1903 [2] 505; Soc. 83, 927 C. 1903 [2] 505).
- 11) **d-1-neo-1-Benzoylamido-2-Methyl-2,3-Dihydroinden.** Sm. 169° (160°) (C. 1901 [2] 421; Soc. 83, 917 C. 1903 [2] 505; Soc. 83, 928 C. 1903 [2] 505).
- 12) **β-Acetylamido-1-Methyl-β-Dihydroanthracen.** Sm. 198° (B. 16, 1634). — II, 639.
- 13) **β-Acetylamido-2-Methyl-9,10-Dihydroanthracen.** Sm. 198° (B. 16, 1634). — IV, 401.
- 14) **Methyläther d. 3,5-Dimethyl-2-[4-Oxyphenyl]indol.** Sm. 134° (B. 37, 871 C. 1904 [1] 1154).
- 15) **Methyläther d. 3,7-Dimethyl-2-[4-Oxyphenyl]indol.** Sm. 127° (B. 37, 870 C. 1904 [1] 1154).
- 16) **1-Acetyl-4-Phenyl-1,2,3,4-Tetrahydrochinolin.** Sm. 120° (B. 28, 1043). — IV, 400.
- 17) **1-Acetyl-6-Phenyl-1,2,3,4-Tetrahydrochinolin.** Sm. 99—100° (A. 230, 22). — IV, 401.
- 18) **1-Benzoylmethyl-1,2,3,4-Tetrahydrochinolin.** Sm. 104° (B. 30, 576). — IV, 195.
- 19) **2-Benzoylmethyl-1,2,3,4-Tetrahydroisochinolin.** Sm. 100—101° (B. 36, 1161 C. 1903 [1] 1186). — \*IV, 145.
- 20) **d-1-Benzoyl-2-Methyl-1,2,3,4-Tetrahydrochinolin.** Sm. 117—118° (Soc. 75, 1082; Ph. Ch. 33, 469). — \*IV, 147.
- 21) **l-1-Benzoyl-2-Methyl-1,2,3,4-Tetrahydrochinolin.** Sm. 117,5—118° (Soc. 75, 1073; Ph. Ch. 33, 469). — \*IV, 147.
- 22) **i-1-Benzoyl-2-Methyl-1,2,3,4-Tetrahydrochinolin.** Sm. 118° (B. 25, 1263; Soc. 75, 1089). — IV, 204; \*IV, 147.
- 23) **Benzoylderivat d. Base C<sub>10</sub>H<sub>13</sub>N** (aus 1,2-Phenylendiessigsäurenitril). Sm. 150—152° (G. 22 [2] 513). — IV, 207.
- 24) **Laktam d. α-Phenylamido-α-Phenyl-β-Methylpropan-β-Carbonsäure.** Sm. 148—149° (B. 40, 1153 C. 1907 [1] 1260).
- 25) **Phenylamid d. α-Phenyl-α-Buten-β-Carbonsäure.** Sm. 128—129° (J. pr. [2] 74, 337 C. 1906 [2] 1824).
- 26) **Phenylamid d. 1,2,3,4-Tetrahydronaphtalin-6-Carbonsäure.** Sm. 141° (B. 35, 2515 C. 1902 [2] 452).

- C<sub>17</sub>H<sub>17</sub>ON** 27) 4-Methylphenylamid d. Phenylisocrotonsäure. Sm. 149° (B. 37, 2001 C. 1904 [2] 24).  
 28) Äthylphenylamid d. β-Phenylakrylsäure. Sm. 74° (Am. 33, 31 C. 1905 [1] 523).  
 29) 3,4-Dimethylphenylamid d. β-Phenylakrylsäure. Sm. 175—176°. — II, 1408.  
 30) 3,5-Dimethylphenylamid d. β-Phenylakrylsäure. — II, 1408.  
 31) Diphenylamid d. β-Methylpropen-α-Carbonsäure. Sm. 99° (B. 34, 2142).  
 32) Phenylbenzylamid d. Propen-α-Carbonsäure. Sm. 82° (B. 34, 2136).  
 33) Phenylbenzylamid d. Propen-β-Carbonsäure. Sd. 204°<sub>15</sub> (B. 34, 2137).  
 34) d-1,2,3,4-Tetrahydro-2-Naphtylamid d. Benzolcarbonsäure. Sm. 155—157° (C. 1900 [1] 863; Soc. 79, 84).  
 35) i-1,2,3,4-Tetrahydro-2-Naphtylamid d. Benzolcarbonsäure. Sm. 150—151° (B. 21, 857; C. 1900 [1] 863). — II, 588.  
 36) 1,2,3,4-Tetrahydro-6-Naphtylamid d. Benzolcarbonsäure. Sm. 166 bis 167° (B. 35, 2515 C. 1902 [2] 451).  
**C<sub>17</sub>H<sub>17</sub>ON<sub>3</sub>**  
 1) α-Semicarbazon-αγ-Diphenyl-β-Buten. Sm. 151° (Bl. [3] 35, 356 C. 1906 [2] 318).  
 2) γ-Phenylsemicarbazon-α-Phenyl-α-Buten. Sm. 195° (B. 37, 3183 C. 1904 [2] 991).  
 3) Äthyläther d. 3-Oxy-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 51—52° (Soc. 73, 370). — IV, 1158.  
 4) Äthyläther d. 3-Oxy-1-Phenyl-5-[3-Methylphenyl]-1,2,4-Triazol. Sm. 59° (Soc. 71, 214). — IV, 1161.  
 5) 1[oder 3]-Acetyl-2-[4-Methylphenyl]imido-5-Methyl-2,3-Dihydrobenzimidazol. Sm. 149° (B. 24, 2520). — IV, 623.  
 6) Phenylamidoaposafranon. Sm. 256° (B. 29, 1605).  
 7) Nitril d. α-[2-Methoxyphenyl]imido-α-[4-Dimethylamidophenyl]-essigsäure. Sm. 148—149° (B. 35, 3575 C. 1902 [2] 1384).  
 8) Nitril d. α-[4-Methoxyphenyl]imido-α-[4-Dimethylamidophenyl]-essigsäure. Sm. 133—134° (B. 35, 3574 C. 1902 [2] 1384).  
**C<sub>17</sub>H<sub>17</sub>ON<sub>5</sub>**  
 C 66,4 — H 5,5 — O 5,2 — N 22,8 — M. G. 307.  
 1) 3-Keto-4-Phenylamidoazo-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol (4-Diazoantipyrinamidobenzol). Zers. bei 136—137° (A. 293, 68). — IV, 1582.  
 2) 3[oder 5]-Acetylamido-5[oder 3]-4-Methylphenylamido-1-Phenyl-1,2,4-Triazol. Sm. 115° (A. 361, 319 C. 1908 [2] 881).  
**C<sub>17</sub>H<sub>17</sub>OC<sub>2</sub>** 1) Chlorid d. αα-Di[4-Methylphenyl]propionsäure. Sm. 54,5—55,5° (B. 41, 689 C. 1908 [1] 1394).  
**C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>N**  
 C 76,4 — H 6,4 — O 12,0 — N 5,2 — M. G. 267.  
 1) α-[4-Nitrophenyl]-β-[4-Isopropylphenyl]äthen. Sm. 132° (J. pr. [2] 61, 185). — \*II, 120.  
 2) γ-[3-Oxyphenyl]imido-α-Oxy-α-Phenyl-α-Penten. Sm. 139° (B. 36, 4018 C. 1904 [1] 293).  
 3) Methyläther d. α-Keto-γ-Phenylimido-α-[3-Oxyphenyl]butan. Sm. 84—85° (B. 27, 3042). — III, 271.  
 4) Methyläther d. α-Keto-γ-Phenylimido-α-[4-Oxyphenyl]butan. Sm. 111—112° (B. 27, 910). — III, 271.  
 5) Methyläther d. α-Keto-γ-[4-Oxyphenyl]imido-α-Phenylbutan. Sm. 107—108° (B. 28, 1045). — III, 270.  
 6) 2-Butyrylamidodiphenylketon. Sm. 56° (B. 25, 3087). — III, 182.  
 7) 4-Propionylamido-3-Methyldiphenylketon. Sm. 128° (Soc. 85, 593 C. 1904 [1] 1554).  
 8) 6-Propionylamido-3-Methyldiphenylketon. Sm. 99° (Soc. 85, 596 C. 1904 [1] 1554).  
 9) γ-Keto-α-[3-Benzoylamidophenyl]butan. Sm. 94—95° (B. 23, 1886). — III, 149.  
 10) Methyldi[Benzoylmethyl]amin. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr (C. 1899 [1] 1285). — \*III, 97.  
 11) α-Acetylphenylamidoäthylphenylketon. Sm. 55° (Bl. [3] 17, 72). — \*III, 113.

- C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>N** 12) **2-Methylphenylacetylamidobenzoylmethan.** Sm. 92° (B. 25, 2866). — III, 127.
- 13) **4-Methylphenylacetylamidobenzoylmethan.** Sm. 89° (B. 25, 2867). — III, 127.
- 14) **Acetonbenzilimid.** Sm. 176° u. Zers. (B. 18, 180). — III, 299.
- 15) **4-Methyläther d.  $\gamma$ -Oximido- $\delta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten.** Sm. 97—98° (M. 22, 757). — \*III, 185.
- 16) **2-Äthyläther d.  $\gamma$ -Oximido- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpropen.** Sm. 107—108° (B. 25, 3535). — III, 247.
- 17) **Benzyläther d.  $\beta$ -Oximido- $\gamma$ -Keto- $\alpha$ -Phenylbutan.** Fl. (B. 16, 834). — III, 149.
- 18) **4-Methyläther- $\beta$ -Phenyläther d.  $\gamma$ -Oximido- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten.** Sm. 179° (B. 35, 3556 C. 1902 [2] 1311).
- 19) **N-Benzoylbenzimidopropyläther.** Sd. 231—232,5°<sub>17</sub> (Am. 20, 75). — \*II, 761.
- 20) **N-Benzoylphenylacetimidoäthyläther.** Sd. 215—216°<sub>13</sub> (Am. 20, 76). — \*II, 815.
- 21) **9-Butyrylamidoxanthen.** Sm. 186—187° (C. r. 145, 815 C. 1908 [1] 140).
- 22) **4-Oximido-2,6-Diphenyltetrahydropyran.** Sm. 154°. + Glycerin, + Äthylenglykol (C. 1899 [2] 476; 1900 [1] 608; B. 32, 1747; 33, 746). — \*III, 543.
- 23) **3-Benzoyl-2-Methyl-4-Phenyltetrahydrooxazol.** Sm. 140° (B. 21, 927). — IV, 207.
- 24) **3,5-Diacetyl-2,6-Dimethyl-4-Phenylpyridin.** Sm. 188° (B. 31, 1027). — \*IV, 232.
- 25) **Apomorphin.** + (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>O, HCl (A. Spl. 7, 172, 179; Fr. 24, 643; J. 1872, 754; C. 1899 [2] 684; M. 18, 384; Soc. 26, 1082; B. 4, 21; B. 35, 4383 C. 1903 [1] 337; C. 1903 [2] 1449; 1906 [1] 1440; B. 40, 1988 C. 1907 [2] 156; C. 1908 [2] 1187; 1909 [2] 2186). — III, 901; \*III, 671.
- 26) **Äthylester d.  $\beta$ -Phenylamido- $\beta$ -Phenylakrylsäure.** Fl. (B. 21, 521). — II, 1644.
- 27) **Acetat d. anti- $\alpha$ -Oximido-4-Äthylidiphenylmethan.** Sm. 95° (B. 24, 4031). — III, 231.
- 28) **Acetat d. syn- $\alpha$ -Oximido-4-Äthylidiphenylmethan.** Fl. (B. 24, 4031). — III, 231.
- 29) **Acetat d. anti- $\alpha$ -Oximido-2,4-Dimethyldiphenylmethan.** Sm. 91° (B. 24, 4049). — III, 231.
- 30) **Acetat d. syn- $\alpha$ -Oximido-2,4-Dimethyldiphenylmethan.** Sm. 103° (B. 24, 4049). — III, 231.
- 31) **Benzoat d. 4-Isopropylbenzaloxim.** Sm. 125—126° (G. 26 [1] 459). — \*III, 44.
- 32) **Phenylamidoformiat d.  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Buten.** Sm. 94—95° (B. 35, 2650 C. 1902 [2] 588).
- 33) **Phenylamidoformiat d. d-2-Oxy-1,2,3,4-Tetrahydronaphtalin.** Sm. 115—117° (Soc. 89, 1256 C. 1906 [2] 1126).
- 34) **Phenylamidoformiat d. i-2-Oxy-1,2,3,4-Tetrahydronaphtalin.** Sm. 93,5° (B. 23, 211). — II, 855.
- 35) **Äthylamid d.  $\alpha$ -Keto- $\alpha\beta$ -Diphenyläthan- $\alpha^2$ -Carbonsäure.** Sm. 139 bis 140° (B. 18, 1258, 2435). — II, 1709.
- 36) **Phenylamid d.  $\beta$ -Benzoylisobuttersäure.** Sm. 188—190° (Bl. [3] 19, 398). — \*II, 974.
- 37) **Phenylamid d.  $\beta$ -[4-Methylbenzoyl]propionsäure.** Sm. 147° (Bl. [3] 23, 521). — \*II, 973.
- 38) **Benzoylphenylamid d. Isobuttersäure.** Sm. 83° (Bl. [3] 31, 626 C. 1904 [2] 98).
- 39) **1-Naphtylamid d. 2-Oxybenzol-1-Carbonsäure.** Sm. 182—183° (Soc. 95, 444 C. 1909 [1] 1654).
- 40) **2-Naphtylimid d. Pentan- $\alpha\gamma$ -Dicarbonsäure.** Sm. 127,5° (A. 292, 216). — \*II, 340.
- 41) **2-Naphtylimid d. fum. Pentan- $\beta\gamma$ -Dicarbonsäure.** Sm. 148—150° (A. 309, 338). — \*II, 340.
- 42) **2-Naphtylimid d. mal. Pentan- $\beta\gamma$ -Dicarbonsäure.** Sm. 159—160° (A. 298, 166). — \*II, 340.



- C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>N** 43) 1-Naphtylimid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 199° (A. 285, 238). — \*II, 336.
- 44) 2-Naphtylimid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 231—232° (A. 285, 238). — \*II, 340.
- 45) 2-Naphtylimid d.  $\beta$ -Methylbutan- $\alpha\beta$ -Dicarbonsäure. Sm. 96—97° (A. 298, 177). — \*II, 340.
- 46) 2-Naphtylimid d.  $\beta$ -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 148° (A. 285, 236). — \*II, 340.
- 47) 2-Naphtylimid d.  $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 132—132,5° (A. 309, 330). — \*II, 340.
- C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>** C 69,2 — H 5,8 — O 10,8 — N 14,2 — M. G. 295.
- 1)  $\beta$ -Nitro- $\alpha\gamma$ -Di[4-Methylphenylimido]propan. Sm. 138° (Am. 22, 101). — \*II, 284.
- 2)  $\gamma$ -[4-Dimethylamidophenyl]imido- $\alpha$ -[2-Nitrophenyl]propen. Sm. 90° (C. 1907 [1] 108).
- 3)  $\gamma$ -[4-Dimethylamidophenyl]imido- $\alpha$ -[3-Nitrophenyl]propen. Sm. 192° (C. 1907 [1] 108).
- 4)  $\gamma$ -[4-Dimethylamidophenyl]imido- $\alpha$ -[4-Nitrophenyl]propen. Sm. 227° (C. 1907 [1] 108).
- 5)  $\gamma$ -Phenylsemicarbazon- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Buten + H<sub>2</sub>O. Sm. 183 bis 184° u. Zers. (B. 37, 3184 C. 1904 [2] 991).
- 6) Phenyläther d.  $\gamma$ -Semicarbazon- $\beta$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 216° (B. 35, 3554 C. 1902 [2] 1311).
- 7)  $\gamma$ -Phenylhydrazon- $\alpha$ -[3-Nitro-4-Methylphenyl]- $\alpha$ -Buten. Sm. 146 bis 147° (B. 32, 2285). — \*IV, 504.
- 8)  $\beta$ -[4-Acetylamidobenzyliden]- $\alpha$ -Acetyl- $\alpha$ -Phenylhydrazin. Sm. 211° (J. pr. [2] 56, 104). — IV, 753.
- 9) 3,5-Dicyan-2,6-Diketo-1,4-Dimethyl-4-[ $\beta$ -Phenyläthyl]hexahydro-pyridin. Sm. 203—204° (C. 1901 [1] 581). — \*II, 1218.
- 10) 6-[1,2-Phtalyl]amido-5-Methyl-2,4-Diäthyl-1,3-Diazin. Sm. 127 bis 128° (J. pr. [2] 39, 275; C. 1906 [1] 942). — II, 1814.
- 11) 3-Keto-1-Acetyl-7-Methyl-2-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,2,4-Benztriazin. Sm. 190° (B. 32, 2969). — \*IV, 797.
- 12) Acetat d.  $\beta$ -Oximido- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylpropan. Sm. 134,5° (G. 30 [2] 454). — \*IV, 510.
- 13) Benzoylamid d.  $\beta$ -Isopropyliden- $\alpha$ -Phenylhydrazin- $\alpha$ -Carbonsäure. Sm. 139—140° (Am. 34, 128 C. 1905 [2] 1031).
- 14) Benzylidenhydrazid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 194° (J. pr. [2] 70, 143 C. 1904 [2] 1394).
- 15) Verbindung (aus Citrakonsäurephenylimid). Sm. 158—159° (B. 21, 1362, 1380; 22, 2297). — IV, 708.
- C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>N<sub>5</sub>** C 63,2 — H 5,2 — O 9,9 — N 21,7 — M. G. 323.
- 1) 4-Phenylhydroxylamidoazo-3-Keto-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazol. Sm. 105° u. Zers. (A. 328, 70 C. 1903 [2] 249). — \*IV, 1142.
- C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>Cl** 1) Benzoat d. 6-Chlor-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 71 bis 73° (G. 26 [2] 405). — \*II, 718.
- C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>Br** 1) Dimethyläther d.  $\beta$ -Brom- $\alpha$ -[2,5-Dioxyphenyl]- $\alpha$ -Phenylpropen. Sm. 81,5° (B. 38, 799 C. 1905 [1] 866; A. 344, 58 C. 1906 [1] 1097).
- 2)  $\beta$ -Brom- $\alpha\alpha$ -Di[4-Methylphenyl]propionsäure. Sm. 143—144°. Ba (B. 15, 1478). — II, 1471.
- 3) Benzoat d.  $\beta$ -Brom-4-Oxy-1-tert. Butylbenzol. Sm. 78,5° (Am. 17, 114). — \*II, 718.
- 4) Benzoat d. 6-Brom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 67 bis 67,5° (G. 18, 517; 23 [2] 78). — II, 1148.
- C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>J** 1) Benzoat d. 6-Jod-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 95° (J. pr. [2] 39, 294). — II, 1148.
- C<sub>17</sub>H<sub>17</sub>O<sub>8</sub>N** C 72,1 — H 6,0 — O 17,0 — N 4,9 — M. G. 283.
- 1) Anthracenpropylnitrat. Sm. 92° (Soc. 61, 866). — II, 260.
- 2) Methylenäther d. 6-Benzoylamido-3,4-Dioxy-1-Propylbenzol. Sm. 151° (Ar. 242, 89 C. 1904 [1] 1007).
- 3) Trimethyläther d. 10-Oximido-9,9-Dioxy-9-10-Dihydroanthracen. Sm. 96° (A. 323, 228 C. 1902 [2] 802).

- C<sub>17</sub>H<sub>17</sub>O<sub>3</sub>N** 4) **9-Methyläther-9-Äthyläther d. 10-Oximido-9,9-Dioxy-9,10-Dihydroanthracen.** Sm. 134—135° u. Zers. (A. 323, 230 C. 1902 [2] 802).  
 5) **Acetonbenziloimid.** Sm. 146° (B. 18, 181). — III, 300.  
 6) **Äthyläther d. Benzoyl-4-Methylbenzhydroxamsäure.** Fl. (A. 281, 267). — II, 1345.  
 7) **Äthyläther d. 4-Methylbenzoylbenzhydroxamsäure.** Fl. (A. 281, 267). — II, 1345.  
 8) **6-Äthyläther d. 4-Oximido-6-Oxy-2-Phenyl-2,3-Dihydrobenzpyran.** Sm. 185—186° (B. 33, 1484). — \*III, 559.  
 9) **1-[3,4-Dioxybenzoyl]methyl-1,2,3,4-Tetrahydrochinolin.** Sm. 170° (B. 27, 1973). — IV, 215.  
 10) **2-[3,4-Dioxybenzoyl]methyl-1,2,3,4-Tetrahydroisochinolin.** HCl (D. R. P. 71312). — \*IV, 146.  
 11)  **$\alpha$ -[4-Äthoxyphenyl]- $\beta$ -[2-Nitrophenyl]akrylsäure.** Sm. 189° (A. 322, 153 C. 1902 [2] 282).  
 12) **d- $\alpha$ -[ $\beta$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthyl]amidopropionsäure.** Sm. 161° (A. 337, 347 C. 1905 [1] 341).  
 13) **l- $\alpha$ -[ $\beta$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthyl]amidopropionsäure.** Sm. 161° (A. 337, 348 C. 1905 [1] 341).  
 14) **r- $\alpha$ -[ $\beta$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthyl]amidopropionsäure.** Sm. 152° u. Zers. (A. 337, 347 C. 1905 [1] 341).  
 15)  **$\alpha$ -Phenacetylamido- $\beta$ -Phenylpropionsäure.** Sm. 126°. Na, Ag (B. 17, 1619; 30, 2977; 31, 2238; A. 307, 154, 169). — II, 1420; \*II, 836.  
 16)  **$\gamma$ -[2-Benzoylamidophenyl]buttersäure.** Sm. 156° (B. 40, 184b C. 1907 [2] 39).  
 17)  **$\beta$ -Benzoylamido- $\beta$ -[4-Methylphenyl]propionsäure.** Sm. 210° (B. 39, 3711 C. 1907 [1] 41).  
 18)  **$\alpha$ -[3-Benzoylamidobenzyl]propionsäure.** Sm. 147—148° (B. 23, 1900). — II, 1382.  
 19)  **$\alpha$ -Oximido- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure.** Sm. 144—146° (A. 294, 332). — \*II, 1012.  
 20) **Methylester d.  $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionsäure.** Sm. 86,5 bis 87,5° (corr.) (A. 369, 281 C. 1909 [2] 2140).  
 21) **Methylester d. 4'-Dimethylamidodiphenylketon-2-Carbonsäure.** Sm. 118° (B. 27 [2] 665; A. 307, 308; Bl. [3] 25, 171). — \*I, 1000.  
 22) **isom. Methylester d. 4'-Dimethylamidodiphenylketon-2-Carbonsäure.** Sm. 116° (C. 1908 [1] 2097).  
 23) **Methylester d. 5-Keto-2-Methyl-1-[1-Naphtyl]tetrahydropyrrol-2-Carbonsäure.** Sm. 91° (B. 38, 1225 C. 1905 [1] 1257).  
 24) **Methylester d. 5-Keto-2-Methyl-1-[2-Naphtyl]tetrahydropyrrol-2-Carbonsäure.** Sm. 104—105° (B. 38, 1224 C. 1905 [1] 1257).  
 25) **Äthylester d.  $\alpha$ -Benzoylamido- $\alpha$ -Phenylelessigsäure.** Sm. 84° (B. 24, 4151). — II, 1326.  
 26) **Äthylester d. Phenylphenacylamidoameisensäure.** Sm. 60° (G. 35 [2] 90 C. 1905 [2] 895).  
 27) **Äthylester d. 4-Benzoyl-2-Methylphenylamidoameisensäure.** Sm. 88° (Soc. 85, 594 C. 1904 [1] 1554).  
 28) **Äthylester d. 2-Benzoyl-4-Methylphenylamidoameisensäure.** Sm. 58° (Soc. 85, 596 C. 1904 [1] 1554).  
 29) **Äthylester d. 3-[3,4-Dimethylbenzoyl]pyridin-2-Carbonsäure.** Sm. 37—39° (M. 22, 117).  
 30) **2-Methoxyphenylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure.** Sm. 69° (Bl. [3] 21, 13). — \*IV, 143.  
 31) **2-Methoxy-4-Allylphenylester d. Phenylamidoameisensäure.** Sm. 95,5° (B. 18, 2432). — II, 975.  
 32) **2-Methoxy-4-Allylphenylester d. 4-Amidobenzol-1-Carbonsäure.** Sm. 156° (D. R. P. 67923). — \*II, 789.  
 33) **Acetat d. N-Acetylphenyl-2-Oxybenzylamin.** Sm. 98—99° (B. 27, 1803; 32, 2062). — II, 742; \*II, 427.  
 34) **Acetat d. 4-[2-Methylphenyl]acetylamido-1-Oxybenzol.** Sm. 106° (J. pr. [2] 34, 61). — II, 718.  
 35) **Acetat d. 4-[4-Methylphenyl]acetylamido-1-Oxybenzol.** Sm. 101° (J. pr. [2] 33, 227). — II, 718.

- C<sub>17</sub>H<sub>17</sub>O<sub>3</sub>N** 36) Benzoat d. 6-Nitroso-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 110° (B. 8, 1501). — II, 1148.
- 37) Benzoat d. p-Oxyacetyl-4-Amido-1,3-Dimethylbenzol. Sm. 118 bis 119° (B. 33, 2651).
- 38) Benzoat d. α-Benzoylamido-β-Oxypropan. Sm. 87° (C. 1901 [1] 819).
- 39) Benzoat d. α-Propylbenzhydroxamsäure. Sm. 32° (A. 281, 238). — II, 1207.
- 40) Benzoat d. β-Propylbenzhydroxamsäure. Sm. 50,3° (A. 281, 240). — II, 1207.
- 41) Benzoat d. γ-Propylbenzhydroxamsäure. Sm. 20–24° (A. 281, 242). — II, 1207.
- 42) Benzoat d. α-Äthyl-4-Methylbenzhydroxamsäure. Sm. 62° (A. 281, 252). — II, 1344.
- 43) Benzoat d. β-Äthyl-4-Methylbenzhydroxamsäure. Sm. 51,5–52° (A. 281, 253). — II, 1344.
- 44) Benzoat d. γ-Äthyl-4-Methylbenzhydroxamsäure. Sm. 56° (A. 281, 254). — II, 1344.
- 45) 4-Methylbenzoat d. α-Äthylbenzhydroxamsäure. Sm. 114,5° (A. 281, 247). — II, 1344.
- 46) 4-Methylbenzoat d. β-Äthylbenzhydroxamsäure. Sm. 70° (A. 281, 248). — II, 1344.
- 47) 4-[2-Amidobenzoat] d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 98–99° (D. R. P. 189333 C. 1908 [1] 185).
- 48) 4-[3-Amidobenzoat] d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 72–73°. HCl (D. R. P. 189333 C. 1908 [1] 186).
- 49) Phenylamidoformiat d. 1-[α-Oxyäthyl]-1,2-Dihydrobenzofuran. Sm. 73° (B. 36, 2871 C. 1903 [2] 833).
- 50) Amid d. α-Keto-α-[4 oder 5-Äthoxyphenyl]-β-Phenyläthan-α<sup>2</sup>-Carbonsäure. Sm. 149–151° (B. 34, 3739 C. 1902 [1] 39).
- 51) Amid d. 2-[4-Isopropylbenzoxyl]benzol-1-Carbonsäure. Sm. 200° (J. 1856, 502). — II, 1500.
- 52) Monoamid d. αβ-Diphenylpropan-γγ-Dicarbonsäure. Sm. 182° u. Zers. (Am. 33, 354 C. 1905 [1] 1392).
- 53) Phenylmonamid d. β-Phenylpropan-αγ-Dicarbonsäure. Sm. 168° (171°). Ag (Am. 20, 513; A. 320, 86; C. 1899 [1] 730). — \*II, 1071.
- 54) α-Phenylamid d. α-Phenyläthan-αβ-Dicarbonsäure-β-Methylester. Sm. 96° (A. 354, 138 C. 1907 [2] 694).
- 55) β-Phenylamid d. α-Phenyläthan-αβ-Dicarbonsäure-α-Methylester. Sm. 149° (A. 354, 137 C. 1907 [2] 694).
- 56) α-[4-Methylphenyl]amid d. α-Phenyläthan-αβ-Dicarbonsäure. Sm. 175° (A. 354, 142 C. 1907 [2] 694).
- 57) β-[4-Methylphenyl]amid d. α-Phenyläthan-αβ-Dicarbonsäure. Sm. 163–169°. Ag (A. 354, 141 C. 1907 [2] 694).
- 58) 2,4,5-Trimethylphenylmonamid d. Benzol-1,2-Dicarbonsäure (Phtal-pseudocumidsäure). Sm. 179° u. Zers. (B. 17, 1808). — II, 1797.
- 59) 3,5-Dimethylbenzylmonamid d. Benzol-1,2-Dicarbonsäure (Mesityl-phtalamidsäure). Sm. 152°. Ag (B. 25, 3012). — II, 1797.
- 60) 4-Äthoxyphenylamid d. Benzoylessigsäure. Sm. 139–140° (C. 1898 [1] 501). — \*II, 958.
- 61) α-Äthoxybenzylamid d. Benzolketocarbonsäure. Sm. 116° (B. 29, 2105). — \*II, 941.
- C<sub>17</sub>H<sub>17</sub>O<sub>3</sub>N<sub>3</sub>** C 65,6 — H 5,5 — O 15,4 — N 13,5 — M. G. 311.
- 1) β-Phenyläther d. γ-Semicarbazon-β-Oxy-α-[4-Oxyphenyl]-α-Buten. Sm. 220° (B. 35, 3556 C. 1902 [2] 1311).
- 2) β-Acetyl-α-[2-Acetylamidobenzoyl]-α-Phenylhydrazin. Sm. 195 bis 196° (A. 301, 93). — \*IV, 428.
- 3) α-Oximido-α-[4-Methylbenzoyl]-β-[4-Methylphenyl]oxyhydrazon-äthan (B. 16, 324). — \*III, 231.
- 4) Dimethyläther d. 3-Keto-5,6-Di[4-Oxyphenyl]-2,3,4,5-Tetrahydro-1,2,4-Triazin. Sm. 212–213° (A. 339, 286 C. 1905 [2] 47).
- 5) d-γ-Semicarbazon-αγ-Diphenylbuttersäure. Sm. 107–110° (Soc. 85, 1369 C. 1904 [2] 1647).
- 6) i-γ-Semicarbazon-αγ-Diphenylbuttersäure. Sm. 189–191° (Soc. 85, 1364 C. 1904 [2] 1646).



- C<sub>17</sub>H<sub>17</sub>O<sub>8</sub>N<sub>8</sub>** 7) Äthylamid d. Carbanilidoisatinsäure. Sm. 210° u. Zers. (*J. pr.* [2] 32, 290). — II, 1604.
- 8) Phenylamid d. Benzoylamidoacetylamidoessigsäure. Sm. 238 bis 240° (*J. pr.* [2] 70, 80 *C.* 1904 [2] 1033).
- 9) Di[Methylphenylamid] d. Oximidomalonsäure. Sm. 109°. + CH<sub>4</sub>O (*Soc.* 83, 42 *C.* 1903 [1] 442).
- 10) isom. Di[Methylphenylamid] d. Oximidomalonsäure. Sm. 192° (*Soc.* 83, 43 *C.* 1903 [1] 442; *C.* 1904 [1] 1555).
- 11) Di[2-Methylphenylamid] d. Oximidomalonsäure. Sm. 111°. K (*Soc.* 83, 39 *C.* 1903 [1] 441).
- 12) Di[4-Methylphenylamid] d. Oximidomalonsäure. Sm. 170—171°. K, Ag (*Soc.* 83, 36 *C.* 1903 [1] 73, 441).
- 13) α-Phenylhydrazid d. Phenylimidoessigsäure-2-Carbonsäureäthylester. Sm. 140—141° u. Zers. (*A.* 332, 236 *C.* 1904 [2] 38).
- 14) Phenylacetylhydrazid d. Benzoylamidoessigsäure. Sm. 155° (*J. pr.* [2] 52, 250). — IV, 670.
- C<sub>17</sub>H<sub>17</sub>O<sub>8</sub>Cl** 1) 1-Isobutyläther d. 6-Chlor-1,3,6-Trioxypentanthren. Sm. 140 bis 141° (*B.* 34, 1555).
- C<sub>17</sub>H<sub>17</sub>O<sub>8</sub>Br** 1) Dimethyläther d. β-Brom-α-Oxy-γ-Keto-α-[4-Oxyphenyl]-γ-Phenylpropan. Sm. 101° (*B.* 39, 35 *C.* 1906 [1] 674).
- 2) Dimethyläther d. α-Brom-β-Oxy-γ-Keto-α-[4-Oxyphenyl]-γ-Phenylpropan. Sm. 102° (*C.* 1900 [2] 1015). — \*III, 168.
- C<sub>17</sub>H<sub>17</sub>O<sub>8</sub>N** C 68,2 — H 5,7 — O 21,4 — N 4,7 — M. G. 299.
- 1) Äthyläther d. β-Nitro-γ-Keto-α-Oxy-α-γ-Diphenylpropan. Sm. 119° (*A.* 328, 240 *C.* 1903 [2] 999).
- 2) Dimethyläther d. Benzoylamidomethyl-3,4-Dioxyphenylketon. Sm. 155° (156°) (*D.R.P.* 185598 *C.* 1907 [2] 654; *B.* 42, 2948 *C.* 1909 [2] 1255).
- 3) Benzoylpinaphrin. H<sub>2</sub>SO<sub>4</sub>, Pikrat (*H.* 28, 318; 29, 105; *B.* 36, 1839). — \*III, 667.
- 4) Äthyläther d. Benzoyl-4-Methoxylbenzhydroxamsäure. Sm. 93 bis 94° (*A.* 217, 15; *B.* 16, 875). — II, 1534.
- 5) Äthyläther d. 4-Methoxylbenzoylbenzhydroxamsäure. Sm. 64° (*A.* 217, 10; *B.* 16, 875). — II, 1533.
- 6) Benzoat d. p-Nitroso-1,3-Dioxy-β-Äthylbenzol-β-Methyläther. Sm. 141—142° (*M.* 12, 377). — II, 1150.
- 7) Benzoat d. α-Äthyl-4-Methoxylbenzhydroxamsäure. Sm. 79° (*A.* 175, 337; 217, 7; 281, 259). — II, 1533.
- 8) Benzoat d. β-Äthyl-4-Methoxylbenzhydroxamsäure. Sm. 51° (*A.* 281, 260).
- 9) 4-Methoxylbenzoat d. Äthylbenzhydroxamsäure. Sm. 74° (*A.* 175, 336; 217, 2). — II, 1533.
- 10) isom. 4-Methoxylbenzoat d. Äthylbenzhydroxamsäure. Sm. 89° (*A.* 217, 4). — II, 1533.
- 11) 1-[2,3,4-Trioxylbenzoyl]methyl-1,2,3,4-Tetrahydrochinolin (Hydrochinolinglykopyrogallol). Sm. 177—178° (*B.* 27, 1972). — IV, 215.
- 12) 3',8-Dimethyläther d. 2,7,8-Trioxyl-3-[2-Oxyphenyl]chinolin. Sm. 255—256° (*B.* 32, 180).
- 13) Base (aus Glaucin). HJ (*C.* 1901 [2] 783). — \*III, 658.
- 14) α-Phenyl-β-[2-Amido-3,4-Dimethoxylphenyl]akrylsäure. Sm. 179° (*B.* 33, 1818). — \*II, 1095.
- 15) α-Phenyl-β-[6-Amido-3,4-Dimethoxylphenyl]akrylsäure. Sm. 209° (*B.* 33, 1830). — \*II, 1095.
- 16) β-Oximido-α-[4 oder 5-Äthoxylphenyl]-β-Phenyläthan-α<sup>2</sup>-Carbonsäure. Sm. 174° (*B.* 34, 3743 *C.* 1902 [1] 40).
- 17) Monomethylester d. α-Phenylamido-α-Phenyläthan-ββ-Dicarbonsäure. Anilinsalz (*B.* 28, 146). — II, 1850.
- 18) Dimethylester d. 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbonsäure. Sm. 139—140°. (HCl, AuCl<sub>3</sub>) (*B.* 25, 2788). — IV, 386.
- 19) Äthylester d. r-α-Phenylamidoformoxylphenyllessigsäure (Phenylglykolsäureäthylesterphenylurethan). Sm. 93° (*Bl.* [3] 19, 775). — \*II, 923.
- 20) Äthylester d. Methyl-2-Benzoxylphenylamidoameisensäure. Sm. 88—89° (*Am.* 23, 36; *B.* 33, 203). — \*II, 717.

- C<sub>17</sub>H<sub>17</sub>O<sub>4</sub>N** 21)  $\alpha$ -Äthylester d.  $\alpha$ -[2-Carboxylphenyl]amido- $\alpha$ -Phenylessigsäure. Sm. 175—176° (B. 32, 3059). — \*II, 820.
- 22) Monoäthylester d. 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbon-säure. Sm. 179—180° (B. 17, 2911; Ph. Ch. 3, 394). — IV, 386.
- 23) Propylester d. Benzoyl-4-Oxyphenylamidoameisensäure. Sm. 133 bis 144° (D. R. P. 73285). — \*II, 740.
- 24) 2-Acetat d. 1,2-Dioxy- $\beta$ -Benzoylamidomethylbenzol-1-Methyläther. Sm. 161° (A. 343, 236 C. 1906 [1] 924).
- 25) Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -[2-Pyridyl]äthan. Sm. 36—37° (B. 36, 121 C. 1903 [1] 470). — \*IV, 226.
- 26) Äthylcarbonat d. 2-Methylbenzoylamido-1-Oxybenzol. Sm. 68° (Am. 23, 34; B. 33, 203). — \*II, 739.
- 27) Mono[ $\gamma$ -Phenoxypropylamid] d. Benzol-1,2-Dicarbon-säure. Sm. 134°. Ag (B. 24, 2633). — II, 1796.
- 28) 4-Äthoxyphenylamid d. 2-Acetoxybenzol-1-Carbon-säure. Sm. 132° (G. 28 [2] 200; B. 37, 3976 C. 1904 [2] 1605). — \*II, 892.
- 29) Mono[4-Methylphen- $\beta$ -Oxyäthylamid] d. Benzol-1,2-Dicarbon-säure (p-Kresoxäthylphtalimidsäure). Sm. 137°. Ag (B. 24, 191). — II, 1796.
- C<sub>17</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>** C 62,4 — H 5,2 — O 19,6 — N 12,8 — M. G. 327.
- 1) Allyldi[2-Nitrobenzyl]amin. Sm. 55°. (2HCl, PtCl<sub>4</sub>) (B. 26, 2587). — II, 521.
- 2) Allyldi[4-Nitrobenzyl]amin. Sm. 46° (B. 30, 68). — \*II, 293.
- 3) 9-Methyläther d. 3,5-Di[Acetylamido]-9-Oxyphenoxazoniumhydro-xyd. Methylsulfat (A. 322, 28 C. 1902 [2] 222).
- 4) Coelestinblau B (B. 41, 608 C. 1908 [1] 1286).
- 5) Correïn. Pikrat (J. pr. [2] 77, 501 C. 1908 [2] 175).
- 6)  $\alpha$ -[2,4-Dimethylphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 151° (J. pr. [2] 75, 127 C. 1907 [1] 1036).
- 7) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 86° (B. 36, 3884 C. 1904 [1] 27).
- 8) 4-Phenylamid d. Benzol-1-Amidoameisensäureäthylester-4-Oxamin-säure. Sm. 340° (351° corr.) (B. 27, 962; A. 293, 379). — IV, 593.
- 9) Di[Methylphenylamid] d. Nitromalonsäure. Sm. 156° u. Zers. (C. 1904 [1] 1555).
- C<sub>17</sub>H<sub>17</sub>O<sub>4</sub>N<sub>5</sub>** C 57,5 — H 4,8 — O 18,0 — N 19,7 — M. G. 355.
- 1) 6-Amido-7-Methyl-2-[4-Nitrophenyl]-2,3-Dihydro-1,2,4-Benztri-azin-3-[Äthyl- $\alpha$ -Carbon-säure]? (B. 39, 1004 C. 1906 [1] 1342).
- C<sub>17</sub>H<sub>17</sub>O<sub>6</sub>N** C 64,8 — H 5,4 — O 25,4 — N 4,4 — M. G. 315.
- 1) Dimethyläther d.  $\gamma$ -Keto- $\alpha\alpha$ -Dioxy- $\gamma$ -Phenyl- $\alpha$ -[4-Nitrophenyl]pro-pan. Sm. 91° (B. 37, 1150 C. 1904 [1] 1267).
- 2) Trimethyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[2-Nitro-3,4-Dioxyphenyl]-äthen. Sm. 156° (B. 35, 4404 C. 1903 [1] 342).
- 3) 2-Oxybenzoat-4-Acetylamidophenyläther d.  $\alpha\beta$ -Dioxyäthan. Sm. 133° (A. 305, 285). — \*II, 886.
- 4) 4-Methoxybenzoat d.  $\alpha$ -Methyl-4-Methoxybenzhydroxamsäure. Sm. 50—51° (A. 281, 258). — II, 1535.
- 5) 4-Methoxybenzoat d.  $\beta$ -Methyl-4-Methoxybenzhydroxamsäure. Sm. 91° (A. 281, 258). — II, 1535.
- 6)  $\alpha$ -[2-Methoxyphenyl]- $\beta$ -[2-Amido-3-Methoxy-4-Oxyphenyl]akryl-säure. Sm. bei 90° (B. 33, 179). — \*II, 1145.
- 7)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Amido-3-Oxy-4-Methoxyphenyl]akryl-säure. Sm. 150—152° (B. 35, 4408 C. 1903 [1] 342).
- 8) Decarbousninsäureoximanhydrid. Sm. 214° (A. 310, 271, 295). — \*II, 1205.
- 9) Äthylester-4-Phenylglykolyamidophenylester d. Kohlensäure (Amygdophenin). Sm. 162—163° (C. 1897 [1] 469). — \*II, 924.
- 10) 1-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbon-säure. Sm. 161—162° (R. 15, 285). — \*II, 1161.
- 11) 2-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbon-säure. Sm. 171—172° (R. 15, 283). — \*II, 1160.
- 12) Benzylmonamid d. 4,5-Dioxybenzoldimethyläther-1,2-Dicarbon-säure (Benzylmonamid d. m-Hemipinsäure) (M. 9, 334). — II, 1999.
- 13)  $\alpha$ -[4-Äthoxyphenyl]amid d. Oxyessigphenyläthersäure-2-Carbon-säure. Sm. 182° (C. 1898 [2] 952). — \*II, 890.

- C<sub>17</sub>H<sub>17</sub>O<sub>5</sub>N** 14) 2-[4-Äthoxyphenyl]amid d. Oxyessigphenyläther-2-Carbonsäure. Sm. 175—178° (*J. pr.* [2] 60, 405). — \*II, 892.
- C<sub>17</sub>H<sub>17</sub>O<sub>5</sub>N<sub>3</sub>** C 59,5 — H 4,9 — O 23,3 — N 12,2 — M. G. 343.
- 1) 3,4-Methylenäther d.  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -(6-Nitro-3,4-Dioxyphenyl)butan. Sm. 134—139° u. Zers. (*B.* 38, 2854 C. 1905 [2] 1098).
  - 2) 3-Methyläther d. 7,9-Di[Acetylamido]-3-Oxyphenoxazoniumhydr-oxyd. Methylsulfat (*A.* 322, 28). — \*IV, 837.
  - 3) Verbindung (aus 4-Amidoantipyrin u. Brenztraubensäure). Sm. 170° u. Zers. (*A.* 293, 63). — IV, 1109.
- C<sub>17</sub>H<sub>17</sub>O<sub>5</sub>N<sub>5</sub>** C 55,0 — H 4,6 — O 21,5 — N 18,9 — M. G. 371.
- 1) Amid d. 1-[Methyl- $\alpha$ -Carboxyäthylamido]-4-[2,4-Dinitrobenzyliden]-amidobenzol. Sm. 235—238° (*B.* 36, 763 C. 1903 [1] 963). — \*IV, 394.
- C<sub>17</sub>H<sub>17</sub>O<sub>8</sub>N** C 61,6 — H 5,1 — O 29,0 — N 4,2 — M. G. 331.
- 1) Äthylester d. 2-Oxybenzol- $\beta$ -[2-Nitrophen]oxyläthyläther-1-Carbon-säure. Sm. bei 100° (*J. pr.* [2] 27, 212). — II, 1495.
  - 2) Äthylester d. 2-Oxybenzol- $\beta$ -[4-Nitrophen]oxyläthyläther-1-Carbon-säure. Sm. 81° (*J. pr.* [2] 27, 220). — II, 1496.
  - 3) Äthylester d. 4-Oxybenzol- $\beta$ -[2-Nitrophen]oxyläthyläther-1-Carbon-säure. Sm. 103° (*J. pr.* [2] 27, 222). — II, 1527.
  - 4) Äthylester d. 4-Oxybenzol- $\beta$ -[4-Nitrophen]oxyläthyläther-1-Carbon-säure. Sm. 131° (*J. pr.* [2] 27, 224). — II, 1527.
  - 5) Diäthylester d. 4-Oximido-3-Oxy-1,4-Dihydronaphtalin-1-Methylen-dicarbonensäure. Sm. 171° (*C.* 1907 [1] 1130).
  - 6) Diäthylester d. 6-Oxy-2-Keto-1-Phenyl-1,2-Dihydropyridin-3,5-Di-carbonsäure. Sm. 197°. Na, K, Ag (*A.* 285, 115, 141, 142). — \*IV, 130.
  - 7) Diäthylester d. 2,6-Diketo-1-Phenyl-1,2,5,6-Tetrahydropyridin-3,5-Dicarbonensäure ( $\alpha\gamma$ -Phenylimid d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonensäure- $\alpha\gamma$ -Di-äthylester). Sm. 147° (*A.* 285, 108, 149; *B.* 34, 3700; *J. pr.* [2] 80, 54 C. 1909 [2] 1319). — \*IV, 131.
- C<sub>17</sub>H<sub>17</sub>O<sub>8</sub>Br** 1) Diäthylester d. 3-Brom-1,4-Dioxynaphtalin-2-Methyldicarbonensäure. Sm. 130° u. Zers. (*B.* 34, 1553).
- C<sub>17</sub>H<sub>17</sub>O<sub>7</sub>Cl** 1) Äthylester d. 3[oder 5]-Chlor-4,5[oder 4,6]-Diacetoxy-1,6[oder 1,3]-Dimethylbenzofuran-2-Carbonsäure. Sm. 136° (*A.* 283, 264). — III, 732.
- C<sub>17</sub>H<sub>17</sub>O<sub>7</sub>Br** 1) Verbindung (aus Äthylxanthophansäure). Sm. 208° u. Zers. (*B.* 40, 3581 C. 1907 [2] 1745).
- C<sub>17</sub>H<sub>17</sub>N<sub>2</sub>Cl** 1) 4-[ $\alpha$ -Chlorcinnamyliden]amido-1-Dimethylamidobenzol. Sm. 122 bis 124° (*B.* 24, 247). — IV, 597.
- 2) Chlormethylat d. 5-Methyl-1,3-Diphenylpyrazol. 2 + PtCl<sub>4</sub> (*B.* 18, 935). — IV, 936.
  - 3) Chlormethylat d. 3-Methyl-1,5-Diphenylpyrazol. 2 + PtCl<sub>4</sub> (*B.* 18, 315). — IV, 936.
  - 4) Chlorbenzylat d. 1-Benzylimidazol. 2 + PtCl<sub>4</sub> (*B.* 10, 1369). — IV, 502.
- C<sub>17</sub>H<sub>17</sub>N<sub>2</sub>Br** 1) 4-[ $\alpha$ -Bromcinnamyliden]amido-1-Dimethylamidobenzol. Sm. 253 bis 255° (*B.* 24, 248). — IV, 597.
- 2) Bromphenylat d. 2-Phenylamido-1,2-Dihydropyridin. Sm. 162° (*J. pr.* [2] 69, 109, 123 C. 1904 [1] 814).
  - 3) Verbindung (aus 2-Amido-1-Methylbenzol u.  $\alpha\beta$ -Dibromakrylsäure). Sm. 115°. HBr (*B.* 22, 3309). — II, 463.
  - 4) Verbindung (aus 4-Amido-1-Methylbenzol u.  $\alpha\beta$ -Dibromakrylsäure). Sm. 165—166° (*B.* 22, 3309). — II, 494.
- C<sub>17</sub>H<sub>17</sub>N<sub>2</sub>J** 1) Jodmethylat d. 5-Methyl-1,3-Diphenylpyrazol. Sm. 192° (*B.* 18, 934). — IV, 936.
- 2) Jodmethylat d. 3-Methyl-1,5-Diphenylpyrazol. Sm. 187° u. Zers. (*B.* 18, 315). — IV, 936.
  - 3) 3-Jodäthylat d. 2,4-Diphenylimidazol. Sm. 162° (*B.* 34, 1831). — \*IV, 690.
  - 4) Jodäthylat d. 2-Methyl-4-Phenyl-1,3-Benzdiazin. Sm. 204° (*B.* 25, 3085). — IV, 1026.
- C<sub>17</sub>H<sub>17</sub>N<sub>3</sub>S** 1) Farbstoff (aus Tetrahydrochinolindimethylanilinanthiosulfonsäureindamin). 2 + ZnCl<sub>2</sub> + H<sub>2</sub>O (*B.* 23, 1379). — IV, 197.
- C<sub>17</sub>H<sub>17</sub>N<sub>4</sub>Cl** 1) 3-Chlor-1,2-Diphenylhydrazon-R-Pentamethylen (*B.* 20, 2789).
- 2) Chlormethylat d. 5-Phenylazo-3-Methyl-1-Phenylpyrazol. 2 + PtCl<sub>4</sub> (*B.* 42, 2770 C. 1909 [2] 625).



- C<sub>17</sub>H<sub>17</sub>N<sub>4</sub>J** 1) Jodmethylat d. 5-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 194° (B. 42, 2770 C. 1909 [2] 625).
- C<sub>17</sub>H<sub>18</sub>ON<sub>2</sub>** C 76,7 — H 6,8 — O 6,0 — N 10,5 — M. G. 266.
- 1)  $\gamma$ -[2-Oxyphenyl]imido- $\alpha$ -[4-Dimethylamidophenyl]propen. Sm. 143° (C. 1907 [1] 109).
  - 2)  $\gamma$ -[4-Oxyphenyl]imido- $\alpha$ -[4-Dimethylamidophenyl]propen. Sm. 260° (C. 1907 [1] 109).
  - 3)  $\gamma$ -Keto- $\gamma$ -[3-Amidophenyl]- $\alpha$ -[4-Dimethylamidophenyl]propen. 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 34, 3530). — \*III, 180.
  - 4)  $\alpha$ -Phenylimido- $\alpha$ -Butyrylamidophenylmethan. Sm. 137° (Am. 20, 576). — \*IV, 567.
  - 5)  $\alpha$ -Imido- $\alpha$ -[ $\alpha$ -Benzoylisopropyl]amido- $\alpha$ -Phenylmethan. Sm. 175° (B. 34, 641). — \*IV, 569.
  - 6)  $\alpha$ -Phenyl- $\beta$ -[1,2,3,4-Tetrahydro-2-Naphtyl]harnstoff. Sm. 165,5° (B. 21, 859). — II, 588.
  - 7)  $\alpha$ -Phenyl- $\beta$ -[1,2,3,4-Tetrahydro-5-Naphtyl]harnstoff (B. 21, 1794). — II, 587.
  - 8)  $\alpha$ -Methylphenylhydrazon- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 103—104° (A. 253, 18). — IV, 783.
  - 9)  $\alpha$ -[2-Oxybenzyliden]- $\beta$ -[2,4,5-Trimethylbenzyliden]hydrazin (B. 35, 3238 C. 1902 [2] 1045).
  - 10)  $\alpha$ -Benzyliden- $\beta$ -Butyryl- $\beta$ -Phenylhydrazin. Sm. 113,5° (A. 252, 310). — IV, 750.
  - 11) 2-Äthylamido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 141°. (2HCl, PtCl<sub>4</sub>) (B. 28, 1901). — \*II, 661.
  - 12) 2-Keto-4,5-Dimethyl-1,3-Diphenyltetrahydroimidazol (s-Dimethyläthylen- $\alpha\beta$ -Diphenylharnstoff). Sm. 139—141° (B. 25, 3282). — II, 381.
  - 13) 2-Keto-1,3-Di[3-Methylphenyl]tetrahydroimidazol. Sm. 146° (B. 34, 1513).
  - 14) 2-Keto-1,3-Di[4-Methylphenyl]tetrahydroimidazol (Äthylendi-4-Methylphenylharnstoff). Sm. 228° (B. 14, 2184). — II, 495.
  - 15)  $\delta$ -Methylbenzoylamido- $\alpha$ -[3-Pyridyl]- $\alpha$ -Buten (Benzoylmetanikotin). Sm. 83°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 27, 1057, 1060, 2865; Bl. [3] 11, 110; B. 42, 3433 C. 1909 [2] 1350). — IV, 860.
  - 16) 3-Keto-2-Methyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 137—138° (B. 25, 2935). — II, 432.
  - 17) 4-Amido-3-Methyl-6-Isopropyl-1-Phenylbenzoxazol. Sm. 106—108°. (2HCl, PtCl<sub>4</sub>) (G. 20, 142; 25 [2] 402). — II, 1148; \*II, 718.
  - 18) 4-Amido-6-Methyl-4-Isopropyl-1-Phenylbenzoxazol. Sm. 130—132° (G. 20, 188). — II, 1148.
  - 19) 1-Acetyl-2-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 120,5° (B. 24, 3058). — IV, 853.
  - 20) Base (aus Methylanilin u. Formaldehyd) (C. 1902 [2] 1174).
  - 21) 4-Methylphenylamid d.  $\alpha$ -[4-Methylphenyl]amidoakrylsäure. Sm. 150° (B. 40, 2307 C. 1907 [2] 298).
  - 22) Verbindung (aus  $\alpha\delta$ -Diketo- $\alpha$ -Phenylpentan). Sm. 105° (B. 17, 2763). — III, 273.
- C<sub>17</sub>H<sub>18</sub>ON<sub>4</sub>** C 69,4 — H 6,1 — O 5,4 — N 19,1 — M. G. 294.
- 1)  $\beta\delta$ -Di[Phenylhydrazon] d.  $\beta\gamma\delta$ -Triketopentan. Sm. 156° u. Zers. (B. 34, 3053). — \*IV, 516.
  - 2)  $\alpha\gamma$ -Di[4-Methylphenylhydrazon]- $\beta$ -Ketopropan. Sm. 192—193° u. Zers. (B. 27, 221). — IV, 810.
  - 3)  $\beta$ -Phenylhydrazon- $\alpha$ -Acetylphenylhydrazonpropan. Sm. 229° (Soc. 53, 527; A. 247, 200). — IV, 758.
  - 4)  $\alpha$ -[4-Methylphenyl]azo- $\alpha$ -[4-Methylphenyl]hydrazon- $\beta$ -Ketopropan. Sm. 153—154° (B. 25, 3546). — IV, 1230.
  - 5) Amid d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[4-Amidophenyl]propan- $\beta$ -Carbonsäure. Sm. 231° (G. 35 [1] 130 C. 1905 [1] 1385).
  - 6) Verbindung (aus Phenylhydrazinlävulinsäurephenylhydrazid). Sm. 142 bis 142,5° (A. 267, 108). — IV, 692.
- C<sub>17</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** C 72,3 — H 6,4 — O 11,3 — N 9,9 — M. G. 282.
- 1)  $\alpha\epsilon$ -Di[Phenylamido]- $\delta\epsilon$ -Dioxy- $\alpha\gamma$ -Pentadien. HBr (J. pr. [2] 72, 559 C. 1906 [1] 370).

- $C_{17}H_{18}O_2N_2$  2) Diäthyläther d. Di[4-Oxyphenylimido]methan. 2HCl (*C.* 1899 [1] 951). — \*II, 412.
- 3) Benzoylpseudoäthylbenzylharnstoff (Äthyläther d. Benzoylimidobenzylamidooxymethan). Sm. 89—90° (*Am.* 27, 219 *C.* 1902 [1] 916). — \*II, 736.
- 4) Benzoylpseudoäthyl-4-Methylphenylharnstoff (Äthyläther d. Benzoylimido-4-Methylphenylamidooxymethan). Sm. 75° (77—78°) (*Am.* 27, 219 *C.* 1902 [1] 915; *Am.* 32, 367 *C.* 1904 [2] 1507). — \*II, 736.
- 5)  $\alpha$ -Acetyl- $\alpha\beta$ -Di[4-Methylphenyl]harnstoff. Sm. 140° (148°) (*B.* 35, 1878 *C.* 1902 [2] 33; *B.* 37, 3119 *C.* 1904 [2] 1317).
- 6) 2,2'-Diamido-4,4'-Diacetyldiphenylmethan. Sm. 166° (*C. r.* 146, 1325 *C.* 1908 [2] 416).
- 7) 4-Acetylamido-1-Acetylbenzylamidobenzol. Sm. 116,5—117° (*Soc.* 55, 591). — IV, 586.
- 8) 2,4'-Di[Acetylamido]diphenylmethan. Sm. 218—219° (*A.* 283, 162; *B.* 38, 4121 *C.* 1906 [1] 363). — IV, 973.
- 9) 4,4'-Di[Acetylamido]diphenylmethan. Sm. 228° (*A.* 283, 161; *B.* 23, 2578; 25, 303; 27, 1811; *B.* 41, 3386 *C.* 1908 [2] 1807). — IV, 975.
- 10) Di[4-Acetylphenylamido]methan. Sm. 188° (*B.* 37, 397 *C.* 1904 [1] 658).
- 11) 4,4'-Di[Acetylamido]-2-Methylbiphenyl. Sm. 310° (*B.* 28, 2550). — IV, 975.
- 12) 4,4'-Di[Acetylamido]-3-Methylbiphenyl? Sm. 310° (*B.* 25, 3225). — IV, 975.
- 13)  $\alpha\beta$ -Di[Benzoylamido]propan. Sm. 192—193° (*B.* 21, 2360). — II, 1169.
- 14)  $\alpha\gamma$ -Di[Benzoylamido]propan. Sm. 147—148° (*B.* 21, 2365; *J. pr.* [2] 62, 198). — II, 1170.
- 15) s-Benzoyl-2,4,5-Trimethylphenylharnstoff. Sm. 207° (*Am.* 24, 221). — \*II, 736.
- 16)  $\gamma\delta$ [oder  $\gamma\epsilon$ ]-Dioximido- $\alpha\epsilon$ -Diphenylpentan. Sm. 200,5—202° (*G.* 27 [2] 270; 29 [2] 402, 407; *C.* 1906 [1] 136).
- 17) isom.  $\gamma\delta$ [oder  $\gamma\epsilon$ ]-Dioximido- $\alpha\epsilon$ -Diphenylpentan. Sm. 164—165° (*G.* 29 [2] 402, 407, 416; *C.* 1906 [1] 136). — \*III, 191.
- 18)  $\alpha\epsilon$ -Dioximido- $\alpha\epsilon$ -Diphenylpentan. Sm. 149—151° (161°) (*A. ch.* [6] 22, 358; *A.* 302, 218). — III, 299.
- 19) isom.  $\alpha\epsilon$ -Dioximido- $\alpha\epsilon$ -Diphenylpentan. Sm. 62° (*A.* 302, 217). — \*III, 230.
- 20) 4,4'-Di[ $\alpha$ -Oximidoäthyl]diphenylmethan. Sm. 210° (*C. r.* 146, 343 *C.* 1908 [1] 1393).
- 21)  $\epsilon$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\gamma$ -Pentadien + Hydroxylamin. Sm. 161° (*C.* 1906 [2] 1842; 1908 [2] 711).
- 22) isom.  $\epsilon$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha\gamma$ -Pentadien + Hydroxylamin. Sm. 196° (*C.* 1908 [2] 712).
- 23) Dioxim d. Dimethylphenyl-m-Biscyklohexanon. Sm. 103—105° (*B.* 36, 2146 *C.* 1903 [2] 369).
- 24) isom. Dioxim d. Dimethylphenyl-m-Biscyklohexanon. Sm. 190 bis 193° (*B.* 36, 2147 *C.* 1903 [2] 369).
- 25) N-Acetyl- $\alpha$ -Phenylhydrazon- $\alpha$ -[6-Oxy-3-Methylphenyl]äthan. Sm. 105° (*A.* 365, 344 *C.* 1909 [1] 1868).
- 26)  $\alpha\beta$ -Dibenzoyl- $\alpha$ -Propylhydrazin. Sm. 131° (*B.* 34, 3268; *J. pr.* [2] 70, 279 *C.* 1904 [2] 1545).
- 27)  $\alpha\beta$ -Diacetyl- $\alpha$ -Diphenylmethylhydrazin. Sm. 197—198° (*J. pr.* [2] 67, 169 *C.* 1903 [1] 873). — \*IV, 649.
- 28)  $\alpha\beta$ -Diacetyl- $\alpha$ -Phenyl- $\beta$ -[4-Methylphenyl]hydrazin. Sm. 91° (*A.* 303, 370). — IV, 1502.
- 29)  $\beta\beta$ -Diacetyl- $\alpha$ -Phenyl- $\alpha$ -Benzylhydrazin. Sm. 128° (*B.* 41, 1867 *C.* 1908 [2] 505; *M.* 29, 915 *C.* 1908 [2] 2008).
- 30) 3,6-Di[Dimethylamido]xanthon. Sm. 240—242°. HCl, (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 54, 235; *Ph. Ch.* 24, 494; *B.* 37, 204 *C.* 1904 [1] 664). — \*III, 154.
- 31) 5'-Methyläther d. 5',6'-Dioxy-3'-Allyl-2-Methylazobenzol. Sm. 92 bis 93° (*G.* 36 [2] 26 *C.* 1906 [2] 1192).
- 32) 5'-Methyläther d. 5',6'-Dioxy-3'-Allyl-3-Methylazobenzol. Sm. 79 bis 80° (*G.* 36 [2] 30 *C.* 1906 [2] 1192).

- $C_{17}H_{18}O_2N_2$  33) 5'-Methyläther d. 5',6'-Dioxy-3'-Allyl-4-Methylazobenzol. Sm. 102 bis 103° (C. 36 [2] 32 C. 1906 [2] 1192).
- 34) 5'-Methyläther d. 5',6'-Dioxy-3'-Propenyl-2-Methylazobenzol. Zers. oberhalb 62° (C. 1906 [2] 1124).
- 35) 5'-Methyläther d. 5',6'-Dioxy-3'-Propenyl-3-Methylazobenzol. Zers. bei 60° (C. 1906 [2] 1124).
- 36) 6-Benzoylazo-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 165—167° (A. 340, 107 C. 1905 [2] 323).
- 37) 2,4-Diketo-1-Methyl-5-Propyl-3-[2-Naphtyl]tetrahydroimidazol. Sm. 152—153° (C. 1908 [1] 970).
- 38) 5[oder 6]-Äthyläther-2-[4-Methylphenyl]äther d. 5[oder 6]-Oxy-2-Oxymethylbenzimidazol. Sm. 145—146°. Pikrat (*J. pr.* [2] 63, 189). — \*IV, 588.
- 39)  $\alpha$ -Phenylimido- $\gamma$ -Phenylamidovaleriansäure. Sm. 194—195° (B. 17, 996; A. 265, 254; A. ch. [7] 9, 468). — II, 405; \*II, 205.
- 40)  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[Methyl-4-Methylphenylamido]essigsäure. Zers. bei 80—81° (Soc. 85, 997 C. 1904 [2] 321, 831).
- 41)  $\gamma$ -Phenylhydrazido- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Phenylhydrazinsalz (A. 367, 30 C. 1909 [2] 527).
- 42)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylbuttersäure. Sm. 140° (B. 18, 793). — IV, 698.
- 43) Dialdehyd d.  $\alpha$ -Di[Phenylamido]propan-2,2'-Dicarbonsäure. Sm. 103—105° (B. 42, 1144 C. 1909 [1] 1578).
- 44) Methylester d. 4-Methylphenylimido-4-Methylphenylamidoessigsäure. Sm. 103°. (2HCl, PtCl<sub>4</sub>) (Soc. 85, 994 C. 1904 [2] 831).
- 45) Methylester d. 2-[ $\alpha$ -Dimethylamidobenzyliden]amidobenzol-1-Carbonsäure. Sm. 109°. Pikrat (B. 37, 2681 C. 1904 [2] 521).
- 46) Äthylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Phenylpropionsäure. Sm. 63 bis 64° (B. 28, 773). — IV, 697.
- 47) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazidoessigsäure. Sm. 73 bis 74° (B. 28, 1226). — IV, 750.
- 48) Acetat d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[6-Oxy-3-Methylphenyl]äthan. Sm. 99° (A. 365, 344 C. 1909 [1] 1868).
- 49) Acetat d. 4'-Oxy-2,4,5-Trimethylazobenzol. Sm. 105° (B. 24, 2313). — IV, 1414.
- 50) Acetat d. 6'-Oxy-3,4,3'-Trimethylazobenzol. Sm. 106—106,5° (A. 365, 304 C. 1909 [1] 1865).
- 51) Acetat d. 5-Oxy-1,2,4-Trimethyl-*p*-Azobenzol. Sm. 73—74° (B. 24, 2307). — IV, 1424.
- 52) Propionat d. 6-Oxy-3,4'-Dimethylazobenzol. Sm. 62° (A. 364, 179 C. 1909 [1] 919).
- 53) Phenylamidoformiat d. anti-4-Isopropylbenzaldoxim. Sm. 89° (93°) (B. 26, 2095; A. 355, 52 C. 1907 [2] 1165). — III, 56.
- 54) Phenylamidoformiat d. syn-4-Isopropylbenzaldoxim. Sm. 103° (104°) (B. 23, 2176; A. 355, 45 C. 1907 [2] 1165). — III, 57.
- 55) Nitril d.  $\beta$ -Butyroxyl- $\alpha$ -[2-Cyanphenyl]- $\alpha$ -Penten- $\alpha$ -Carbonsäure. Sm. 105° (B. 29, 2393). — \*II, 1136.
- 56) Nitril d.  $\beta$ -Isobutyroxyl- $\alpha$ -[2-Cyanphenyl]- $\gamma$ -Methyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure (Pseudodiisobutyryl-o-Cyanbenzylcyanid). Sm. 94°. + C<sub>2</sub>H<sub>6</sub>O (Sm. 140°) (B. 30, 890). — \*II, 1136.
- 57) Amid d.  $\alpha$ -Phenacetyl-amido- $\beta$ -Phenylpropionsäure. Sm. 189—190° (186°) (B. 16, 2822; 17, 1616; 30, 2977, 2981; 31, 2238; A. 307, 152). — II, 1367, 1577; \*II, 836.
- 58) Amid d.  $\alpha\gamma$ -Diphenylpropan- $\beta\beta$ -Dicarbonsäure. Sm. 197° (193°) (D.R.P. 162280 C. 1905 [2] 725; A. 340, 344 C. 1905 [2] 892).
- 59) Methylenamid d. Phenylessigsäure. Sm. 205° (208°) (B. 10, 1650; *J. pr.* [2] 54, 545). — II, 1312; \*II, 814.
- 60) 4-Methylphenylamid d.  $\alpha$ -Benzoylamidopropionsäure. Sm. 172 bis 175° (*J. pr.* [2] 70, 147 C. 1904 [2] 1394).
- 61) Di[Phenylamid] d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 223—224°. — II, 414.
- 62) Di[Phenylamid] d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sm. 213—215° (B. 21, 1245). — II, 415.
- 63) Di[Methylphenylamid] d. Malonsäure. Sm. 109° (B. 17, 137; 31, 1826). — II, 413; \*II, 210.



- C<sub>17</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** 64) Di[2-Methylphenylamid] d. Malonsäure. Sm. 193° (Soc. 83, 39 C. 1903 [1] 441).
- 65) Di[4-Methylphenylamid] d. Malonsäure. Sm. 248° (250°) (J. pr. [2] 58, 414; Soc. 83, 36 C. 1903 [1] 441).
- 66) Phenyl-2-Acetylamidobenzylamid d. Essigsäure. Sm. 123—124° (B. 24, 3053; 27, 42; J. pr. [2] 51, 262). — IV, 630.
- 67) Mono[2,4,5-Trimethylphenyl]diamid d. Benzol-1,2-Dicarbonsäure (Phthalpseudocumidamid). Sm. 218° (B. 17, 1807). — II, 1808.
- 68) Verbindung (aus Dibenzalacetone). Sm. 200,5—202° (G. 27 [2] 271).
- 69) Verbindung (aus Di-2-Oxybenzylidenacetonehydroxylaminoxim). Sm. 191° u. Zers. (C. 1906 [1] 136).
- 70) Verbindung (aus 2-Amido-1-Methylbenzol u. Brompropionsäure). Sm. 184 bis 185° (B. 22, 3308). — II, 463.
- 71) Verbindung (aus Cantharidin u. 3,4-Diamido-1-Methylbenzol). Sm. 180 bis 189° (G. 23 [1] 139). — III, 623.
- C<sub>17</sub>H<sub>18</sub>O<sub>2</sub>N<sub>4</sub>** C 65,8 — H 5,8 — O 10,3 — N 18,1 — M. G. 310.
- 1)  $\alpha$ -Semicarbazido- $\gamma$ -[3-Oxyphenyl]imido- $\alpha$ -Phenyl- $\alpha$ -Buten. Sm. 124° (B. 36, 2452 C. 1903 [2] 670).
- 2)  $\alpha$ -Phenylureido- $\alpha$ -Phenylamidoformylimidopropan (Propenyldiphenyldiureid). Sm. 169—170° (B. 23, 2924). — II, 378.
- 3)  $\alpha$ -[ $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazido]acetyl- $\beta$ -Methylharnstoff. Sm. 238° (C. 1899 [2] 422). — \*IV, 484.
- 4)  $\alpha$ -Acetylphenylhydrazon- $\alpha$ -[ $\alpha$ -Acetyl- $\beta$ -Phenylhydrazido]methan. Sm. 197° (B. 25, 3188). — IV, 1227.
- 5)  $\alpha$ -Phenyl- $\beta$ -[2,4-Di(Acetylamido)benzyliden]hydrazin. Sm. 246 bis 252° u. Zers. (B. 35, 2714 C. 1902 [2] 638). — \*IV, 487.
- 6) 4,6-Di[Acetylamido]-3-Methylazobenzol. Sm. 216—217° (Soc. 81, 94 C. 1902 [1] 186). — \*IV, 1023.
- 7)  $\beta\gamma$ -Di[Phenylhydrazon]butan- $\alpha$ -Carbonsäure. Sm. 175° (B. 40, 1651 C. 1907 [1] 1622).
- 8)  $\alpha\beta$ -Di[4-Methylphenylhydrazon]propionsäure. Sm. 187—188° u. Zers. (A. 248, 88). — IV, 807.
- 9) Äthylester d.  $\alpha\beta$ -Di[Phenylhydrazon]propionsäure. Sm. 222 bis 223° (229—231°; 215—217°) (B. 24, 3833; Soc. 81, 430; B. 38, 2103 C. 1905 [2] 395). — IV, 705; \*IV, 460.
- 10) Äthylester d.  $\alpha$ -[4-Methylphenyl]azo- $\alpha$ -Phenylhydrazonessigsäure. Sm. 85° (B. 27, 1687). — IV, 1241.
- 11) Phenylhydrazid d. 5-Keto-3-Methyl-1-Phenyltetrahydropyrrol-3-Carbonsäure. Sm. 144° (J. pr. [2] 74, 310 C. 1906 [2] 1820).
- 12) Verbindung (aus Brenztraubensäurephenylhydrazon). Sm. 186,5° (Am. 21, 42). — \*IV, 452.
- C<sub>17</sub>H<sub>18</sub>O<sub>2</sub>N<sub>6</sub>** C 60,5 — H 5,3 — O 9,5 — N 24,8 — M. G. 338.
- 1) 4-Amido-6-[ $\beta$ -Cyanpropyl]amido-3-Methylazobenzol (B. 39, 1003 C. 1906 [1] 1342).
- C<sub>17</sub>H<sub>18</sub>O<sub>2</sub>Br<sub>2</sub>** 1) 3,3'-Dibrom-4,4'-Dioxy-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 152—153° (B. 36, 1890 C. 1903 [2] 291; B. 37, 1471 C. 1904 [1] 1518; A. 356, 169 C. 1907 [2] 1700).
- 2) Diäthyläther d. 5,5'-Dibrom-2,2'-Dioxydiphenylmethan. Sm. 143° (B. 38, 1492 C. 1905 [1] 1406).
- 3) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1-[ $\alpha\beta$ -Dibrompropyl]-benzol (Benzylisoeugenoldibromid). Sm. 122° (C. 1897 [2] 1183). — \*II, 637.
- C<sub>17</sub>H<sub>18</sub>O<sub>2</sub>S** 1) Diäthyläther d. 4,4'-Dioxydiphenylthioketon. Sm. 118—119° (B. 28, 2871). — III, 211.
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>S<sub>2</sub>** 1)  $\gamma\gamma$ -Dimerkaptovalerianidiphenyläthersäure. Sm. 68—69° (67°). Ba (B. 19, 1795; 34, 2652, 2656). — II, 789.
- 2)  $\alpha\alpha$ -Dimerkaptopropionidbenzyläthersäure. Sm. 98—100° (B. 36, 299 C. 1903 [1] 499).
- C<sub>17</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub>** C 68,5 — H 6,0 — O 16,1 — N 9,4 — M. G. 298.
- 1) Methyläther d. 4,4'-Di[Acetylamido]-2-Oxybiphenyl. Sm. 285° (B. 36, 4079 C. 1904 [1] 268).
- 2) Äthyläther d. N-Formyl-4'-Formylamido-4-Oxy-2-Methyldiphenylamin. Sm. 140° (B. 36, 3860 C. 1904 [1] 91).

- C<sub>17</sub>H<sub>19</sub>O<sub>8</sub>N<sub>2</sub>** 3) 4-Methyläther- $\alpha$ -Äthyläther d.  $\alpha$ -Benzoylimido- $\alpha$ -[3-Oxyphenyl]-amido- $\alpha$ -Oxymethan. Sm. 66—67° (*Am.* 32, 367 *C.* 1904 [2] 1507).
- 4)  $\alpha$ -Acetylamido- $\beta$ -[2-Naphtoyl]acetylamidoäthan (*B.* 25, 2139). — II, 1454.
- 5) Resorcinantipyrin. Sm. 103—104° (*Bl.* [3] 15, 172). — IV, 510.
- 6) 4,5-Dioxy-2-Keto-1-Äthyl-4,5-Diphenyltetrahydroimidazol. Sm. 191 bis 192° (*A.* 368, 230 *C.* 1909 [2] 1468).
- 7) 4,5-Dioxy-2-Keto-1,3-Dimethyl-4,5-Diphenyltetrahydroimidazol. Sm. 205° u. Zers. (*B.* 41, 171 *C.* 1908 [1] 847; *A.* 368, 207 *C.* 1909 [2] 1466).
- 8) Dimethyläther d. anti-4,5-Dioxy-2-Keto-4,5-Diphenyltetrahydroimidazol. Sm. 217°. + CH<sub>2</sub>O (*A.* 368, 197 *C.* 1909 [2] 1465).
- 9) Dimethyläther d. syn-4,5-Dioxy-2-Keto-4,5-Diphenyltetrahydroimidazol. Sm. 179°. + CH<sub>2</sub>O (*A.* 368, 195 *C.* 1909 [2] 1465).
- 10) 5[oder 6]-Äthyläther-2-[2-Methoxyphenyl]äther d. 5[oder 6]-Oxy-2-Oxymethylbenzimidazol. Sm. 122—123°. Pikrat (*J. pr.* [2] 63, 190). — \*IV, 588.
- 11)  $\alpha$ -Benzylidenamido- $\beta$ -Phenylamido- $\alpha$ -Oxybuttersäure. Sm. 220° (*B.* 31, 2716). — \*III, 25.
- 12)  $\alpha$ -Benzylidenamido- $\beta$ -Methylamido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 179° u. Zers. (*B.* 31, 2717). — \*III, 25.
- 13)  $\alpha$ -Benzylidenamido- $\beta$ -[4-Methylphenyl]amido- $\alpha$ -Oxypropionsäure. Sm. 228° (*B.* 31, 2712). — \*III, 25.
- 14) 4-Oxy-2-Methyl-5-Isopropylazobenzol-3-Carbonsäure. Sm. 185 bis 195° (*Soc.* 89, 307 *C.* 1906 [2] 1495).
- 15) 1,2<sup>2</sup>-Anhydrid d.  $\beta$ -Tetrahydro-5[oder 6]-Methyl-2-[3,4-Dimethoxyphenyl]benzimidazol-2<sup>2</sup>-Carbonsäure (Tetrahydrotoluylendimethoxyphthalimidon). Sm. 248° (*B.* 25, 1990). — IV, 619.
- 16) Äthylester d. Phenylamidoformylphenylamidoessigsäure. Sm. 80° (*B.* 31, 509). — \*II, 226.
- 17) Äthylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropionphenyläthersäure. Sm. 219—221° (*Am.* 37, 636 *C.* 1907 [2] 450).
- 18) Äthylester d.  $\alpha$ -Phenylureido- $\alpha$ -Phenylessigsäure. Sm. 165° (*B.* 24, 4153). — II, 1326.
- 19) Acetat d. 2-Acetylamido-1-[2-Oxybenzyl]amidobenzol. Sm. 162° (*B.* 28, 935). — IV, 556.
- 20) 6-Acetat d. 6,4'-Dioxy-3-Methylazobenzol-4'-Äthyläther. Sm. 105° (*A.* 365, 306 *C.* 1909 [1] 1865).
- 21) Phenylamidoformiat d. 4-Oximido-1-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 131—132° (*B.* 22, 3106). — III, 365.
- 22) Phenylamid d.  $\alpha$ -Phenylamidoformoxylbuttersäure. Sm. 153—154° (*Bl.* [3] 29, 126 *C.* 1903 [1] 564).
- 23) Phenylamid d.  $\alpha$ -Phenylamidoformoxylisobuttersäure. Sm. 155 bis 156° (*Bl.* [3] 29, 127 *C.* 1903 [1] 564).
- 24)  $\beta$ -Phenylmonamid d.  $\beta$ -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 150° (*B.* 21, 1387). — II, 439.
- 25) 2-Phenylamid d. Benzol-1-Carbonsäure-2-Amidoessigsäure-1-Äthylester. Sm. 164—166° (*B.* 33, 555). — \*II, 785.
- 26)  $\beta$ -Nitro-2-Methyl-4-Isopropylphenylamid d. Benzolcarbonsäure. Sm. 177° (*A.* 221, 167). — II, 1167.
- 27) Di[Phenylamid] d. Oxymethanäthyläther- $\alpha\alpha$ -Dicarbonsäure. Sm. 170—171° (*B.* 31, 554). — \*II, 219.
- 28)  $\alpha$ -Benzyl- $\beta$ -Phenylhydrazid d. Bernsteinsäure. Sm. 142° (*B.* 26, 678). — IV, 812.
- 29) Verbindung (aus 2-Keto-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. 215° u. Zers. (*A.* 368, 176 *C.* 1909 [2] 1463).
- 30) Verbindung (aus 4-Nitrobenzylchlorid u. Isonitrosocampher). Sm. 214° (*Soc.* 93, 248 *C.* 1908 [1] 1271).
- 31) Verbindung (aus Antipyrin u. 1,3-Dioxybenzol). Sm. 101° (*G.* 36 [2] 171 *C.* 1906 [2] 1339).
- C<sub>17</sub>H<sub>18</sub>O<sub>8</sub>N<sub>4</sub>** C 62,6 — H 5,5 — O 14,7 — N 17,2 — M. G. 326.
- 1)  $\alpha$ -[3-Nitrobenzyliden]amido- $\beta$ -Äthyl- $\alpha$ -Benzylharnstoff. Sm. 106° (*B.* 37, 2326 *C.* 1904 [2] 312).

- C<sub>17</sub>H<sub>18</sub>O<sub>3</sub>N<sub>4</sub>** 2) **s-Di[4-Acetylamidophenyl]harnstoff**. Sm. 344° (corr.) (*B.* 27, 399; *A.* 293, 376). — I, 591.
- 3) **s-Di[2-Methylphenylamidoformyl]harnstoff**. Sm. 190° (*Soc.* 81, 1571 *C.* 1903 [1] 158).
- 4) **s-Di[4-Methylphenylamidoformyl]harnstoff**. Sm. 170° (*Soc.* 79, 844).
- 5) **s-Di[Benzoylamidomethyl]harnstoff**. Sm. 246° (*J. pr.* [2] 52, 262). — \*II, 733.
- 6) **Äthyläther d. α-Phenylhydrazonacetyl-β-[4-Oxyphenyl]harnstoff**. Sm. 151° (*C.* 1899 [2] 422). — \*IV, 458.
- C<sub>17</sub>H<sub>18</sub>O<sub>8</sub>S** 1) **α-[4-Methylphenyl]sulfon-γ-Keto-α-Phenylbutan** (*Am.* 31, 178 *C.* 1904 [1] 876). — \*III, 119.
- 2) **β-Äthylsulfon-α-Keto-αγ-Diphenylpropan**. Sm. 156° (*B.* 34, 1403). — \*III, 169.
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>N<sub>2</sub>** C 65,0 — H 5,7 — O 20,4 — N 8,9 — M. G. 314.
- 1) **5,5'-Dinitro-2,3,2',3'-Tetramethyldiphenylmethan**. Sm. 164—167° (*A.* 356, 159 *C.* 1907 [2] 1699).
- 2) **5,5'-Dinitro-2,4,2',4'-Tetramethyldiphenylmethan**. Sm. 173—176° (*A.* 356, 159 *C.* 1907 [2] 1699).
- 3) **Dimethyläther d. Di[4-Oxybenzoylamido]methan**. Sm. 206—207,5° (*B.* 37, 4099 *C.* 1904 [2] 1726).
- 4) **Propyl-2,4,6-Trioxy-5-Phenylazo-3-Methylphenylketon**. Sm. 182° (*A.* 318, 290; *A.* 329, 339 *C.* 1904 [1] 801). — \*IV, 1073.
- 5) **Di[2-Oxybenzyliden]acetonhydroxylaminoxim**. Sm. 207° u. Zers. (*C.* 1906 [1] 136).
- 6) **4,4'-αγ-Propylenäther d. 4-Oxybenzaldoxim**. Sm. 153° (*A.* 357, 376 *C.* 1908 [1] 358).
- 7) **Pyrogallolantipyryn**. Sm. 77—78° (*Bl.* [3] 15, 1049). — IV, 510.
- 8) **Phloroglucinantipyryn**. Sm. 182—184° (*Bl.* [3] 15, 1049). — IV, 510.
- 9) **Nitrosomorphin + H<sub>2</sub>O** (*B.* 4, 123). — III, 901.
- 10) **Diphenylmethan-4,4'-Di[Amidoessigsäure]**. Sm. 175° (*J. pr.* [2] 77, 357 *G.* 1908 [1] 1694).
- 11) **α-[β-Methyl-β-Phenylhydrazido]-α-Phenyläthan-ββ-Dicarbonsäure**. K<sub>p</sub> (*B.* 29, 814). — IV, 742.
- 12) **Dimethotrimethylenchinoxalincarbonsäure**. Sm. 187—188° (*B.* 32, 1934). — \*IV, 662.
- 13) **Lycocetoninsäure** (*C.* 1895 [1] 1184).
- 14) **Methylester d. β-Nitro-γ-Phenylamido-γ-Phenylbuttersäure**. Sm. 122° (*A.* 329, 254 *C.* 1904 [1] 31).
- 15) **Dimethylester d. 4,4'-Diamidodiphenylmethan-3,3'-Dicarbonsäure**. Sm. 147°. 2HCl (*J. pr.* [2] 63, 249; *A.* 324, 130 *C.* 1902 [2] 1253).
- 16) **Dimethylester d. Di[Phenylamido]malonsäure**. Sm. 124—125° (113,5°) (*B.* 35, 522 *C.* 1902 [1] 659; *B.* 35, 1820 *C.* 1902 [2] 25; *C. r.* 141, 48 *C.* 1905 [2] 457).
- 17) **Dimethylester d. Di[Phenylamido]methan-2,2'-Dicarbonsäure**. Sm. 119—120°; Sd. 280° u. Zers. (*J. pr.* [2] 63, 245, 569; *J. pr.* [2] 65, 534 *C.* 1902 [2] 361).
- 18) **Äthylester d. β-Phenylamido-β-[2-Nitrophenyl]propionsäure**. Sm. 78° (*B.* 17, 1502). — II, 1368.
- 19) **Äthylester d. α-Phenyl-4-Nitro-2-Methylphenylamidoessigsäure**. Sm. 118,3° (*B.* 30, 2771). — \*II, 821.
- 20) **Äthylester d. α-Phenyl-2-Nitro-4-Methylphenylamidoessigsäure**. Sm. 106° (*B.* 30, 2772). — \*II, 821.
- 21) **Phenazin d. 1,2-Diketo-R-Pentamethylen-3,5-Dicarbonsäureäthylester**. Sm. 204° (*B.* 35, 3208 *C.* 1902 [2] 1249). — \*IV, 661.
- 22) **Benzoat d. 3-Nitro-5-Amido-2-Oxy-4-Isopropyl-1-Methylbenzol**. Sm. 280—283°. (2HCl, PtCl<sub>4</sub>) (*G.* 20, 186). — II, 1148.
- 23) **Benzoat d. 2-Nitro-6-Amido-3-Oxy-4-Isopropyl-1-Methylbenzol**. Sm. 158—160° (*G.* 25 [2] 403). — \*II, 719.
- 24) **2-Nitrobenzoat d. d-Carvoxim** (*Ph. Ch.* 14, 404). — III, 114; \*III, 85.
- 25) **3-Nitrobenzoat d. d-Carvoxim** (*Ph. Ch.* 14, 404). — III, 114; \*III, 85.
- 26) **4-Nitrobenzoat d. d-Carvoxim** (*Ph. Ch.* 14, 404). — III, 114; \*III, 85.
- 27) **Hydrat d. Mesoxalsäure-2-Methylphenylamid**. Sm. 127—131° (*A.* 270, 315). — II, 468.



- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>N<sub>2</sub>** 28) Hydrat d. Mesoxalsäure-4-Methylphenylamid. Sm. 120—130° u. Zers. (*Am.* 16, 381). — \*II, 281.
- 29) Mesoxanilid-Äthylalkoholat. Sm. 145—151° u. Zers. (*A.* 270, 288). — II, 421.
- 30) Di[Methylphenylamid]d.Dioxymalonsäure. Sm. 184° (*C.* 1904 [1] 1555).
- 31) Di[4-Methoxyphenylphenylamid]d. Methandicarbonsäure. Sm. 232—233° (*G.* 25 [2] 539). — \*II, 409.
- 32) 2-Nitrophenylamid d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 47° (*B.* 34, 2060).
- 33) 3-Nitrophenylamid d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 77° (*B.* 34, 2063).
- 34) 4-Nitrophenylamid d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 125° (*B.* 34, 2068).
- 35) Verbindung (aus Benzoylglyoxylsäureäthylester u. Phenylhydrazin). Sm. 89—90° (*C. r.* 144, 569 *C.* 1907 [1] 1492).
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>N<sub>4</sub>** C 59,6 — H 5,3 — O 18,7 — N 16,4 — M. G. 342.
- 1) 4-[2,4-Dinitrobenzyliden]amido-1-Diäthylamidobenzol + H<sub>2</sub>O. Sm. 173° u. Zers. (*B.* 35, 1227 *C.* 1902 [1] 1000). — \*IV, 394.
- 2)  $\alpha\beta$ -Di[ $\beta$ -Phenylureido]propionsäure. Sm. 214° u. Zers. (*B.* 37, 344 *C.* 1904 [1] 646).
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>N<sub>6</sub>** C 55,1 — H 4,9 — O 17,3 — N 22,7 — M. G. 370.
- 1)  $\alpha\delta$ -Di[4-Nitrophenylhydrazon]pentan. Sm. 106° (*B.* 42, 442 *C.* 1909 [1] 834).
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>N<sub>10</sub>** C 47,9 — H 4,2 — O 15,0 — N 32,9 — M. G. 426.
- 1) Bis[3-Nitrodiazobenzol]pentamethylentetramin. Sm. 184° u. Zers. (*A.* 288, 245). — IV, 1493.
- 2) Bis[4-Nitrodiazobenzol]pentamethylentetramin. Sm. 244° u. Zers. (*A.* 288, 243). — IV, 1493.
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>S** 1) Methylester d.  $\beta$ -[4-Methylphenyl]sulfon- $\beta$ -Phenylpropionsäure. Sm. 156° (*Am.* 31, 173 *C.* 1904 [1] 876).
- 2) Äthylester d.  $\alpha$ -Phenylsulfon- $\beta$ -Phenylpropionsäure. Sm. 95—96°. Na (*Am.* 5, 118). — II, 1369.
- 3) Äthylester d.  $\beta$ -Phenylsulfon- $\beta$ -Phenylpropionsäure. Sm. 139° (54 bis 55°) (*Am.* 31, 174 *C.* 1904 [1] 876; *B.* 40, 4792 *C.* 1908 [1] 232).
- C<sub>17</sub>H<sub>18</sub>O<sub>4</sub>S<sub>2</sub>** 1) 1,3-Di[Phenylsulfon]-R-Pentamethylen. Sm. 232—233° (*B.* 38, 656 *C.* 1905 [1] 740).
- C<sub>17</sub>H<sub>18</sub>O<sub>5</sub>N<sub>2</sub>** C 61,8 — H 5,4 — O 24,2 — N 8,5 — M. G. 330.
- 1) Methyläther d.  $\beta\delta$ -Dinitro- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylbutan. Sm. 151—152°. Na + 2CH<sub>4</sub>O (*B.* 38, 471 *C.* 1905 [1] 741; *A.* 355, 264 *C.* 1907 [2] 1622).
- 2)  $\alpha^4$ -Methyläther- $\beta^4$ -Äthyläther d.  $\beta$ -[2-Nitro-4-Oxyphenyl]amido- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]äthan. Sm. 171° (*B.* 31, 170). — \*III, 107.
- 3)  $\alpha$ -Phenylhydrazon-3,4,5-Trioxyphenylessigtrimethyläthersäure. Sm. 213—214° (*B.* 41, 923 *C.* 1908 [1] 1623).
- 4) Diäthylester d.  $\alpha\gamma$ -Dicyan- $\beta$ -[2-Oxyphenyl]propan- $\alpha\gamma$ -Dicarbonsäure +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 140° (*J. pr.* [2] 50, 20; *C.* 1902 [2] 741; *B.* 37, 4496 *C.* 1905 [1] 250). — II, 1957.
- 5) Verbindung (aus Oximidocampher u. 3-Nitrobenzoylchlorid). Sm. 136 bis 137° (*Soc.* 83, 533 *C.* 1903 [1] 1136, 1353).
- 6) isom. Verbindung (aus Oximidocampher u. 3-Nitrobenzoylchlorid). Sm. 152° (*Soc.* 83, 534 *C.* 1903 [1] 1136, 1353).
- 7) Verbindung (aus Benzylidencampher). Sm. 183° (*C.* 1895 [2] 364).
- 8) Verbindung (aus d. Verb. C<sub>31</sub>H<sub>20</sub>O<sub>6</sub>N<sub>4</sub>). Sm. 170° (*J. pr.* [2] 33, 28). — II, 1249.
- C<sub>17</sub>H<sub>18</sub>O<sub>5</sub>N<sub>4</sub>** C 57,0 — H 5,0 — O 22,3 — N 15,6 — M. G. 358.
- 1) s-Di[5-Nitro-2,4-Dimethylphenyl]harnstoff. Subl. (*Bl.* [3] 21, 949). — \*II, 313.
- 2) s-Di[6-Nitro-2,4-Dimethylphenyl]harnstoff. Subl. bei 300° (*Bl.* [3] 21, 949). — \*II, 313.
- 3) 3,3'-Dinitro-4,4'-Di[Dimethylamido]diphenylketon. Sm. 150° (165 bis 166°) (*Bl.* [3] 19, 609; *G.* 34 [1] 386 *C.* 1904 [2] 111; *B.* 39, 1267 *C.* 1906 [1] 1745). — \*III, 150.
- 4) Diphenylcarbaziddiessigsäure. Sm. 235° u. Zers. (*B.* 36, 3889 *C.* 1904 [1] 28).

- C<sub>17</sub>H<sub>18</sub>O<sub>5</sub>N<sub>4</sub>** 5)  $\beta\beta'$ -Carbonat d.  $\beta$ -Oximido- $\beta$ -Amido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 131° (B. 18, 2480). — II, 1554.
- C<sub>17</sub>H<sub>18</sub>O<sub>5</sub>S** 1) Benzoat d. 3-Oxy-4-Isopropyl-1-Methylbenzol-6-Sulfonsäure. K + H<sub>2</sub>O, Ca + 4H<sub>2</sub>O, Ba + 5H<sub>2</sub>O, Pb + 5H<sub>2</sub>O (Z. 1869, 50). — II, 1148.  
2) Benzoat d. 3-Oxy-4-Isopropyl-1-Methylbenzol- $\gamma$ -Sulfonsäure. K + 3H<sub>2</sub>O (Z. 1869, 50). — II, 1148.
- C<sub>17</sub>H<sub>18</sub>O<sub>5</sub>S<sub>2</sub>** 1)  $\alpha$ -Di[4-Methylphenylsulfon]- $\beta$ -Ketopropan. Sm. 152° (J. pr. [2] 36, 427). — II, 825.
- C<sub>17</sub>H<sub>18</sub>O<sub>6</sub>N<sub>2</sub>** C 59,0 — H 5,2 — O 27,7 — N 8,1 — M. G. 346.  
1) Diäthyläther d. Di[ $\beta$ -Nitro- $\beta$ -Oxyphenyl]methan (OH: NO<sub>2</sub> = 1:2). Sm. 210—215° (D.R.P. 72490). — \*II, 604.  
2) Diäthyläther d. Di[ $\beta$ -Nitro- $\beta$ -Oxyphenyl]methan (OH: NO<sub>2</sub> = 1:3). Sm. 85—90° (D.R.P. 73951). — \*II, 604.  
3) Diäthyläther d. Di[ $\beta$ -Nitro- $\beta$ -Oxyphenyl]methan (OH: NO<sub>2</sub> = 1:4). Sm. 217—218° (D.R.P. 73946). — \*II, 604.  
4)  $\alpha'$ -Nitro- $\alpha$ -[3-Nitrobenzoyl]campher. Sm. 176—177° u. Zers. (C. 1902 [2] 52; Soc. 85, 541 C. 1903 [1] 1354). — \*III, 220.  
5)  $\alpha'$ -Nitro- $\alpha'$ -[3-Nitrobenzoyl]campher. Sm. 112—113° (Soc. 83, 541 C. 1903 [1] 1354).
- C<sub>17</sub>H<sub>18</sub>O<sub>6</sub>N<sub>6</sub>** C 50,7 — H 4,5 — O 23,9 — N 20,9 — M. G. 402.  
1) Dimethyläther d.  $\alpha\gamma$ -Dinitro- $\alpha\gamma$ -Di[4-Oxyphenylazo]propan. Sm. 181° (B. 25, 1712). — IV, 1415.
- C<sub>17</sub>H<sub>18</sub>O<sub>6</sub>S<sub>2</sub>** 1)  $\gamma\gamma$ -Di[Phenylsulfon]valeriansäure. Sm. 140° (B. 34, 2652).  
**C<sub>17</sub>H<sub>18</sub>O<sub>7</sub>S<sub>2</sub>** 1) 5-Isopropyl-2-Methyldiphenylketon- $\beta$ -Disulfonsäure. Ba (J. pr. [2] 35, 501). — III, 238.  
2) Dibenzylidenacetonbischydrosulfonsäure. K<sub>2</sub> + 3/2 H<sub>2</sub>O (B. 37, 4054 C. 1904 [2] 1649).
- C<sub>17</sub>H<sub>18</sub>O<sub>8</sub>N<sub>2</sub>** C 54,0 — H 4,8 — O 33,8 — N 7,4 — M. G. 378.  
1) Verbindung (aus Nitrokodeinsäuremethylester). HCl (B. 42, 3508 C. 1909 [2] 1472).
- C<sub>17</sub>H<sub>18</sub>O<sub>8</sub>Cl<sub>2</sub>** Dichlorthymothinglykuronsäureanhydrid. Sm. 80° (B. 37, 4456 C. 1905 [1] 235; H. 44, 262 C. 1905 [1] 1108).
- C<sub>17</sub>H<sub>18</sub>NCl** 1) Chlormethylat d.  $\beta$ -Dimethylamidoanthracen. 2 + PtCl<sub>4</sub> (B. 16, 1637). — II, 639.  
2) Chloräthylat d. d-2-Propyl-1-Benzylhexahydropyridin (Ch. d. N-Benzylconiin). 2 + PtCl<sub>4</sub> (B. 37, 3632 C. 1904 [2] 1510).  
3) isom. Chloräthylat d. d-2-Propyl-1-Benzylhexahydropyridin. 2 + PtCl<sub>4</sub> (B. 37, 3632 C. 1904 [2] 1510).  
4) 2-Chlor-1,3,3-Trimethyl-2-Phenyl-2,3-Dihydroindol. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (M. 27, 1230 C. 1907 [1] 822).
- C<sub>17</sub>H<sub>18</sub>NJ** 1) Jodmethylat d.  $\beta$ -Dimethylamidoanthracen. Sm. 215° u. Zers. (B. 16, 1636). — II, 639.  
2) Jodmethylat d. 9-Dimethylamidophenanthren. Sm. 217° u. Zers. (B. 36, 2516 C. 1903 [2] 507).
- C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>S** 1) s-Phenyl-[1,2,3,4-Tetrahydro-2-Naphtyl]thioharnstoff. Sm. 161° (B. 21, 858). — II, 588.  
2) s-Phenyl-[1,2,3,4-Tetrahydro-5-Naphtyl]thioharnstoff. Sm. 153° (B. 21, 1794). — II, 587.  
3) 2-Äthylamido-4,5-Diphenyl-4,5-Dihydrothiazol. Sm. 139°. (2HCl, PtCl<sub>4</sub>) (B. 28, 1901). — \*II, 661.  
4) 2-[2-Methylphenyl]imido-3-[2-Methylphenyl]tetrahydrothiazol. Sm. 91° (B. 15, 1317). — II, 465.  
5) 2-[2-Methylphenyl]imido-3-[4-Methylphenyl]tetrahydrothiazol. Sm. 82° (B. 15, 1315). — II, 499.  
6) 2-[4-Methylphenyl]imido-3-[4-Methylphenyl]tetrahydrothiazol. Sm. 112° (115°). HCl, H<sub>2</sub>SO<sub>4</sub> (B. 14, 1492; 15, 1314). — II, 499.  
7) Äthyläther d. 5-Merkapto-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 89° (J. pr. [2] 60, 225).  
8) Methyläther d. 2-Merkapto-6-Methyl-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 87° (J. pr. [2] 73, 226 C. 1906 [1] 1262).
- C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>S<sub>2</sub>** 1) Di[2-Methylphenylamid] d. Methandi[Thiocarbonsäure]. Sm. 122 bis 123° (B. 39, 3301 C. 1906 [2] 1568).  
2) Di[4-Methylphenylamid] d. Methandi[Thiocarbonsäure]. Sm. 145° (B. 39, 3301 C. 1906 [2] 1568).

- C<sub>17</sub>H<sub>18</sub>N<sub>3</sub>Cl** 1) Chlormethylat d. 5-Phenylamido-3-Methyl-1-Phenylpyrazol. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (B. 36, 3276 C. 1903 [2] 1189).  
 2) Chloräthylat d. 5-Methyl-3-[2-Pyridyl]-1-Phenylpyrazol. 2 + PtCl<sub>4</sub> (M. 17, 450). — IV, 1162.
- C<sub>17</sub>H<sub>18</sub>N<sub>3</sub>J** 1) Jodmethylat d. 5-Phenylamido-3-Methyl-1-Phenylpyrazol. Sm. 174° (B. 34, 726; B. 36, 3276 C. 1903 [2] 1189). — \*IV, 759.  
 2) Jodäthylat d. 5-Methyl-3-[2-Pyridyl]-1-Phenylpyrazol. Sm. 181 bis 183° u. Zers. (M. 17, 450). — IV, 1162.
- C<sub>17</sub>H<sub>18</sub>N<sub>4</sub>S** 1) s-Di[4-Methylbenzylidenamido]thioharnstoff. Sm. 191° (B. 41, 1100 C. 1908 [1] 1682).  
 2) α-Allyl-β-[4-Phenylhydrazonmethylphenyl]thioharnstoff. Sm. 136° (J. pr. [2] 56, 107). — IV, 753.  
 3) Nitril d. 4-Dimethylamidophenylimidomerkaptomethylamidoameisenbenzyläthersäure (4-Dimethylamidophenylpseudothiobenzylharnstoffcyanid). Sm. 193° (A. 361, 350 C. 1908 [2] 883).
- C<sub>17</sub>H<sub>18</sub>N<sub>5</sub>Cl** 1) Chlormethylat d. 5-Amido-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 126°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (A. 354, 105 C. 1907 [2] 610).
- C<sub>17</sub>H<sub>18</sub>N<sub>5</sub>J** 1) Jodmethylat d. 5-Amido-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 225° (A. 354, 104 C. 1907 [2] 610).
- C<sub>17</sub>H<sub>18</sub>N<sub>7</sub>Cl** 1) Di[1,2,4-Toluyldiamin]cyanurchlorid. Zers. bei 172° (B. 19, 2058). — IV, 606.
- C<sub>17</sub>H<sub>19</sub>ON** C 80,6 — H 7,5 — O 6,3 — N 5,5 — M. G. 253.  
 1) γ-Oxy-γ-Phenyl-α-[4-Dimethylamidophenyl]propen. Sm. 160° (B. 40, 4369 C. 1908 [1] 35).  
 2) 6-Oxy-3-tert. Butyl-1-Phenylimidomethylbenzol. Sm. 87° (Am. 16, 638). — III, 91.  
 3) 5-Oxy-4-Isopropyl-2-Phenylimidomethyl-1-Methylbenzol. Sm. 142° (B. 16, 2097). — III, 90.  
 4) 6-Benzylidenamido-3-Oxy-4-Propyl-1-Methylbenzol. Sm. 148 bis 150° (G. 25 [2] 390). — III, 32.  
 5) 2-Oxymethylphenyl-4-Isopropylbenzylidenamin. Sm. 103° (B. 25, 2973). — III, 56.  
 6) Methyläther d. Allylbenzyl-2-Oxyphenylamin. Sd. 205–206°<sub>60</sub> (B. 39, 487 C. 1906 [1] 921).  
 7) Methyläther d. 2-[4-Oxybenzyliden]amido-1,3,5-Trimethylbenzol. Sm. 67° (A. 274, 241). — III, 82.  
 8) Methylhydroxyd d. β-Dimethylamidoanthracen. Chlorid, Jodid, siehe diese (B. 16, 1637). — II, 639.  
 9) α-Phenylamido-γ-Keto-α-Phenylpentan. Sm. 121° (Bl. [3] 33, 160 C. 1905 [1] 601).  
 10) β-[2-Methylphenyl]amido-α-Keto-α-Phenylbutan. Sm. 91° (Bl. [3] 15, 1102). — \*III, 118.  
 11) β-[4-Methylphenyl]amido-α-Keto-α-Phenylbutan. Sm. 96° (Bl. [3] 15, 1102). — \*III, 118.  
 12) β-Phenylamido-α-Keto-α-[2,5-Dimethylphenyl]propan. Sm. 110 bis 111° (C. 1897 [2] 576).  
 13) α-[2,4-Dimethylphenyl]amidoäthylphenylketon. Sm. 161–161,5° (Bl. [3] 17, 74). — \*III, 113.  
 14) 4-Diäthylamidodiphenylketon. Sm. 78° (A. 217, 265; D.R.P. 41751). — III, 183; \*III, 147.  
 15) α-Acetylamidodi[4-Methylphenyl]methan. Sm. 159° (157–158°) (B. 24, 2799; 31, 1773). — II, 638.  
 16) γ-Benzoylamidobutylbenzol. Sm. 108° (B. 36, 3000 C. 1903 [2] 949).  
 17) γ-Oximido-αα-Diphenylpentan. Sm. 117° (Am. 38, 534 C. 1908 [1] 227).  
 18) isom. γ-Oximido-αα-Diphenylpentan. Sm. 146° (Am. 38, 534 C. 1908 [1] 227).  
 19) α-Oximido-αβ-Diphenylpentan. Sm. 100° (B. 22, 346). — III, 238.  
 20) α-Oximido-αγ-Diphenylpentan. Sm. 87° (Am. 38, 549 C. 1908 [1] 228).  
 21) β-Oximido-αγ-Diphenylpentan. Sm. 106° (102,5°) (Soc. 75, 869; C. 1900 [2] 476). — \*III, 175.  
 22) γ-Oximido-αε-Diphenylpentan. Sm. 92° (94°) (A. 261, 188; M. 22, 665). — III, 237.



- C<sub>17</sub>H<sub>19</sub>ON** 23)  $\delta$ -Oximido- $\gamma$ - $\delta$ -Diphenyl- $\beta$ -Methylbutan. Sm. 69—70° (B. 22, 347). — III, 238.
- 24)  $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\beta\beta$ -Dimethylpropan. Sm. 191° (C. r. 149, 8 C. 1909 [2] 600).
- 25)  $\beta$ -Oximido- $\alpha\alpha$ -Di[2-Methylphenyl]propan. Sm. 171° (B. 39, 2305 C. 1906 [2] 525).
- 26)  $\beta$ -Oximido- $\alpha\alpha$ -Di[4-Methylphenyl]propan. Sm. 189° (B. 39, 2304 C. 1906 [2] 525).
- 27)  $\beta$ -Oximido- $\alpha\gamma$ -Di[4-Methylphenyl]propan. Sm. 106° (G. 21, 102). — III, 238.
- 28)  $\alpha$ -Oximido-3,4,3',4'-Tetramethyldiphenylmethan. Sm. 147° (B. 38, 844 C. 1905 [1] 875).
- 29) N-Benzyl-4-Isopropylbenzaldoxim. Sm. 156° (B. 27, 1958).
- 30) N-[4-Isopropylbenzyl]benzaldoxim. Sm. 139° (B. 27, 1958).
- 31) 2-Oxy-1,3,3-Trimethyl-2-Phenyl-2,3-Dihydroindol. Sm. 101—102°. Pikrat (M. 27, 1223 C. 1907 [1] 822).
- 32) Phenyläther d. 2-[ $\gamma$ -Oxypropyl]-1,3-Dihydroisindol. Sm. 58° (B. 33, 2816). — \*IV, 138.
- 33)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[1,2,3,4-Tetrahydrochinolyl-2]-äthan (Salicyl-äthantetrahydrochinolin). Sm. 121°. HCl (B. 27, 1981). — IV, 402.
- 34)  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[1,2,3,4-Tetrahydrochinolyl-2]-äthan. Sm. 115°. HCl (B. 27, 1982). — IV, 402.
- 35) Amid d.  $\alpha\alpha$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 150° (C. 1908 [2] 1100).
- 36) Amid d.  $\alpha\gamma$ -Diphenyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sm. 149° (C. r. 149, 10 C. 1909 [2] 601).
- 37) Phenylamid d.  $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 88—89° (A. 261, 307; J. pr. [2] 71, 339 C. 1905 [1] 1598). — II, 1394.
- 38) Phenylamid d.  $\delta$ -Phenylvaleriansäure. Sm. 85—86° (C. 1908 [2] 1100).
- 39) Phenylamid d. isom.  $\beta$ - $\delta$ -Phenylvaleriansäure. Sm. 101—102° (A. 261, 305). — II, 1393.
- 40) Phenylamid d. 4-Isopropylphenylessigsäure. Sm. 104° (G. 21 [1] 56). — II, 1395.
- 41) Methylphenylamid d. dl- $\beta$ -Phenylbuttersäure. Sm. 54—55° (Soc. 85, 445 C. 1904 [1] 1445).
- 42) 4-Methylphenylamid d. d- $\beta$ -Phenylisobuttersäure. Sm. 115—116° (Soc. 85, 446 C. 1904 [1] 1445).
- 43) 4-Methylphenylamid d. dl- $\beta$ -Phenylisobuttersäure. Sm. 130° (Soc. 85, 445 C. 1904 [1] 1445).
- 44)  $\alpha$ -Phenyläthylamid d.  $\beta$ -Phenylpropionsäure. Sm. 89° (B. 37, 2704 C. 1904 [2] 518; J. pr. [2] 71, 328 C. 1905 [1] 1597).
- 45) Methyl-4-Isopropylphenylamid d. Benzolcarbonsäure. Sm. 58° (B. 40, 4360 C. 1908 [1] 33).
- 46) 4-Isopropyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 165° (A. 221, 167). — II, 1167.
- 47) 5-Isopropyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 102° (B. 20, 1263). — II, 1167.
- 48) 4-Isopropylbenzylamid d. Benzolcarbonsäure. Sm. 93° (B. 22, 932). — II, 1167.
- 49)  $\alpha$ -Phenylbutylamid d. Benzolcarbonsäure. Sm. 128° (J. pr. [2] 77, 12 C. 1908 [1] 630).
- 50) 2-Naphtylamid d.  $\beta\gamma$ -Dimethyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 94° (Bl. [3] 35, 302 C. 1906 [2] 317).
- C<sub>17</sub>H<sub>18</sub>ON<sub>3</sub>** C 72,6 — H 6,8 — O 5,7 — N 14,9 — M. G. 281.
- 1)  $\gamma$ -Semicarbazon- $\alpha\alpha$ -Diphenylbutan. Sm. 171° (Soc. 71, 678). — \*III, 174.
- 2)  $\alpha$ -Semicarbazon- $\alpha\beta$ -Diphenylbutan. Sm. 167° (C. r. 143, 127 C. 1906 [2] 670).
- 3)  $\alpha$ -Semicarbazon- $\beta\beta$ -Diphenylbutan. Sm. 167° (C. r. 143, 1243 C. 1907 [1] 727).
- 4)  $\beta$ -Semicarbazon- $\alpha\alpha$ -Di[4-Methylphenyl]äthan. Sm. 185° (B. 39, 2296 C. 1906 [2] 523).
- 5)  $\beta$ -Phenylbenzylhydrazon- $\gamma$ -Oxidobutan. Sm. 114—115° (J. pr. [2] 57, 162 Anm.). — \*IV, 542.

- C<sub>17</sub>H<sub>19</sub>ON<sub>3</sub>** 6) Benzyläther d.  $\gamma$ -Oximido- $\beta$ -Phenylhydrazonbutan. Sm. 73° (B. 42, 1943 C. 1909 [2] 182).  
 7) Phenylazocyanampher. Sm. 155° u. Zers. — IV, 1481.  
 8) Methylhydroxyd d. 5-Phenylamido-3-Methyl-1-Phenylpyrazol. Salze, siehe (B. 36, 3276 C. 1903 [2] 1189).  
 9) 3-[ $\alpha$ -Phenylhydrazonäthyl]-5-Acetyl-2,6-Dimethylpyridin. HNO<sub>3</sub> (B. 30, 2298). — IV, 800.  
 10) 3-Keto-4,6-Dimethyl-1-Propyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol. Sm. 128° (A. 366, 392 C. 1909 [2] 289).  
 11) Nitril d.  $\alpha$ -[2-Methoxyphenyl]amido- $\alpha$ -[4-Dimethylamidophenyl]-essigsäure. Sm. 133° (B. 35, 3574 C. 1902 [2] 1384).  
 12) Nitril d.  $\alpha$ -[4-Methoxyphenyl]amido- $\alpha$ -[4-Dimethylamidophenyl]-essigsäure. Sm. 109–110° (B. 35, 3574 C. 1902 [2] 1384).  
 13) Benzylidenamid d.  $\alpha$ -Phenylhydrazidobuttersäure. Sm. 123° (B. 33, 3551). — \*IV, 477.
- C<sub>17</sub>H<sub>19</sub>OCl** 1)  $\alpha$ -Chlorbenzylidencampher. Sm. 100° (Soc. 83, 104 C. 1903 [1] 233, 458).
- C<sub>17</sub>H<sub>19</sub>OBr** 1) d- $\alpha$ -Brombenzylidencampher. Sm. 82° (C. r. 132, 1574; Bl. [3] 27, 679 C. 1902 [2] 430). — \*III, 388.  
 2) i- $\alpha$ -Brombenzylidencampher. Sm. 56° (C. r. 132, 1574). — \*III, 388.  
 3) d-2-Brombenzylidencampher. Sm. 105° (C. r. 133, 82; Bl. [3] 27, 680 C. 1902 [2] 430; C. r. 136, 71 C. 1903 [1] 459). — \*III, 388.  
 4) d-4-Brombenzylidencampher. Sm. 129–130° (C. r. 133, 82; Bl. [3] 27, 680 C. 1902 [2] 430; C. r. 136, 71 C. 1903 [1] 459). — \*III, 388.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>N** C 75,8 — H 7,1 — O 11,9 — N 5,2 — M. G. 269.  
 1)  $\gamma$ -Äthyläther d.  $\gamma$ -Imido- $\beta\gamma$ -Dioxy- $\alpha\alpha$ -Diphenylpropan. HCl (A. 248, 41). — II, 1699.  
 2) Äthyläther d. 4-[2,4-Dimethylphenyl]imido-6-Oxy-1-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 118° (A. 369, 37 C. 1909 [2] 1855).  
 3)  $\alpha$ -Acetylphenylamido- $\alpha$ -[6-Oxy-3-Methylphenyl]äthan. Sm. 123° (B. 40, 3473 C. 1907 [2] 1332).  
 4) 2'-Acetylamido- $\alpha$ -Oxy-2,4-Dimethyldiphenylmethan. Sm. 165° (B. 32, 1263). — \*II, 662.  
 5) 5-Oxy-4-Acetylphenylamidomethyl-1,2-Dimethylbenzol. Sm. 137 bis 138° (B. 35, 139 C. 1902 [1] 467).  
 6) Äthyläther d. Acetyl-3'-Oxy-4-Methyldiphenylamin. Sm. 61° (J. pr. [2] 65, 53 C. 1902 [1] 578).  
 7) 6-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 178–179° (G. 25 [2] 389). — \*II, 741.  
 8) Methyläther d.  $\alpha$ -Benzoylamido- $\alpha$ -[4-Oxyphenyl]propan. Sm. 118° (J. pr. [2] 77, 19 C. 1908 [1] 630).  
 9) Äthyläther d. 4-Benzoylimido-1-Oxy-1,3-Dimethyl-1,4-Dihydrobenzol. Sm. 79–80° (B. 40, 1924 C. 1907 [2] 230).  
 10) Phenyläther d.  $\delta$ -Benzoylamido- $\alpha$ -Oxybutan. Sm. 72° (B. 32, 1268; B. 39, 4123 C. 1907 [1] 276). — \*II, 738.  
 11) Äthyläther d. 4-Dimethylamido-3'-Oxydiphenylketon. Sm. 90° (D. R. P. 65952). — \*III, 153.  
 12) Methyläther d. N-2,4,6-Trimethylphenyl-4-Oxybenzaldoxim. Sm. 152–152,5° (B. 33, 3631). — \*III, 63.  
 13) 3,5-Diacetyl-2,6-Dimethyl-4-Phenyl-1,4-Dihydropyridin. Sm. 180°; Sd. 225–235°<sub>25</sub> (B. 31, 1026). — \*IV, 223.  
 14) Dimethylketenchinolin. Sm. 81–82° (B. 40, 1150 C. 1907 [1] 1260).  
 15) Desoxymorphin (J. 1871, 779). — III, 907.  
 16) isom. Desoxymorphin. HCl + 1½ H<sub>2</sub>O (Soc. 77, 1034). — \*III, 671.  
 17)  $\delta$ -Amido- $\beta\gamma$ -Diphenylvaleriansäure. HCl (C. 1908 [2] 1600).  
 18)  $\beta$ -Phenyl- $\beta$ -[4-Dimethylamidophenyl]propionsäure. Sm. 184,5°. Ag (C. r. 143, 915 C. 1907 [1] 478).  
 19)  $\alpha$ -Phenylamido- $\alpha$ -[4-Isopropylphenyl]essigsäure. Sm. 158° u. Zers. (145–146° u. Zers.) (B. 31, 2706; G. 21 [1] 48). — II, 1395; \*IV, 845.  
 20) Methylester d. 4-Dimethylamidodiphenylmethan-2'-Carbonsäure. Sm. 62° (C. 1898 [1] 1296; Bl. [3] 25, 202). — \*II, 869.  
 21) Äthylester d.  $\alpha$ -Diphenylamidopropionsäure. Sd. 217°<sub>29</sub> (B. 31, 2679). — \*II, 227.

- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>N** 22) Äthylester d.  $\alpha$ -Methylphenylamidophenylelessigsäure. Sm. 72° (B. 30, 3176). — \*II, 820.
- 23) Äthylester d.  $\alpha$ -[2-Methylphenyl]amido- $\alpha$ -Phenylelessigsäure. Fl. (J. 1878, 781). — II, 1324.
- 24) Äthylester d.  $\alpha$ -[3-Methylphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 109° (B. 30, 2468). — \*II, 821.
- 25) Äthylester d.  $\alpha$ -[4-Methylphenyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 89–90° (85–86°) (J. 1878, 781; B. 30, 2472). — II, 1324; \*II, 821.
- 26) Äthylester d. Di[4-Methylphenyl]amidoameisensäure. Sm. 60–62° (B. 25, 1824). — II, 494.
- 27) Äthylester d. Benzyl-[2-Methylphenyl]amidoameisensäure. Fl. (B. 25, 1825). — II, 525.
- 28) Äthylester d. Dibenzylamidoameisensäure. Sd. 216°<sub>28</sub> (B. 25, 1824; B. 36, 2288 C. 1903 [2] 563). — II, 525.
- 29) 2-Methyl-5-Isopropylphenylester d. Phenylamidoameisensäure. Sm. 134–135° (B. 26, 2086). — II, 767.
- 30) 3-Methyl-6-Isopropylphenylester d. Phenylamidoameisensäure. Sm. 104° (J. pr. [2] 41, 320). — II, 771.
- 31) Benzoat d.  $\beta$ -Dimethylamido- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. HCl (C. 1907 [1] 1578).
- 32) Benzoat d.  $\beta$ -Dimethylamido- $\alpha$ -[4-Oxyphenyl]äthan. HCl, HBr (C. r. 144, 209 C. 1907 [1] 1054).
- 33) Benzoat d. 3-Diäthylamido-1-Oxybenzol. Sm. 22,5–23°; Sd. 236°<sub>15</sub> (B. 29, 509). — \*II, 717.
- 34) Benzoat d. d-Carvoxim. Sm. 97° (A. 252, 149; Ph. Ch. 14, 402). — III, 114; \*III, 85.
- 35) isom. Benzoat d. d-Carvoxim. Sm. 77° (C. 1909 [1] 1237; A. 369, 61 C. 1909 [2] 2000).
- 36) Benzoat d. l-Carvoxim. Sm. 95°. HCl (B. 16, 1730, 2222; A. 252, 149). — III, 113; \*III, 85.
- 37) Benzoat d. Isocarvoxim. Sm. 112° (B. 20, 2074). — III, 114.
- 38) Benzoat d. Pinenonoxim. Sm. 105° (C. 1900 [1] 1022). — \*III, 86.
- 39) Phenylamidoformiat d.  $\gamma$ -Oxy- $\alpha$ -Phenylbutan. Sm. 113° (B. 37, 2314 C. 1904 [2] 217).
- 40) Phenylamidoformiat d.  $\beta$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Sm. 96° (B. 37, 1723 C. 1904 [1] 1515).
- 41) Phenylamidoformiat d.  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Methylpropan. Sm. 62 bis 63° (C. r. 146, 1406 C. 1908 [2] 507).
- 42) Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[4-Methylphenyl]propan. Sm. 86 bis 88° (B. 35, 2253 C. 1902 [2] 274).
- 43) Phenylamidoformiat d.  $\alpha$ -Oxy- $\beta$ -[4-Methylphenyl]propan. Sm. 119 bis 120° (Soc. 87, 653 C. 1905 [2] 239).
- 44) Phenylamidoformiat d. 3-Oxy-1-Methyl-4-Isopropylbenzol. Sm. 107° (B. 39, 1163 C. 1906 [1] 1429).
- 45) Phenylamidoformiat d. 4-[ $\alpha$ -Oxyäthyl]-1-Äthylbenzol. Sm. 72–73° (B. 35, 2250 C. 1902 [2] 273).
- 46) Phenylamidoformiat d. 4-[ $\alpha$ -Oxyäthyl]-1,3-Dimethylbenzol. Sm. 105° (B. 35, 2248 C. 1902 [2] 273).
- 47) Phenylamid d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 97° (B. 34, 1842).
- 48) Methylphenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Sd. 245–248° (B. 34, 2126).
- 49) 2-Methylphenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Sm. 101 bis 102° (B. 34, 1844).
- 50) 3-Methylphenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Sm. 92,5° (B. 34, 1848).
- 51) 4-Methylphenylamid d.  $\alpha$ -Oxybutterphenyläthersäure. Sm. 124° (B. 34, 1849).
- 52) Methylphenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sd. 210 bis 211°<sub>24</sub> (B. 34, 2129).
- 53) 2-Methylphenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 62°; Sd. 210–217°<sub>17</sub> (B. 34, 1845).
- 54) 3-Methylphenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 83° (B. 34, 1848).



- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>N** 55) 4-Methylphenylamid d.  $\alpha$ -Oxyisobutterphenyläthersäure. Sm. 124° (B. 34, 1849).  
 56) 2-Methylphenylamid d.  $\beta$ -Oxyisobutterphenyläthersäure. Sm. 91° (B. 34, 1847).  
 57) Äthylphenylamid d.  $\alpha$ -Oxypropionphenyläthersäure. Sm. 47,5°; Sd. 224—225°<sub>17</sub> (B. 34, 2131).  
 58)  $\beta$ -[2,4-Dimethylphenoxyl]äthylamid d. Benzolcarbonsäure. Sm. 117 bis 118° (B. 29, 2401). — \*II, 738.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>N<sub>3</sub>** C 68,7 — H 6,4 — O 10,8 — N 14,1 — M. G. 297.  
 1) 4-[4-Nitrobenzyliden]amido-1-Diäthylamidobenzol. Sm. 142,5° (B. 35, 1239 C. 1902 [1] 1001). — \*IV, 394.  
 2) Äthyläther d.  $\alpha$ -Phenylamidoformylimido- $\alpha$ -Methylphenylamido- $\alpha$ -Oxymethan. Sm. 115—116° (Am. 26, 239).  
 3)  $\alpha$ -Butyrylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 155° (B. 27, 1517). — IV, 675.  
 4) Phenyl-4-Isopropylbenzoylamidoharnstoff (Cuminoylphenylsemicarbazid). Sm. 209°. — IV, 675.  
 5) Äthyläther d.  $\alpha$ -Phenyl- $[\alpha$ -Oximido- $\beta$ -Phenyläthenyl]harnstoff. Sm. 148° (B. 18, 2482). — II, 1315.  
 6)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Nitro-4-Propylphenyl]äthan. Sm. 138—139° (B. 21, 2226). — IV, 773.  
 7)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Nitro-4-Isopropylphenyl]äthan. Sm. 138° (B. 21, 2227). — IV, 773.  
 8) Diäthylamidoazobenzolcarbonsäure. Sm. 125°. Ba, Ag (B. 10, 526). — IV, 1461.  
 9) Äthylester d. 3,4'-Dimethylazobenzol-6-Amidoameisensäure. Sm. 94° (B. 32, 2970). — \*IV, 1021.  
 10) Amid d.  $\alpha$ -Phenylnitrosamido- $\alpha$ -[4-Isopropylphenyl]essigsäure. Sm. 132° (B. 31, 2706).  
 11) Phenylamid d. 4-Oxy-5-Isopropyl-2-Methylphenylazoameisensäure. Sm. 179—180° u. Zers. (A. 334, 194 C. 1904 [2] 835).  
 12) Di[Methylphenylamid] d. Amidomalonsäure. Sm. 108° (C. 1904 [1] 1555).  
 13) Verbindung (aus d. isom. Di[Methylphenylamid] d. Oximidomalonsäure) (oder C<sub>17</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>). Sm. 185—186° (C. 1904 [1] 1555).  
 C 62,8 — H 5,8 — O 9,8 — N 21,5 — M. G. 325.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>N<sub>5</sub>** 1)  $\beta$ -Methyl- $\alpha$ -Phenylhydrazid d.  $\alpha$ -Oximido- $\beta$ -Phenylhydrazonbuttersäure. Sm. 210° (A. 328, 69 C. 1903 [2] 249). — \*IV, 462.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>Cl** 1) Di[4-Methylphenyläther] d.  $\beta$ -Chlor- $\alpha\gamma$ -Dioxypropan. Sm. 70° (Soc. 79, 1226).  
 2)  $\alpha'$ -Chlor- $\alpha$ -Benzoylcampher. Sm. 219° (Soc. 81, 167 C. 1902 [1] 352). — \*III, 219.  
 3)  $\alpha$ -Chlor- $\alpha'$ -Benzoylcampher. Sm. 88° (Soc. 81, 167 C. 1902 [1] 352). — \*III, 219.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>Br** 1)  $\alpha'$ -Brom- $\alpha$ -Benzoylcampher. Sm. 214° (Soc. 81, 165 C. 1902 [1] 352). — \*III, 219.  
 2)  $\alpha$ -Brom- $\alpha'$ -Benzoylcampher. Sm. 114° (Soc. 81, 163 C. 1902 [1] 352). — \*III, 219.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>J** 1)  $\alpha$ -Jod- $\alpha$ -Benzoylcampher. Sm. 136° (C. 1902 [2] 52; Soc. 83, 542 C. 1903 [1] 1354). — \*III, 219.
- C<sub>17</sub>H<sub>19</sub>O<sub>3</sub>N** C 71,6 — H 6,7 — O 16,8 — N 4,9 — M. G. 285.  
 1) Äthyläther d.  $\beta$ -Nitro- $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylpropan. Sm. 103—104° (C. 1905 [2] 826).  
 2)  $\alpha^4$ -Methyläther- $\beta^4$ -Äthyläther d.  $\beta$ -[4-Oxyphenyl]amido- $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]äthan. Sm. 124° (B. 31, 170). — \*III, 106.  
 3) 4<sup>3</sup>,4<sup>4</sup>-Dimethyläther-1-Äthyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol + 2H<sub>2</sub>O (Methylvanillin-p-Phenetidin). Sm. 210° (C. 1897 [1] 1121). — \*III, 74.  
 4) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1-[ $\alpha$ -Oximidopropyl]-benzol. Sm. 118,5° (C. 1897 [2] 1183). — \*III, 114.  
 5) 1-Äthyläther d. 4-[Acetyl-2-Oxybenzylamido]-1-Oxybenzol. Sm. 101° (Ar. 240, 683 C. 1903 [1] 395).  
 6) Diäthyläther d. 4-Benzoylamido-1,3-Dioxybenzol. Sm. 113,5° (B. 20, 1127). — II, 1180.

- $C_{17}H_{19}O_8N$  7) Benzyläther d. Äthyl-4-Methoxybenzhydroxamsäure. Fl. (A. 281, 219). — II, 1533.
- 8) 6-[4-Methylphenyl]amido-3-Oxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 164—165° (B. 16, 902). — III, 369.
- 9) Cinnamoylscopolin. HBr,  $HNO_3$  (D.R.P. 79864). — \*III, 620.
- 10) Piperin. Sm. 128—129,5° (127—128°). (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), (HJ,  $J_2$ ) (A. 74, 204; 77, 204; 95, 107; J. 1854, 525; 1857, 413; 1877, 891; B. 15, 1390; Soc. 79, 922; J. pr. [2] 3, 328; C. 1896 [2] 127; 1908 [1] 2026). — III, 926; \*III, 688.
- 11) Morphin +  $H_2O$ . Subl. 191—193° (B. 29, 2242). Salze meist bekannt. Lit. bedeutend. — III, 895; \*III, 667.
- 12)  $\alpha$ -Isomorphin. Sm. 246—247°. HCl,  $HBr + H_2O$  (Soc. 77, 1035; 79, 567; B. 41, 978 C. 1908 [1] 1709). — \*III, 671.
- 13)  $\beta$ -Isomorphin. Sm. 182° (183—184°).  $2 + C_2H_5O$ , HCl (Soc. 79, 569; Soc. 91, 1413 C. 1907 [2] 1250; B. 41, 978 C. 1908 [1] 1709). — \*III, 671.
- 14)  $\gamma$ -Isomorphin (Neoisomorphin). Sm. 278°. +  $C_6H_6O$ , HCl,  $HBr$  (Soc. 91, 1413 C. 1907 [2] 1250; B. 41, 979 C. 1908 [1] 1709).
- 15) Base (aus Scopolamin). Sm. 174° (C. 1898 [1] 1198). — \*III, 620.
- 16) Äthylester d.  $\beta$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthylamidoameisensäure. Sm. 148 bis 148,5° (B. 29, 1211). — \*II, 660.
- 17)  $\gamma$ -Phenylamidoformiat d.  $\gamma$ -Oxy- $\alpha$ -[2-Oxyphenyl]butan. Sm. 90° (B. 36, 2872 C. 1903 [2] 833).
- 18)  $\alpha$ -Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[2-Oxyphenyl]propan-2-Methyläther. Sm. 102° (B. 38, 1677 C. 1905 [1] 1636).
- 19)  $\alpha$ -Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther. Sm. 74° (B. 35, 2263 C. 1902 [2] 276; B. 38, 912 C. 1905 [1] 1013; B. 38, 1680 C. 1905 [1] 1636).
- 20)  $\beta$ -Phenylamidoformiat d. 2-Oxy-1-[ $\beta$ -Oxyäthyl]benzol-2-Äthyläther. Sm. 66° (B. 34, 1811).
- 21)  $\alpha$ -Phenylamidoformiat d. 4-Oxy-1-[ $\alpha$ -Oxyäthyl]benzol-4-Äthyläther. Sm. 81° (B. 36, 3594 C. 1903 [2] 1366).
- 22)  $\beta$ -Phenylamidoformiat d.  $\alpha$ , $\beta$ -Dioxy- $\beta$ -Methylpropan- $\alpha$ -Phenyläther. Sm. 70° (B. 39, 2297 C. 1906 [2] 523).
- 23) Phenylamidoformiat d. Oxyketon  $C_{10}H_{14}O_2$  (aus Campherchinon) (B. 35, 3839 C. 1902 [2] 1462).
- 24) Methylphenylamidoformiat d. 3,4-Dioxy-1-Propylbenzol. Sm. 110° (C. r. 138, 425 C. 1904 [1] 798).
- 25) Amid d.  $\alpha$ -Äthoxyl-6-Oxy-3-Methyldiphenylessigsäure. Sm. 103—105° (B. 31, 2820). — \*II, 1091.
- 26) 4-Äthoxyphenylamid d.  $\alpha$ -Oxypropionphenyläthersäure. Sm. 119° (B. 33, 926). — \*II, 408.
- 27) 4-Äthoxyphenylamid d. Oxyessig-2-Methylphenyläthersäure. Sm. 112—113° (D.R.P. 82105). — \*II, 423.
- 28) 4-Äthoxyphenylamid d. Oxyessig-3-Methylphenyläthersäure. Sm. 124—125° (D.R.P. 82105). — \*II, 429.
- 29) 4-Äthoxyphenylamid d. Oxyessig-4-Methylphenyläthersäure. Sm. 133—134° (D.R.P. 82105). — \*II, 434.
- 30) 4-Äthoxyphenylamid d. 4-Oxybenzoläthyläther-1-Carbonsäure. Sm. 171° (J. pr. [2] 59, 588). — \*II, 908.
- 31) 2-Naphtylmonamid d. Pentan- $\alpha$ , $\gamma$ -Dicarbonsäure.  $\alpha$ -Modif. Sm. 129,5°;  $\beta$ -Modif. Sm. 142—143° (A. 292, 216). — \*II, 340.
- 32) 2-Naphtylmonamid d. fum. Pentan- $\beta$ , $\gamma$ -Dicarbonsäure. Sm. 191 bis 192° (A. 309, 337). — \*II, 340.
- 33) 1-Naphtylmonamid d. mal. Pentan- $\beta$ , $\delta$ -Dicarbonsäure. Sm. 155° (A. 285, 238). — \*II, 336.
- 34) 2-Naphtylmonamid d. mal. Pentan- $\beta$ , $\delta$ -Dicarbonsäure. Sm. 151° (A. 285, 237; Bl. [3] 29, 1019 C. 1903 [2] 1315). — \*II, 340.
- 35) 2-Naphtylmonamid d.  $\beta$ -Methylbutan- $\alpha$ , $\beta$ -Dicarbonsäure. Sm. 179° (A. 298, 176). — \*II, 340.
- 36) 2-Naphtylmonamid d.  $\beta$ -Methylbutan- $\beta$ , $\gamma$ -Dicarbonsäure. Sm. 153° (A. 285, 235). — \*II, 340.
- 37)  $\delta$ -[2-Naphtyl]amid d.  $\beta$ -Methylbutan- $\beta$ , $\delta$ -Dicarbonsäure. Sm. 151 bis 152° (Bl. [3] 21, 627). — \*II, 340.

- C<sub>17</sub>H<sub>19</sub>O<sub>3</sub>N** 38) 2-Naphtylmonamid d.  $\beta$ -Methylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 193 bis 194° (A. 309, 330). — \*II, 340.  
 39) Verbindung (aus l-Scopolamin). (2HCl, PtCl<sub>4</sub>) (C. 1898 [1] 1195). — \*III, 618.  
 40) Verbindung (aus  $\alpha\alpha\gamma\gamma$ -Tetracetyl- $\beta$ -Phenylpropan). Sm. 145° (A. 281, 82). — III, 324.
- C<sub>17</sub>H<sub>19</sub>O<sub>3</sub>N<sub>3</sub>** C 65,2 — H 6,1 — O 15,3 — N 13,4 — M. G. 313.  
 1) 3-Nitro-4,4'-Di[Dimethylamido]diphenylketon. Sm. 144° (B. 22, 1883; B. 39, 1267 C. 1906 [1] 1745). — III, 186.  
 2) Äthyläther d.  $\alpha$ -[4-Oxyphenylamido]acetyl- $\beta$ -Phenylharnstoff. Sm. 154° (C. 1899 [2] 420). — \*II, 411.  
 3) Äthyläther d.  $\alpha$ -Phenylamidoacetyl- $\beta$ -[4-Oxyphenyl]harnstoff. Sm. 162° (C. 1899 [2] 420). — \*II, 405.  
 4)  $\beta$ -Äthyläther d.  $\beta$ -Oximido- $\beta$ -[ $\beta$ -Phenylureido]- $\alpha$ -Oxy- $\alpha$ -Phenyläthan. Sm. 119° (B. 18, 2479). — II, 1553.  
 5) Äthylester d.  $\alpha\gamma$ -Diphenylsemicarbazidoessigsäure. Sm. 160° (B. 36, 3886 C. 1904 [1] 27).  
 6)  $\alpha$ -Phenylamid d.  $\alpha$ -[4-Methylphenyl]hydrazin- $\alpha$ -Carbonsäure- $\beta$ -Carbonsäureäthylester. Sm. 96—97° (B. 34, 2338). — \*IV, 533.  
 7)  $\alpha$ -Methylphenylamid d.  $\alpha$ -Phenylhydrazin- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Äthylester. Sm. 117° (B. 34, 2316). — \*IV, 433.  
 8)  $\alpha$ -[4-Methylphenyl]amid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Carbonsäure- $\beta$ -Carbonsäureäthylester. Sm. 134° (B. 34, 2338). — \*IV, 434.  
 9)  $\alpha$ -Benzylamid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Carbonsäure- $\beta$ -Carbonsäureäthylester. Sm. 143—144° (B. 34, 2334). — \*IV, 434.
- C<sub>17</sub>H<sub>19</sub>O<sub>3</sub>N<sub>5</sub>** C 59,8 — H 5,6 — O 14,1 — N 20,5 — M. G. 341.  
 1) Aldehyd d. 3'-Nitro-3,5-Di[Dimethylamido]azobenzol-2-Carbonsäure. Sm. 158° (B. 41, 106 C. 1908 [1] 521).  
 2) Phenylamid d.  $\beta$ -Phenylureidoacetylamidomethylamidoameisensäure. Sm. 222° u. Zers. (J. pr. [2] 70, 258 C. 1904 [2] 1464).  
 3) Phenylhydrazid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 139° u. Zers. (J. pr. [2] 70, 257 C. 1904 [2] 1464).
- C<sub>17</sub>H<sub>19</sub>O<sub>3</sub>Br** 1) Verbindung (aus Dicyklopentadienbenzochinon). Sm. 188° (A. 348, 49 C. 1906 [2] 770).
- C<sub>17</sub>H<sub>19</sub>O<sub>4</sub>N** C 67,8 — H 6,3 — O 21,3 — N 4,6 — M. G. 301.  
 1)  $\alpha, \alpha, 4$ -Trimethyläther d.  $\beta$ -Oximido- $\alpha\alpha$ -Dioxy- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 206—208° u. Zers. (A. 355, 286 C. 1907 [2] 1624).  
 2)  $\alpha$ -Nitro- $\alpha'$ -Benzoylcampher. Sm. 110° (Soc. 83, 539 C. 1903 [1] 1354).  
 3)  $\alpha'$ -Nitro- $\alpha$ -Benzoylcampher. Sm. 225° u. Zers. (C. 1902 [2] 52; Soc. 83, 539 C. 1903 [1] 1354). — \*III, 220.  
 4) 2-Nitrobenzoylcampher (Enolform). Sm. 118° (Soc. 81, 412 C. 1902 [1] 873). — \*III, 220.  
 5) 3-Nitrobenzoylcampher (Enolform). Sm. 106—107° (Soc. 81, 410 C. 1902 [1] 873). — \*III, 220.  
 6) Phtalidcarboxyltropein. Sm. 79—80°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HNO<sub>3</sub> (Soc. 89, 363 C. 1906 [1] 1618).  
 7) l- $\beta$ -[4-Äthoxylphenyl]amido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 207°. Na (B. 39, 793 C. 1906 [1] 1167).  
 8) i- $\beta$ -[4-Äthoxylphenyl]amido- $\alpha$ -Oxy- $\beta$ -Phenylpropionsäure. Sm. 185° (B. 39, 793 C. 1906 [1] 1167).  
 9) Äthylester d. 2-Keto-5-Acetyl-4-Methyl-6-Phenyl-1,2,3,4-Tetrahydropyridin-3-Carbonsäure. Sm. 156° (B. 36, 2189 C. 1903 [2] 569).  
 10) Diäthylester d.  $\delta$ -Phenylimido- $\alpha\beta$ -Pentadien- $\alpha\gamma$ -Dicarbonsäure. Sm. 180° (Soc. 71, 326). — \*II, 221.  
 11) Diäthylester d. 2-Naphtylamidomalonsäure. Sm. 88° (B. 31, 1816). — \*II, 342.  
 12) Benzoat d. Camphoryloxim. Sm. 131° (138°) (Bl. [3] 1, 471; Soc. 73, 999; C. 1907 [1] 1588). — III, 494; \*III, 358.  
 13) 4-Äthoxylphenylamid d.  $\alpha$ -Oxypropion-2-Oxyphenyläthersäure + 2H<sub>2</sub>O. Sm. 163,5° (B. 33, 1674). — \*II, 553.  
 14) 4-Äthoxylphenylamid d. Oxyessig-2-Methoxylphenyläthersäure. Sm. 103° (B. 33, 1395; D.R.P. 82105). — \*II, 552.
- C<sub>17</sub>H<sub>19</sub>O<sub>4</sub>N<sub>3</sub>** C 62,0 — H 5,8 — O 19,4 — N 12,8 — M. G. 329.  
 1) Propylidi[2-Nitrobenzyl]amin. Sm. 31° (B. 26, 2586). — II, 520.



- C<sub>17</sub>H<sub>19</sub>O<sub>4</sub>N<sub>3</sub>** 2) Propyldi[4-Nitrobenzyl]amin. Sm. 77° (*B.* 30, 65). — \*II, 293.  
 3) 4,4'-Dimethyläther d.  $\beta$ -Semicarbazon- $\alpha$ -Oxy- $\alpha\beta$ -Di[4-Oxyphenyl]-äthan. Sm. 185° u. Zers. (*A.* 339, 271 *C.* 1905 [2] 47).  
 4) 3-Äthylester d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3,4'-Dicarbonsäure. Sm. 285° NH<sub>4</sub> (*A.* 366, 365 *C.* 1909 [2] 287).  
 5) 4'-Äthylester d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3,4'-Dicarbonsäure. Sm. 285° (*A.* 366, 369 *C.* 1909 [2] 288).  
 6) 3-Äthylester d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3,4'-Dicarbonsäure. Sm. oberhalb 300° u. Zers. (2HCl, PtCl<sub>4</sub>) (*A.* 366, 370 *C.* 1909 [2] 288).  
 7) Verbindung (aus d.  $\gamma$ -d-Campherdioximmonobenzoat). Sm. 112° (*Soc.* 85, 912 *C.* 1904 [2] 598).  
**C<sub>17</sub>H<sub>19</sub>O<sub>4</sub>N<sub>5</sub>** C 57,1 — H 5,3 — O 17,9 — N 19,6 — M. G. 357.  
 1) 2,4-Di[Dimethylamido]phenyl-2,4-Dinitrobenzylidenamin. Sm. 209° (*B.* 41, 112 *C.* 1908 [1] 522).  
**C<sub>17</sub>H<sub>19</sub>O<sub>4</sub>P** 1) Diäthylester d. 4-Benzoylphenylphosphinsäure. Fl. (*A.* 315, 47).  
**C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>N** C 64,4 — H 6,0 — O 25,2 — N 4,4 — M. G. 317.  
 1) 2,5,2',5'-Tetramethyläther d.  $\alpha$ -Oximido-2,5,2',5'-Tetraoxydiphenylmethan. Sm. 134,5° (*A.* 344, 75 *C.* 1906 [1] 1098).  
 2) 3,4,3',4'-Tetramethyläther d.  $\alpha$ -Oximido-3,4,3',4'-Tetraoxydiphenylmethan. Sm. 145° (*Soc.* 89, 1662 *C.* 1907 [1] 407).  
 3) Dioxymorphin? (*M.* 10, 102). — III, 901.  
 4) Äthylester d.  $\zeta$ -Phtalylamido- $\beta$ -Ketohehexan- $\gamma$ -Carbonsäure. Sm. 65° (*B.* 42, 1243 *C.* 1909 [1] 1692).  
 5) Diäthylester d. 5-Phenylamido-4-Oxy-2,3-Dihydro-R-Penten-1,3-Dicarbonsäure? Sm. 107° (*B.* 35, 3208 *C.* 1902 [2] 1249).  
 6) Diäthylester d. 2,4-Dimethyl-6-[2-Furanyl]pyridin-3,5-Dicarbonsäure. Sm. 40–41° (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (*B.* 25, 2406). — IV, 370.  
 7) Acetat d. Salicylscopecolein (*C.* 1895 [1] 61).  
**C<sub>17</sub>H<sub>19</sub>O<sub>5</sub>N<sub>3</sub>** 2) 2,5-Dimethoxyphenylamid d. 2,5-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 120° (*A.* 344, 75 *C.* 1906 [1] 1098).  
 C 59,1 — H 5,5 — O 23,2 — N 12,2 — M. G. 345.  
 1) Amid d. 9-Diäthylamido-2,3-Dioxyphenoxazoniumhydroxyd-5-Carbonsäure (oder C<sub>17</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>) (*J. pr.* [2] 72, 258 *C.* 1905 [2] 1450).  
**C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>N** C 61,3 — H 5,7 — O 28,8 — N 4,2 — M. G. 333.  
 1) Diäthylester d.  $\gamma$ -Phtalylamidopropan- $\alpha\alpha$ -Dicarbonsäure. Sm. 42 bis 44° (*B.* 24, 2449; 34, 2901). — II, 1812.  
 2) Diäthylester d.  $\delta$ -Keto- $\delta$ -Phenyl- $\beta$ -Buten- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 137° (*Soc.* 75, 785). — \*II, 1200.  
 3) Acetat d. Nitrodesmotroposantonin. Sm. 166–167° (*G.* 38 [2] 48 *C.* 1908 [2] 1035).  
 4) Verbindung (aus 2-Methylphenylimidodiessigsäurediäthylester u. Oxalsäurediäthylester). Sm. 146° (*Soc.* 87, 450 *C.* 1905 [1] 1640).  
**C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>N<sub>3</sub>** C 56,5 — H 5,3 — O 26,6 — N 11,6 — M. G. 361.  
 1) Pyrazolon (aus 5-Keto-1-Oxy-1-Methyl-3-[3-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäurediäthylester). Sm. 260° u. Zers. (*A.* 323, 105 *C.* 1902 [2] 785). — \*IV, 662.  
 2) Pyrazolon (aus 5-Keto-1-Oxy-1-Methyl-3-[4-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäurediäthylester). Sm. 280° u. Zers. (*A.* 323, 106 *C.* 1902 [2] 785). — \*IV, 662.  
 3) Pyrazolon (aus d. isom. 5-Keto-1-Oxy-1-Methyl-3-[4-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäurediäthylester). Sm. 260° u. Zers. (*A.* 323, 106 *C.* 1902 [2] 785). — \*IV, 662.  
**C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>N<sub>5</sub>** C 52,4 — H 4,9 — O 24,7 — N 18,0 — M. G. 389.  
 1)  $\alpha$ -Isoamyl- $\alpha$ -Phenyl- $\beta$ -[2,4,6-Trinitrophenyl]hydrazin. Sm. 58° (*B.* 30, 2821). — IV, 1498.  
**C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>P** 1) Diäthylester-2-Phenylester d. Phenylphosphorsäure-2-Carbonsäure (Salol-O-Phosphinsäurediäthylester). Sd. 105–115°<sub>18</sub> (*B.* 31, 2176). — \*II, 891.  
**C<sub>17</sub>H<sub>19</sub>O<sub>7</sub>N** C 58,4 — H 5,4 — O 32,1 — N 4,0 — M. G. 349.  
 1) Acetat d. Nitrochinol C<sub>15</sub>H<sub>17</sub>O<sub>6</sub>N (aus Nitrodesmotroposantonin). Sm. 186–188° (*G.* 38 [2] 50 *C.* 1908 [2] 1035).  
 2)  $\gamma$ -Phenylamid d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure- $\alpha\gamma$ -Diäthylester. NH<sub>4</sub>, Na (*J. pr.* [2] 80, 55 *C.* 1909 [2] 1320).

- $C_{17}H_{19}O_7N_3$  C 54,1 — H 5,0 — O 29,7 — N 11,1 — M. G. 377.  
 1) Verbindung (aus Tetrolsäureäthylester). Sm. 74° u. Zers. (A. 345, 109 C. 1906 [1] 1332).
- $C_{17}H_{19}O_{10}N$  C 51,4 — H 4,8 — O 40,2 — N 3,5 — M. G. 397.  
 1) Tetramethylester d.  $\alpha$ -[4-Nitrophenyl]propan- $\beta\beta\gamma\gamma$ -Tetracarbon-säure. Sm. 119—120° (B. 40, 3176 C. 1907 [2] 981).  
 2) Tetramethylester d.  $\beta$ -[2-Nitrophenyl]propan- $\alpha\alpha\gamma\gamma$ -Tetracarbon-säure. Sm. 94—95° (A. 360, 345 C. 1908 [2] 319).
- $C_{17}H_{19}NS$  1) Diäthyläther d. 4-[4-Merkaptobenzyliden]amido-1-Merkaptobenzol. Sm. 114—115° (Soc. 89, 279 C. 1906 [1] 1487).
- $C_{17}H_{19}NS_2$  1) Äthylester d. Dibenzylamidodithioameisensäure. Sm. 38°; Sd. 280 bis 300° (B. 35, 3378 C. 1902 [2] 1363).
- $C_{17}H_{19}N_2Cl$  1) Chloräthylat d. 1-Äthyl-2-Phenylbenzimidazol + 2H<sub>2</sub>O. 2 + PtCl<sub>4</sub> (A. 210, 361). — IV, 1007.
- $C_{17}H_{19}N_2J$  1) Jodäthylat d. 1-Äthyl-2-Phenylbenzimidazol + H<sub>2</sub>O. + J<sub>2</sub> (A. 210, 360; Am. 5, 419). — IV, 1007.
- $C_{17}H_{19}N_3S$  1)  $\alpha$ -sec. Butylidenamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 174° (B. 30, 1016). — IV, 768.  
 2)  $\alpha$ -Isopropylidenamido- $\beta$ -Phenyl- $\alpha$ -[4-Methylphenyl]thioharnstoff. Sm. 164° (B. 30, 1017). — IV, 810.
- $C_{17}H_{19}N_3S_2$  1) Methyläther d.  $\alpha$ -Phenylamidothioformylimido- $\alpha$ -[Methyl-4-Methylphenylamido]- $\alpha$ -Merkaptomethan. Sm. 124°. HJ (Am. 30, 175 C. 1903 [2] 872).  
 2) Methyläther d.  $\alpha$ -[ $\beta$ -2-Methylphenylthioureido]- $\alpha$ -[2-Methylphenyl]-imido- $\alpha$ -Merkaptomethan. Sm. 122—123° (Am. 30, 182 C. 1903 [2] 873).  
 3) Äthyläther d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -Merkaptomethan. Sm. 117—118° (Am. 30, 180 C. 1903 [2] 873).  
 4) Äthyläther d.  $\alpha$ -[ $\beta$ -2-Methylphenylthioureido]- $\alpha$ -Phenylimido- $\alpha$ -Merkaptomethan. Sm. 95—96° (Am. 30, 181 C. 1903 [2] 873).  
 5) Dimethyläther d. Phenylimidomerkaptomethyl-2-Methylphenyl-imidomerkaptomethylamin. Sm. 147—148° (Am. 30, 179 C. 1903 [2] 872).  
 6) Dimethyläther d. Phenylimidomerkaptomethyl-4-Methylphenyl-imidomerkaptomethylamin. Fl. HJ (Am. 30, 174 C. 1903 [2] 872).
- $C_{17}H_{19}N_4Cl$  1) Chlormethylat d. 5-Phenylhydrazido-3-Methyl-1-Phenylpyrazol. 2 + PtCl<sub>4</sub> (B. 42, 2766 C. 1909 [2] 625).
- $C_{17}H_{19}N_4J$  1) Jodmethylat d. 5-Phenylhydrazido-3-Methyl-1-Phenylpyrazol. Sm. 175° (B. 42, 2766 C. 1909 [2] 625).  
 2) Jodmethylat d. 1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 198° (Soc. 57, 53). — IV, 1234.  
 3) Jodmethylat d. 1,4-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 242° (Soc. 57, 50). — IV, 1234.
- $C_{17}H_{20}ON_2$  C 76,1 — H 7,5 — O 6,0 — N 10,4 — M. G. 268.  
 1) 4-Methylphenyl-4-Isopropylbenzylnitrosamin. Sm. 67° (A. 245, 295). — II, 560.  
 2) 2,5-Dimethylphenylamido-2,5-Dimethylphenylhydroxylamidomethan. Cu (B. 35, 1880 C. 1902 [2] 33).  
 3) Äthyläther d. 2-Methylphenylimido-2-Methylphenylamidooxymethan. Sd. 215,5°<sub>3</sub> (C. 1899 [1] 829). — \*II, 253.  
 4) Äthyläther d. 4-[4-Dimethylamidobenzyliden]amido-1-Oxybenzol. Sm. 145—146° (B. 35, 3575 C. 1902 [2] 1384).  
 5)  $\alpha$ -Phenyl- $\beta$ -[4-Isopropylbenzyl]harnstoff. Sm. 143,5° (146°) (B. 8, 1151; 20, 2415). — II, 561.  
 6) s-Di[ $\beta$ -Phenyläthyl]harnstoff. Sm. 137° (138,5°) (A. 309, 200; J. pr. [2] 64, 308; R. 25, 241 C. 1906 [2] 779). — \*II, 307.  
 7) uns-Di[ $\beta$ -Phenyläthyl]harnstoff. Sm. 108—109° (G. 9, 568). — II, 539.  
 8) Di[4-Äthylphenyl]harnstoff. Sm. 217° (B. 17, 2804). — II, 537.  
 9)  $\alpha\alpha$ -Diäthyl- $\beta\beta$ -Diphenylharnstoff. Sm. 54° (B. 9, 711; D.R.P. 178133 C. 1907 [1] 143). — II, 381.  
 10)  $\alpha\beta$ -Diäthyl- $\alpha\beta$ -Diphenylharnstoff. Sm. 79° (B. 9, 712; D.R.P. 178133 C. 1907 [1] 143). — II, 380.  
 11) s-Di[2,3-Dimethylphenyl]harnstoff. Sm. 240—241° (u. 207—209°) (Bl. [3] 17, 732). — \*II, 308.

- $C_{17}H_{20}ON_2$  12) **s-Di[2,4-Dimethylphenyl]harnstoff**. Sm. 263° (262°) (*B.* 3, 226; 21, 526; *G.* 29 [2] 135; *M.* 25, 381 *C.* 1904 [2] 320). — II, 544; \*II, 312.
- 13) **s-Di[2,5-Dimethylphenyl]harnstoff**. Subl. bei 285° (*Bl.* [3] 17, 732). — \*II, 315.
- 14) **s-Di[3,4-Dimethylphenyl]harnstoff**. Sm. 234—235° (*Bl.* [3] 17, 732). — \*II, 308.
- 15) **s-Di[3,5-Dimethylphenyl]harnstoff**. Sm. 250—251° (*B.* 25, 1089). — II, 545.
- 16) **s-Di[3-Methylbenzyl]harnstoff**. Sm. 137° (*B.* 21, 2703). — II, 545.
- 17)  **$\alpha$ -[4-Methylphenyl]- $\beta$ -[2,4,5-Trimethylphenyl]harnstoff**. Sm. 218° (*B.* 25, 1361). — II, 552.
- 18) **Äthylphenyl-3-Acetylamidobenzylamin**. Sm. 96° (*J. pr.* [2] 76, 507 *C.* 1908 [1] 862).
- 19) **Äthylbenzyl-4-Acetylamidophenylamin**. Sm. 111° (*A.* 334, 263 *C.* 1904 [2] 902).
- 20)  **$\alpha$ -Benzoylamido- $\gamma$ -[4-Methylphenyl]amidopropan** (*B.* 30, 2508). — \*II, 733.
- 21) **6-Benzoylamido-4-Dimethylamido-1,3-Dimethylbenzol** (*Soc.* 91, 366 *C.* 1907 [1] 1404).
- 22) **2,2'-Di[Dimethylamido]diphenylketon**. Sm. 117—118° (122°).  $2H_2SO_4$ , 2 Pikrat (*J. pr.* [2] 65, 340 *C.* 1902 [1] 1352; *B.* 38, 2765 *C.* 1905 [2] 1168). — \*III, 149.
- 23) **3,3'-Di[Dimethylamido]diphenylketon**. Sm. 59—60° (*A.* 354, 192 *C.* 1907 [2] 988).
- 24) **3,4'-Di[Dimethylamido]diphenylketon**. Sm. 77—78,5°. HCl, (2HCl,  $PtCl_4 + H_2O$ ) (*A.* 354, 190 *C.* 1907 [2] 988).
- 25) **4,4'-Di[Dimethylamido]diphenylketon** (Tetramethyldiamidobenzophenon). Sm. 174° (172—172,5°); Sd. oberhalb 360°. HCl, 2HCl, 4HCl, (2HCl,  $PtCl_4$ ), (2HCl + 2ClJ), Pikrat, Stearat (*B.* 9, 716, 1900; 19, 109; 20, 2845, 3262; 31, 1002, 1144; *Bl.* [3] 7, 657; D.R.P. 44077; *R.* 6, 366; *B.* 38, 886 *C.* 1905 [1] 1024; *B.* 42, 391 *C.* 1909 [1] 844; *B.* 42, 3983 *C.* 1909 [2] 1735). — III, 185; \*III, 149.
- 26) **Isotetramethyldiamidobenzophenon**. Sm. 152°. (2HCl,  $PtCl_4$ ) (*B.* 12, 1168). — III, 186.
- 27) **Di[4-Methylamido-3-Methylphenyl]keton**. Sm. 80—81°. 2HCl (*B.* 35, 913 *C.* 1902 [1] 811; *C.* 1903 [1] 399). — \*III, 172.
- 28) **4-[4-Dimethylamidophenyl]imido-1-Keto-3-Isopropyl-1,4-Dihydrobenzol**. Sm. 73—74° (*Bl.* [3] 13, 983). — IV, 599.
- 29) **4-[4-Dimethylamidophenyl]imido-1-Keto-2-Methyl-5-Äthyl-1,4-Dihydrobenzol**. Sm. 77° (*Bl.* [3] 13, 897). — III, 364.
- 30)  **$\alpha$ -Oximido-4-Diäthylamidodiphenylmethan**. Sm. 175—177° (D.R.P. 167053 *C.* 1906 [1] 721).
- 31) **6-Oxy-3-tert. Butyl-1-Phenylhydrazonmethylbenzol**. Sm. 178° (*Am.* 16, 637).
- 32)  **$\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta\beta$ -Dimethylpropan**. Sm. 117° (*M.* 20, 624).
- 33) **Phenyl-6-Oxy-3-tert. Butylbenzylidenhydrazin**. Sm. 178° (*Am.* 16, 637). — IV, 761.
- 34) **Phenyl-4-Oxy-3-Methyl-6-Isopropylbenzylidenhydrazin**. Sm. 109° (*A.* 357, 330 *C.* 1908 [1] 354).
- 35)  **$\beta$ -Propionyl- $\alpha\alpha$ -Di[2-Methylphenyl]hydrazin**. Sm. 167° (*B.* 25, 1079). — IV, 801.
- 36)  **$\beta$ -Propionyl- $\alpha\alpha$ -Di[4-Methylphenyl]hydrazin**. Sm. 171,5° (*B.* 25, 1080). — IV, 805.
- 37)  **$\beta$ -Benzoyl- $\alpha\alpha$ -Diäthyl- $\beta$ -Phenylhydrazin**. Sm. 110° (*C.* 1905 [1] 80).
- 38)  **$\beta$ -Benzoyl- $\alpha\beta$ -Diäthyl- $\alpha$ -Phenylhydrazin**. Sm. 60° (*C.* 1903 [1] 1128; *B.* 35, 4186 *C.* 1903 [1] 143). — \*IV, 427.
- 39) **Äthyläther d. 6'-Oxy-2,4,3'-Trimethylazobenzol**. Sm. 51°; Sd. 238 bis 242°<sub>25</sub> (*A.* 369, 33 *C.* 1909 [2] 1855).
- 40) **Äthyläther d. 2-Oxy-3,5,4'-Trimethylazobenzol**. Sm. 51,5—52,5° (*A.* 369, 24 *C.* 1909 [2] 1854).
- 41) **Isobutyläther d. 4'-Oxy-4-Methylazobenzol**. Sm. 90° (*A.* 287, 162). — IV, 1413.



- C<sub>17</sub>H<sub>20</sub>ON<sub>2</sub>** 42) **3,6-Di[Dimethylamido]xanthen**. Sm. 116° (113°). 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 27, 3303; J. pr. [2] 54, 229; B. 37, 204 C. 1904 [1] 665; B. 37, 3620 C. 1904 [2] 1503). — \*II, 603.
- 43) **Methyläther d. 3-[β-Oxypropyl]-1,2-Diphenyl-1,2-Dihydro-R-Azime**thylen. Sm. 81–82° (J. pr. [2] 64, 163). — \*IV, 1089.
- 44) **1,3,4,6-Tetramethyl-2-[2-Oxybenzyliden]-2,3-Dihydrobenzimidazol**. Sm. 132–133° (J. pr. [2] 73, 431 C. 1906 [2] 252).
- 45) **Äthylhydroxyd d. 1-Äthyl-2-Phenylbenzimidazol**. Sm. 132°. Chlorid + 2H<sub>2</sub>O, 2Chlorid + PtCl<sub>4</sub>, Jodid, Jodid + J<sub>2</sub>, Sulfat + H<sub>2</sub>O (A. 210, 360; Am. 5, 419). — IV, 1007.
- 46) **5-Keto-1-Phenyl-4,5-Dihydro-3,4-Camphopyrazol**. Sm. 152° (B. 32, 1990). — \*IV, 576.
- 47) **3-Keto-1-Phenyl-2,3-Dihydro-4,5-Camphopyrazol**. Sm. 285° u. Zers. (B. 32, 1989). — \*IV, 576.
- 48) **Amid d. α-Phenylamido-α-[4-Isopropylphenyl]essigsäure**. Sm. 159° (B. 31, 2706). — \*II, 845.
- 49) **Phenylamid d. α-Phenylamidobutan-β-Carbonsäure**. Sm. 115° (Bl. [3] 33, 770 C. 1905 [2] 541).
- 50) **Phenylamid d. α-Phenylamidoisovaleriansäure**. Sm. 105–106° (B. 30, 2319). — \*II, 228.
- 51) **4-Methylphenylamid d. α-[4-Methylphenyl]amidopropionsäure**. Sm. 158° (B. 30, 2474). — \*II, 283.
- C<sub>17</sub>H<sub>20</sub>ON<sub>4</sub>** C 68,9 — H 6,8 — O 5,4 — N 18,9 — M. G. 296.
- 1) **γδ-Di[Phenylhydrazon]-β-Oxy-β-Methylbutan**. Sm. 141° (C. 1905 [1] 344).
- 2) **Di[Methylphenylhydrazon] d. αγ-Dioxyaceton**. Sm. 127–130° u. Zers. (B. 35, 964 C. 1902 [1] 860). — \*IV, 496.
- 3) **4'-Dimethylamido-5-Acetylamido-2-Methylazobenzol**. Sm. 200° HCl (A. 234, 355). — IV, 1383.
- 4) **4'-Dimethylamido-3-Acetylamido-4-Methylazobenzol**. Sm. 192° (A. 234, 361). — IV, 1383.
- 5) **Phenylhydrazid d. γ-Phenylhydrazonvaleriansäure**. Sm. 178° (180,5 bis 181,5°) (A. 256, 325; 267, 107). — IV, 692.
- C<sub>17</sub>H<sub>20</sub>OBr<sub>2</sub>** 1) **αα-Dibrombenzylcampher**. Sm. 92° (Bl. [3] 15, 988).
- 2) **2-Brombenzylbromcampher**. Fl. (C. r. 136, 71 C. 1903 [1] 459).
- 3) **4-Brombenzylbromcampher**. Fl. (C. r. 136, 71 C. 1903 [1] 459).
- 4) **α,4-Dibrombenzylcampher** (C. r. 136, 72 C. 1903 [1] 459).
- C<sub>17</sub>H<sub>20</sub>O<sub>3</sub>N<sub>2</sub>** C 71,8 — H 7,0 — O 11,3 — N 9,9 — M. G. 284.
- 1) **γγ-Di[2-Oxymethylphenylamido]propen** (B. 25, 2970). — II, 1062.
- 2) **Diäthyläther d. 4-Oxyphenylimido-4-Oxyphenylamidomethan**. Sm. 114°. HCl, Acetat (C. 1898 [2] 523). — \*I, 401.
- 3) **2-Methyläther-4-Äthyläther d. α-[2-Oxyphenyl]amido-α-[4-Oxyphenyl]imidoäthan**. Sm. 107° (D.R.P. 80568). — \*II, 402.
- 4) **4-Methyläther-2-Äthyläther d. α-[2-Oxyphenyl]amido-α-[4-Oxyphenyl]imidoäthan**. Sm. 85° (D.R.P. 80568). — \*II, 402.
- 5) **Methyläthyläther d. α-[4-Oxyphenyl]amido-α-[4-Oxyphenyl]imidoäthan**. Sm. 98° (D.R.P. 80568). — \*II, 403.
- 6) **Äthyläther d. 4-Acetylamido-4'-Oxy-2-Methyldiphenylamin**. Sm. 112–113° (A. 287, 174). — \*IV, 404.
- 7) **Äthyläther d. 4'-Acetylamido-4-Oxy-2-Methyldiphenylamin**. Sm. 97–98° (A. 287, 158). — \*IV, 385.
- 8) **Äthyläther d. 4'-Acetylamido-4-Oxy-3-Methyldiphenylamin**. Sm. 173° (A. 287, 154). — \*IV, 385.
- 9) **Äthyläther d. 4-Acetylamido-4'-Oxy-3-Methyldiphenylamin**. Sm. 156° (A. 287, 166). — \*IV, 404.
- 10) **Äthyläther d. 4'-Acetylamido-3'-Oxy-4-Methyldiphenylamin**. Sm. 168–169° (A. 369, 12 C. 1909 [2] 1853).
- 11) **6-Oximido-2-[α-Oximidobenzyl]-4-Isopropenyl-1-Methylhexahydrobenzol**. Sm. 138–139° (Soc. 91, 703 C. 1907 [2] 65).
- 12) **α-Phenylbenzylhydrazon-βγ-Dioxybutan**. Sm. 116° (B. 35, 1908 C. 1902 [2] 22). — \*IV, 542.
- 13) **3,6-Di[Dimethylamido]-9-Oxyxanthen**? Chlorid + H<sub>2</sub>O, 2 Chlorid + PtCl<sub>4</sub> (D.R.P. 59003, 60505; J. pr. [2] 54, 232). — \*III, 569.

- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>N<sub>2</sub>** 14) **Pyrazol** (aus 5-Keto-1-Oxy-2,4-Diacetyl-1-Methyl-3-Phenylhexahydrobenzol). Sm. 220° u. Zers. (A. 323, 111 C. 1902 [2] 786). — \*IV, 663.
- 15) **Protochinamin**. (2HCl, PtCl<sub>4</sub>) (A. 207, 305). — III, 857.
- 16) **p-Diamido-αα-Di[4-Methylphenyl]propionsäure**. 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 15, 1477). — II, 1472.
- 17) **Äthylester d. γ-[2-Naphtyl]hydrazonvaleriansäure**. Sm. 129—130° (A. 242, 368). — IV, 930.
- 18) **Äthylester d. 2-Methyl-2,3-Dihydro-peri-Naphtimidazol-2-[Äthyl-β-Carbonsäure]**. Sm. 102° (A. 365, 162 C. 1909 [1] 1823).
- 19) **Acetat d. βγ-Di[Phenylamido]-α-Oxypropan**. Sm. 99—100° (J. 1888, 1063). — II, 426.
- 20) **Acetat d. α-Oxydi[4-Amido-3-Methylphenyl]methan**. Sm. 153° (C. 1903 [2] 442).
- 21) **Acetat d. α-Phenyl-β-[5-Oxy-1,2,4-Trimethyl-p-Phenyl]hydrazin**. Sm. 123° (B. 24, 2308). — IV, 1506.
- 22) **Acetat d. 4'-Oxy-2,4,5-Trimethyl-s-Diphenylhydrazin**. Sm. 102 bis 103° (B. 24, 2313). — IV, 1505.
- 23) **Propionat d. 6-Oxy-3,4-Dimethyl-s-Diphenylhydrazin**. Sm. 105° (A. 364, 180 C. 1909 [1] 919).
- 24) **Phenylamidoformiat d. d-Carvoxim**. Sm. 133° (B. 22, 3104). — III, 113; \*III, 85.
- 25) **Phenylamidoformiat d. Isocarvoxim**. Sm. 150° (B. 22, 3104). — III, 114.
- 26) **Phenylamidoformiat d. Pinenonoxim**. Sm. 135° (C. 1900 [1] 1022). — \*III, 86.
- 27) **Verbindung** (aus d-Benzylidencampheroxim). Sm. 117° (C. 1902 [1] 1296). — \*III, 387.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>N<sub>4</sub>** C 65,4 — H 6,4 — O 10,3 — N 17,9 — M. G. 312.
- 1) **αε-Di[Phenylnitrosamido]pentan**. Sm. 60° (B. 41, 2168 C. 1908 [2] 706).
- 2) **Di[4-Äthylnitrosamidophenyl]methan**. Sm. 83° (B. 41, 2151 C. 1908 [2] 703).
- 3) **Di[6-Methylnitrosamido-3-Methylphenyl]methan**. Sm. 123° (B. 41, 2154 C. 1908 [2] 704).
- 4) **2,2'-Diamido-4,4'-Di[Acetylamido]diphenylmethan**. Sm. 244° (C. r. 146, 1325 C. 1908 [2] 416).
- 5) **4-Ureido-3-[α-4-Methylphenylureido]methyl-1-Methylbenzol**. Sm. 219° u. Zers. (J. pr. [2] 73, 223 C. 1906 [1] 1261).
- 6) **δε-Di[Phenylhydrazon]-αβ-Dioxypentan**. Sm. 125° (B. 35, 2368 C. 1902 [2] 511). — \*IV, 519.
- 7) **Di[Phenylhydrazon] d. Methyltetrose**. Sm. 171—174° (B. 29, 1382; B. 35, 2364 C. 1902 [2] 511). — IV, 790; \*IV, 519.
- 8) **Phenylosazon d. αβδ-Trioxo-γ-Ketopentan**. Sm. 180—181° (Bl. [4] 5, 226 C. 1909 [1] 1315).
- 9) **4'-Nitro-2-Diäthylamido-1-Methyl-p-Azobenzol**. Sm. 107,5—108° (B. 28, 1892). — IV, 1383.
- 10) **α-Phenyl-αα-Di[5-Keto-3,4-Dimethyl-4,5-Dihydropyrazolyl-4]-methan**. Sm. 129° (J. pr. [2] 52, 40). — IV, 1289.
- 11) **Phenylamid d. 4-Oximido-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol-1-Hydrazoncarbonsäure**. Sm. 204—205° (A. 343, 198 C. 1906 [1] 838).
- 12) **Phenylamid d. 4-Oximido-3-Methyl-6-Isopropyl-1,4-Dihydrobenzol-1-Hydrazoncarbonsäure**. Sm. 234° (A. 343, 197 C. 1906 [1] 837).
- 13) **Di[Phenylhydrazid] d. Propan-αα-Dicarbonsäure**. Sm. 233° (B. 21, 1242). — IV, 704.
- 14) **Verbindung** (aus 4-Methylphenylhydrazin u. 1-p-Tolyl-3,5-Pyrazolidon). Sm. 182° (B. 30, 1023). — IV, 808.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>S** 1) **Methyläthyl-desylsulfhydrat**. 2 Chlorid + PtCl<sub>4</sub>, Bromid, Pikrat (Soc. 77, 1178). — \*III, 165.
- 2) **Benzoat d. β-Merkaptocampher**. Sm. 59° (Soc. 83, 483 C. 1903 [1] 923, 1137).
- C<sub>17</sub>H<sub>20</sub>O<sub>3</sub>N<sub>2</sub>** C 68,0 — H 6,7 — O 16,0 — N 9,3 — M. G. 300.
- 1) **α-Oxy-3-Nitro-4'-Diäthylamidodiphenylmethan**. Sm. 65° (D. R. P. 45806). — \*II, 658.

- $C_{17}H_{20}O_3N_2$  2)  $\alpha$ -Oxy-4-Nitro-4'-Diäthylamidodiphenylmethan. Sm. 92° (D.R.P. 45806). — \*II, 658.
- 3)  $\alpha\beta$ -Di[ $\beta$ -2-Oxyphenyläthyl]harnstoff. Sm. 187—188° (B. 38, 2072 C. 1905 [2] 232).
- 4) 4-Methyläther- $\alpha$ -Äthyläther d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Oxybenzyl]-harnstoff. Sm. 92° (J. pr. [2] 56, 82). — \*II, 438.
- 5) Diäthyläther d. s-Di[4-Oxyphenyl]harnstoff. Sm. 225—226° (B. 25, 1090; C. 1898 [1] 501). — II, 720; \*II, 405.
- 6) Phenylbenzylhydrazon d. d-Erythrose. Sm. 105,5° (B. 32, 3675). — \*IV, 542.
- 7) Phenylbenzylhydrazon d. l-Erythrose. Sm. 105° (B. 34, 1365). — \*IV, 542.
- 8) Phenylbenzylhydrazon d. l-Threose. Sm. 194,5° (B. 34, 1370). — \*IV, 543.
- 9) d-[2-Nitrophenyl]amidomethylencampher. Sm. 157—158° (Soc. 95, 182 C. 1909 [1] 1331).
- 10) d-[3-Nitrophenyl]amidomethylencampher. Sm. 167—168° (Soc. 95, 183 C. 1909 [1] 1332).
- 11) d-[4-Nitrophenyl]amidomethylencampher. Sm. 154—155° (Soc. 95, 182 C. 1909 [1] 1332).
- 12) 4-Nitrophenylcamphoformenamin. Sm. 156° (Am. 39, 283 C. 1908 [1] 1182).
- 13) 4'-Diäthylamido-4-Oxydiphenylamin-3-Carbonsäure. Sm. 175 bis 177° (D.R.P. 140733 C. 1903 [1] 1011). — \*IV, 382.
- 14) d- $\alpha$ -[ $\beta$ -l-Naphtylureido]isocaprönsäure. Sm. 178° (C. 1907 [2] 1157).
- 15) r- $\alpha$ -[ $\beta$ -l-Naphtylureido]isocaprönsäure. Sm. 163,5° (B. 38, 2363 C. 1905 [2] 460).
- 16) Äthylester d. 6-Oxy-2-[4-Isopropylphenyl]-1,3-Diazin-4-Methylcarbonsäure. Sm. 128° (B. 30, 2008). — IV, 990.
- 17) Di[3-Dimethylamidophenylester] d. Kohlensäure. Sm. 137—138°; Sd. 265°<sub>15</sub>. 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 29, 503). — \*II, 396.
- 18) 6-Acetat d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[6-Oxy-3-Methylphenyl]hydrazin-4-Äthyläther. Sm. 97° (A. 365, 306 C. 1909 [1] 1865).
- 19) Monobenzoat d.  $\gamma$ -d-Campherdioxim. Sm. 172° u. Zers. (Soc. 85, 911 C. 1904 [2] 598).
- $C_{17}H_{20}O_8N_4$  C 62,2 — H 6,1 — O 14,6 — N 17,1 — M. G. 328.
- 1)  $\alpha\gamma$ -Di[4-Methylphenylnitrosamido]- $\beta$ -Oxypropan. Sm. 223° (B. 37, 3035 C. 1904 [2] 1213).
- 2) Äthyläther d.  $\alpha$ -[ $\alpha$ -Phenylhydrazido]acetyl- $\beta$ -[4-Oxyphenyl]harnstoff. Sm. 169° (C. 1899 [2] 422). — \*IV, 477.
- 3) Di[Phenylhydrazon] d. Apiose. Sm. 155° (156—157°) (A. 318, 129; A. 321, 75 C. 1902 [1] 912). — \*IV, 519.
- 4) Di[Phenylhydrazon] d. d-Arabinose. Sm. 159—160° (162—163°; 166°) (B. 26, 735; 31, 1576; B. 38, 46 C. 1906 [1] 548). — IV, 790; \*IV, 520.
- 5) Di[Phenylhydrazon] d. l-Arabinose. Sm. 160° (157—158°) (A. 254, 304; Soc. 75, 791; B. 20, 345). — IV, 790; \*IV, 520.
- 6) Di[Phenylhydrazon] d. r-Arabinose. Sm. 163° (169—170° corr.) u. Zers. (B. 26, 637, 742, 2491; 33, 2250). — IV, 790; \*IV, 520.
- 7) Di[Phenylhydrazon] d. Carnose. Sm. 162° (163—164°) (B. 42, 1202 C. 1909 [1] 1893; B. 42, 2106 C. 1909 [2] 717).
- 8) Di[Phenylhydrazon] d. l-Xylose. Sm. 155—160° (160°) (A. 254, 304; B. 23, 385; 30, 3106; 32, 3386). — IV, 790; \*IV, 520.
- 9) Di[Phenylhydrazon] d. i-Xylose. Sm. 210—215° u. Zers. (B. 27, 2486; 33, 2145). — IV, 790; \*IV, 520.
- 10)  $\alpha$ -Phenylhydrazid d.  $\alpha$ -[4-Methylphenyl]hydrazin- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Äthylester<sup>a</sup> Sm. 174—175° (C. 1901 [1] 936). — \*IV, 533.
- 11)  $\alpha$ -[4-Methylphenyl]hydrazid d.  $\alpha$ -Phenylhydrazin- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Äthylester. Sm. 200° (C. 1901 [1] 936). — \*IV, 533.
- 12)  $\alpha$ -[ $\beta$ -Methyl- $\beta$ -Phenylhydrazid] d.  $\alpha$ -Phenylhydrazin- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Äthylester. Sm. 164—165° (B. 34, 2315). — \*IV, 434.
- 13) Di[Phenylhydrazid] d.  $\alpha$ -Oxypropan- $\alpha\beta$ -Dicarbonsäure. Sm. 231 bis 232° (B. 25, 202). — IV, 712.
- 14) Di[Phenylhydrazid] d.  $\beta$ -Oxypropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 234 bis 235° (B. 24, 3251). — IV, 712.



- C<sub>17</sub>H<sub>20</sub>O<sub>3</sub>N<sub>6</sub>** C 57,3 — H 5,6 — O 13,5 — N 23,6 — M. G. 356.  
 1)  $\alpha\beta$ -Di[4-Acetylamido-3-Amidophenyl]harnstoff. Sm. oberhalb 300° (D. R. P. 166680 C. 1906 [1] 520).  
 2) Dibenzylidentriureid (A. 151, 192). — III, 33.
- C<sub>17</sub>H<sub>20</sub>O<sub>3</sub>S** 1) 2-Methyl-5-Isopropyldiphenylmethan-*p*-Sulfonsäure. Sm. 71—72° (B. 40, 2373 C. 1907 [2] 335).
- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>N<sub>2</sub>** C 64,6 — H 6,3 — O 20,3 — N 8,8 — M. G. 316.  
 1) Diphenylhydrazon d. d-Arabinose. Sm. 216—218° (H. 35, 35). — \*IV, 520.  
 2) Diphenylhydrazon d. l-Arabinose. Sm. 218° (204—205°) (B. 33, 2254; B. 37, 312 C. 1904 [1] 650; B. 38, 500 C. 1905 [1] 811). — \*IV, 520.  
 3) Diphenylhydrazon d. r-Arabinose. Sm. 206° (B. 33, 2248). — \*IV, 520.  
 4) Diphenylhydrazon d. Xylose. Sm. 107—108° (103—104°) (B. 38, 501 C. 1905 [1] 811).  
 5) 4-Biphenylhydrazon d. Arabinose. Sm. 138—140° u. Zers. (B. 27, 3107). — IV, 970.  
 6) Pyrazolon (aus 5-Keto-1-Oxy-1-Methyl-3-Phenylhexahydrobenzol-2,4-Dicarbonsäurediäthylester). Sm. 257° u. Zers. (A. 323, 104 C. 1902 [2] 785). — \*IV, 662.  
 7) Pyrazolon (aus d. isom. 5-Keto-1-Oxy-1-Methyl-3-Phenylhexahydrobenzol-2,4-Dicarbonsäurediäthylester). Sm. 140° (A. 323, 104 C. 1902 [2] 785). — \*IV, 662.  
 8) Diäthylester d. 5-Methyl-1-[4-Methylphenyl]pyrazol-3,4-Dicarbon-säure. Sm. 50° (B. 33, 3363). — \*IV, 354.  
 9) Diäthylester d. 1-Phenylpyrazol-3-Carbonsäure-5-Äthyl- $\beta$ -Carbon-säure. Sm. 83—84° (B. 21, 2585; 31, 625). — IV, 722; \*IV, 356.  
 10) Diäthylester d. 6-Methyl-1,4-Benzdiazin-2,3-Di[Methylcarbon-säure]. Sm. 59° (Bl. [3] 25, 721). — \*IV, 629.  
 11) Benzoat d. Camphennitrosit. Fl. (B. 32, 1502). — \*III, 398.  
 12) Benzoat d. Terpinennitrosit. Sm. 77—78° (A. 245, 274). — III, 532.  
 13) Verbindung (aus 4-Nitrobenzylchlorid u. Isonitrosocampher). Sm. 175° (Soc. 93, 248 C. 1908 [1] 1270).  
 14) isom. Verbindung (aus 4-Nitrobenzylbromid u. Isonitrosocampher). Sm. 114° (Soc. 93, 250 C. 1908 [1] 1271).
- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>N<sub>4</sub>** C 59,3 — H 5,8 — O 18,6 — N 16,3 — M. G. 344.  
 1)  $\alpha\delta$ -Di[2-Nitrophenylamido]pentan. Sm. 172° (B. 32, 852). — \*II, 159.  
 2)  $\alpha\epsilon$ -Di[2-Nitrophenylamido]pentan. Sm. 55—57° (B. 40, 855 C. 1907 [1] 1123).  
 3) Di[4-Nitrophenylamido]- $\beta$ -Methylbutan. Sm. 158° (A. 328, 130 C. 1903 [2] 790).  
 4) Di[2-Nitro-4-Dimethylamidophenyl]methan. Sm. 172° (191,5°; 195°) (B. 27, 2323, 3162; J. pr. [2] 54, 241; B. 34, 4315 C. 1902 [1] 323; D. R. P. 139989 C. 1903 [1] 798). — IV, 974; \*IV, 647.  
 5) Di[3-Nitro-4-Dimethylamidophenyl]methan. Sm. 123—124° (B. 27, 3161; B. 41, 3300 C. 1908 [2] 1776). — IV, 974.  
 6) Methylenäther d. 2-Acetylamido-1-Hydroxylamidobenzol. Sm. 144° u. Zers. (B. 39, 4067 C. 1907 [1] 468).  
 7)  $\alpha$ -Isoamyl- $\alpha$ -Phenyl- $\beta$ -[2,4-Dinitrophenyl]hydrazin. Sm. 104° (B. 30, 2821). — IV, 1498.  
 8)  $\alpha$ -Phenylhydrazid d.  $\alpha$ -[4-Methoxyphenyl]hydrazin- $\alpha$ -Carbon-säure- $\beta$ -Carbon-säureäthylester. Sm. 184° (B. 34, 2323). — \*IV, 548.  
 9)  $\alpha$ -[4-Methoxyphenyl]hydrazid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Carbon-säure- $\beta$ -Carbon-säureäthylester. Sm. 161—162° (B. 34, 2322). — \*IV, 548.
- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>S<sub>2</sub>** 1)  $\gamma\gamma$ -Diphenylsulfonpentan. Sm. 130—131° (A. 253, 162). — II, 784.  
 2)  $\beta\gamma$ -Diphenylsulfon- $\beta$ -Methylbutan? Fl. (J. pr. [2] 51, 305). — \*II, 470.  
 3)  $\alpha\beta$ -Di[2-Methylphenylsulfon]propan. Fl. (J. pr. [2] 54, 528). — \*II, 482.  
 4)  $\alpha\beta$ -Di[4-Methylphenylsulfon]propan. Sm. 147—148° (143—144°) (A. 283, 200, 203; J. pr. [2] 51, 292). — \*II, 485.

- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>S<sub>2</sub>** 5)  $\alpha\gamma$ -Di[2-Methylphenylsulfon]propan. Fl. (*J. pr.* [2] 54, 529). — \*II, 482.  
 6)  $\alpha\gamma$ -Di[4-Methylphenylsulfon]propan. Sm. 124—125° (*A.* 283, 200; *B.* 24, 1834; *J. pr.* [2] 51, 296). — II, 824; \*II, 485.  
 7)  $\alpha\gamma$ -Di[Benzylsulfon]propan. Sm. 189° (*B.* 32, 1374). — \*II, 639.  
 8)  $\beta\beta$ -Di[Benzylsulfon]propan. Sm. 153° (*B.* 36, 299 *C.* 1903 [1] 499).  
 9)  $\alpha\alpha$ -Di[Äthylsulfon]diphenylmethan. Sm. 136—137° (*B.* 33, 3168). — \*III, 146.
- C<sub>17</sub>H<sub>20</sub>O<sub>5</sub>N<sub>2</sub>** C 61,4 — H 6,0 — O 24,1 — N 8,4 — M. G. 332.  
 1) Hydrazon d. Dicarbonsäure. Sm. 237° (*A.* 310, 275). — \*II, 1205.  
 2) Äthylester d. Nitroso-Nor-1-Ecgoninbenzoat. Fl. (*B.* 26, 1486). — III, 863.  
 3) Äthylester d. Anhydrocotarnincyanessigsäure. Sm. 95—96° u. Zers. (2HCl, PtCl<sub>4</sub>) (*B.* 37, 2747 *C.* 1904 [2] 545).  
 4) Diäthylester d. 5-Acetyl-4-Phenyl-4,5-Dihydropyrrol-3,5-Dicarbonsäure? Sm. 76° (*B.* 28, 222; 35, 785). — IV, 893; \*IV, 597.  
 5) Diäthylester d. Säure C<sub>13</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub> (aus Diazoessigsäureäthylester u. Benzalacetessigsäureäthylester). Sm. 76°. — IV, 952.  
 6) Verbindung (aus Formaldehyd u. Anthranilsäuremethylester). Sm. 117° (*J. pr.* [2] 63, 570).
- C<sub>17</sub>H<sub>20</sub>O<sub>5</sub>N<sub>6</sub>** C 52,6 — H 5,2 — O 20,6 — N 21,6 — M. G. 388.  
 1) Disalicyltriureid. Cu (*A.* 151, 200). — III, 74.
- C<sub>17</sub>H<sub>20</sub>O<sub>5</sub>S** 1) Campher- $\beta$ -Sulfonat d. 2-Oxybenzaldehyd. Sm. 123° (*Soc.* 95, 338 *C.* 1909 [1] 1563).
- C<sub>17</sub>H<sub>20</sub>O<sub>6</sub>N<sub>2</sub>** C 58,6 — H 5,7 — O 27,6 — N 8,1 — M. G. 348.  
 1) m-Nitro-d-Cocain. Fl. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ, HNO<sub>3</sub> (*B.* 27, 1880). — III, 868.  
 2) m-Nitro-l-Cocain. Sm. 76—77°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (*B.* 27, 1876). — III, 867.  
 3) Verbindung (aus Cannabinol) (*C.* 1898 [1] 948).
- C<sub>17</sub>H<sub>20</sub>O<sub>6</sub>N<sub>4</sub>** C 54,2 — H 5,3 — O 25,5 — N 14,9 — M. G. 376.  
 1) Amidobenzol + 2,4,6-Trinitro-3-Pseudobutyl-1-Methylbenzol. Sm. 58—59° (*B.* 24, 2838). — II, 313.  
 2) 5-Dimethylamido-1,2,4-Trimethylbenzol + 1,3,5-Trinitrobenzol (*Soc.* 85, 239 *C.* 1904 [1] 1006).
- C<sub>17</sub>H<sub>20</sub>O<sub>6</sub>S<sub>4</sub>** 1)  $\beta$ -Benzyl-4-Isopropyl-1-Methylbenzol- $\beta$ -Disulfonsäure (*J.* 1878, 402). — II, 241.
- C<sub>17</sub>H<sub>20</sub>O<sub>6</sub>S<sub>3</sub>** 1)  $\alpha$ -Äthylsulfon- $\beta\beta$ -Di[Phenylsulfon]propan. Sm. 138—139° (*B.* 24, 1513). — II, 783.
- C<sub>17</sub>H<sub>20</sub>O<sub>7</sub>N<sub>2</sub>** C 56,0 — H 5,5 — O 30,8 — N 7,7 — M. G. 364.  
 1) Dinitropodocarpinsäure. Sm. 203°. K<sub>2</sub> + 5H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag<sub>2</sub> + 4H<sub>2</sub>O (*A.* 170, 229). — II, 1686.
- C<sub>17</sub>H<sub>20</sub>O<sub>8</sub>N<sub>2</sub>** C 53,7 — H 5,2 — O 33,7 — N 7,4 — M. G. 380.  
 1) 1,2-Methylenäther-3,4-Dimethyläther d. 5,6-Di[Diacetylamido]-1,2,3,4-Tetraoxybenzol. Sm. 133° (*B.* 23, 2290). — II, 1030.  
 2) Antipyringlykuronsäure. Ba + BaCl<sub>2</sub> + H<sub>2</sub>O (*H.* 32, 117; *B.* 33, 2345).  
 3) Tetraäthylester d. 2,3-Dicyan-R-Trimethylen-1,1,2,3-Tetracarbon-säure (*B.* 34, 3715 *C.* 1902 [1] 50).  
 4) Triacetat d. 3,5-Di[Acetylamido]-2,4,6-Trioxy-1-Methylbenzol. Sm. 217—218° (*M.* 21, 57). — \*II, 621.  
 5) Verbindung (aus d. Verb. C<sub>17</sub>H<sub>20</sub>O<sub>6</sub>N<sub>2</sub> aus Cannabinol) (*C.* 1898 [1] 948).
- C<sub>17</sub>H<sub>20</sub>O<sub>8</sub>N<sub>3</sub>** 1) Säure (aus Gelseminin) = (C<sub>17</sub>H<sub>20</sub>O<sub>8</sub>N<sub>3</sub>)<sub>x</sub>. Sm. noch nicht bei 350° (*B.* 26, 1060). — III, 884.
- C<sub>17</sub>H<sub>20</sub>NCl** 1) d- $\alpha$ -Methylallylphenylbenzylammoniumchlorid. 2 + PtCl<sub>4</sub> (*Soc.* 79, 838).  
 2) i- $\alpha$ -Methylallylphenylbenzylammoniumchlorid. Sm. 152—154°. 2 + PtCl<sub>4</sub> + AuCl<sub>3</sub> (*B.* 32, 3563; *C.* 1905 [2] 1726). — \*II, 291.  
 3) i- $\beta$ -Methylallylphenylbenzylammoniumchlorid. Sm. 113—116°. 2 + PtCl<sub>4</sub> + AuCl<sub>3</sub> (*B.* 32, 3567; *C.* 1905 [2] 1726). — \*I, 292.  
 4) Dimethylphenyl- $\gamma$ -Phenylallylammoniumchlorid. 2 + CdCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*B.* 42, 2593 *C.* 1909 [2] 515; *Ar.* 247, 348 *C.* 1909 [2] 1439; *Ar.* 247, 371 *C.* 1909 [2] 1441).

- C<sub>17</sub>H<sub>20</sub>NBr** 1) **d- $\alpha$ -Methylallylphenylbenzylammoniumbromid.** Sm. 147—149° (165 bis 167°) (*Soc.* 75, 1130; 79, 833; *B.* 41, 1033 *C.* 1908 [1] 1685). — \*II, 291.  
 2) **l- $\alpha$ -Methylallylphenylbenzylammoniumbromid.** Sm. 166—168° (*Soc.* 75, 1130; 79, 834). — \*II, 292.  
 3) **i- $\alpha$ -Methylallylphenylbenzylammoniumbromid.** Sm. 161—163° u. Zers. (*B.* 32, 3561; *Soc.* 79, 834; *C.* 1905 [2] 1726; *B.* 41, 2418 *C.* 1908 [2] 687). — \*II, 291.  
 4) **i- $\beta$ -Methylallylphenylbenzylammoniumbromid.** Sm. 105—107° (*B.* 32, 3565; *C.* 1905 [2] 1726). — \*II, 292.
- C<sub>17</sub>H<sub>20</sub>NJ** 1) **d- $\alpha$ -Methylallylphenylbenzylammoniumjodid.** Sm. 145—147° u. Zers. (*Soc.* 75, 1129; 79, 830; *B.* 37, 2725 *C.* 1904 [2] 592; *Soc.* 87, 1485 *C.* 1905 [2] 1672; *B.* 41, 1033 *C.* 1908 [1] 1685). — \*II, 291.  
 2) **l- $\alpha$ -Methylallylphenylbenzylammoniumjodid.** Sm. 147° u. Zers. (*Soc.* 75, 1130; 79, 833; *Soc.* 87, 1486 *C.* 1905 [2] 1672). — \*II, 292.  
 3) **i- $\alpha$ -Methylallylphenylbenzylammoniumjodid.** Sm. 140—142° u. Zers. (*B.* 32, 519; *B.* 35, 766 *C.* 1902 [1] 719; *B.* 35, 885 *C.* 1902 [1] 866; *Ph. Ch.* 45, 236 *C.* 1903 [2] 979; *C.* 1905 [2] 1726). — \*II, 291.  
 4) **i- $\beta$ -Methylallylphenylbenzylammoniumjodid.** Sm. 158—159° u. Zers. (*B.* 32, 522; *B.* 35, 767 *C.* 1902 [1] 719; *B.* 35, 885 *C.* 1902 [1] 866; *C.* 1905 [2] 1726). — \*II, 292.  
 5) **Jodmethylat d.  $\beta$ -[4-Dimethylamidophenyl]- $\alpha$ -Phenyläthen.** Sm. 204° (*B.* 38, 516 *C.* 1905 [1] 736).  
 6) **Jodmethylat d.  $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Äthyl-2-Pyridyl]äthen.** Sm. 212° (*B.* 38, 3705 *C.* 1906 [1] 52).  
 7) **Jodmethylat d. 1-Methyl-6-Phenyl-1,2,3,4-Tetrahydrochinolin + H<sub>2</sub>O.** Sm. 194—195° (*A.* 230, 27). — IV, 401.  
 8) **Jodmethylat d. 2-Methyl-1-Phenyl-1,2,3,4-Tetrahydroisochinolin.** Sm. 240—243° (*B.* 42, 1762 *C.* 1909 [2] 37).
- C<sub>17</sub>H<sub>20</sub>N<sub>2</sub>Cl<sub>2</sub>** 1)  **$\alpha\epsilon$ -Di[2-Chlorphenylamido]pentan.** Sm. oberhalb 300° (*B.* 40, 857 *C.* 1907 [1] 1123).  
 2)  **$\alpha\alpha$ -Dichlor-4,4'-Di[Dimethylamido]diphenylmethan.** Sm. 125—140°. 2HCl (*B.* 42, 3981 *C.* 1909 [2] 1734).
- C<sub>17</sub>H<sub>20</sub>N<sub>2</sub>J<sub>2</sub>** 1) **Bisjodäthylat d. 3-Methyl-4,7-Naphtisodiazin.** Sm. 239° (*B.* 33, 2928). — \*IV, 675.
- C<sub>17</sub>H<sub>20</sub>N<sub>2</sub>S** 1)  **$\alpha$ -Methyl- $\beta$ -Propyl- $\alpha\beta$ -Diphenylthioharnstoff.** Sm. 56,5° (*B.* 21, 103). — II, 397.  
 2) **s-Di[2-Äthylphenyl]thioharnstoff.** Sm. 141—142° (*B.* 17, 768). — II, 536.  
 3) **s-Di[4-Äthylphenyl]thioharnstoff.** Sm. 144° (*B.* 16, 2019; 17, 768). — II, 537.  
 4) **s-Di[ $\alpha$ -Phenyläthyl]thioharnstoff.** Sm. 163° (*B.* 26, 2168). — II, 538.  
 5) **s-Di[ $\beta$ -Phenyläthyl]thioharnstoff.** Sm. 84° (*B.* 19, 1824). — II, 539.  
 6)  **$\alpha\beta$ -Diäthyl- $\alpha\beta$ -Diphenylthioharnstoff.** Sm. 75,5° (*B.* 20, 1631). — II, 397.  
 7)  **$\alpha$ -Phenyl- $\beta$ -[4-Isobutylphenyl]thioharnstoff.** Sm. 152° (*B.* 16, 2023). — II, 558.  
 8) **s-Di[2,4-Dimethylphenyl]thioharnstoff.** Sm. 152—153° (*B.* 9, 1296; 34, 2601; *B.* 39, 4374 *C.* 1907 [1] 337). — II, 544.  
 9) **s-Di[2,6-Dimethylphenyl]thioharnstoff.** Sm. 231° (*B.* 32, 1011). — \*II, 310.  
 10)  **$\alpha$ -[2-Methylphenyl]- $\beta$ -[2,4,6-Trimethylphenyl]thioharnstoff.** Sm. 167° (*B.* 15, 1014). — II, 555.  
 11)  **$\alpha$ -Phenyl- $\beta$ -[4-Isopropylbenzyl]thioharnstoff.** Sm. 106° (*B.* 20, 2416). — II, 561.  
 12) **Di[2-Methylbenzyl]thioharnstoff.** Sm. 186—187° (*B.* 23, 1027). — II, 541.  
 13) **Di[3-Methylbenzyl]thioharnstoff.** Sm. 97° (*B.* 21, 2702). — II, 545.  
 14) **Di[4-Methylbenzyl]thioharnstoff.** Sm. 124—125° (*B.* 23, 1031). — II, 547.  
 15) **2-Methylphenylimido-[2-Methylphenyl]amidomethyläthylsulfid.** Sm. 51° (*B.* 15, 1316). — II, 465.  
 16) **4-Methylphenylimido-[4-Methylphenyl]amidomethyläthylsulfid.** Sm. 87°. HCl (*B.* 15, 1312). — II, 498.



- C<sub>17</sub>H<sub>20</sub>N<sub>2</sub>S** 17) Benzylimidobenzylamidomethyläthylsulfid. Fl. (2HCl, PtCl<sub>4</sub>), HJ, H<sub>2</sub>SO<sub>4</sub> (B. 19, 2349). — II, 528.
- 18) Phenylimidoäthylphenylamidomethyläthylsulfid. Fl. (2HCl, PtCl<sub>4</sub>) (B. 15, 567). — II, 395.
- 19) 4,4'-Di[Dimethylamido]diphenylthioketon. Sm. 202° (B. 20, 1732, 2857, 3266, 3290; A. 259, 303; D.R.P. 37730, 39074, 40374, 57963; Bl. [3] 7, 657; J. pr. [2] 50, 411; C. 1898 [1] 1029; B. 35, 377 C. 1902 [1] 588; B. 38, 276 C. 1905 [1] 531). — III, 191; \*III, 151.
- 20) Di[3-Methylamido-4-Methylphenyl]thioketon. Sm. 176—177°. HCl, 2HCl (B. 35, 914 C. 1902 [1] 811). — \*III, 172.
- 21) 3,6-Di[Dimethylamido]thioxanthen (Leukothiopyronin). Sm. 130° (J. pr. [2] 65, 505 C. 1902 [2] 372). — \*III, 597.
- C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>S<sub>2</sub>** 1) αγ-Di[β-Phenylthioureido]propan. Sm. 60° (u. 115°) (A. 228, 236). — II, 393.
- C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>S<sub>4</sub>** 1) Verbindung (aus 4-Methylbenzenylamidomerkaptosim) (B. 24, 390). — II, 1343.
- C<sub>17</sub>H<sub>20</sub>ClJ** 1) 4-Isoamylidiphenyljodoniumchlorid. Zers. bei 159°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (B. 34, 3685).
- C<sub>17</sub>H<sub>20</sub>BrJ** 1) 4-Isoamylidiphenyljodoniumbromid. Sm. 145° (B. 34, 3685).
- C<sub>17</sub>H<sub>21</sub>ON** C 80,0 — H 8,2 — O 6,3 — N 5,5 — M. G. 255.
- 1) 4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 153 bis 155° (A. 334, 337 C. 1904 [2] 989).
- 2) Äthyläther d. α-Oxy-4-Dimethylamidodiphenylmethan. Sm. 37 bis 37,5°; Sd. 206—208°<sub>14</sub> (B. 39, 3772 C. 1907 [1] 45).
- 3) Äthyläther d. Äthylbenzyl-3-Oxyphenylamin. Sd. 250°<sub>81</sub> (B. 41, 494 C. 1908 [1] 1050).
- 4) Äthyläther d. Äthyl-3-Oxyphenyl-4-Methylphenylamin. Fl. (J. pr. [2] 33, 217). — II, 715.
- 5) Äthyläther d. Äthyl-4-Oxyphenyl-4-Methylphenylamin. Sd. 340° (J. pr. [2] 33, 229). — II, 718.
- 6) d-α-Methylallylphenylbenzylammoniumhydroxyd. Bromid, Jodid, Nitrat, d- u. l-Camphersulfonat (Soc. 75, 1128; 79, 829; Soc. 87, 1483 C. 1905 [2] 1672; B. 38, 1839 C. 1905 [2] 27; Soc. 89, 285 C. 1906 [1] 1542). — \*II, 291.
- 7) l-α-Methylallylphenylbenzylammoniumhydroxyd. Bromid, Jodid, d- u. l-Camphersulfonat (Soc. 75, 1128; 79, 829; Soc. 87, 1483 C. 1905 [2] 1672). — \*II, 292.
- 8) i-α-Methylallylphenylbenzylammoniumhydroxyd. Salze, siehe diese (Soc. 75, 1128; 79, 836; B. 32, 3563; C. 1905 [2] 1726). — \*II, 291.
- 9) i-β-Methylallylphenylbenzylammoniumhydroxyd. Salze, siehe (B. 32, 522, 3565; C. 1905 [2] 1726). — \*II, 292.
- 10) Benzyliden-α-Anhydropulegonhydroxylamin. Sm. 105—106°. Pikrat (B. 37, 2284 C. 1904 [2] 441; D.R.P. 173775 C. 1906 [2] 1094).
- 11) Phenylamidomethylencampher. Sm. 167—170° (A. 281, 357; Am. 21, 248; D.R.P. 119862 C. 1901 [1] 1024; C. r. 136, 1223 C. 1903 [2] 116; Soc. 95, 177 C. 1909 [1] 1331). — III, 116; \*II, 219; \*III, 87.
- 12) l-Benzoylamidocamphen. Sm. 157° (Soc. 79, 650). — \*IV, 73.
- 13) Benzoylamidopinen. Sm. 125° (A. 268, 204). — IV, 79.
- 14) α-d-Benzoylcarvylamin. Sm. 168—169° (B. 26, 2805; 30, 2071). — IV, 78; \*IV, 72.
- 15) α-l-Benzoylcarvylamin. Sm. 169° (B. 30, 2073). — \*IV, 72.
- 16) β-d-Benzoylcarvylamin. Sm. 103° (B. 26, 2805; 30, 2073). — IV, 78; \*IV, 72.
- 17) β-l-Benzoylcarvylamin. Sm. 103° (B. 30, 2073). — \*IV, 72.
- 18) α-r-Benzoylcarvylamin. Sm. 141° (B. 30, 2074). — \*IV, 72.
- 19) β-r-Benzoylcarvylamin. Sm. 140° (B. 30, 2074). — \*IV, 72.
- 20) 2-Oxybenzylidenamidopinen. Sm. 108—109° (A. 268, 206). — IV, 79.
- 21) d-Benzylidencampheroxim. Sm. 197° (C. 1902 [1] 1296). — \*III, 387.
- 22) 2-Naphtyläther d. 1-[β-Oxyäthyl]hexahydropyridin. Sm. 47—49°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (B. 34, 3556). — \*IV, 14.
- 23) Methylhydroxyd d. i-l-Benzyl-1,2,3,4-Tetrahydrochinolin. d-Bromcamphersulfonat, d-Camphersulfonat (B. 40, 4455 C. 1908 [1] 47; Soc. 91, 1824 C. 1908 [1] 263).

- C<sub>17</sub>H<sub>21</sub>ON** 24) Base (aus  $\alpha$ -Oxybenzylidencampher). Sm. 118—119°. Pikrat (*Soc.* 83, 108 *C.* 1903 [1] 233, 458).
- 25) Base (aus  $\alpha$ -Chlorbenzylidencampher). Sm. 170°. Pikrat (*Soc.* 83, 107 *C.* 1903 [1] 233, 458).
- 26) 1-Naphtylamid d. Hexan- $\alpha$ -Carbonsäure. Sm. 106° (*Soc.* 93, 1037 *C.* 1908 [2] 504).
- C<sub>17</sub>H<sub>21</sub>ON<sub>3</sub>** C 72,1 — H 7,4 — O 5,6 — N 14,8 — M. G. 283.
- 1) 4-Benzoylamido-1,3-Di[Dimethylamido]benzol. Fl. Pikrat (Sm. 128°) (*B.* 30, 3113). — IV, 1124.
- 2) 2-Amido-4,4'-Di[Dimethylamido]diphenylketon. Sm. 205,5° (*B.* 39, 1275 *C.* 1906 [1] 1746).
- 3) 3-Amido-4,4'-Di[Dimethylamido]diphenylketon. Sm. 138,5—139°. (2HCl, PtCl<sub>4</sub>), Pikrat (*B.* 22, 1884; *B.* 39, 1268 *C.* 1906 [1] 1745). — III, 186.
- 4) 4-Phenylsemicarbazon-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol (d-Carvonphenylcarbaminsäurehydrazon). Sm. 176—177° (*B.* 37, 3183 *C.* 1904 [2] 991).
- 5)  $\alpha$ -Oximido-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 233° (*B.* 19, 1852). — III, 191.
- 6) Äthyläther d. 4-Dimethylamido-4'-Oxy-2-Methylazobenzol. Sm. 136—137°. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 3482). — \*IV, 1039.
- 7) 3,9-Di[Dimethylamido]-4-Methylphenoxazin (*C.* 1902 [2] 378).
- 8) Amid d.  $\alpha$ -Methylphenylamido- $\alpha$ -[4-Dimethylamidophenyl]essigsäure. Sm. 170° (*B.* 35, 3575 *C.* 1902 [2] 1384).
- C<sub>17</sub>H<sub>21</sub>OBr** 1) d- $\alpha$ -Brombenzylcampher. Sm. 146° (*C.* 1900 [2] 96; *C. r.* 130, 1362). — \*III, 389.
- 2)  $\alpha$ -Brombenzylcampher. Sm. 82° (*Bl.* [3] 15, 988).
- 3) d-Benzylbromcampher. Sm. 94—95° (*C. r.* 133, 81; *Bl.* [3] 27, 679 *C.* 1902 [2] 430; *C. r.* 136, 69 *C.* 1903 [1] 459). — \*III, 389.
- 4) isom. d-Benzylbromcampher. Sm. 90—91° (*C. r.* 133, 81; *C. r.* 136, 70 *C.* 1903 [1] 459). — \*III, 389.
- 5) r-Benzylbromcampher. Sm. 112° (*C. r.* 132, 1574). — \*III, 389.
- C<sub>17</sub>H<sub>21</sub>OJ** 1) 4-Isoamyldiphenyljodoniumhydroxyd. Salze, siehe (*B.* 34, 3684).
- C<sub>17</sub>H<sub>21</sub>OP** 1) Isoamyldiphenylphosphinoxyd. Sm. 96—97° (*A.* 229, 317). — IV, 1658.
- C<sub>17</sub>H<sub>21</sub>O<sub>2</sub>N** C 75,3 — H 7,7 — O 11,8 — N 5,2 — M. G. 271.
- 1) 5'-Äthyläther d. 4',5'-Dioxy-2,4,2'-Trimethyldiphenylamin. Sm. 103° (*A.* 369, 38 *C.* 1909 [2] 1856).
- 2) Methyläthylphenylphenacylammoniumhydroxyd. Bromid, d-Camphersulfonat (*B.* 41, 2805 *C.* 1908 [2] 1346).
- 3) 6-[Acetyl-4-Methylphenyl]amido-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 95—97° (*Soc.* 89, 197 *C.* 1906 [1] 1420).
- 4) Methyläther d. 4-Oxyphenylimidocampher. Sm. 120° (*Soc.* 95, 952 *C.* 1909 [2] 360).
- 5) Benzoylamidocampher. Sm. 141° (132°) (*A.* 274, 94; *B.* 31, 3260; *Soc.* 85, 895 *C.* 1904 [2] 331, 596). — III, 496; \*III, 361.
- 6) 4-Oxyphenylcamphoformenamin. Sm. 314° (*Am.* 39, 283 *C.* 1908 [1] 1183).
- 7) Apotropin. Sm. 60—62°. HCl, (HCl, AuCl<sub>3</sub>), HBr, H<sub>2</sub>SO<sub>4</sub> + 5H<sub>2</sub>O (*G.* 11, 538, 547; 12, 60, 285; *A.* 277, 292; *B.* 27 [2] 883; *B.* 41, 729 *C.* 1908 [1] 1557). — III, 785.
- 8) Atropyltropin. Fl. (HCl, AuCl<sub>3</sub>) (*A.* 217, 102). — III, 787.
- 9) Belladonin. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O) (*B.* 13, 165; 17, 381; *A.* 148, 236; 277, 295). — III, 797.
- 10) Cinnamoyltropein + H<sub>2</sub>O. Sm. 45—46° (36—37°; 70° wasserfrei). HCl + 1½H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr + 1½H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 5H<sub>2</sub>O, Pikrat (*B.* 13, 1085; *A.* 217, 100; *Soc.* 95, 1029 *C.* 1909 [2] 544). — III, 787.
- 11) Cinnamoylpseudotropin. Sm. 87—88°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 24, 2344). — III, 795.
- 12) Phenylester d. Cyancampholsäure. Sd. 265—270°<sub>40</sub> (*A. ch.* [6] 30, 518; [7] 2, 390). — II, 662; \*II, 361.
- 13) Benzoat d. 1-Oximido-3-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 155° (*A.* 297, 147).

- C<sub>17</sub>H<sub>21</sub>O<sub>2</sub>N** 14) Benzoat d. d-Campheroxim. Sm. 88—90° (*Soc.* 71, 1041). — \*III, 366.  
 15) Benzoat d. β-Thujonoxim. Sm. 52—53° (*A.* 336, 271 *C.* 1905 [1] 254).  
 16) Benzoat d. Isothujonoxim. Sm. 139—140° (*A.* 336, 274 *C.* 1905 [1] 255).  
 17) Phenylamidoformiat d. l-Pinocarveol. Sm. 82—84° (*C.* 1905 [2] 675; *A.* 346, 228 *C.* 1906 [1] 1824).  
 18) isom. Phenylamidoformiat d. l-Pinocarveol. Sm. 94—95° (*C.* 1905 [2] 675; *A.* 346, 229 *C.* 1906 [1] 1824).  
 19) Phenylamidoformiat d. β-Isocampher. Sm. 112° (*A.* 313, 78). — \*III, 372.  
 20) Benzylimid d. Camphersäure. Sm. 58—62° (*R.* 12, 14). — II, 530.  
 21) Benzylisoimid d. Camphersäure. Sm. 63—66° (*R.* 12, 18). — II, 530.  
 22) 4-Methylphenylimid d. Camphersäure. Sm. 189—190° (*G.* 39 [2] 228 *C.* 1909 [2] 2156).  
 23) α-4-Methylphenylisoimid d. Camphersäure. Sm. 131° (*G.* 39 [2] 232 *C.* 1909 [2] 2156).  
 24) β-4-Methylphenylisoimid d. Camphersäure. Sm. 144—146° (*G.* 39 [2] 233 *C.* 1909 [2] 2156).
- C<sub>17</sub>H<sub>21</sub>O<sub>2</sub>N<sub>3</sub>** C 68,2 — H 7,0 — O 10,7 — N 14,0 — M. G. 299.  
 1) 2-Nitro-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 95° (96 bis 96,5°) (*B.* 34, 4314 *C.* 1902 [1] 323; D.R.P. 139989 *C.* 1903 [1] 798). — \*IV, 647.  
 2) 3-Nitro-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 87—88° (*B.* 27, 3161).  
 3) Diäthyläther d. Di[4-Oxyphenyl]guanidin. Sm. 122,5°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> (D.R.P. 66550). — \*II, 406.  
 4) Chinonpinylpseudosemicarbazon + H<sub>2</sub>O. Zers. bei 194° (*Soc.* 91, 23 *C.* 1907 [1] 1042).  
 5) Äthylester d. 4-[2-Methylphenyl]hydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 108° (*A.* 366, 375 *C.* 1909 [2] 288).  
 6) Äthylester d. 4-[4-Methylphenyl]hydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 154° (*A.* 366, 373 *C.* 1909 [2] 288).  
 C 62,4 — H 6,4 — O 9,8 — N 21,4 — M. G. 327.
- C<sub>17</sub>H<sub>21</sub>O<sub>2</sub>N<sub>5</sub>** 1) 4-Nitrosodimethylanilinhydrocyanid. Sm. 221—222° (*M.* 6, 537). — II, 330.  
 2) 4-Nitro-5'-Dimethylamido-2',4'-Dimethyldiazoamidobenzol. Sm. 108—115° u. Zers. (*Soc.* 91, 369 *C.* 1907 [1] 1404).  
 3) 4'-Nitro-4,6-Di[Dimethylamido]-3-Methylazobenzol. Sm. 126—127° (*Soc.* 81, 656 *C.* 1902 [1] 1279). — \*IV, 1023.  
 C 71,1 — H 7,3 — O 16,7 — N 4,9 — M. G. 287.
- C<sub>17</sub>H<sub>21</sub>O<sub>3</sub>N** 1) Acetylparasantonimid. Sm. 169—170° (*C.* 1903 [2] 1067).  
 2) Säure (aus β-Keto-αα-Dimethyläthen u. Chinolin). Sm. 152—153° (*B.* 39, 971 *C.* 1906 [1] 1233).  
 3) Methylester d. 6-[4-Methylphenyl]amido-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 147° (*A.* 294, 301). — \*II, 280.  
 4) Benzoat d. l-Pseudonitrocamphan. Fl. (*Soc.* 77, 261). — \*II, 10.  
 5) Phenylamidoformiat d. 6-Oxy-1-Keto-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol. Sm. 41° (*B.* 39, 1167 *C.* 1906 [1] 1429).  
 6) Phenylamidoformiat d. 6-Oxy-4-Keto-5-Methyl-2-Isopropyl-1,2,3,4-Tetrahydrobenzol. Sm. 125° (*B.* 35, 2996 *C.* 1902 [2] 1048; *G.* 36 [1] 304 *C.* 1906 [2] 126).  
 7) Phenylamidoformiat d. d-Oxycaron. Sm. 190° u. Zers. (*B.* 31, 3213). — \*III, 373.  
 C 64,8 — H 6,7 — O 15,2 — N 13,3 — M. G. 315.
- C<sub>17</sub>H<sub>21</sub>O<sub>3</sub>N<sub>3</sub>** 1) Benzochinoncamphorylpseudosemicarbazon. Sm. 197° u. Zers. (*Soc.* 87, 733 *C.* 1905 [2] 242).  
 2) Äthylester d. 4-Semicarbazon-6-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sm. 158—161° (*A.* 342, 353 *C.* 1905 [2] 1791).  
 3) Äthylester d. isom. 4-Semicarbazon-6-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sm. 168—171° (*A.* 342, 355 *C.* 1905 [2] 1791).  
 4) Äthylester d. β-Isocantipyrylimidobuttersäure. Sm. 141° (*A.* 352, 205 *C.* 1907 [1] 1051).



- C<sub>17</sub>H<sub>21</sub>O<sub>3</sub>N<sub>3</sub>** 5) Verbindung (aus 4-Amidoantipyrin u. Acetessigsäureäthylester). Sm. 158—160° (A. 293, 63). — IV, 1109.
- C<sub>17</sub>H<sub>21</sub>O<sub>3</sub>P** 1) Diphenylester d. Isoamylphosphinsäure. Fl. (B. 32, 1579). — \*II, 367.
- C<sub>17</sub>H<sub>21</sub>O<sub>4</sub>N** C 67,3 — H 6,9 — O 21,1 — N 4,6 — M. G. 303.
- 1) Atroscin (oder i-Scopolamin). Sm. 82—83° wasserfrei. + H<sub>2</sub>O (Sm. 56—57°); + 2H<sub>2</sub>O (Sm. 36—37°). HCl, (HCl, AuCl<sub>3</sub>), HBr + 3H<sub>2</sub>O, HJ + 1/2(3)H<sub>2</sub>O. Lit. bedeutend. — III, 796; \*III, 617.
  - 2) l-Scopolamin + H<sub>2</sub>O. Sm. 59°. HCl + 2H<sub>2</sub>O, (HCl, AuCl<sub>3</sub>), HBr + 3H<sub>2</sub>O, HJ, H<sub>2</sub>SO<sub>4</sub>, Pikrat (A. 206, 299; 271, 111; B. 14, 1870; 22, 3183; 27 [2] 883; 29, 1775; 34, 1025; M. 18, 387; C. 1898 [1] 1194; A. 243, 316 C. 1905 [2] 558). — III, 796; \*III, 617.
  - 3) α-Cocain. Sm. 87—88°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HJ + 1 1/2 H<sub>2</sub>O, Pikrat (B. 29, 2224; 31, 1540). — III, 873; \*III, 648.
  - 4) d-Cocain (Isococain; Methylester d. d-Benzoyllecgonin). Sm. 46—47° (43—45°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr + H<sub>2</sub>O, HJ + xH<sub>2</sub>O, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 23, 473, 508, 926, 981; D.R.P. 55338). — III, 867; \*III, 645.
  - 5) l-Cocain. Sm. 98°. Salze meist bekannt. Lit. bedeutend. — III, 866; \*III, 645.
  - 6) r-Cocain. Sm. 80°. HCl, (HCl, AuCl<sub>3</sub> + 2H<sub>2</sub>O), HNO<sub>3</sub> (B. 34, 1461; A. 326, 71 C. 1903 [1] 841). — \*III, 645.
  - 7) Hyoscin (siehe auch C<sub>17</sub>H<sub>23</sub>O<sub>3</sub>N). HCl + 2H<sub>2</sub>O, HBr + 1/2(1-2-3)H<sub>2</sub>O, HJ + 1/2 H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (J. pr. [2] 64, 278, 354; A. 303, 149). — \*III, 620.
  - 8) Tropylscopolein. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (C. 1898 [1] 1198). — \*III, 620.
  - 9) Acetylderivat d. Parasantoninoximid. Sm 176° (C. 1903 [2] 1377).
  - 10) Methylester d. Benzoyldioxyanhydroecgonin. Sm. 107—108°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (B. 25, 1397). — III, 872.
  - 11) Dimethylester d. Benzaltropinsäure. Sm. 67—69° (B. 31, 1592). — \*III, 615.
  - 12) Äthylester d. Nor-d-Ecgoninbenzoat (Nor-d-Cocäthylin). Sm. 127°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 26, 1487). — III, 863.
  - 13) Äthylester d. Cocaylbenzoxylessigsäure. Fl. HCl, (HCl, AuCl<sub>3</sub>), HBr, HJ (B. 21, 3032, 3441). — III, 863.
  - 14) γ-Äthylester d. δ-Äthylamido-β-Phenyl-αγ-Pentadien-αγ-Dicarbon-säure. Ag, Äthylaminsalz (Soc. 75, 781).
  - 15) Diäthylester d. γ-Cyan-β-Phenylbutan-αγ-Dicarbon-säure. Sm. 89° (C. 1900 [2] 1239).
  - 16) Diäthylester d. isom. γ-Cyan-β-Phenylbutan-αγ-Dicarbon-säure. Sd. 260°<sub>100</sub> (C. 1900 [2] 1239).
  - 17) Diäthylester d. β-[Methylphenyl]imidodiakrylsäure. Sm. 73° (B. 25, 1053). — II, 509.
  - 18) Acetat d. Santoninoxim. Sm. 165—170° u. Zers. (G. 19, 375; B. 26, 412). — II, 1786.
  - 19) Acetat d. Chromosantoninoxim. Sm. 200—201° (G. 32 [1] 338 C. 1902 [1] 1406).
  - 20) Phenylimid d. γ-Acetoxy-βδ-Dimethylpentan-βδ-Dicarbon-säure. Sm. 178° (C. 1898 [2] 416).
  - 21) Verbindung (aus Mesitylsäureäthylester). Sm. 74° (B. 14, 1077). — I, 1009.
- C<sub>17</sub>H<sub>21</sub>O<sub>5</sub>N** C 63,9 — H 6,6 — O 25,1 — N 4,4 — M. G. 319.
- 1) Pentamethyläther d. Pentaoxydiphenylamin. Sm. 131—133° (Ar. 242, 512 C. 1904 [2] 1387).
  - 2) Anhydrocotarninacetylaceton. Sm. 98—99°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 37, 2745 C. 1904 [2] 545).
  - 3) m-Oxy-d-Cocain. Sm. 82°. HCl (B. 27, 1886). — III, 868.
  - 4) m-Oxy-l-Cocain. Sm. 123°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 27, 1879). — III, 868.
  - 5) Methyläther d. 4-Oxybenzoyllecgonin (Anisylecgonin). Sm. 194° (B. 22, 132). — III, 870.
  - 6) Nitropodocarpinsäure. Sm. 205°. NH<sub>4</sub> + 4H<sub>2</sub>O, Na<sub>2</sub> + 9H<sub>2</sub>O, K<sub>2</sub> + 5 1/2 H<sub>2</sub>O, Ca + 4H<sub>2</sub>O, Ba + 4(7)H<sub>2</sub>O (A. 170, 226). — II, 1686.

- C<sub>17</sub>H<sub>21</sub>O<sub>5</sub>N** 7) Äthylester d. 3-Keto-4-[4-Nitrobenzyl]-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 90,5° (A. 348, 104 C. 1906 [2] 783).
- 8) Diäthylester d. 4-[2-Furanyl]-2,6-Dimethyl-1,4-Dihydropyridin-3,5-Dicarbonsäure (D. d. Hydrofuryldicarbolutidinsäure). Sm. 164° (B. 16, 1607; Soc. 83, 378 C. 1903 [1] 845, 1144). — IV, 242.
- 9)  $\gamma$ -Piperidid d.  $\beta$ -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sm. 146° u. Zers. (C. 1899 [1] 730; A. 320, 92). — \*IV, 13.
- C<sub>17</sub>H<sub>21</sub>O<sub>5</sub>P** 1)  $\beta\beta'$ -Di[2-Methylphenoxy]isopropylphosphorigesäure. Sm. 88–89°. Ca + 4H<sub>2</sub>O, Anilinsalz, p-Toluidinsalz (Soc. 83, 1138 C. 1903 [2] 1059).
- 2)  $\beta\beta'$ -Di[3-Methylphenoxy]isopropylphosphorigesäure. Sm. 85–87°. Anilinsalz, p-Toluidinsalz (Soc. 83, 1140 C. 1903 [2] 1059).
- 3)  $\beta\beta'$ -Di[4-Methylphenoxy]isopropylphosphorigesäure. Sm. 111–112°. Anilinsalz, p-Toluidinsalz (Soc. 79, 1227; Soc. 83, 1141 C. 1903 [2] 1059).
- C<sub>17</sub>H<sub>21</sub>O<sub>6</sub>N** 1) Diäthylester d. 1-Oximido-5-Methyl-3-[2-Furanyl]-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 142° u. Zers. (A. 303, 245). — \*III, 516.
- C<sub>17</sub>H<sub>21</sub>O<sub>6</sub>N<sub>5</sub>** C 52,2 — H 5,4 — O 24,5 — N 17,9 — M. G. 391.
- 1) o-Toluidin + 2 Molec. Oximidocyanessigsäureäthylester. Sm. 85 bis 95° (A. ch. [7] 1, 516). — \*II, 246.
- C<sub>17</sub>H<sub>21</sub>O<sub>6</sub>Br** 1) Diäthylester d. 6-Brom-5-Isopropyl-2-Methyl-1,4-Benzochinon-3-Methyldicarbonsäure. Sm. 78°. Ba (B. 34, 1558).
- C<sub>17</sub>H<sub>21</sub>O<sub>7</sub>N** C 58,1 — H 6,0 — O 31,9 — N 4,0 — M. G. 351.
- 1) 2,6-Diacetat d. 5-Diacetylamido-2,4,6-Trioxy-1,3-Dimethylbenzol-4-Methyläther. Sm. 137° (M. 21, 1027). — \*II, 622.
- C<sub>17</sub>H<sub>21</sub>O<sub>7</sub>N<sub>3</sub>** C 53,8 — H 5,5 — O 29,5 — N 11,1 — M. G. 379.
- 1) Äthylester d. Benzoylamidoacetoxybisacetylamidoessigsäure. Sm. 148–149° (B. 39, 1383 C. 1906 [1] 1873).
- C<sub>17</sub>H<sub>21</sub>O<sub>7</sub>N<sub>5</sub>** C 50,1 — H 5,2 — O 27,5 — N 17,2 — M. G. 407.
- 1) Benzoyltetra[Amidoacetyl]amidoessigsäure + H<sub>2</sub>O. Sm. 246–252° u. Zers. Ag (J. pr. [2] 70, 87, 95 C. 1904 [2] 1034, 1035).
- C<sub>17</sub>H<sub>21</sub>O<sub>7</sub>Br** 1) Äthylester d. Brompikrotoxininsäure. Sm. 170° (G. 39 [1] 297 C. 1909 [1] 1482).
- C<sub>17</sub>H<sub>21</sub>O<sub>9</sub>N** C 53,3 — H 5,5 — O 37,6 — N 3,6 — M. G. 383.
- 1) Tetraäthylester d. 4-Keto-1,4-Dihydropyridin-2,3,5,6-Tetracarbonsäure. Sm. 229° (G. 21, 203). — II, 2095.
- C<sub>17</sub>H<sub>21</sub>N<sub>2</sub>Cl** 1) Chlormethylat d. 1,4-Diphenylhexahydro-1,4-Diazin. 2 + PtCl<sub>4</sub> (J. 1858, 353). — II, 344.
- C<sub>17</sub>H<sub>21</sub>N<sub>2</sub>J** 1)  $\beta$ -Jod- $\delta\delta$ -Di[Phenylamido]- $\beta$ -Methylbutan (A. ch. [6] 16, 168). — II, 445.
- 2) Jodmethylat d.  $\alpha$ -Äthylphenylamido- $\alpha$ -Phenyläthan (J. 1856, 415). — II, 347.
- 3) Jodmethylat d. 1,4-Diphenylhexahydro-1,4-Diazin. Sm. 183° (J. 1858, 353; Soc. 95, 419 C. 1909 [1] 1648). — II, 344.
- C<sub>17</sub>H<sub>21</sub>N<sub>3</sub>S** 1)  $\beta$ -Isobutylphenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 140° (A. 252, 284). — IV, 680.
- 2)  $\beta$ -[2,4,5-Trimethylbenzyl]amido- $\alpha$ -Phenylthioharnstoff. Sm. 167 bis 168° (J. pr. [2] 62, 125). — \*IV, 547.
- 3) Anhydrid d. Camphorylphenylthiosemicarbazid. Sm. 235° (Soc. 91, 1890 C. 1908 [1] 259).
- C<sub>17</sub>H<sub>22</sub>ON<sub>2</sub>** C 75,6 — H 8,1 — O 5,9 — N 10,4 — M. G. 270.
- 1)  $\alpha$ -Phenylamido- $\beta$ -Oxy- $\beta$ -Phenylamidomethylbutan. Sd. 145–148°<sub>17</sub> (D. R. P. 173610 C. 1906 [2] 932).
- 2)  $\alpha\gamma$ -Di[4-Methylphenylamido]- $\beta$ -Oxypropan. Sm. 113,5° (B. 37, 3035 C. 1904 [2] 1213).
- 3) 4,4'-Di[Dimethylamido]-3-Oxydiphenylmethan. Sm. 111–111,5° (B. 41, 3302 C. 1908 [2] 1776).
- 4)  $\alpha$ -Oxy-3,3'-Di[Dimethylamido]diphenylmethan. Sm. 72–73° (A. 354, 194 C. 1907 [2] 988).
- 5)  $\alpha$ -Oxy-3,4'-Di[Dimethylamido]diphenylmethan. Sm. 100–101° (A. 354, 191 C. 1907 [2] 988).
- 6)  $\alpha$ -Oxy-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 96° (97°). HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (B. 9, 1900; 22, 1879, 1881; 27, 1403; 31, 1002; 32, 2148; D. R. P. 27032; Bl. [3] 9, 127; [3] 11, 406; [3] 13, 273, 275; B. 35, 359 C. 1902 [1] 587; B. 36, 4298 C. 1904 [1] 379). — II, 1078; \*II, 658.

- C<sub>17</sub>H<sub>22</sub>ON<sub>2</sub>** 7)  $\alpha$ -Oxydi[4-Methylamido-3-Methylphenyl]methan. Sm. 160—161° (B. 35, 913 C. 1902 [1] 811).
- 8) Äthyläther d. 4,6'-Diamido-3-Oxy-2,6,3'-Trimethylbiphenyl. Sm. 117—118° (A. 369, 30 C. 1909 [2] 1855).
- 9) Äthyläther d. 4,2'-Diamido-5-Oxy-2,3',5'-Trimethylbiphenyl. Sd. 240—260°<sub>50</sub> (A. 369, 39 C. 1909 [2] 1856).
- 10) Äthyläther d. 4-Amido-3-Oxy-2,6,4'-Trimethyldiphenylamin. Fl. (A. 369, 27 C. 1909 [2] 1854).
- 11)  $s$ - $\alpha$ -d-Phenylcarvylharnstoff. Sm. 187—191° (B. 26, 2085). — IV, 78.
- 12)  $s$ - $\beta$ -d-Phenylcarvylharnstoff. Sm. 138° (B. 26, 2085). — IV, 78.
- 13) Phenylharnstoff d. 1-Amidocamphen. Sm. 213° (Soc. 79, 651). — \*IV, 73.
- 14) Benzylidenpinennitrolamin. Sm. 162° (Soc. 91, 7 C. 1907 [1] 1040).
- 15)  $\alpha$ -Benzylidenamidocampheroxim. Sm. 153—154° (Soc. 81, 555 C. 1902 [1] 1058, 1334). — \*III, 368.
- 16) Methylphenylhydrazon d. Campherchinon. Sm. 80° (Soc. 87, 1290 C. 1905 [2] 1340).
- 17) Pulegenylpyridazinon. Sm. 93° (Soc. 89, 1875 C. 1907 [1] 721).
- 18) Phenylamid d. Cyancampolsäure. Sm. 162—163°. — II, 371.
- 19) Monobenzoylderivat d. Base C<sub>10</sub>H<sub>18</sub>N<sub>2</sub> (aus Nitrosopiperidin). HCl (B. 30, 534; 31, 2273). — IV, 533; \*IV, 345.
- C<sub>17</sub>H<sub>22</sub>ON<sub>4</sub>** C 68,4 — H 7,4 — O 5,4 — N 18,8 — M. G. 298.
- 1)  $s$ -Phenyl-2,4-Di[Dimethylamido]phenylharnstoff. Sm. 175° (B. 30, 3114). — IV, 1123.
- 2)  $s$ -Di[4-Dimethylamidophenyl]harnstoff. Sm. 262° (246°) u. Zers. 2HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (B. 12, 536; 14, 2179). — IV, 591.
- 3) 3,3'-Diamido-4,4'-Di[Dimethylamido]diphenylketon. Sm. 145—145,5° (B. 39, 1272 C. 1906 [1] 1745).
- 4)  $\alpha$ -Oximido-3-Amido-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 194,5—196,5° (B. 39, 1270 C. 1906 [1] 1745).
- 5) 4-Acetylamido-5-Piperidyl-3-Methyl-1-Phenylpyrazol. Sm. 171° (A. 354, 114 C. 1907 [2] 611).
- 6) Äthylhydroxyd d. 3-Amido-7-Dimethylamido-2-Methyl-5,10-Napht-diazin. Nitrat (A. 327, 124 C. 1903 [1] 1221). — \*IV, 403.
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>2</sub>** C 71,3 — H 7,7 — O 11,2 — N 9,8 — M. G. 286.
- 1) Di[4-Dimethylamido-2-Oxyphenyl]methan. Sm. 180° (178°). 2HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 27, 2896, 3301; J. pr. [2] 54, 223, 246; B. 37, 205 Ann. C. 1904 [1] 665). — \*II, 603.
- 2) Di[4-Dimethylamido-3-Oxyphenyl]methan. Sm. 114,5—115° (B. 41, 3304 C. 1908 [2] 1776).
- 3) Di[2,4-Dimethylphenylhydroxylamido]methan. Sm. 128—129° (B. 35, 1882 C. 1902 [2] 33).
- 4) Di[2,5-Dimethylphenylhydroxylamido]methan. Sm. 125° (B. 33, 953; B. 35, 1879 C. 1902 [2] 33). — \*II, 316.
- 5) Diäthyläther d. Di[4-Oxyphenylamido]methan. Sm. 89°; Sd. 174°<sub>13</sub> (B. 31, 3245; B. 36, 49 C. 1903 [1] 505; B. 39, 3976 C. 1907 [1] 155). — \*II, 412.
- 6) Diäthyläther d. Di[ $\beta$ -Amido- $\beta$ -Oxyphenyl]methan (OH: NH<sub>2</sub> = 1:2). 2HCl (D. R. P. 70402). — \*II, 604.
- 7) 4,4'-Di[Dimethylamido]diphenylmethan-NN-Dioxyd + 2H<sub>2</sub>O. Sm. 147° (156° wasserfrei). 2HCl, (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>), Ferrocyanid, 2Pikrat (B. 41, 3295 C. 1908 [2] 1776).
- 8) d-2-Nitrobenzylidenbornylamin. Sm. 71° (Soc. 75, 1153). — \*IV, 60.
- 9) d-4-Nitrobenzylidenbornylamin. Sm. 75° (Soc. 75, 1154). — \*IV, 60.
- 10) 2-Oxybenzylidenpinennitrolamin. Sm. 128° (Soc. 91, 7 C. 1907 [1] 1040).
- 11) Pyrazolon (aus  $\alpha\alpha$ -Diacetylbutan- $\beta$ -Carbonsäureäthylester). Sd. 237°<sub>45</sub> (C. 1909 [2] 799).
- 12) Pyrazolon (aus d.  $\alpha\alpha$ -Diacetyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäureäthylester). Sd. 215°<sub>20</sub> (C. 1909 [2] 799).
- 12) Phenylamidoformiat d. d-Campheroxim. Sm. 94° (B. 22, 3104). — III, 500.
- 13) 4-Methylphenylamidoimid d. Camphersäure. Sm. 146° (B. 25, 2568). — IV, 809.



- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>2</sub>** 14) Phenylhydrazid d. Camphocarbonsäure. Sm. 137° (B. 24, 3395; 26, 291). — IV, 693; \*IV, 454.
- 15) isom. Phenylhydrazid d. Camphocarbonsäure. Sm. 126—127° (B. 24, 3395; 26, 291). — IV, 693.
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>4</sub>** C 65,0 — H 7,0 — O 10,2 — N 17,8 — M. G. 314.
- 1) 4-Semicarbazon-6-[Acetylphenyl]amido-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 210° u. Zers. (Soc. 89, 203 C. 1906 [1] 1421).
- 2) Monosemicarbazon d. 1-Benzoyl-5-Butyryl-1,2,3,4-Tetrahydropyridin. Sm. 190° (B. 38, 3102 C. 1905 [2] 1260).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>6</sub>** C 59,6 — H 6,4 — O 9,3 — N 24,6 — M. G. 342.
- 1) 4,4'-Di[α-Methylsemicarbazido]diphenylmethan. Sm. 232° (B. 41, 2173 C. 1908 [2] 707).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) l-Menthylester d. 2,3-Dichlorbenzol-1-Carbonsäure. Sd. 229°<sub>15</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 2) l-Menthylester d. 2,4-Dichlorbenzol-1-Carbonsäure. Sd. 218—219°<sub>15</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 3) l-Menthylester d. 2,5-Dichlorbenzol-1-Carbonsäure. Sm. 28—29°; Sl. 243—245°<sub>85</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 4) l-Menthylester d. 2,6-Dichlorbenzol-1-Carbonsäure. Sm. 134—135° (Soc. 83, 1214 C. 1903 [2] 1330).
- 5) l-Menthylester d. 3,4-Dichlorbenzol-1-Carbonsäure. Sd. 244—245°<sub>35</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- 6) l-Menthylester d. 3,5-Dichlorbenzol-1-Carbonsäure. Sd. 223—225°<sub>20</sub> (Soc. 83, 1214 C. 1903 [2] 1330).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>Br<sub>2</sub>** 1) l-Menthylester d. 2,3-Dibrombenzol-1-Carbonsäure. Sm. 49—52° (Soc. 89, 49 C. 1906 [1] 1018).
- 2) l-Menthylester d. 2,4-Dibrombenzol-1-Carbonsäure (Soc. 89, 50 C. 1906 [1] 1018).
- 3) l-Menthylester d. 2,5-Dibrombenzol-1-Carbonsäure. Sm. 42—43° (Soc. 89, 51 C. 1906 [1] 1018).
- 4) l-Menthylester d. 2,6-Dibrombenzol-1-Carbonsäure. Sm. 151—152° (Soc. 89, 51 C. 1906 [1] 1018).
- 5) l-Menthylester d. 3,4-Dibrombenzol-1-Carbonsäure. Sm. 41—43° (Soc. 89, 52 C. 1906 [1] 1018).
- 6) l-Menthylester d. 3,5-Dibrombenzol-1-Carbonsäure (Soc. 89, 52 C. 1906 [1] 1018).
- C<sub>17</sub>H<sub>22</sub>O<sub>3</sub>N<sub>2</sub>** C 67,5 — H 7,3 — O 15,9 — N 9,3 — M. G. 302.
- 1) Benzylidenderivat d. 4-Oximido-2-Hydroxylamido-1-Oxy-1,5-Dimethyl-1,2,3,4-Tetrahydrobenzol-1-Äthyläther. Sm. 192—192,5° (B. 40, 2257 C. 1907 [2] 592).
- 2) Hippuryltropein. (HCl, AuCl<sub>3</sub>), HBr (C. 1895 [1] 434).
- 3) Äthylester d. 2-Keto-4-[4-Isopropylphenyl]-6-Methyl-1,2,3,4-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 161—162° (G. 23 [1] 373). — II, 1685.
- C<sub>17</sub>H<sub>22</sub>O<sub>3</sub>Br<sub>2</sub>** 1) Äthylester d. εζ-Dibrom-δ-Keto-ζ-Phenyl-γ-Äthylpentan-γ-Carbonsäure. Sm. 55° (A. 218, 184). — II, 1685.
- C<sub>17</sub>H<sub>22</sub>O<sub>4</sub>N<sub>2</sub>** C 64,1 — H 6,9 — O 20,1 — N 8,8 — M. G. 318.
- 1) m-Amido-d-Cocain. Sm. 116—117°. 2HCl, (2HCl, 2AuCl<sub>3</sub> + H<sub>2</sub>O) (B. 27, 1881). — III, 868.
- 2) m-Amido-l-Cocain. Sm. 125°. 2HCl, 2HJ (B. 27, 1877). — III, 868.
- 3) 4-Phenylhydrazon-R-Pentamethylen-1,2-Dicarbonsäure. Sm. 105° (B. 26, 376). — IV, 715.
- 4) Diäthylester d. γ-Cyan-γ-Phenylamidobutan-α,γ'-Dicarbonsäure. Sm. 75° (B. 40, 4050 C. 1907 [2] 1837).
- C<sub>17</sub>H<sub>22</sub>O<sub>4</sub>N<sub>6</sub>** C 54,5 — H 5,9 — O 17,1 — N 22,5 — M. G. 374.
- 1) 2-Nitrobenzoldiazopseudosemicarbazidocampher. Sm. 160° u. Zers. (Soc. 89, 232 C. 1906 [1] 1431).
- 2) 3-Nitrobenzoldiazopseudosemicarbazidocampher. Sm. 170° u. Zers. (Soc. 89, 233 C. 1906 [1] 1431).
- 3) 4-Nitrobenzoldiazopseudosemicarbazidocampher. Sm. 170° (Soc. 89, 234 C. 1906 [1] 1431).
- 4) Azid d. β-[β-Benzoylamidoacetylamidobutyryl]amidobuttersäure. Zers. bei 78° (J. pr. [2] 70, 222 C. 1904 [2] 1461).

- C<sub>17</sub>H<sub>22</sub>O<sub>4</sub>S** 1) 2-Methylphenylester d. d-Campher- $\beta$ -Sulfonsäure. Sm. 58° (*Soc.* 95, 338 *C.* 1909 [1] 1563).
- C<sub>17</sub>H<sub>22</sub>O<sub>5</sub>N<sub>2</sub>** C 61,1 — H 6,6 — O 23,9 — N 8,4 — M. G. 334.  
 1) Nitroatropin. HCl (*B.* 25, 1390). — III, 784.  
 2) Lakton d.  $\gamma$ -Oxy- $\gamma$ -[3,5-Diacetylamido-4-Methoxyphenyl]pentan- $\gamma^2$ -Carbonsäure. Sm. 131,5—132° (*B.* 41, 507 *C.* 1908 [1] 1184).
- C<sub>17</sub>H<sub>22</sub>O<sub>6</sub>N<sub>2</sub>** C 58,3 — H 6,3 — O 27,4 — N 8,0 — M. G. 350.  
 1) Diäthylester d.  $\alpha$ -Benzoylamidoacetylamidoäthan- $\alpha\beta$ -Dicarbon-säure. Sm. 92° (*J. pr.* [2] 70, 171 *C.* 1904 [2] 1396).  
 2) Diäthylester d. 4-Methyl-1,3-Phenylendimalonaminsäure. Sm. 110 bis 113° (*A.* 347, 27 *C.* 1906 [2] 506).  
 3) l-Menthylester d. 2,4-Dinitrobenzol-1-Carbonsäure. Sm. 69—71° (*Soc.* 89, 1480 *C.* 1906 [2] 1643).  
 4) l-Menthylester d. 2,6-Dinitrobenzol-1-Carbonsäure. Sm. 121—123° (*Soc.* 89, 1480 *C.* 1906 [2] 1643).  
 5) l-Menthylester d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. 153—154° (*Soc.* 89, 1481 *C.* 1906 [2] 1643).
- C<sub>17</sub>H<sub>22</sub>O<sub>6</sub>N<sub>4</sub>** C 54,0 — H 5,8 — O 25,4 — N 14,8 — M. G. 378.  
 1) Äthylester d. Benzoyltri[Amidoacetyl]amidoessigsäure. Sm. 213° (*B.* 35, 3227 *C.* 1902 [2] 1043; *B.* 37, 1284 *C.* 1904 [1] 1335; *B.* 37, 1299 *C.* 1904 [1] 1336; *J. pr.* [2] 70, 85 *C.* 1904 [2] 1034).
- C<sub>17</sub>H<sub>22</sub>O<sub>6</sub>S** 1) Podocarpinsulfonsäure + 8H<sub>2</sub>O. Na<sub>2</sub> + 7H<sub>2</sub>O, Ca + 7H<sub>2</sub>O, Ba + 6H<sub>2</sub>O, Ba + 8H<sub>2</sub>O (*A.* 170, 232). — II, 1686.
- C<sub>17</sub>H<sub>22</sub>O<sub>7</sub>N<sub>2</sub>** C 55,8 — H 6,0 — O 30,6 — N 7,6 — M. G. 366.  
 1)  $\beta$ -Amid d.  $\beta$ -Phenylamidoformoxylpropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\alpha\gamma$ -Diäthylester. Sm. 146° u. Zers. (*B.* 38, 3200 *C.* 1905 [2] 1324).
- C<sub>17</sub>H<sub>22</sub>O<sub>8</sub>N<sub>2</sub>** C 53,4 — H 5,8 — O 33,5 — N 7,3 — M. G. 382.  
 1) Dicyanmalonacetbernsteinsäuresterlaktam. Sm. 116° (*A.* 332, 131 *C.* 1904 [2] 190).  
 2) Diacetat d. 2,6-Dinitro-4-Dioxyethyl-5-tert. Butyl-1,3-Dimethylbenzol. Sm. 147° (*B.* 32, 3648; 33, 607). — \*III, 45.
- C<sub>17</sub>H<sub>22</sub>O<sub>10</sub>N<sub>8</sub>** C 41,0 — H 4,4 — O 32,1 — N 22,5 — M. G. 498.  
 1) Verbindung (aus d. Verb. C<sub>11</sub>H<sub>19</sub>O<sub>3</sub>N) (*C.* 1900 [2] 723).
- C<sub>17</sub>H<sub>22</sub>NCl** 1) d-Methylpropylphenylbenzylammoniumchlorid (*B.* 41, 1031 *C.* 1908 [1] 1685).  
 2) l-Methylpropylphenylbenzylammoniumchlorid. Zers. bei 174—175° (*B.* 41, 1030 *C.* 1908 [1] 1685).
- C<sub>17</sub>H<sub>22</sub>NBr** 1) d-Methylpropylphenylbenzylammoniumbromid (*B.* 41, 1031 *C.* 1908 [1] 1685).  
 2) l-Methylpropylphenylbenzylammoniumbromid (*B.* 39, 476 *C.* 1906 [1] 919).  
 3) i-Methylpropylphenylbenzylammoniumbromid. Zers. bei 173—174° (*B.* 38, 3443 *C.* 1905 [2] 1529).  
 4) i-Diäthylphenylbenzylammoniumbromid (*B.* 41, 2419 *C.* 1908 [2] 687).
- C<sub>17</sub>H<sub>22</sub>NJ** 1) d-Methylpropylphenylbenzylammoniumjodid (*B.* 38, 3446 *C.* 1905 [2] 1530; *C.* 1906 [1] 1737; *B.* 41, 1031 *C.* 1908 [1] 1685).  
 2) l-Methylpropylphenylbenzylammoniumjodid. Zers. bei 149—150° (*B.* 38, 3445 *C.* 1905 [2] 1530; *B.* 39, 475 *C.* 1906 [1] 919).  
 3) i-Methylpropylphenylbenzylammoniumjodid. Sm. 147° u. Zers. (167°) (*B.* 38, 3442 *C.* 1905 [2] 1529; *Soc.* 89, 287 *C.* 1906 [1] 1542; *C.* 1906 [1] 1737).  
 4) d-Methylisopropylphenylbenzylammoniumjodid (*Soc.* 89, 292 *C.* 1906 [1] 1543).  
 5) l-Methylisopropylphenylbenzylammoniumjodid. Sm. 132° (*C.* 1905 [1] 927).  
 6) i-Methylisopropylphenylbenzylammoniumjodid. Sm. 133° (*C.* 1905 [1] 926, *Soc.* 89, 288 *C.* 1906 [1] 1542).  
 7) Methyl-diäthyl-4-Biphenylammoniumjodid. (2HCl, PtCl<sub>4</sub>) (*J.* 1862, 345). — II, 633.
- C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>S** 1)  $\alpha$ -Merkapto-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 81° (82°) (*D. R. P.* 58198, 58277; *B.* 35, 882 *C.* 1902 [1] 589). — \*II, 659.  
 2)  $\alpha$ -Merkaptodi[3-Methylamido-4-Methylphenyl]methan? Sm. 213 bis 214° (*B.* 35, 914 *C.* 1902 [1] 811).

- C<sub>17</sub>H<sub>22</sub>N<sub>4</sub>S** 1) s-Di[4-Dimethylamidophenyl]thioharnstoff. Sm. 186,5°. 2HCl (B. 12, 534). — IV, 591.  
2) s-Phenyl-2,4-Di[Dimethylamido]phenylthioharnstoff. Sm. 143° (B. 30, 3114). — IV, 1123.
- C<sub>17</sub>H<sub>22</sub>JAs** 1) Diäthylphenyl-4-Methylphenylarsoniumjodid. Sm. 148° (A. 321, 159 C. 1902 [2] 43). — \*IV, 1194.
- C<sub>17</sub>H<sub>23</sub>ON** C 79,4 — H 8,9 — O 6,2 — N 5,4 — M. G. 257.  
1) d-Methylpropylphenylbenzylammoniumhydroxyd. Nitrat (B. 39, 478 C. 1906 [1] 919).  
2) l-Methylpropylphenylbenzylammoniumhydroxyd. Salze, siehe (B. 38, 3444 C. 1905 [2] 1529).  
3) i-Methylpropylphenylbenzylammoniumhydroxyd. Salze, siehe (B. 38, 3442 C. 1905 [2] 1529; Soc. 89, 287 C. 1906 [1] 1542).  
4) l-Methylisopropylphenylbenzylammoniumhydroxyd. d-Bromcamphersulfonat (C. 1905 [1] 926; Soc. 89, 288 C. 1906 [1] 1542; C. 1907 [2] 798).  
5) i-Methylisopropylphenylbenzylammoniumhydroxyd. d-Camphersulfonat, d-Bromcamphersulfonat, Tartrat + H<sub>2</sub>O (Soc. 89, 288 C. 1906 [1] 1542; C. 1907 [2] 798).  
6) 3-Keto-2-Phenylamidomethylen-4-Isopropyl-1-Methylhexahydrobenzol (Anilidomethylenmenthon). Fl. (C. 1901 [1] 1025).  
7) Önanthol-1-Naphtylamin. Fl. (B. 16, 287). — II, 623.  
8) d-2-Oxybenzylidenbornylamin. Sm. 62° (Soc. 75, 1154). — \*IV, 60.  
9) 4-Oxybenzylidenbornylamin. Sm. 162° (Soc. 75, 1154). — \*II, 60.  
10) d-2-Oxybenzylidenfenchylamin. Sm. 95° (A. 272, 107). — IV, 59.  
11) l-2-Oxybenzylidenfenchylamin. Sm. 95° (A. 296, 363; 276, 321). — IV, 58.  
12) i-2-Oxybenzylidenfenchylamin. Sm. 64–65° (A. 272, 108). — IV, 59.  
13) l-4-Oxybenzylidenfenchylamin. Sm. 175° (A. 276, 321). — IV, 59.  
14) l-Benzoylamidodekahydronaphtalin. Sm. 195° (C. r. 144, 983 C. 1907 [2] 153).  
15) d-Benzoylbornylamin. Sm. 139° (Soc. 73, 393). — \*IV, 60.  
16) i-Benzoylbornylamin. Sm. 131° (B. 20, 108). — IV, 57.  
17) Benzoylneobornylamin. Sm. 130° Soc. 73, 395). — \*IV, 61.  
18) Benzoylcarylamin. Sm. 123° (B. 27, 3486). — IV, 57.  
19) Benzoyldihydrocarvylamin. Sm. 181–182° (A. 275, 123). — IV, 58.  
20) Benzoyldihydroeucarvylamin. Sm. 155–156° (B. 27, 3487). — IV, 58.  
21) Benzoylfencholenamin. Sm. 88–89° (A. 269, 373). — IV, 59.  
22) l-Benzoylfenchylamin. Sm. 133–135° (A. 269, 361). — IV, 58.  
23) Benzoylisothujonamin. Sm. 127–128° (A. 336, 275 C. 1905 [1] 255).  
24) Benzoylpinocamparylamin. Sm. 144° (Soc. 89, 1562 C. 1907 [1] 252).  
25) 3-Oximido-2-Benzyliden-4-Isopropyl-1-Methylhexahydrobenzol (Oxim d. Benzylidenmenthon). Sm. 161° (A. 305, 265; B. 29, 1599; C. 1904 [2] 1044). — \*III, 141.  
26) Oxim d. Benzoyldihydrocarvon. Sm. 138° (D. R. P. 202720 C. 1908 [2] 1837).  
27) Oxim d. Benzylcampher. Sm. 127–128° (B. 24 [2] 731). — III, 514.  
28) Benzyläther d. d-Campheroxim. Fl. (Soc. 71, 1037). — \*III, 366.  
29) Acetylderivat d. 2-Methylen-1,3,3-Triäthyl-2,3-Dihydroindol. Sm. 116–117° (2HCl, PtCl<sub>4</sub>) (B. 29, 2477). — IV, 230.  
30) Propylphenyltetrahydroazindon. Sm. 212° (B. 29, 818). — IV, 343.  
31) Benzoylcamphidin. Sm. 61°; Sd. 217–220°<sub>11</sub> (B. 42, 1431 C. 1909 [1] 1873).  
32) 4-Methylphenylamid d. Pulegensäure. Sm. 143° (Bl. [3] 27, 311 C. 1902 [1] 1223).  
33) Camphylamid d. Benzolcarbonsäure. Sm. 75–77° (B. 19, 711). — II, 1162.  
**C<sub>17</sub>H<sub>23</sub>ON<sub>3</sub>** C 71,6 — H 8,1 — O 5,6 — N 14,7 — M. G. 285.  
1) 3-Phenylsemicarbazon-4-Isopropyliden-1-Methylhexahydrobenzol (Pulegonphenylcarbaminsäurehydrazon). Sm. 132–133° (B. 37, 3182 C. 1904 [2] 991).  
2) Phenylsemicarbazon d. d-Campher. Sm. 153–154° (B. 37, 3182 C. 1904 [2] 991).  
3) Oxim (aus α-Oxy-Tetramethyldiamidodiphenylmethan). Sm. 154° u. Zers. (B. 27, 1404). — II, 1709.



- C<sub>17</sub>H<sub>23</sub>ON<sub>5</sub>** C 65,2 — H 7,3 — O 5,1 — N 22,4 — M. G. 313.  
 1)  $\alpha$ -Oximido-3,3'-Diamido-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 168° (B. 39, 1272 C. 1906 [1] 1745).
- C<sub>17</sub>H<sub>23</sub>OCl** 1) 2-Chlor-3-Keto-1-Methyl-4-Isopropyl-2-Benzylhexahydrobenzol (Benzylidenmenthonhydrochlorid). Sm. 140° (B. 29, 1599; C. 1904 [2] 1043). — \*III, 134.
- C<sub>17</sub>H<sub>23</sub>OBr** 1) Benzylidenmenthonhydrobromid. Sm. 115–116° (B. 29, 1599; C. r. 133, 41). — \*III, 134.
- C<sub>17</sub>H<sub>23</sub>O<sub>2</sub>N** C 74,7 — H 8,4 — O 11,7 — N 5,1 — M. G. 273.  
 1) Methyläther d. 4-Oxyphenylamidocampher. Sm. 101° (Soc. 95, 952 C. 1909 [2] 360).  
 2) Benzylidentanacetonhydroxylamin. Sm. 138–140° (B. 36, 4371 C. 1904 [1] 456).  
 3) Hydroxylaminderivat (aus Benzylidendihydrocarvon). Sm. 145–146° (A. 305, 269). — \*III, 144.  
 4) Benzoylderivat d.  $\beta$ -[2-Hydroxylamido-4-Methylhexahydrophenyl]-propen. Sm. 63° (B. 36, 486 C. 1903 [1] 637).  
 5) Benzoylpulegonamin. Sm. 100,5–101° (A. 262, 15). — III, 510.  
 6) Benzoyllupinin. Sm. 49–50°. HCl (A. r. 240, 343 C. 1902 [2] 650; (D. R. P. 129561 C. 1902 [1] 790). — \*III, 664.  
 7)  $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -[1-Piperidyl]- $\alpha$ -Phenylbutan. Sm. 93° (Soc. 85, 1176 C. 1904 [2] 1215).  
 8) N-Acetyl- $\alpha$ -Methylacetylcamphenpyrrol. Sm. 88° (A. 313, 35). — \*IV, 156.  
 9) Hydroapopatropin. Fl. (G. 11, 547). — III, 785.  
 10) 4,6-Diketo-2,2,8,8-Tetramethyldekahydroakridin (A. 309, 372). — \*IV, 212.  
 11) Äthylester d. 3-Benzylimido-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 61° (J. pr. [2] 79, 116 C. 1909 [1] 855).  
 12) Benzoat d. Thujamenthonoxim. Sm. 135–136° u. Zers. (A. 336, 276 C. 1905 [1] 255).  
 13) Phenylamidoformiat d.  $\beta$ -[4-Oxy-4-Methylhexahydrophenyl]propen. Sm. 85° (B. 35, 2149 C. 1902 [2] 279).  
 14) Phenylamidoformiat d. 1-Oxymethyl-4-Isopropyl-2-Tetrahydrobenzol. Sm. 85–86° (C. 1905 [1] 1470).  
 15) Phenylamidoformiat d. 1-Oxydekahydronaphtalin. Sm. 110° (C. r. 141, 954 C. 1906 [1] 365).  
 16) Phenylamidoformiat d. 2-Oxydekahydronaphtalin. Sm. 165° (C. r. 140, 591 C. 1905 [1] 1025).  
 17) Phenylamidoformiat d. d-Borneol. Sm. 138–139° (133°) (B. 20, 45; 23 [2] 148; J. pr. [2] 49, 5). — III, 471.  
 18) Phenylamidoformiat d. Isoborneol. Sm. 138–139° (J. pr. [2] 49, 5). — III, 473.  
 19) Phenylamidoformiat d. Dihydrocarveol. d-Modif. Sm. 87°; l-Modif. Sm. 87°; i-Modif. Sm. 93° (A. 275, 112). — III, 476.  
 20) Phenylamidoformiat d. l-Fenchylalkohol. Sm. 82–82,5° (J. pr. [2] 61, 296). — \*III, 343.  
 21) Phenylamidoformiat d. l-Isosfenchylalkohol. Sm. 106–107° (J. pr. [2] 61, 301; A. 363, 3 C. 1908 [2] 1594). — \*III, 343.  
 22) Phenylamidoformiat d. r-Isosfenchylalkohol. Sm. 94° (A. 362, 200 C. 1908 [2] 1182).  
 23) Phenylamidoformiat d. l-Linalool. Sm. 65° (J. pr. [2] 67, 323 C. 1903 [1] 1137).  
 24) Phenylamidoformiat d. Methylcamphenilol. Sm. 127,5–128° (B. 37, 1037 C. 1904 [1] 1263; A. 340, 59 A. 1905 [2] 553).  
 25) Phenylamidoformiat d. Myrcenol. Sm. 68° (R. 26, 169 C. 1907 [2] 680).  
 26) Phenylamidoformiat d. Ocimen. Sm. 72° (R. 26, 169 C. 1907 [2] 680).  
 27) Phenylamidoformiat d. l-Pinocampeol. Sm. 67–68°; Sd. 217–218°<sub>760</sub> (C. 1909 [2] 2158).  
 28) Phenylamidoformiat d. Pinocampeol. Sm. 98° (A. 300, 289). — \*III, 350.  
 29) Phenylamidoformiat d. i-Terpeneol. Sm. 113° (A. 230, 267; 275, 104; B. 35, 2149 C. 1902 [2] 279). — III, 483.

- C<sub>17</sub>H<sub>23</sub>O<sub>2</sub>N** 30) Phenylamidoformiat d. isom. i-Terpineol. Sm. 85° (C. 1901 [1] 1008; B. 35, 2149). — \*III, 352.  
 31) Phenylamidoformiat d. isom. Terpeneol. Sm. 132° (Soc. 85, 1329 C. 1904 [2] 1652).  
 32) Phenylamidoformiat d. Alkohol C<sub>10</sub>H<sub>18</sub>O (aus Gingergrasöl). Sm. 100 bis 101° (J. pr. [2] 71, 463, 473 C. 1905 [2] 554).  
 33) 4-Methylphenylimid d. β-Dimethylhexan-γδ-Dicarbonsäure. Sm. 113—115° (A. 292, 174). — \*II, 279.  
 34) Verbindung (aus Menthonamin). Sm. 145—146° (C. 1904 [1] 1517).  
 35) isom. Verbindung (aus Menthonamin). Sm. 85—86° (C. 1904 [1] 1517).  
**C<sub>17</sub>H<sub>23</sub>O<sub>2</sub>N<sub>5</sub>** 1) Benzoldiazopseudosemicarbazidocampher. Sm. 191° (Soc. 89, 229 C. 1906 [1] 1430).  
**C<sub>17</sub>H<sub>23</sub>O<sub>2</sub>Cl** 1) l-Menthylester d. 2-Chlorbenzol-1-Carbonsäure. Sd. 225°<sub>30</sub> (Soc. 83, 1214 C. 1903 [2] 1330).  
 2) l-Menthylester d. 3-Chlorbenzol-1-Carbonsäure. Sd. 218—219°<sub>14</sub> (Soc. 83, 1214 C. 1903 [2] 1330).  
 3) l-Menthylester d. 4-Chlorbenzol-1-Carbonsäure. Sd. 231—232°<sub>20</sub> (Soc. 83, 1214 C. 1903 [2] 1330).  
**C<sub>17</sub>H<sub>23</sub>O<sub>2</sub>Br** 1) d-Phenylbromhomocampholsäure. Sm. 135° (C. r. 133, 80).  
 2) l-Menthylester d. 2-Brombenzol-1-Carbonsäure (C. 1902 [2] 1238; Soc. 83, 1214 C. 1903 [2] 1330).  
 3) l-Menthylester d. 3-Brombenzol-1-Carbonsäure (C. 1902 [2] 1238).  
 4) l-Menthylester d. 4-Brombenzol-1-Carbonsäure (C. 1902 [2] 1238).  
**C<sub>17</sub>H<sub>23</sub>O<sub>2</sub>J** 1) l-Menthylester d. 2-Jodbenzol-1-Carbonsäure. Fl. (Soc. 85, 1272 C. 1904 [2] 1303).  
 2) l-Menthylester d. 3-Jodbenzol-1-Carbonsäure. Fl. (Soc. 85, 1273 C. 1904 [2] 1303).  
 3) l-Menthylester d. 4-Jodbenzol-1-Carbonsäure. Fl. (Soc. 85, 1274 C. 1904 [2] 1303).  
**C<sub>17</sub>H<sub>23</sub>O<sub>3</sub>N** C 70,6 — H 8,0 — O 16,6 — N 4,8 — M. G. 289.  
 1) d-Atropin. Sm. 110—111°. (HCl, AuCl<sub>3</sub>) (B. 22, 2591; Ar. 239, 301). — III, 784; \*III, 605.  
 2) l-Atropin. Sm. 111°. (HCl, AuCl<sub>3</sub>) (B. 22, 2592; Ar. 239, 301). — III, 784; \*III, 605.  
 3) r-Atropin (Daturin). Sm. 115—115,5°. Salze meist bekannt. Lit. bedeutend. — III, 783; \*III, 604.  
 4) Pseudoatropin (Atrolaktyltropein). Sm. 119—120°. (HCl, AuCl<sub>3</sub>), Pikrat (B. 15, 1027; A. 217, 87). — III, 788.  
 5) p-Methylhomatropin (4-Methylphenylglykolyltropein). (HCl, AuCl<sub>3</sub>) (C. 1895 [1] 434).  
 6) Tropylpseudotropin. Sm. 86—88°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 25, 934). — III, 796.  
 7) Hyoscin (oder C<sub>17</sub>H<sub>21</sub>O<sub>4</sub>N). Fl. (HCl, AuCl<sub>3</sub>), HBr + 1½(3)H<sub>2</sub>O, (HBr, AuBr<sub>3</sub>), (HBr, AuCl<sub>3</sub>), HJ + ½H<sub>2</sub>O (A. 206, 299; 303, 149; J. pr. [2] 64, 274, 354; B. 13, 1554; 14, 1870; 25, 2388; Soc. 71, 679; J. pr. [2] 66, 194 C. 1902 [2] 942). — III, 795; \*III, 615.  
 8) d-Hyoscyamin. Sm. 106° (Ar. 240, 498 C. 1902 [2] 1327).  
 9) l-Hyoscyamin. Sm. 103° (Ar. 240, 498 C. 1902 [2] 1327).  
 10) Hyoscyamin. Sm. 108,5°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), (HBr, AuCl<sub>3</sub>), (HBr, AuBr<sub>3</sub>), (HJ, TiJ<sub>3</sub>), H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O, Oxalat (J. 1878, 894; 1882, 1094; G. 30 [2] 476; A. 7, 270; 157, 98; 206, 282; 208, 196; 309, 80; 310, 355; B. 13, 254, 607; 14, 154, 1870; 21, 1720, 2784; 23 [2] 208; 31, 2036; 34, 1025; C. 1901 [2] 128; Soc. 61, 90; 71, 681; 75, 72; 79, 71; B. 35, 1114 C. 1902 [1] 937; B. 35, 2770 C. 1902 [2] 980). — III, 794; \*III, 615.  
 11) Pseudohyoscyamin. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (J. pr. [2] 64, 282). — \*III, 621.  
 12) α-Oxy-β-Phenylpropionyltropein. Sm. 89—90°. (HCl, AuCl<sub>3</sub>), HBr, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Pikrat (Soc. 95, 543 C. 1909 [2] 543).  
 13) α-cis-4-Methylphenylcampheraminsäure. Sm. 201—209° (G. 39 [2] 224 C. 1909 [2] 2155).  
 14) β-cis-4-Methylphenylcampheraminsäure. Sm. 190—196° (G. 39 [2] 226 C. 1909 [2] 2156).

- C<sub>17</sub>H<sub>23</sub>O<sub>3</sub>N** 15)  $\alpha$ -trans-4-Methylphenylcampheraminsäure. Sm. 183° (*G.* 39 [2] 225 *C.* 1909 [2] 2156).  
 16)  $\beta$ -trans-4-Methylphenylcampheraminsäure. Sm. 189° (*G.* 39 [2] 228 *C.* 1909 [2] 2156).  
 17) Amidopodocarpinsäure. HCl +  $\frac{1}{2}$ H<sub>2</sub>O (*A.* 170, 234). — II, 1686.  
 18) Benzoat d. Pulegonoximhydrat. Sm. 137—138° u. Zers. (*A.* 262, 10). — III, 511.  
 19) Benzoat d. Verbindung C<sub>10</sub>H<sub>19</sub>O<sub>2</sub>N. Sm. 144°. HCl (*B.* 36, 768 *C.* 1903 [1] 836).  
 20) Phenylamidoformiat d. 4-Oxy-3-Keto-4-Isopropyl-1-Methylhexahydrobenzol (Ph. d. Menthketol). Sm. 157° (*B.* 27, 1640; *J. r.* 29, 52). — \*II, 180.  
 21) Phenylamidoformiat d. Camphenglykol. Sm. 147—147,5° (*J. r.* 28, 65). — \*II, 180.  
 22) Phenylmonamid d. Oxycamphocarbonsäure. Sm. 203° (*C.* 1895 [2] 217).
- C<sub>17</sub>H<sub>23</sub>O<sub>3</sub>N<sub>3</sub>** C 64,4 — H 7,2 — O 15,1 — N 13,3 — M. G. 317.  
 1) l- $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido-d- $\beta$ -[3-Indolyl]propionsäure + H<sub>2</sub>O (l-Leucyl-d-Tryptophan). Sm. 148° (wasserfrei) (*B.* 40, 2748 *C.* 1907 [2] 464).
- C<sub>17</sub>H<sub>23</sub>O<sub>3</sub>Br** 1) d-4-Bromphenyloxyhomocampholsäure. Sm. 100° (*C. r.* 133, 83).  
 2) isom. 4-Bromphenyloxyhomocampholsäure. Sm. 120° (*C. r.* 136, 73 *C.* 1903 [1] 459).  
 3) Äthylester d. d-P-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Ä. d. d-Bromsantonigen Säure). Sm. 86° (*B.* 28 [2] 394; *G.* 25 [1] 519). — II, 1672; \*II, 978.  
 4) Äthylester d. l-P-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Ä. d. l-Bromsantonigen Säure). Sm. 86° (*B.* 28 [2] 394; *G.* 25 [1] 519). — II, 1672; \*II, 978.  
 5) Äthylester d. i-P-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Ä. d. i-Bromisantonigen Säure). Sm. 104° (104—106°) (*B.* 28 [2] 394). — II, 1672; \*II, 978.
- C<sub>17</sub>H<sub>23</sub>O<sub>4</sub>N** C 66,9 — H 7,5 — O 21,0 — N 4,6 — M. G. 305.  
 1) Anhydrocotarninmethylpropylketon. Sm. 86—92°. (2HCl, PtCl<sub>4</sub>) (*B.* 37, 214 *C.* 1904 [1] 591).  
 2) Piperidinbrenzkatechin. Sm. 80—81° (*Soc.* 73, 140).  
 3)  $\alpha\beta$ -Dioxy- $\alpha$ -Phenylpropionyltropein (Atroglyceryltropein). Sm. 124 bis 125°. HCl, AuCl<sub>3</sub> +  $\frac{1}{3}$ H<sub>2</sub>O, HBr, H<sub>2</sub>SO<sub>4</sub> + 2 $\frac{1}{2}$ H<sub>2</sub>O, Pikrat (*Soc.* 95, 1021 *C.* 1909 [2] 543).  
 4)  $\alpha$ -[3-Phenylamidoformoxyl-4-Methylhexahydrophenyl]propionsäure. Sm. 227° (*B.* 36, 769 *C.* 1903 [1] 836).  
 5) 4-Benzoyl-2,2,6,6-Tetramethylhexahydropyridin-4-Carbonsäure (D.R.P. 92588). — \*IV, 42.  
 6) Methylester d. Cineolphenylaminsäure. Sm. 78—79° (*A.* 271, 23). — II, 420.  
 7) Äthylester d.  $\beta$ -Benzoximido- $\gamma$ -Äthylpentan- $\gamma$ -Carbonsäure. Sm. 70—71° (*G.* 28 [1] 276). — \*II, 758.  
 8) l-Menthylester d. 2-Nitrobenzol-1-Carbonsäure. Sm. 62—64° (*Soc.* 87, 1190 *C.* 1905 [2] 768).  
 9) l-Menthylester d. 3-Nitrobenzol-1-Carbonsäure. Fl. (*C.* 1902 [2] 1238; *Soc.* 87, 1191 *C.* 1905 [2] 768).  
 10) l-Menthylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 61—63° (*Soc.* 87, 1191 *C.* 1905 [2] 768).  
 11) 4-Methylphenylmonamid d. Cineolsäure. Sm. 125—126°. Ag (*A.* 271, 24). — II, 503.
- C<sub>17</sub>H<sub>23</sub>O<sub>4</sub>N<sub>3</sub>** C 61,3 — H 6,9 — O 19,2 — N 12,6 — M. G. 333.  
 1) Äthylester d. l-[ $\alpha$ -4-Nitrophenylhydrazonäthyl]hexahydrobenzol-1-Carbonsäure. Sm. 145° (*B.* 40, 3945 *C.* 1907 [2] 1619).  
 2) Äthylester d. 2,5-Diketo-4,4-Dimethyl-1-Phenyltetrahydroimidazol-3- $\alpha$ -Amidoisobuttersäure. Sm. 98° (*C.* 1904 [2] 1029).
- C<sub>17</sub>H<sub>23</sub>O<sub>5</sub>N** C 63,5 — H 7,2 — O 24,9 — N 4,4 — M. G. 321.  
 1) Diäthylester d.  $\beta$ -[4-Äthoxyphenyl]imidopropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 57° (*B.* 38, 3186 *C.* 1905 [2] 1322).



- C<sub>17</sub>H<sub>23</sub>O<sub>5</sub>N** 2) Acetat d. Isophotosantonsäurelaktinoxim. Sm. 170° (*G.* 32 [1] 317 *C.* 1902 [1] 1405).
- 3) Sebacinsäuremonophenylamid-3-Carbonsäure (Benzamsebacylsäure). Sm. 192—193° (*G.* 15, 550). — II, 1266.
- 4) Phenylmonamid d.  $\delta$ -Acetoxyheptan- $\gamma$ -Dicarbonsäure. Sm. 144° (*Bl.* [3] 33, 644 *C.* 1905 [2] 215).
- 5) Phenylmonamid d.  $\gamma$ -Acetoxy- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 157° (*C.* 1898 [2] 416).
- 6) 4-Methylphenylmonamid d. Homocamphoronsäure. Sm. 163—164° u. Zers. (*Soc.* 75, 999). — \*II, 282.
- C<sub>17</sub>H<sub>23</sub>O<sub>5</sub>N<sub>3</sub>** C 58,5 — H 6,6 — O 22,9 — N 12,0 — M. G. 349.
- 1)  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutyryl]amidobuttersäure. Sm. 147°. NH<sub>4</sub>, Ag (*J. pr.* [2] 70, 219 *C.* 1904 [2] 1461).
- 2) Äthylester d.  $\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidopropionyl]amidopropionsäure. Sm. 174—175° (*J. pr.* [2] 70, 123 *C.* 1904 [2] 1037).
- C<sub>17</sub>H<sub>23</sub>O<sub>5</sub>Cl** 1) Chlorhydrin d. Dehydrodioxyparasantonsäuredimethylester. Sm. 146° (*C.* 1903 [2] 1447).
- C<sub>17</sub>H<sub>23</sub>O<sub>6</sub>N** C 60,5 — H 6,8 — O 28,5 — N 4,1 — M. G. 337.
- 1) Amid d. 3,4-Dioxy-1-[ $\alpha$ -Acetoxy- $\gamma$ -Ketoisohexyl]benzol-3,4-Dimethyläther-2-Carbonsäure. Sm. 187° (*M.* 25, 1062 *C.* 1904 [2] 1644).
- C<sub>17</sub>H<sub>23</sub>O<sub>6</sub>N<sub>3</sub>** C 55,9 — H 6,3 — O 26,3 — N 11,5 — M. G. 365.
- 1) Äthylester d. N-Carbäthoxylglycyl-N-Phenylglycylglycin. Sm. 142—143° (*B.* 41, 2593 *C.* 1908 [2] 1021).
- 2) Äthylester d. N-Carbäthoxyl-N-Phenylglycylglycylglycin. Sm. 135 bis 136° (*B.* 41, 2589 *C.* 1908 [2] 1020).
- C<sub>17</sub>H<sub>23</sub>O<sub>6</sub>N<sub>7</sub>** C 48,4 — H 5,5 — O 22,8 — N 23,3 — M. G. 421.
- 1) Hydrazid d. Benzoyltetra[Amidoacetyl]amidoessigsäure. Sm. 272 bis 274° (268—269°). HCl (*B.* 37, 1300 *C.* 1904 [1] 1337; *J. pr.* [2] 70, 97 *C.* 1904 [2] 1035).
- C<sub>17</sub>H<sub>23</sub>N<sub>2</sub>Cl** 1) Verbindung d. 4,4'-Di[Dimethylamido]biphenyl. (HCl, PtCl<sub>4</sub>) (*B.* 14, 2164). — IV, 963.
- C<sub>17</sub>H<sub>23</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Verbindung (aus  $\alpha$ -Oxy-Tetramethyldiamidodiphenylmethan) (*Bl.* [3] 9, 127). — II, 1079.
- C<sub>17</sub>H<sub>23</sub>N<sub>2</sub>J** 1) Monojodmethylat d.  $\alpha\beta$ -Di[Methylphenylamido]äthan. Sm. 163° (*Soc.* 95, 418 *C.* 1909 [1] 1648).
- 2) Jodmethylat d. 2,4'-Di[Dimethylamido]biphenyl. Sm. 184° (*B.* 22, 3017). — IV, 959.
- 3) Jodmethylat d. 4,4'-Di[Dimethylamido]biphenyl. Sm. 263° (*B.* 14, 2163). — IV, 963.
- C<sub>17</sub>H<sub>23</sub>N<sub>3</sub>S** 1) Campholenaminphenylthioharnstoff. Sm. 119°. — IV, 533.
- 2) Verbindung (aus Phenylsenföl u. Dipiperidein). Sm. 143—144° (*B.* 22, 1323). — IV, 533.
- C<sub>17</sub>H<sub>24</sub>ON<sub>2</sub>** C 75,0 — H 8,8 — O 5,9 — N 10,3 — M. G. 272.
- 1) Benzyl-l-Fenchylnitrosamin. Sm. 93° (*A.* 269, 362). — IV, 58.
- 2) s-Phenyl-d-Bornylharnstoff. Sm. 270° (248° u. Zers.?) (*B.* 20, 108; *Soc.* 73, 393). — IV, 57; \*IV, 59.
- 3) s-Phenylneobornylharnstoff. Sm. 254° (*Soc.* 73, 396). — \*IV, 60.
- 4) s-Phenylcamphylharnstoff. Sm. 120—121° (*Soc.* 87, 737 *C.* 1905 [2] 243).
- 5) act.  $\alpha$ -Phenyl- $\beta$ -Dihydrocarvylharnstoff. Sm. 191° (*A.* 275, 123; *C.* 1898 [1] 573). — IV, 57; \*IV, 61.
- 6) i- $\alpha$ -Phenyl- $\beta$ -Dihydrocarvylharnstoff. Sm. 142° (*C.* 1898 [1] 573). — \*IV, 61.
- 7)  $\alpha$ -Phenyl- $\beta$ -Dihydroeucarvylharnstoff. Sm. 142° (*A.* 305, 240). — \*IV, 61.
- 8) s-Phenylpulegonylharnstoff. Sm. 154—155° (*A.* 289, 349). — IV, 57.
- 9) s-Phenylthujenylharnstoff. Sm. 120° (*A.* 286, 97). — IV, 59.
- 10) isom. s-Phenylthujenylharnstoff. Sm. 110° (*A.* 286, 97). — IV, 59.
- 11) isom. s-Phenylthujenylharnstoff. Sm. 178° (*A.* 286, 98). — IV, 60.
- 12)  $\alpha$ -Dipentinnitrolbenzylamin. Sm. 109—110° (*A.* 252, 126). — III, 529.
- 13)  $\alpha$ -Limonennitrolbenzylamin. Sm. 93°. HCl (*A.* 252, 121). — III, 526.
- 14) d-Pinennitrolbenzylamin. Sm. 122—123°. HCl (*A.* 252, 130). — III, 522.

- C<sub>17</sub>H<sub>24</sub>ON<sub>2</sub>** 15) Origanennitrolbenzylamin. Sm. 198° (*Soc.* 93, 869 *C.* 1908 [2] 249).  
 16) Sylvestrennitrolbenzylamin. Sm. 71–72°. HCl (*A.* 252, 135). — III, 531.  
 17) Terpinennitrolbenzylamin. Sm. 137° (*A.* 252, 134). — III, 532.  
 18) *p*-Benzoyl-1,1'-Bipiperidyl. Fl. HCl (*C.* 1896 [1] 1126).  
 19) *l*-Benzoyl-4,4'-Bipiperidyl. Sd. 224°<sub>91</sub> (*B.* 31, 2279). — \*IV, 310.  
 20) Amid d. 4-Methyl-1-Isopropylhexahydrocarbazol-9-Carbonsäure. Sm. 87–88° (*A.* 359, 74 *C.* 1908 [1] 1551).  
**C<sub>17</sub>H<sub>24</sub>ON<sub>4</sub>** C 68,0 — H 8,0 — O 5,3 — N 18,7 — M. G. 300.  
 1) 6-Imido-2-[4-Methylphenyl]imido-4-Keto-5,5-Dipropylhexahydro-1,3-Diazin (D. R. P. 186456 *C.* 1907 [2] 957).  
**C<sub>17</sub>H<sub>24</sub>O<sub>2</sub>N<sub>2</sub>** C 70,8 — H 8,3 — O 11,1 — N 9,7 — M. G. 288.  
 1) d-2-Nitrobenzylbornylamin. Sm. 39–40°. HCl, (2HCl, PtCl<sub>4</sub>) (*Soc.* 75, 952). — \*IV, 59.  
 2) d-4-Nitrobenzylbornylamin. Sm. 60–61°. HCl, (2HCl, PtCl<sub>4</sub>) (*Soc.* 75, 953). — \*IV, 59.  
 3) Pinolnitrolbenzylamin. Sm. 135–136°. HCl (*A.* 253, 264). — III, 508.  
 4) Phenylhydrazon d. Methylester C<sub>11</sub>H<sub>18</sub>O<sub>3</sub> (aus Campherchinon). Sm. 99–100° (*B.* 35, 3832 *C.* 1902 [2] 1461).  
 5) *γ*-Piperidylpropylester d. *β*-[4-Amidophenyl]akrylsäure. Sm. 122°. HCl (D. R. P. 187593 *C.* 1907 [2] 1131).  
 6) Phenylamidoformiat d. Lupinin. Sm. 94–95° (*B.* 35, 1915 *C.* 1902 [2] 132). — \*III, 664.  
**C<sub>17</sub>H<sub>24</sub>O<sub>2</sub>S** 1) Isoamyläther d. *α*-Merkapto-*γ*-Keto-*β*-Acetyl-*α*-Phenylbutan. Sm. 57–58° (*Soc.* 87, 21 *C.* 1905 [1] 741).  
 2) *β*-Benzylsulfondihydrocamphen. Sm. 127° (*B.* 38, 653 *C.* 1905 [1] 739).  
**C<sub>17</sub>H<sub>24</sub>O<sub>3</sub>N<sub>2</sub>** 3) Benzylsulfondihydropinen. Fl. (*B.* 38, 653 *C.* 1905 [1] 739).  
 C 67,1 — H 7,9 — O 15,8 — N 9,2 — M. G. 304.  
 1) Äthylester d. 1-[1-Piperidyl]acetylamidomethylbenzol-3-Carbonsäure. Fl. HCl (*A.* 343, 296 *C.* 1908 [1] 928).  
 2) 2-Phenylhydrazid d. 1,1,2-Trimethyl-*R*-Pentamethylen-2,5-Dicarbonsäure-5-Methylester. Sm. 158° (*C. r.* 141, 699 *C.* 1906 [1] 35).  
 3) Mono-4-Methylphenylhydrazid d. Camphersäure. Sm. bei 193° (*B.* 25, 2568). — IV, 809.  
**C<sub>17</sub>H<sub>24</sub>O<sub>4</sub>N<sub>2</sub>** C 63,7 — H 7,5 — O 20,0 — N 8,7 — M. G. 320.  
 1) Diäthylester d. *γ*-Phenylhydrazonpentan-*αε*-Dicarbonsäure. Sm. 66° (*B.* 20, 2815; 21, 1398). — IV, 714.  
 2) Diäthylester d. *β*-Phenylhydrazonpentan-*γγ*-Dicarbonsäure. Sm. 44 bis 45° (*Am.* 14, 506). — IV, 715.  
 3) Amylester d. *α*-Benzoylamidoacetylamidopropionsäure. Sm. 96° (*J. pr.* [2] 70, 117 *C.* 1904 [2] 1036).  
 4) 4-Nitrobenzoat d. *β*-Oxy-*α*-Piperidyl-*β*-Methylbutan. Fl. HJ (D. R. P. 179627 *C.* 1907 [1] 1364).  
**C<sub>17</sub>H<sub>24</sub>O<sub>5</sub>N<sub>2</sub>** C 60,7 — H 7,1 — O 23,8 — N 8,3 — M. G. 336.  
 1) Butyl-3,5-Dinitro-6-Pseudobutyl-2,4-Dimethylphenylketon. Sm. 151° (*B.* 31, 1349). — \*III, 127.  
 2) *β*-Amid d. *β*-[2-Methylphenyl]amidopropan-*αβγ*-Tricarbonsäure-*αγ*-Diäthylester. Sm. 141–142° (*B.* 38, 3189 *C.* 1905 [2] 1323).  
 3) *β*-Amid d. *β*-[3-Methylphenyl]amidopropan-*αβγ*-Tricarbonsäure-*αγ*-Diäthylester. Sm. 104° (*B.* 38, 3189 *C.* 1905 [2] 1323).  
 4) *β*-Amid d. *β*-[4-Methylphenyl]amidopropan-*αβγ*-Tricarbonsäure-*αγ*-Diäthylester. Sm. 79–80° (*B.* 38, 3189 *C.* 1905 [2] 1323).  
**C<sub>17</sub>H<sub>24</sub>O<sub>5</sub>N<sub>4</sub>** C 56,0 — H 6,6 — O 22,0 — N 15,4 — M. G. 364.  
 1) *α*[*β*-Phenylureido]isocapronylamidoacetylamidoessigsäure. Sm. 182 bis 183° (*B.* 36, 2991 *C.* 1903 [2] 1112).  
 2) Äthylester d. *α*-[*α*-Benzoylamidoacetylamidopropionyl]amidoäthylamidoameisensäure. Sm. 203° (*J. pr.* [2] 70, 126 *C.* 1904 [2] 1037).  
**C<sub>17</sub>H<sub>24</sub>O<sub>6</sub>N<sub>2</sub>** C 58,0 — H 6,8 — O 27,3 — N 7,9 — M. G. 352.  
 1) Verbindung (aus Äthylidenmalonsäurediäthylester u. *β*-Amidocrotonsäureäthylester). Sm. 155–157° (*B.* 35, 2183 *C.* 1902 [2] 374). — \*IV, 79.  
**C<sub>17</sub>H<sub>24</sub>O<sub>6</sub>N<sub>4</sub>** C 53,7 — H 6,3 — O 25,2 — N 14,7 — M. G. 380.  
 1) Diäthylester d. *α*-Benzoylamidoacetylamidoäthan-*αβ*-Di[Amidoameisensäure]. Sm. 214° (*J. pr.* [2] 70, 178 *C.* 1904 [2] 1396).

- C<sub>17</sub>H<sub>24</sub>O<sub>7</sub>S** 1) Cuminyldenmalonäthylesterhydrosulfonsäure. K +  $\frac{1}{2}$ H<sub>2</sub>O (B. 37, 4059 C. 1904 [2] 1649).  
C 51,0 — H 6,0 — O 36,0 — N 7,0 — M. G. 400.
- C<sub>17</sub>H<sub>24</sub>O<sub>9</sub>N<sub>2</sub>** 1) Tetraäthylester d. Harnstoffdioxalelessigsäure (Dioxalelessigester-carb-  
amid). Sm. 104° (J. pr. [2] 55, 506; [2] 56, 480). — \*I, 736.
- C<sub>17</sub>H<sub>24</sub>O<sub>9</sub>N<sub>4</sub>** 1) Tetraäthylester d. Nitrosoguanidindioxalelessigsäure. Sm. 127—128°  
u. Zers. (J. pr. [2] 56, 484). — \*I, 638.  
C 47,2 — H 5,6 — O 33,6 — N 13,1 — M. G. 428.
- C<sub>17</sub>H<sub>24</sub>O<sub>11</sub>N<sub>2</sub>** 1) Pentaacetat d. Glykoseureid. Sm. 200° (R. 22, 59 C. 1903 [1]  
1080).
- C<sub>17</sub>H<sub>24</sub>NCI** 1) Chlormethylat d. 3-Isopropyl-2-Isobutylchinolin. 2 + PtCl<sub>4</sub> (B. 18,  
3376). — IV, 343.  
2) Chlormethylat d. 4-Methyl-7-Isopropylcarbazonenin. 2 + PtCl<sub>4</sub>,  
+ AuCl<sub>3</sub> (C. 1904 [2] 343).
- C<sub>17</sub>H<sub>24</sub>NJ** 1) Jodmethylat d. 3-Isopropyl-2-Isobutylchinolin + H<sub>2</sub>O. Zers. bei 180°  
(B. 18, 3375). — IV, 343.  
2) Jodmethylat d. 4-Methyl-7-Isopropylcarbazonenin. Sm. 209—210°  
u. Zers. (C. 1904 [2] 342; 1908 [1] 2026).
- C<sub>17</sub>H<sub>24</sub>N<sub>2</sub>S** 1)  $\alpha$ -Phenyl- $\beta$ -Bornylthioharnstoff. Sm. 170° (B. 30, 109). — IV, 57.  
2) s-Phenylcamphylthioharnstoff. Sm. 118° (120°) (B. 19, 712; B. 35,  
832 C. 1902 [1] 713). — II, 393.  
3) isom. s-Phenylcamphylthioharnstoff? Sm. 150—152° (B. 37, 160 C.  
1904 [1] 582).  
4) act.  $\alpha$ -Phenyl- $\beta$ -Dihydrocarvylthioharnstoff. Sm. 125—126° (A. 275,  
122; C. 1898 [1] 573). — IV, 57; \*IV, 61.  
5) i- $\alpha$ -Phenyl- $\beta$ -Dihydrocarvylthioharnstoff. Sm. 119° (126°) (A. 275,  
125; C. 1898 [1] 573). — IV, 57.  
6)  $\alpha$ -Phenyl- $\beta$ -Dihydroeucarvylthioharnstoff. Sm. 144—145° (120—121°)  
(A. 305, 241). — \*IV, 61.  
7) s-Phenyl-d-Fenchylthioharnstoff. Sm. 153—154° (A. 272, 107). —  
IV, 59.  
8) s-Phenyl-l-Fenchylthioharnstoff. Sm. 153—154° (A. 269, 360). —  
IV, 58.  
9) s-Phenyl-i-Fenchylthioharnstoff. Sm. 169—170° (A. 272, 108). —  
IV, 59.  
10) s-Phenylthujylthioharnstoff. Sm. 152—153° (A. 286, 98). —  
IV, 60.  
11) isom. s-Phenylthujylthioharnstoff. Sm. 107—108° (B. 35, 832 C. 1902  
[1] 713). — \*IV, 62.  
12) Phenylthioharnstoff d. Camphidin. Sm. 142—145° (B. 34, 3285). —  
\*IV, 63.  
13) Phenylamid d. 6-Methyldekahydrochinolin-1-Thiocarbonsäure. Sm.  
138° (J. pr. [2] 79, 456 C. 1909 [2] 134).  
C 78,8 — H 9,6 — O 6,2 — N 5,4 — M. G. 259.
- C<sub>17</sub>H<sub>25</sub>ON** 1) d-2-Oxybenzylidenmenthylamin. Sm. 96—97° (A. 276, 311). —  
IV, 43.  
2) l-2-Oxybenzylidenmenthylamin. Sm. 56—57° (A. 276, 305). —  
IV, 42.  
3) Benzoylcampholamin. Sm. 98° (G. 22 [2] 112). — II, 1162.  
4) Benzoyl-l-Menthylamin. Sm. 156° (Soc. 85, 70 C. 1904 [1] 375, 808).  
5) Benzoyl-iso-l-Menthylamin. Sm. 121° (Soc. 85, 121 C. 1904 [1] 808).  
6) Benzoyl-neo-l-Menthylamin. Sm. 128° (Soc. 85, 77 C. 1904 [1]  
375, 808).  
7) Benzoyl-iso-neo-l-Menthylamin. Sm. 104° (Soc. 85, 77 C. 1904 [1]  
375, 808).  
8) Benzoyltetrahydroeucarvylamin. Sm. 168° (A. 339, 115 C. 1905  
[1] 1322).  
9) Benzoylthujamenthylamin. Sm. 106—107° (A. 323, 354 C. 1902 [2]  
1205). — \*IV, 37.  
10) N-Benzoyl- $\alpha$ -Dekamethylenimin. Sm. 27,5—28° (B. 39, 2195 C.  
1906 [2] 420).  
11) l-Benzoyl-2,2,7,7-Tetramethyl-R-Hexamethylenimin + H<sub>2</sub>O. Sm.  
76,5—77° (C. 1905 [2] 830).



- C<sub>17</sub>H<sub>25</sub>ON** 12) Benzoylderivat d. Base C<sub>10</sub>H<sub>21</sub>N. Sm. 95° (A. 324, 290 C. 1902 [2] 1506). — \*IV, 37.
- 13) p-Thymotinpiperidid. Sm. 140° (B. 37, 1457 C. 1905 [1] 235).
- 14) Thymolalkoholpiperidid + H<sub>2</sub>O. Sm. 140°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (H. 44, 253 C. 1905 [1] 1108).
- 15) Base (aus Anilidomethylencampher). Sd. 231°<sub>30</sub> (C. 1901 [1] 1024). — \*III, 87.
- C<sub>17</sub>H<sub>25</sub>ON<sub>3</sub>** C 71,1 — H 8,7 — O 5,6 — N 14,6 — M. G. 287.
- 1) α-Phenylamido-β-Bornylharnstoff. Sm. 140° u. Zers. (Soc. 85, 1191 C. 1904 [2] 1125).
- 2) 5-Semicarbazon-1-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol. Sm. 142° (A. 303, 274). — \*III, 134.
- 3) 1-3-Phenylsemicarbazon-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 180—181° (B. 37, 3182 C. 1904 [2] 991).
- C<sub>17</sub>H<sub>25</sub>O<sub>2</sub>N** C 74,2 — H 9,1 — O 11,6 — N 5,1 — M. G. 275.
- 1) 3-Keto-2-[α-Hydroxylamidobenzyl]-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 162° (B. 37, 234 C. 1904 [1] 725).
- 2) Hydroxylaminderivat d. isom. Benzylidenmenthon vom Sm. 47°. Sm. 155° (C. r. 134, 1438 C. 1902 [2] 280; C. 1904 [2] 1044).
- 3) Hydroxylaminderivat d. isom. Benzylidenmenthon vom Sm. 51°. Sm. 172° (C. r. 134, 1437 C. 1902 [2] 280; C. 1904 [2] 1044).
- 4) Phenylester d. l-Menthylamidoameisensäure. Sm. 138° (Soc. 91, 303 C. 1907 [1] 1330).
- 5) Acetat d. Cedronoxim. Sd. 185—190° (Bl. [3] 17, 487). — \*III, 403.
- 6) Benzoat d. 1-[β-Oxyäthyl]-2-Propylhexahydropyridin. HJ (B. 15, 1144). — IV, 33.
- 7) Benzoat d. 4-Oxy-1,2,2,6,6-Pentamethylhexahydropyridin. Fl. (C. 1900 [1] 1082). — \*IV, 35.
- 8) Phenylamidoformiat d. 1-3-Oxy-4-Propyl-1-Methylhexahydrobenzol. Sm. 108—109° (C. r. 140, 476 C. 1905 [1] 872).
- 9) Phenylamidoformiat d. cis-5-Oxy-3-Isopropyl-1-Methylhexahydrobenzol. Sm. 88° (A. 297, 170). — \*I, 86.
- 10) Phenylamidoformiat d. 2-Oxymethyl-1,1,2,5-Tetramethyl-R-Pentamethylen. Sm. 45° (Bl. [3] 31, 750 C. 1904 [2] 303).
- 11) Phenylamidoformiat d. l-Menthol. Sm. 111° (B. 20, 115; J. pr. [2] 55, 29). — III, 467; \*III, 334.
- 12) Phenylamidoformiat d. Tetrahydroeucarveol. Sm. 74—75° (A. 339, 112 C. 1905 [1] 1322).
- C<sub>17</sub>H<sub>25</sub>O<sub>2</sub>N<sub>8</sub>** C 67,3 — H 8,2 — O 10,6 — N 13,9 — M. G. 303.
- 1) 3,5-Dicyan-2,6-Diketo-4-Methyl-4-Nonylhexahydropyridin. Sm. 136,5—137,5°. NH<sub>4</sub> (C. 1901 [1] 580).
- C<sub>17</sub>H<sub>25</sub>O<sub>2</sub>Cl** 1) Chlordekylester d. Benzolcarbonsäure. Sd. 201°<sub>12</sub> (B. 25, 480). — II, 1141.
- C<sub>17</sub>H<sub>26</sub>O<sub>3</sub>N** C 70,1 — H 8,6 — O 16,5 — N 4,8 — M. G. 291.
- 1) α-Benzoylamidononan-α-Carbonsäure. Sm. 97° (74°). Ba (C. r. 143, 362 C. 1906 [2] 1126; B. 39, 2195 C. 1906 [2] 420).
- 2) ε-Benzoylamido-βζ-Dimethylheptan-α-Carbonsäure. Sm. 127—128° (A. 312, 198). — \*II, 748.
- 3) Äthylester d. Cyancampherisobuttersäure. Sd. 220—226°<sub>18</sub> (C. r. 140, 1435 C. 1905 [2] 135).
- 4) Äthylester d. Benzoylhomoconiinsäure. Sm. 95° (B. 19, 501). — IV, 34.
- 5) Phenylglykolat d. lab. 4-Oxy-1,2,2,6-Tetramethylhexahydropyridin (Ph. d. lab. Methylvinylidiacetonalkamin; Euphthalmin). Sm. 113°. HCl, (HCl, AuCl<sub>3</sub>), Salicylat (A. 296, 341; B. 31, 665). — \*IV, 33.
- 6) Phenylglykolat d. stab. 4-Oxy-1,2,2,6-Tetramethylhexahydropyridin (Ph. d. stab. Methylvinylidiacetonalkamin). Fl. (A. 296, 337). — \*IV, 33.
- 7) Amid d. Acetylisoalantolsäure. Sm. 212° (B. 34, 779). — \*II, 939.
- 8) Acetylamid d. Alantolsäure. Sm. 179° u. Zers. (A. 285, 364). — II, 1595.
- 9) Phenylmonamid d. Oktan-α-Carbonsäure-β-Methylcarbonsäure. Sm. 73° (Bl. [4] 1, 95 C. 1907 [1] 1184).
- 10) Phenylmonamid d. cis-βζ-Dimethylheptan-γδ-Dicarbonsäure. Sm. 149—150° (Am. 30, 238 C. 1903 [2] 934).

- C<sub>17</sub>H<sub>25</sub>O<sub>3</sub>N** 11) **4-Methylphenylmonamid d.  $\beta\epsilon$ -Dimethylhexan- $\gamma\delta$ -Dicarbonsäure.** Sm. 172—173° (A. 292, 173). — \*II, 279.  
C 66,4 — H 8,1 — O 20,8 — N 4,6 — M. G. 307.
- C<sub>17</sub>H<sub>25</sub>O<sub>4</sub>N** 1) **Methylhydroxyd d. Homoatropin.** Salze, siehe (Soc. 91, 97 C. 1907 [1] 1137).  
2)  **$\alpha$ -Phenylamidoformoxylnonan- $\beta$ -Carbonsäure.** Sm. 105° (Bl. [3] 33, 652 C. 1905 [2] 216).  
3) **Äthylester d. Santonsäureoxim.** Sm. 126—127° (G. 22 [1] 186). — II, 1789.  
4) **Äthylester d. Metasantonsäureoxim.** Sm. 166° (G. 25 [2] 470; 29 [2] 233). — \*II, 1045.  
5) **Diäthylester d. 2,6-Dimethyl-4-Isobutylpyridin-3,5-Dicarbonsäure.** Sd. 312—318°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 231, 57). — IV, 171.  
C 60,9 — H 7,5 — O 19,1 — N 12,5 — M. G. 335.
- C<sub>17</sub>H<sub>25</sub>O<sub>4</sub>N<sub>3</sub>** 1)  **$\alpha$ -[ $\alpha$ -Amidoisocapronyl]amidoacetyl-amido- $\beta$ -Phenylpropionsäure.** Sm. 225—228° (B. 37, 3314 C. 1904 [2] 1307).  
2) **Diäthylester d. 1-Phenylhexahydropyridin-1<sup>2</sup>,1<sup>4</sup>-Di[Amidoameisensäure]** (B. 39, 2634 C. 1906 [2] 1201).  
C 56,1 — H 6,9 — O 17,6 — N 19,3 — M. G. 363.
- C<sub>17</sub>H<sub>25</sub>O<sub>4</sub>N<sub>5</sub>** 1) **Hydrazid d.  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutyl]amidobuttersäure.** Sm. 194°. HCl (J. pr. [2] 70, 221 C. 1904 [2] 1461).
- C<sub>17</sub>H<sub>25</sub>O<sub>4</sub>Br** 1) **Monoäthylester d. Säure C<sub>15</sub>H<sub>21</sub>O<sub>4</sub>Br** (aus Dibromparasantonsäure). Sm. 93—95° (C. 1903 [2] 1447).
- C<sub>17</sub>H<sub>25</sub>O<sub>5</sub>N** C 63,2 — H 7,7 — O 24,8 — N 4,3 — M. G. 323.  
1) **Diäthylester d. 4-Diäthylamidophenylloxymalonsäure.** Sm. 45° (C. r. 148, 230 C. 1909 [1] 920).  
2) **Diäthylester d.  $\alpha$ -[1-Piperidyl]- $\alpha$ -[3-Furanyl]äthan- $\beta\beta$ -Dicarbonsäure.** Sm. 35—37° (B. 29, 816). — IV, 21.  
C 58,1 — H 7,1 — O 22,8 — N 12,0 — M. G. 351.
- C<sub>17</sub>H<sub>25</sub>O<sub>5</sub>N<sub>3</sub>** 1) **Tripeptid** (aus Tryptophan, Leucin u. Glutaminsäure). Zers. bei 205° (H. 58, 386 C. 1909 [1] 1247).  
2)  **$\beta$ -[ $\alpha$ -Phenylureidoisocapronyl]amido- $\alpha$ -Oxyisobuttersäure.** Sm. 178 bis 179° (A. 362, 359 C. 1908 [2] 1253).  
3) **isom.  $\beta$ -[ $\alpha$ -Phenylureidoisocapronyl]amido- $\alpha$ -Oxyisobuttersäure.** Sm. 186° (A. 362, 360 C. 1908 [2] 1253).  
4) **Äthylester d.  $\beta$ -Semicarbazon- $\alpha\gamma$ -Di[2-Keto-R-Pentamethylenyl]-propan- $\alpha$ -Carbonsäure.** Sm. 191—192° (A. 350, 240 C. 1907 [1] 251).  
C 51,1 — H 6,3 — O 32,1 — N 10,5 — M. G. 399.
- C<sub>17</sub>H<sub>25</sub>O<sub>8</sub>N<sub>3</sub>** 1) **Tetraäthylester d. Guanidindioxalessigsäure** (Dioxalessigester-guanidin). Sm. 147° u. Zers. (J. pr. [2] 55, 506; [2] 56, 479). — \*I, 637.
- C<sub>17</sub>H<sub>26</sub>ON<sub>2</sub>** C 74,4 — H 9,5 — O 5,8 — N 10,2 — M. G. 274.  
1) **s-Phenyl-d-Menthylharnstoff.** Sm. 177—178° (A. 300, 284). — \*IV, 36.  
2) **s-Phenyl-l-Menthylharnstoff.** Sm. 140—141° (A. 300, 279). — \*IV, 36.  
3) **s-Phenyl-d-Tetrahydrocarvylharnstoff.** Sm. 185—186° (A. 287, 379). — IV, 41.  
4) **s-Phenylthujamenthylharnstoff** (A. 323, 355 C. 1902 [2] 1205). — \*IV, 37.  
5) **Dihydroterpinenbenzylnitrolamin.** Sm. 107° (B. 40, 2961 C. 1907 [2] 597).  
6) **i-Menthennitrolbenzylamin.** Sm. 105,5—106,5° (Am. 18, 769). — \*II, 289.  
7)  **$\gamma$ -Keto- $\beta$ -Phenylhydrazonundekan.** Sm. 91—92° (J. pr. [2] 50, 376; G. 24 [2] 297). — IV, 782.  
8)  **$\epsilon$ -Benzoylamido- $\alpha$ -[1-Piperidyl]pentan.** Sm. 74°. Pikrat (B. 38, 175 C. 1905 [1] 507; B. 40, 3932 Ann. C. 1907 [2] 1525).  
9)  **$\alpha\alpha$ -Di[1-Piperidyl]- $\alpha$ -[2-Oxyphenyl]methan** (Salicylidenbispiperidin). Sm. 86—87° (B. 37, 4498 C. 1905 [1] 250).  
C 70,3 — H 9,0 — O 11,0 — N 9,7 — M. G. 290.
- C<sub>17</sub>H<sub>26</sub>O<sub>2</sub>N<sub>2</sub>** 1) **Methyläther d. Diisobutylamidobenzoylimidooxymethan.** Fl. HCl (Am. 42, 14 C. 1909 [2] 1128).  
2) **4-Amidobenzozat d.  $\beta$ -Oxy- $\alpha$ -Piperidyl- $\beta$ -Methylbutan.** Fl. (D.R.P. 179627 C. 1907 [1] 1364).  
3) **Phenylamidoformiat d. 4-Oxy-1,2,2,6,6-Pentamethylhexahydropyridin.** Sm. 111—113° (C. 1900 [1] 1082). — \*IV, 35.

- $C_{17}H_{26}O_2Br_3$  1) Terapinsäurebromid (C. 1896 [1] 171).
- $C_{17}H_{26}O_3N_2$  1) Acetat d. Oxylupanin. (HCl, AuCl<sub>3</sub>) (Ar. 242, 428 C. 1904 [2] 782).
- 2) Äthylester d.  $\alpha$ -[ $\alpha$ -Amidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. HCl (B. 37, 3310 C. 1904 [2] 1306).
- 3) Santalolester d. Ureidoameisensäure. Sm. 162° (D.R.P. 204922 C. 1909 [1] 326).
- 4) Diäthylamidomethylamid d. Oxyessig[2-Methoxyl-4-Propenylphenyl]äthersäure. Sm. 75–76°. Pikrat (D.R.P. 208255 C. 1909 [1] 1281).
- $C_{17}H_{26}O_3N_4$  C 61,1 — H 7,8 — O 14,3 — N 16,8 — M. G. 334.
- 1) Methyläther d.  $\epsilon$ -Semicarbazon- $\alpha$ -[4-Oxybenzoyl]amidooktan. Sm. 144° (B. 38, 3098 C. 1905 [2] 1259).
- $C_{17}H_{26}O_4N_2$  C 63,3 — H 8,1 — O 19,9 — N 8,7 — M. G. 322.
- 1) 4-Propyläther-6-Butyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 176° (C. 1905 [1] 815).
- 2) 4-Propyläther-6-Isobutyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 200° (C. 1905 [1] 815).
- 3) 4-Isopropyläther-6-Butyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 196° (C. 1905 [1] 815).
- 4) 4-Isopropyläther-6-Isobutyläther d. 4,6-Dioxy-1,3-Di[ $\alpha$ -Oximidoäthyl]benzol. Sm. 211° (C. 1905 [1] 815).
- 5) 4-Nitrobenzoat d.  $\beta$ -Diisobutylamido- $\alpha$ -Oxyäthan. Fl. (D.R.P. 179627 C. 1907 [1] 1364).
- 6) 4-Nitrobenzoat d.  $\gamma$ -Oxy- $\gamma$ -Piperidylmethylpentan. Fl. HJ (D.R.P. 179627 C. 1907 [1] 1364).
- $C_{17}H_{26}O_4S$  1) Verbindung (aus Phellandren). Fl. (B. 38, 656 C. 1905 [1] 740).
- $C_{17}H_{26}O_5N_2$  C 60,3 — H 7,7 — O 23,7 — N 8,3 — M. G. 338.
- 1) Amylphenylhydrazon d. Galaktose. Sm. 116° (R. 15, 226). — \*IV, 521.
- $C_{17}H_{26}O_8Br_2$  1) Tetraäthylester d.  $\alpha\epsilon$ -Dibrompentan- $\alpha\alpha\epsilon\epsilon$ -Tetracarbonsäure. Sm. 38–40°; Sd. 251–253°<sub>12</sub> (Soc. 59, 827; B. 35, 2072 C. 1902 [2] 218). — I, 861.
- $C_{17}H_{26}O_{10}S$  1) Tetraäthylester d. 2,6-Dioxytetrathiopyran-2,3,5,6-Tetracarbonsäure. Sm. 118° (Bl. [4] 1, 25 C. 1907 [1] 825).
- $C_{17}H_{26}N_2S$  1)  $\alpha$ -Phenyl- $\beta$ -[2-Methyl-5-Isopropylhexahydrophenyl]thioharnstoff. Sm. 117° (A. 277, 139). — IV, 43.
- 2) s-Phenylcampholythioharnstoff. Sm. 117–118° (G. 22 [2] 112). — II, 393.
- 3) s-Phenyl-d-Menthylthioharnstoff. Sm. 178–179° (A. 276, 311). — IV, 43.
- 4) s-Phenyl-l-Menthylthioharnstoff. Sm. 135° (A. 276, 305). — IV, 42.
- 5) s-Phenylthujamenthylthioharnstoff. Sm. 112° (A. 323, 355 C. 1902 [2] 1205). — \*IV, 37.
- $C_{17}H_{27}ON$  C 73,2 — H 10,3 — O 6,1 — N 5,4 — M. G. 261.
- 1) 3-Oxy-2-Phenylamidomethyl-4-Isopropyl-1-Methylhexahydrobenzol. Sd. 247–248°<sub>20</sub> (C. 1901 [1] 1025; 1904 [2] 1044).
- 2) 3-Oxy-2-[ $\alpha$ -Amidobenzyl]-4-Isopropyl-1-Methylhexahydrobenzol. Sd. 202–206°<sub>15</sub> (B. 37, 235 C. 1904 [1] 725).
- 3) Carvakryl- $\alpha$ -Methylpiperidid. Sm. 151°. (2HCl, PtCl<sub>4</sub>) (H. 44, 282 C. 1905 [1] 1110).
- 4) Thymotin- $\alpha$ -Methylpiperidid. Sm. 118° (H. 44, 282 C. 1905 [1] 1110).
- 5) Methyl-o-Thymotinpiperidid. Sm. 144° (H. 44, 259 C. 1905 [1] 1108).
- 6) Diisoamylamid d. Benzolcarbonsäure. Sd. 300–319° (B. 39, 3806 C. 1907 [1] 106).
- 7) Phenylamid d. Dekan- $\alpha$ -Carbonsäure. Sm. 68° (64°) (Bl. [4] 1, 354 C. 1907 [2] 34; Soc. 93, 1037 C. 1908 [2] 503).
- 8) 4-Methylphenylamid d. Nonan- $\alpha$ -Carbonsäure. Sm. 80° (Soc. 93, 1037 C. 1908 [2] 503).
- 9) 4-Methylphenylamid d.  $\beta$ -Dimethylheptan- $\delta$ -Carbonsäure. Sm. 140 bis 141° (Soc. 73, 63). — \*II, 271.
- 10)  $\beta$ -Oktyl-2-Methylphenylamid d. Essigsäure. Sm. 81° (B. 18, 147). — II, 566.



- C<sub>17</sub>H<sub>27</sub>ON<sub>3</sub>** C 70,6 — H 9,3 — O 5,5 — N 14,5 — M. G. 289.  
 1)  $\beta$ -Phenylhydrazon- $\gamma$ -Oximidoundekan. Sm. 91—92° (*J. pr.* [2] 50, 376). — IV, 782.  
 2)  $\gamma$ -Phenylureido- $\alpha$ -[1-Piperidyl]pentan. Sm. 104° (*Bl.* [4] 3, 548 *C.* 1908 [1] 2086).
- C<sub>17</sub>H<sub>27</sub>O<sub>2</sub>N** C 73,6 — H 9,7 — O 11,6 — N 5,1 — M. G. 277.  
 1) 2-Methoxyphenyläther d. 1-[ $\epsilon$ -Oxyamyl]hexahydropyridin. Sd. 190°. HCl (D.R.P. 184968 *C.* 1907 [2] 862).  
 2) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ - $\epsilon$ -Dimethylhexan. HCl (*C. r.* 138, 767 *C.* 1904 [1] 1196; D.R.P. 169746 *C.* 1906 [1] 1585).  
 3) Benzoat d.  $\beta$ -Diäthylamido- $\delta$ -Oxy- $\beta$ -Methylpentan. HCl (D.R.P. 181287 *C.* 1907 [1] 1650).  
 4) Benzoylderivat d. Base C<sub>10</sub>H<sub>23</sub>ON. Sm. 109° (*A.* 324, 304 *C.* 1902 [2] 1507).  
 5) Phenylamidoformiat d. Oxydekan (aus Diisoamylen). Sm. 214° (*J. pr.* [2] 54, 461). — \*II, 179.  
 6) Phenylamid d.  $\alpha$ -Oxydekan- $\alpha$ -Carbonsäure. Sm. 80° (*Bl.* [4] 1, 356 *C.* 1907 [2] 34).  
 7) 4-Methylphenylamid d.  $\alpha$ -Oxynonan- $\alpha$ -Carbonsäure. Sm. 100° (*Bl.* [4] 1, 350 *C.* 1907 [2] 34).
- C<sub>17</sub>H<sub>27</sub>O<sub>2</sub>N<sub>3</sub>** C 66,9 — H 8,8 — O 10,5 — N 13,8 — M. G. 305.  
 1)  $\beta$ -[4-Nitrophenyl]hydrazonundekan. Sm. 90—91° (*C.* 1908 [1] 1260).  
 2) Semicarbazon d. Methylpseudojononhydrat (D.R.P. 150771 *C.* 1904 [1] 1307).  
 3) Semicarbazon d. isom. Methylpseudojononhydrat. Sm. 193° (D.R.P. 150771 *C.* 1904 [1] 1307).
- C<sub>17</sub>H<sub>27</sub>O<sub>3</sub>N** C 69,6 — H 9,2 — O 16,4 — N 4,8 — M. G. 293.  
 1) Diäthyläther d. N-Benzoyl- $\beta$ - $\beta$ -Dioxyäthylbutylamin. Fl. (*Ar.* 246, 312 *C.* 1908 [2] 229).  
 2) Äthylester d. Santonaminsäure. Sm. 140—141° (*G.* 22 [1] 191). — II, 1789.  
 3) 2-Methoxyphenylester d. Diisobutylamidoessigsäure. Fl. (2HCl, PtCl<sub>2</sub>), (HCl, AuCl<sub>3</sub>), HJ (*C.* 1900 [1] 271; *Ar.* 240, 638 *C.* 1903 [1] 24). — \*II, 549.
- C<sub>17</sub>H<sub>27</sub>O<sub>3</sub>N<sub>3</sub>** C 63,5 — H 8,4 — O 15,0 — N 13,1 — M. G. 321.  
 1)  $\alpha$ - $\alpha$ -Diamyl- $\beta$ -[2-Nitrophenyl]harnstoff. Fl. (*Am.* 19, 317).  
 2) Äthyläther d. 4-Acetylamido-1-Oxy- $\beta$ -Diäthylamidoacetylamido-methylbenzol. Sm. 122° (*A.* 343, 302 *C.* 1906 [1] 928).
- C<sub>17</sub>H<sub>27</sub>O<sub>4</sub>N** C 66,0 — H 8,7 — O 20,7 — N 4,5 — M. G. 309.  
 1) Diäthylester d. Isobutyldihydrolutidindicarbonsäure. Sm. 100° (*A.* 231, 56). — IV, 95.
- C<sub>17</sub>H<sub>27</sub>O<sub>5</sub>N** C 62,8 — H 8,3 — O 24,6 — N 4,3 — M. G. 325.  
 1) Diäthylester d. 1-Oximido-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 108—109° (*A.* 288, 333). — \*I, 389.
- C<sub>17</sub>H<sub>27</sub>O<sub>6</sub>N** C 59,8 — H 7,9 — O 28,2 — N 4,1 — M. G. 341.  
 1) Triäthylester d.  $\epsilon$ -Cyan- $\beta$ -Methylhexan- $\beta$ - $\epsilon$ -Tricarbonsäure. Sd. 235—240°<sub>20</sub> (*Bl.* [3] 33, 896 *C.* 1905 [2] 755).
- C<sub>17</sub>H<sub>27</sub>O<sub>7</sub>N** C 57,1 — H 7,5 — O 31,4 — N 3,9 — M. G. 357.  
 1)  $\alpha$ -Diäthylmonamid d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure- $\alpha\gamma\gamma$ -Triäthylester? Fl. (*A.* 285, 101). — \*I, 793.
- C<sub>17</sub>H<sub>27</sub>O<sub>7</sub>N<sub>3</sub>** C 53,0 — H 7,0 — O 29,1 — N 10,9 — M. G. 385.  
 1) Triäthylester d. 3-Semicarbazon-1-Methyl-2-Äthyl-R-Tetramethylen-1,2,4-Tricarbonsäure. Fl. (*B.* 33, 3753).
- C<sub>17</sub>H<sub>27</sub>O<sub>8</sub>Cl** 1) Tetraäthylester d.  $\gamma$ -Chlorpentan- $\beta\beta\delta\delta$ -Tetracarbonsäure. Sd. 171 bis 173°<sub>12</sub> (*J. pr.* [2] 74, 444 *C.* 1907 [1] 230).
- C<sub>17</sub>H<sub>27</sub>N<sub>2</sub>P** 1) 4-Methylphenyldi[1-Piperidyl]phosphin. Sm. 80° (*B.* 31, 1046). — IV, 1682.
- C<sub>17</sub>H<sub>27</sub>N<sub>3</sub>S** 1)  $\alpha$ -1-Menthylamido- $\beta$ -Phenylthioharnstoff. Sm. 160° (*C.* 1900 [1] 654; *J. pr.* [2] 64, 122). — \*IV, 302.  
 2) Verbindung (aus Phenylsenfö u. Isovaleraldehyd). Sm. 152—153° (*Soc.* 53, 417). — II, 445.
- C<sub>17</sub>H<sub>28</sub>ON<sub>2</sub>** C 73,9 — H 10,1 — O 5,8 — N 10,1 — M. G. 276.  
 1)  $\alpha\alpha$ -Di[ $\alpha$ -Methylbutyl]- $\beta$ -Phenylharnstoff. Sm. 134° (*C. r.* 141, 115 *C.* 1905 [2] 540).

- C<sub>17</sub>H<sub>28</sub>O<sub>2</sub>N<sub>2</sub>** C 69,9 — H 9,6 — O 10,9 — N 9,6 — M. G. 292.  
 1) **Hämatopyrrolidincarbonsäure.** Pikrat (A. 366, 267 C. 1909 [2] 218).  
 2) **4-Amidobenzoat d.  $\beta$ -Diisobutylamido- $\alpha$ -Oxyäthan.** Sm. 84—85°. HCl (D.R.P. 179627 C. 1907 [1] 1364).  
 3) **4-Amidobenzoat d.  $\gamma$ -Oxy- $\gamma$ -Piperidylmethylpentan.** Fl. (D.R.P. 179627 C. 1907 [1] 1364).  
 4) **4-Diäthylamidobenzoat d.  $\beta$ -Diäthylamido- $\alpha$ -Oxyäthan.** HCl (D.R.P. 180291 C. 1907 [1] 1365).  
 5) **Diäthylamid d.  $\alpha$ -Diäthylamido- $\beta$ -Oxy- $\beta$ -Phenylpropionsäure.** Sm. 92—93° (Bl. [4] 1, 557 C. 1907 [2] 405).
- C<sub>17</sub>H<sub>28</sub>O<sub>3</sub>N<sub>2</sub>** C 66,2 — H 9,1 — O 15,6 — N 9,1 — M. G. 308.  
 1) **Diäthyläther d.  $\alpha$ -[ $\beta$ -Dioxyäthyl]- $\alpha$ -Butyl- $\beta$ -Phenylharnstoff.** Sm. 50—52° (Ar. 246, 312 C. 1908 [2] 229).
- C<sub>17</sub>H<sub>28</sub>O<sub>4</sub>N<sub>2</sub>** C 63,0 — H 8,6 — O 19,7 — N 8,6 — M. G. 324.  
 1) **Amylphenylhydrazon d. Rhamnose.** Sm. 99° (R. 15, 226). — \*IV, 518.
- C<sub>17</sub>H<sub>28</sub>O<sub>4</sub>S<sub>2</sub>** 1)  **$\alpha\alpha$ -Di[Isoamylsulfon]- $\alpha$ -Phenylmethan.** Sm. 99—100° (B. 36, 298 C. 1903 [1] 499).
- C<sub>17</sub>H<sub>28</sub>O<sub>5</sub>N<sub>2</sub>** C 60,0 — H 8,2 — O 23,5 — N 8,2 — M. G. 340.  
 1) **d- $\beta$ -[ $\alpha$ -Methylbutyl]- $\beta$ -Phenylhydrazon d. d-Galaktose.** Sm. 127 bis 128° (B. 38, 872 C. 1905 [1] 814).  
 2) **d- $\beta$ -[ $\alpha$ -Methylbutyl]- $\beta$ -Phenylhydrazon d. l-Galaktose** (B. 38, 873 C. 1905 [1] 814).  
 3) **d- $\beta$ -[ $\alpha$ -Methylbutyl]- $\beta$ -Phenylhydrazon d. r-Galaktose** (B. 38, 872 C. 1905 [1] 814).  
 4) **Amylphenylhydrazon d. Glykose.** Sm. 128° (R. 15, 226). — \*IV, 522.  
 5) **Amylphenylhydrazon d. Mannose.** Sm. 134° (R. 15, 226). — \*IV, 523.
- C<sub>17</sub>H<sub>28</sub>O<sub>6</sub>S<sub>3</sub>** 1)  **$\alpha\alpha\delta$ -Triäthylsulfon- $\alpha$ -Phenylpentan.** Sm. 163° (B. 37, 508 C. 1904 [1] 883).
- C<sub>17</sub>H<sub>28</sub>NJ** 1) **Jodäthylat d. d-2-Propyl-1-Benzylhexahydropyridin** (J. d. N-Benzylconiin). Sm. 179° (B. 37, 3631 C. 1904 [2] 1510; B. 38, 600 C. 1905 [1] 751).  
 2) **isom. Jodäthylat d. d-2-Propyl-1-Benzylhexahydropyridin.** Sm. 208° (B. 37, 3632 C. 1904 [2] 1510; B. 38, 600 C. 1905 [1] 752).
- C<sub>17</sub>H<sub>28</sub>N<sub>2</sub>S** 1)  **$\alpha\alpha$ -Diisoamyl- $\beta$ -Phenylthioharnstoff.** Sm. 72—72,3° (B. 26, 1685). — II, 392.
- C<sub>17</sub>H<sub>29</sub>ON** C 77,6 — H 11,0 — O 6,1 — N 5,3 — M. G. 263.  
 1) **3-Oxy- $\beta$ -Dipropylamidomethyl-1-Methyl-4-Isopropylbenzol.** Sm. 76° (C. 1906 [1] 256).
- C<sub>17</sub>H<sub>29</sub>O<sub>3</sub>N** C 69,2 — H 9,8 — O 16,3 — N 4,7 — M. G. 295.  
 1)  **$\beta$ -Diäthylamidoäthylester d. Camphocarbonsäure.** Fl. HCl (A. 361, 158 C. 1908 [2] 399).
- C<sub>17</sub>H<sub>29</sub>O<sub>3</sub>N<sub>3</sub>** C 63,2 — H 9,0 — O 14,9 — N 12,9 — M. G. 323.  
 1) **Semicarbazon d. Cedrenketosäuremethylester.** Sm. 180° (B. 40, 3524 C. 1907 [2] 1694).
- C<sub>17</sub>H<sub>29</sub>O<sub>4</sub>N** C 65,6 — H 9,3 — O 20,6 — N 4,5 — M. G. 311.  
 1) **Diäthylester d.  $\delta$ -Cyan- $\beta\eta$ -Dimethyloktan- $\delta\epsilon$ -Dicarbonsäure.** Sd. 187—189°<sub>30</sub> (Soc. 77, 1300).
- C<sub>17</sub>H<sub>29</sub>O<sub>6</sub>N** C 59,5 — H 8,5 — O 28,0 — N 4,0 — M. G. 343.  
 1) **Triäthylester d.  $\beta$ -Piperidylpropan- $\alpha\beta\gamma$ -Tricarbonsäure.** Sd. 201 bis 202°<sub>10</sub>. HCl (Soc. 73, 725). — \*IV, 17.
- C<sub>17</sub>H<sub>29</sub>N<sub>3</sub>S** 1)  **$\alpha$ -Phenylamido- $\beta\beta$ -Diisoamylthioharnstoff.** Sm. 99—100° (B. 30, 848). — IV, 678.
- C<sub>17</sub>H<sub>30</sub>O<sub>2</sub>N<sub>6</sub>** C 58,3 — H 8,6 — O 9,1 — N 24,0 — M. G. 350.  
 1) **Disemicarbazon d. Ketoaldehyd C<sub>15</sub>H<sub>24</sub>O<sub>3</sub>** (aus Cedren). Sm. 234° (B. 40, 3523 C. 1907 [2] 1694).
- C<sub>17</sub>H<sub>31</sub>ON** C 77,0 — H 11,7 — O 6,0 — N 5,3 — M. G. 265.  
 1) **Amid d.  $\alpha$ -Hexadekin- $\alpha$ -Carbonsäure.** Sm. 76—77° (B. 33, 3589).
- C<sub>17</sub>H<sub>31</sub>O<sub>2</sub>N** C 72,6 — H 11,0 — O 11,4 — N 5,0 — M. G. 281.  
 1)  **$\alpha$ -Cyanpalmitinsäure.** Sm. 75—76° (B. 24, 989). — I, 1220.
- C<sub>17</sub>H<sub>31</sub>O<sub>5</sub>N** C 62,0 — H 9,4 — O 24,3 — N 4,2 — M. G. 329.  
 1)  **$\gamma$ -Oximidopentadekan- $\alpha\alpha$ -Dicarbonsäure.** Sm. 83—84° (Soc. 91, 573 C. 1907 [2] 72).

- $C_{17}H_{31}O_5N_3$  C 54,7 — H 8,3 — O 25,7 — N 11,2 — M. G. 373.  
 1) Äthylaminderivat d. 2,6-Diketo-1-Äthyl-1,2,5,6-Tetrahydropyridin-3,5-Dicarbonsäurediäthylester (A. 285, 89).
- $C_{17}H_{31}N_2J$  1) Jodäthylat d. Spartein. Zers. bei 230°. HJ (A. 235, 374; C. r. 141, 49 C. 1905 [2] 495; Bl. [3] 33, 1258 C. 1906 [1] 245; Bl. [3] 33, 1261 C. 1906 [1] 245). — III, 932.  
 2) isom. Jodäthylat d. Spartein. HJ (C. r. 141, 49 C. 1905 [2] 495; Bl. [3] 33, 1259 C. 1906 [1] 245).
- $C_{17}H_{33}O_3N_2$  C 65,4 — H 10,2 — O 15,4 — N 9,0 — M. G. 312.  
 1) 1- $\delta$ -[1- $\beta$ -Menthylureido]- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 173° (C. 1908 [2] 2007).  
 2) r- $\delta$ -[1- $\beta$ -Menthylureido]- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 144° (C. 1908 [2] 2007).
- $C_{17}H_{33}O_4N_4$  C 57,3 — H 9,0 — O 18,0 — N 15,7 — M. G. 356.  
 1) Di[uns-Diäthylureid] d. Pentan- $\gamma\gamma$ -Dicarbonsäure. Sm. 125° (A. 359, 182 C. 1908 [1] 1538).  
 2) Diäthylester d. s-Diisoamylharnstoff- $\alpha\alpha'$ -Dicarbonsäure. Sd. 180 bis 190°<sub>18</sub> (C. r. 140, 506 C. 1905 [1] 863).  
 2) sym. Ureid d.  $\delta$ -Oxyheptan- $\delta$ -Carbonsäure. Sm. 39°; Sd. 186—188°<sub>25</sub>. Mg (Am. 40, 292 C. 1908 [2] 1773).
- $C_{17}H_{33}N_2Cl_2$  1) Bischlormethylat d. Spartein. 2 + PtCl<sub>4</sub> (Ar. 244, 74 C. 1906 [1] 1358).  
 2) Chloräthylat d. Hydrochlorspartein. + PtCl<sub>4</sub> (A. 125, 76). — III, 932.
- $C_{17}H_{33}N_2J_2$  1) Bisjodmethylat d. Spartein. + C<sub>2</sub>H<sub>6</sub>O (Bl. [3] 33, 1243 C. 1906 [1] 245).  
 2) Jodäthylat d. Hydrojodspartein (A. 125, 75; 235, 371). — III, 932.
- $C_{17}H_{33}ON$  C 76,4 — H 12,3 — O 6,1 — N 5,2 — M. G. 267.  
 1) Nitril d.  $\alpha$ -Oxyhexadekan- $\alpha$ -Carbonsäure. Sm. 60—61° (Soc. 87, 1893 C. 1906 [1] 652).
- $C_{17}H_{33}ON_3$  C 69,2 — H 11,2 — O 5,4 — N 14,2 — M. G. 295.  
 1) Semicarbazon d. Muskon. Sm. 134° (J. pr. [2] 73, 492 C. 1906 [2] 126).
- $C_{17}H_{33}O_2N_3$  C 65,6 — H 10,6 — O 10,3 — N 13,5 — M. G. 311.  
 1)  $\delta$ -Nitro- $\delta$ -Di[1-Piperidylmethyl]- $\beta$ -Methylbutan. Sm. 40° (C. 1902 [1] 401). — \*IV, 9.
- $C_{17}H_{33}O_2Br$  1)  $\alpha$ -Bromhexadekan- $\alpha$ -Carbonsäure. Sm. 52,5° (Soc. 85, 838 C. 1904 [2] 509).  
 2) Bromdaturinsäure. Sm. 35—36° (B. 26 [2] 288). — \*I, 178.
- $C_{17}H_{33}O_3N$  C 68,2 — H 11,0 — O 16,0 — N 4,7 — M. G. 299.  
 1) Rocellaminsäure (A. 117, 341). — I, 690.  
 2) Monamid d. Pentadekan- $\alpha\alpha$ -Dicarbonsäure (B. 24, 990). — I, 1388.
- $C_{17}H_{33}NS$  1) Cetylrhodanid. Sm. 15—15,5°; Sd. 242—249°<sub>30</sub> (C. 1901 [2] 275).
- $C_{17}H_{34}OS_2$  1) Oxydithioameisencetyläthersäure (Cetylaxthogensäure). K (A. 44, 319, 320). — I, 886.
- $C_{17}H_{34}O_2S_2$  1) Äthylester d.  $\gamma\gamma$ -Dimerkaptovalerandiisoamyläthersäure. Fl. (B. 34, 2654).  
 2) Äthylester d.  $\beta\beta$ -Dimerkapt- $\alpha$ -Methylbutterdiisoamyläthersäure. Fl. (B. 34, 2662).
- $C_{17}H_{34}O_6S_2$  1) Äthylester d.  $\gamma\gamma$ -Di[Isoamylsulfon]valeriansäure. Sm. 46° (B. 34, 2654).  
 2) Äthylester d.  $\beta\beta$ -Di[Isoamylsulfon]- $\alpha$ -Methylbuttersäure. Fl. (B. 34, 2663).
- $C_{17}H_{34}N_3Cl$  1) Chlormethylat d.  $\alpha$ -Isoamylcyanamido- $\delta$ -[1-Piperidyl]pentan. 2 + PtCl<sub>4</sub> (B. 40, 3929 C. 1907 [2] 1525).
- $C_{17}H_{35}ON$  C 75,8 — H 13,0 — O 5,9 — N 6,2 — M. G. 269.  
 1)  $\alpha$ -Oximidoheptadekan. Sm. 89,5° (Soc. 85, 834 C. 1904 [2] 509).  
 2)  $\epsilon$ -Oximidoheptadekan (Oxim d. Dioktylketon). Sm. 11—12° (Soc. 63, 457). — \*I, 550.  
 3) Amid d. Margarinsäure. Sm. 106° (Soc. 85, 837 C. 1904 [2] 509).
- $C_{17}H_{35}ON_3$  C 68,7 — H 11,8 — O 5,4 — N 14,1 — M. G. 297.  
 1)  $\alpha$ -Semicarbazonhexadekan. Sm. 107° (Soc. 87, 1892 C. 1906 [1] 652).



- $C_{17}H_{35}O_2N$  C 71,6 — H 12,3 — O 11,2 — N 4,9 — M. G. 285.  
 1) Sphingosin. HCl,  $HNO_3$ ,  $2 + H_2SO_4$ ,  $+ HgNO_3$ , Pikrat (*J. pr.* [2] 25, 24; [2] 53, 73; [2] 60, 493; *Ar.* 244, 80 *C.* 1906 [2] 138). — III, 574; \*II, 433.  
 2) Methylester d. Pentadekylamidoameisensäure. Sm. 61—62° (*B.* 30, 900; *Am.* 22, 26). — \*I, 713.  
 3) Amid d.  $\alpha$ -Oxyhexadekan- $\alpha$ -Carbonsäure. Sm. 148,5° (*Soc.* 87, 1893 *C.* 1906 [1] 652).
- $C_{17}H_{35}O_2N_3$  C 65,2 — H 11,2 — O 10,2 — N 13,4 — M. G. 313.  
 1)  $\alpha$ -Guanidylpalmitinsäure. Sm. 173°. HCl,  $HNO_3$  (*B.* 41, 4391 *C.* 1909 [1] 442).
- $C_{17}H_{36}O_2N_4$  C 62,2 — H 11,0 — O 9,7 — N 17,1 — M. G. 328.  
 1)  $\alpha\alpha$ -Di[ $\beta\beta$ -Diäthylureido]heptan. Sm. 95° (*R.* 8, 242). — I, 1314.  
 2) Di[Diäthylamidomethylamid] d. Pentan- $\gamma\gamma$ -Dicarbonsäure. Sm. 86° (*A.* 343, 274 *C.* 1906 [1] 926).
- $C_{17}H_{36}O_8N_6$  C 54,8 — H 9,7 — O 12,9 — N 22,6 — M. G. 372.  
 1) Diönanthotriureid. Sm. 162° (*A.* 151, 189). — I, 1314.
- $C_{17}H_{36}O_4N_4$  C 56,7 — H 10,0 — O 17,7 — N 15,6 — M. G. 360.  
 1) Verbindung (aus d.  $\alpha$ -Amidocaprylsäure) (*A.* 177, 131).
- $C_{17}H_{36}N_2J_2$  1) Di[Jodmethylat] d.  $\alpha\gamma$ -Di[1-Methylpiperidyl]methan (*B.* 21, 3102). — IV, 493.
- $C_{17}H_{38}O_4Si$  1) Kieselsäureäthyltriisoamylester. Sd. 280—285° (*A. ch.* [4] 9, 19). — I, 347.
- $C_{17}H_{38}JAs$  1) Äthyltriisoamylarsoniumjodid. Sm. noch nicht bei 250° (*Am.* 33, 146 *C.* 1905 [1] 801).
- $C_{17}H_{40}O_{13}N_4$  C 40,2 — H 7,9 — O 40,9 — N 11,0 — M. G. 508.  
 1) Verbindung (aus d. Nitril d. Methylenamidoessigsäure). 4HCl (*B.* 36, 1509 *C.* 1903 [1] 1302).

### $C_{17}$ -Gruppe mit vier Elementen.

- $C_{17}H_8ONBr_3$  1) 2,4,5-Tribrom-2-Phenyl- $\alpha\alpha'$ -Naphtoxazol. Sm. 234° (*B.* 39, 3334 *C.* 1906 [2] 1616).
- $C_{17}H_8O_4N_2Br_2$  1) 4,6-Dibrom- $\alpha\beta$ -Naphtophenazin-2-Carbonsäure (*A.* 293, 136). — IV, 1065.
- $C_{17}H_8O_5N_2Br_2$  1) Dibromnaphteurhodolcarbonsäure (*A.* 293, 139). — IV, 1065.
- $C_{17}H_8O_5N_2Br_2$  1) 2-Naphtylester d. 3,5-Dibrom-4,6-Dinitro-2-Oxybenzol-1-Carbonsäure. Sm. 248—262° (*B.* 26, 1469). — II, 1512.
- $C_{17}H_9O_4NS$  1) Alizarinrön (*B.* 24, 2299; *J. pr.* [2] 44, 106). — IV, 462.
- $C_{17}H_9O_5N_2Br$  1) *p*-Brom-*p*-Dinitrophenyl-1-Naphtylketon. Sm. bei 90° u. Zers. (*J. pr.* [2] 35, 509). — III, 254.
- $C_{17}H_9O_8NS$  1) Trioxyanthrachinolinchinonsulfonsäure (Alizarinrön). K (*J. pr.* [2] 44, 105; D.R.P. 72204; *A.* 276, 32). — IV, 462; \*IV, 279.
- $C_{17}H_{10}O_2NBr$  1) Verbindung (aus 4-Brom-1-Methylacetyl-amido-9,10-Anthrachinon) (D.R.P. 192201 *C.* 1908 [1] 571).
- $C_{17}H_{10}O_2N_2Br_2$  1) Dibrommethylindigo (D.R.P. 149940 *C.* 1904 [1] 1046).
- $C_{17}H_{10}O_4N_2Br_2$  1) Methylbromisatoid. Sm. 230—231° (*B.* 15, 2095). — II, 1606.
- $C_{17}H_{10}O_5N_2Cl_2$  1)  $\gamma$ -Keto- $\alpha\delta$ -Di[5-Chlor-2-Nitrophenyl]- $\alpha\delta$ -Pentadien (*A.* 262, 143). — III, 252.
- $C_{17}H_{10}O_6N_2S$  1) Methylenindigosulfonsäure (*C.* 1903 [2] 835).
- $C_{17}H_{10}O_7N_2S$  1) 5-Oxy- $\beta$ -[3-Nitrophenyl]- $\beta$ -Naphtoxazol-7-Sulfonsäure (D.R.P. 165102 *C.* 1905 [2] 1761).
- $C_{17}H_{10}O_8N_2Br_4$  1) Diacetat d. 2,5,2',5' [oder 5,6,5',6']-Tetrabrom-3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 167° (*A.* 333, 367 *C.* 1904 [2] 1117).
- $C_{17}H_{10}O_9N_2Br_2$  1) Diacetat d. 5,5'-Dibrom-3,3'-Dinitro-4,4'-Dioxydiphenylketon. Sm. 165° (*A.* 362, 228 *C.* 1908 [2] 943).
- $C_{17}H_{10}N_2ClBr$  1) 6-Chlor-8-Brom-11-Methyl- $\beta\beta$ -Naphtophenazin. Zers. bei 270° (*B.* 42, 3385 *C.* 1909 [2] 1650).
- $C_{17}H_{11}ONBr_2$  1) 3,5-Dibrom-4-Oxy-1-[1-Naphtylimido]methylbenzol. Sm. 146° (*B.* 28, 3236). — III, 85.
- $C_{17}H_{11}ONJ_2$  1) 1-[3,5-Dijod-4-Oxybenzyliden]amidonaphtalin. Sm. 156° (*B.* 29, 2305). — \*III, 61.  
 2) 2-[3,5-Dijod-4-Oxybenzyliden]amidonaphtalin. Sm. 165° (*B.* 29, 2305). — \*III, 61.

- C<sub>17</sub>H<sub>11</sub>ON<sub>2</sub>Cl** 1) Methylchlornaphteurhodon (*Soc.* 63, 1386). — IV, 1063.  
 2) 5,7-Anhydro-9-Chlor-5-Oxy- $\alpha$ - $\beta$ -Naphtophenazin-7-Methylhydroxyd (*B.* 34, 1100). — \*IV, 711.  
 3) 5,12-Anhydro-10-Chlor-5-Oxy- $\alpha$ - $\beta$ -Naphtophenazin-12-Methylhydroxyd (*B.* 34, 1101).
- C<sub>17</sub>H<sub>11</sub>OCIS** 1) Benzoat d. 4-Chlor-1-Merkaptonaphtalin. Sm. 111—112° (*C. r.* 138, 983 *C.* 1904 [1] 1413).
- C<sub>17</sub>H<sub>11</sub>OBrS** 1) Benzoat d. 4-Brom-1-Merkaptonaphtalin. Sm. 120—121° (*C. r.* 138, 983 *C.* 1904 [1] 1413).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) 1-Chlor-2-[2-Nitrobenzyliden]amidonaphtalin. Sm. 142° (*Soc.* 77, 1218). — \*III, 23.  
 2) 1-Chlor-2-[4-Nitrobenzyliden]amidonaphtalin. Sm. 151° (*Soc.* 77, 1218). — \*III, 23.  
 3) 1-[6-Chlor-3-Nitrobenzyliden]amidonaphtalin. Sm. 176° (*M.* 25, 371 *C.* 1904 [2] 322).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) 1-Brom-2-[2-Nitrobenzyliden]amidonaphtalin. Sm. 137—138° (*Soc.* 77, 1218). — \*III, 24.  
 2) 1-Brom-2-[4-Nitrobenzyliden]amidonaphtalin. Sm. 154—155° (*Soc.* 77, 1218). — \*III, 24.  
 3) *p*-Brom- $\alpha$ -[2-Nitrophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 274° (*B.* 36, 1667 *C.* 1903 [2] 49). — \*IV, 273.  
 4) *p*-Brom- $\alpha$ -[2-Nitrophenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 243° (*B.* 36, 1670 *C.* 1903 [2] 49). — \*IV, 273.  
 5) Brommethyldingo (D.R.P. 149940 *C.* 1904 [1] 1046).
- C<sub>17</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>Br<sub>2</sub>** 1) Phenylamid d. 3,*p*-Dibrom-4-Oxy-1-Naphtylazoameisensäure. Sm. 250° u. Zers. (*A.* 334, 200 *C.* 1904 [2] 835).
- C<sub>17</sub>H<sub>11</sub>O<sub>3</sub>NS<sub>2</sub>** 1) 3,4-Methylenäther d. 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 193° (*M.* 24, 511 *C.* 1903 [2] 836).
- C<sub>17</sub>H<sub>11</sub>O<sub>3</sub>N<sub>3</sub>Cl** 1) 5-Keto-3-Methyl-4-[3,6-Dichlor-2-Nitrobenzyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 139° (*B.* 39, 378 *C.* 1906 [1] 856).
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>NS** 1) Methylenäther d. 2,4-Diketo-5-[3,4-Dioxybenzyliden]-3-Phenyltetrahydrothiazol. Sm. 207—208° (*Soc.* 95, 120 *C.* 1909 [1] 1340).
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>NS<sub>2</sub>** 1) 5-Oxy-1-Phenyl- $\alpha$ -Naphtthiazol-7-Sulfonsäure (D.R.P. 165126 *C.* 1905 [2] 1755).  
 2) 8-Oxy-1-Phenyl- $\alpha$ -Naphtthiazol-6-Sulfonsäure (D.R.P. 165126 *C.* 1905 [2] 1755).
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>N<sub>2</sub>Cl** 1) 3-Chlor-2-[*p*-Nitro-4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 230° (*B.* 15, 487). — III, 378.  
 2) 3-Chlor-2-[*p*-Nitro-4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 236—240° (*B.* 15, 487). — III, 378.
- C<sub>17</sub>H<sub>11</sub>O<sub>4</sub>BrS** 1) Phenyl-*p*-Brom-1-Naphtylketon-*p*-Sulfonsäure. Sm. 116°. Pb (*B.* 19, 1967). — III, 254.
- C<sub>17</sub>H<sub>11</sub>O<sub>5</sub>N<sub>3</sub>S** 1) 6-Oxy-2-[3-Nitrophenyl]- $\alpha$ [oder  $\beta$ ]-Naphtimidazol-8-Sulfonsäure (D.R.P. 172319 *C.* 1906 [2] 644).  
 2) 6-Oxy-2-[3-Nitrophenyl]- $\beta$ -Naphtimidazol-8-Sulfonsäure (D.R.P. 193350 *C.* 1908 [1] 999).  
 3) 9-Oxy-2-[3-Nitrophenyl]- $\beta$ -Naphtimidazol-5-Sulfonsäure (D.R.P. 193350 *C.* 1908 [1] 1000).
- C<sub>17</sub>H<sub>11</sub>O<sub>5</sub>N<sub>3</sub>S<sub>2</sub>** 1) 2-[3-Nitrophenyl]- $\alpha$ [oder  $\beta$ ]-Naphtimidazol-6,8-Disulfonsäure (D.R.P. 167139 *C.* 1906 [1] 797).
- C<sub>17</sub>H<sub>11</sub>O<sub>5</sub>N<sub>3</sub>S<sub>2</sub>** 1) 9-Oxy-2-[3-Nitrophenyl]- $\beta$ -Naphtimidazol-4,7-Disulfonsäure (D.R.P. 193350 *C.* 1908 [1] 1000).
- C<sub>17</sub>H<sub>12</sub>ONCl** 1) 1-Chlor-2-[2-Oxybenzyliden]amidonaphtalin. Sm. 152—153° (*Soc.* 77, 1218). — \*III, 52.  
 2) 1-Chlor-2-[4-Oxybenzyliden]amidonaphtalin. Sm. 191° (*Soc.* 77, 1218). — \*III, 61.  
 3) Chlorid d. Phenyl-2-Naphtylamidoameisensäure. Sm. 101—102° (*B.* 23, 425, 811, 1540). — II, 615.
- C<sub>17</sub>H<sub>12</sub>ONBr** 1) 1-Brom-2-[2-Oxybenzyliden]amidonaphtalin. Sm. 144—145° (*A.* 274, 257; *Soc.* 77, 1216). — III, 73; \*III, 52.  
 2) 1-Brom-2-[4-Oxybenzyliden]amidonaphtalin. Sm. 189—190° (*Soc.* 77, 1216). — \*III, 61.

- C<sub>17</sub>H<sub>12</sub>ONBr** 3) 3-Brom-4-Oxy-1-Phenylimidomethylnaphtalin. Sm. 180° u. Zers. (A. 357, 332 C. 1908 [1] 354).
- 4)  $\alpha$ -Oximido-2-Bromphenyl-1-Naphtylmethan. Sm. 165° (B. 28, 1872; M. 16, 210). — III, 254.
- C<sub>17</sub>H<sub>12</sub>ONJ** 1) Jodmethylat d. Fluorennonchinolin + H<sub>2</sub>O. Zers. oberhalb 240° (B. 35, 3282 C. 1902 [2] 1261). — \*IV, 272.
- C<sub>17</sub>H<sub>12</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) 3,4-Dichlor-5-Phenylimido-2-Keto-1-[4-Methylphenyl]-2,5-Dihydropyrrol (Dichlormalein-p-Toluilanil). Sm. 141° (A. 295, 51). — \*II, 280.
- C<sub>17</sub>H<sub>12</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) Mono-2-Methylphenylhydrazon d.  $\beta$ -Dibrom-1,2-Naphtochinon. Sm. 254° (B. 19, 2492). — IV, 804.
- 2) Mono-4-Methylphenylhydrazon d.  $\beta$ -Dibrom-1,2-Naphtochinon. Sm. 136° (B. 19, 2492). — IV, 810.
- 3)  $\beta$ -Dibrom-2-Oxy-1-[4-Methylphenylazo]naphtalin. Sm. 190° (B. 19, 2490). — IV, 1436.
- 4) 2-Oxy-1-[2,6-Dibrom-4-Methylphenylazo]naphtalin. Sm. 141° (Soc. 83, 812 C. 1903 [2] 426). — \*IV, 1045.
- C<sub>17</sub>H<sub>12</sub>ON<sub>3</sub>Cl** 1) 4-Benzoylamido-1-Diazonaphtalinchlorid. Sm. 140—143° u. Zers. 2 + PtCl<sub>4</sub> (Soc. 91, 1317 C. 1907 [2] 1075).
- 2) Verbindung (aus Chinolin u.  $\alpha$ -Oximido- $\alpha$ -[2-Chlorphenyl]essigsäurenitril). Sm. 76° (J. pr. [2] 66, 378 C. 1902 [2] 1503).
- 3) Verbindung (aus Chinolin u.  $\alpha$ -Oximido- $\alpha$ -[4-Chlorphenyl]essigsäurenitril). Sm. 111° (J. pr. [2] 66, 374 C. 1902 [2] 1502).
- C<sub>17</sub>H<sub>12</sub>ON<sub>3</sub>Br** 1) 4-Benzoylamido-1-Diazonaphtalinbromid. Sm. 148—149° (Soc. 91, 1317 C. 1907 [2] 1075).
- C<sub>17</sub>H<sub>12</sub>OCl<sub>2</sub>Br<sub>4</sub>** 1)  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha\epsilon$ -Di[3-Chlorphenyl]pentan. Sm. 186° (C. 1899 [2] 188; J. pr. [2] 60, 156). — \*III, 174.
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>NCl** 1) 3-Chlor-2-[2-Methylphenyl]amido-1,4-Naphtochinon. Sm. 152° (B. 15, 487; A. 210, 191). — III, 377.
- 2)  $\beta$ -Chlor- $\beta$ -[2-Methylphenyl]amido-1,4-Naphtochinon. Sm. 175° (B. 18, 3075). — III, 378.
- 3) 3-Chlor-2-[4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 196° (B. 15, 487). — III, 378.
- 4)  $\beta$ -Chlor- $\beta$ -[4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 164° (B. 18, 3075). — III, 378.
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>NBr** 1) 3-Brom-2-Benzylamido-1,4-Naphtochinon. Sm. 109° (B. 32, 2102). — \*III, 277.
- 2) Nitril d. 4-Brom-3-[4-Methylphenyl]-3,4-Dihydro-2,1-Benzpyron-4-Carbonsäure. Zers. bei 173° (B. 40, 1207 C. 1907 [1] 1258).
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) 3,6-Dichlor-2,5-Diketo-1,4-Diphenyl-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 174—175° (J. pr. [2] 41, 85). — II, 469.
- 2) Acetat d. 5,7-Dichlor-8-Phenylamido-6-Oxychinolin. Sm. 170° (A. 264, 220). — IV, 278.
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1)  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Chinolyl]äthan. Sm. 164° u. Zers. (B. 38, 3720 C. 1908 [1] 54).
- 2)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2-Chinolyl]äthan. Sm. 276° (B. 22, 285). — IV, 454.
- 3) Nitril d.  $\gamma\delta$ -Dibrom- $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 179—180° (A. 336, 220 C. 1904 [2] 1733).
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>4</sub>** 1) 2,4-Diketo-5,5-Di[ $\beta$ -Dibrombenzyl]tetrahydroimidazol. Sm. 285° (G. 26 [1] 203). — \*II, 871.
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>N<sub>3</sub>Cl** 1) 7-Chlormethylat d. 10-Nitro- $\alpha\beta$ -Naphtophenazin (B. 31, 3095). — \*IV, 704.
- C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>N<sub>3</sub>Br** 1) Phenylamid d. 3-Brom-4-Oxy-1-Naphtylazoameisensäure. Sm. 250° u. Zers. (A. 334, 199 C. 1904 [2] 835).
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>NBr** 1) 4-Brom-1-Methylacetyl-amido-9,10-Anthrachinon (D. R. P. 192201 C. 1908 [1] 571).
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>Cl<sub>2</sub>** 1)  $\alpha\beta$ -Dichlor- $\gamma$ -Phenylbenzoylhydrazoncrotonsäure. Zers. bei 117° + C<sub>2</sub>H<sub>6</sub>O, Na (B. F. HALVORSEN, Dissert. Freiburg (Schweiz) 1901).
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>Cl<sub>4</sub>** 1) Acetat d. 2,4,5,6-Tetrachlor-3-Oxy-1-Acetylphenylhydrazon-methylbenzol. Sm. 148° (B. 34, 4124 C. 1902 [1] 190). — \*IV, 492.
- C<sub>17</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>Br<sub>2</sub>** 1) 2,5-Diketo-1[oder 3]-Acetyl-4,4-Di[4-Bromphenyl]tetrahydroimidazol. Sm. 230° (B. 41, 1388 C. 1908 [1] 2103).



- $C_{17}H_{12}O_3N_2Br_2$  2)  $\alpha\beta$ -Dibrom- $\gamma$ -Phenylbenzoylhydrazoncrotonsäure. Sm. 172° u. Zers. +  $C_2H_6O$ , Na (B. F. HALVORSEN, Dissert. Freiburg [Schweiz] 1901).
- $C_{17}H_{12}O_3N_2S$  1) 3,4-Methylenäther d. 2-Phenylimido-4-Keto-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 259—261° (C. 1903 [1] 1258). — \*IV, 621.
- 2) 1-[3-Amidophenyl]- $\alpha$ -Naphththiazol-6-Sulfonsäure. Na (D.R.P. 165126 C. 1905 [2] 1755).
- $C_{17}H_{12}O_3N_2S_2$  1) 2-Thiocarbonyl-4-Keto-3-Benzyl-5-[3-Nitrobenzyliden]tetrahydrothiazol. Sm. 183° (M. 29, 407 C. 1908 [2] 1039).
- 2) 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-[3-Nitrobenzyliden]tetrahydrothiazol. Sm. 193° (M. 26, 1209 C. 1905 [2] 1675).
- 3) 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-[4-Nitrobenzyliden]tetrahydrothiazol. Sm. 260° u. Zers. (M. 26, 1210 C. 1905 [2] 1675).
- 4) 2-Thiocarbonyl-4-Keto-3-[3-Methylphenyl]-5-[3-Nitrobenzyliden]tetrahydrothiazol. Sm. 234° (M. 29, 403 C. 1908 [2] 1038).
- 5) 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-[4-Nitrobenzyliden]tetrahydrothiazol. Sm. 201° (M. 26, 1213 C. 1905 [2] 1676).
- $C_{17}H_{12}O_3N_3Cl$  1) 5-Keto-3-Methyl-4-[4-Chlor-2-Nitrobenzyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 180° (B. 37, 1865 C. 1904 [1] 1600).
- $C_{17}H_{12}O_3N_3Br$  1) 4-Brom-2-Nitro-1-Benzylnitrosamidonaphtalin. Sm. 98° (Soc. 89, 1436 C. 1906 [2] 1615).
- $C_{17}H_{12}O_3N_4S$  1) 2-Naphtalinsulfonat d. 1-Oxy-5-Phenyl-1,2,3,4-Tetrazol. Sm. 101° u. Zers. (Soc. 95, 189 C. 1909 [1] 1316).
- $C_{17}H_{12}O_4NCl$  1) Äthylester d. 1-Chlor-9,10-Anthrachinon-2-Amidoameisensäure. Sm. 189—191° (D.R.P. 199758 C. 1908 [2] 462).
- $C_{17}H_{12}O_4NBr$  1) Lakton d.  $\gamma$ -Brom- $\delta$ -Oxy- $\delta$ -Phenyl- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 169—171° (B. 37, 1123 C. 1904 [1] 1210; A. 336, 219 C. 1904 [2] 1733).
- $C_{17}H_{12}O_4N_2S$  1) 6-Oxy-2-Phenyl- $\alpha$ -Naphtimidazol-8-Sulfonsäure (D.R.P. 172319 C. 1906 [2] 644; D.R.P. 181178 C. 1907 [1] 1084).
- $C_{17}H_{12}O_4N_2S_2$  1) 5-Oxy-1-[3-Amidophenyl]- $\alpha$ -Naphththiazol-7-Sulfonsäure (D.R.P. 165126 C. 1905 [2] 1755).
- $C_{17}H_{12}O_4N_3Cl$  1) 1'-Methyläther d. 2-Oxy-1-[2-Chlor-3-Nitro-4-Oxyphenylazo]-naphtalin. Sm. 249—250° (Soc. 81, 995 C. 1902 [2] 697). — \*IV, 1047.
- 2) 3-Methyläther d. 2-Oxy-1-[6-Chlor-4-Nitro-3-Oxyphenyl]azonaphtalin (D.R.P. 216417 C. 1909 [2] 2106).
- $C_{17}H_{12}O_4N_3Br$  1) Äthylester d. 4-Brom-2-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amidobenzol-1-Carbonsäure. Sm. 144° (B. 37, 1872 C. 1904 [1] 1601).
- $C_{17}H_{12}O_5N_2Br_4$  1)  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha\epsilon$ -Di[4-Nitrophenyl]pentan. Sm. 239° (B. 31, 1512). — \*III, 175.
- $C_{17}H_{12}O_5N_2S$  1) 5-Oxy-2-[3-Amidophenyl]- $\beta$ -Naphtoxazol-7-Sulfonsäure (D.R.P. 165102 C. 1905 [2] 1761).
- 2) 6-Oxy-2-[4-Oxyphenyl]- $\alpha$ -Naphtimidazol-8-Sulfonsäure (D.R.P. 181178 C. 1907 [1] 1084).
- $C_{17}H_{12}O_6N_2S$  1)  $\gamma$ -[3-Nitrobenzyliden]amidonaphtolsulfonsäure (D.R.P. 135335 C. 1902 [2] 1167).
- 2)  $\gamma$ -[4-Nitrobenzyliden]amidonaphtolsulfonsäure (D.R.P. 135335 C. 1902 [2] 1166).
- 3) 1-[4-Oxyphenyl]azonaphtalin-1<sup>3</sup>-Carbonsäure-4-Sulfonsäure. Na +  $4\frac{1}{2}H_2O$  (C. 1908 [2] 310).
- 4) 2-Oxy-1-Phenylazonaphtalin-1<sup>3</sup>-Carbonsäure- $\rho$ -Sulfonsäure? Ba +  $4H_2O$  (B. 14, 2036). — IV, 1464.
- $C_{17}H_{12}O_6N_2S_2$  1) 2-Phenyl- $\alpha$ -Naphtimidazol-6,8-Disulfonsäure (D.R.P. 181178 C. 1907 [1] 1084).
- $C_{17}H_{12}O_7N_2S$  1) 2,4-Dinitronaphtylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 159,5° (B. 41, 3933 C. 1909 [1] 25).
- $C_{17}H_{12}O_7N_2S_2$  1) 6-Oxy-2-Phenyl- $\alpha$ -Naphtimidazol-2<sup>3</sup>,8-Disulfonsäure (D.R.P. 181178 C. 1907 [1] 1084).
- 2) 1-Oxy-9[oder 10]-Methyl- $\alpha\beta$ -Naphtophenazin-3,6-Disulfonsäure. Na<sub>2</sub> (B. 31, 2158). — \*IV, 718.
- $C_{17}H_{12}O_8N_2Br_2$  1) Diacetat d. 5,5'-Dibrom-3,3'-Dinitro-4,4'-Dioxydiphenylmethan. Sm. 185° (A. 333, 366 C. 1904 [2] 1117).

- $C_{17}H_{12}O_9N_2S_2$  1) 2-Oxy-1-Phenylazonaphtalin-1<sup>3</sup>-Carbonsäure-3,6-Disulfonsäure.  $Ba + 6H_2O$ ,  $Ba_2 + 12H_2O$  (B. 14, 2037). — IV, 1464.
- $C_{17}H_{12}O_9N_2S_3$  1) 2-Phenyl- $\alpha$ -Naphtimidazol-2<sup>3</sup>,6,8-Trisulfonsäure (D.R.P. 181178 C. 1907 [1] 1084).
- $C_{17}H_{12}O_{12}N_2S_3$  1) m-Sulfobenzoësäureazo- $\beta$ -Naphtol- $\alpha$ -Disulfonsäure.  $Ba_2 + 5H_2O$ ,  $Ba_3 + 3H_2O$  (B. 14, 2038). — IV, 1464.
- $C_{17}H_{18}ONBr_2$  1) Nitril d.  $\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[3-Oxyphenyl]akryläthyläther-säure. Sm. 119° (B. 34, 3087).
- $C_{17}H_{18}ONBr_4$  1) Verbindung (aus Tribromxylenolbromid u. Chinolin). Sm. 232° (B. 29, 2353). — IV, 253.
- $C_{17}H_{18}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-Benzyl-5-Benzylidentetrahydrothiazol. Sm. 219° (M. 29, 407 C. 1908 [2] 1039).
- 2) 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-Benzylidentetrahydrothiazol. Sm. 171° (M. 26, 1193 C. 1905 [2] 1674).
- 3) 2-Thiocarbonyl-4-Keto-3-[3-Methylphenyl]-5-Benzylidentetrahydrothiazol. Sm. 124° (M. 29, 402 C. 1908 [2] 1038).
- 4) 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-Benzylidentetrahydrothiazol. Sm. 187,5° (M. 26, 1195 C. 1905 [2] 1674).
- $C_{17}H_{18}ON_2Cl$  1) 4-Chlor-5-Phenylimido-2-Keto-3-Methyl-1-Phenyl-2,5-Dihydropyrrol (Chlorcitrakondianil). Sm. 125° (A. 295, 60). — \*II, 217.
- 2) 5-Chlor-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 88°; Sd. 245°<sub>15</sub> (B. 36, 524 C. 1903 [1] 641). — \*IV, 359.
- 3) 2-Chlor-1-Acetyl-4,5-Diphenylimidazol. Sm. 185° (B. 40, 2632 C. 1907 [2] 339).
- 4) 7-Chlormethylat d. 9-Oxy- $\alpha\beta$ -Naphtophenazin (B. 31, 2480). — \*IV, 708.
- 5) Phenylamid d. 2-Chlor-3-Methylchinolin-4-Carbonsäure. Sm. 267—268° (B. 40, 1093 C. 1907 [1] 1268).
- $C_{17}H_{18}ON_2Br$  1)  $\alpha$ -[3-Bromphenyl]- $\beta$ -[1-Naphtyl]harnstoff. Sm. 250°. — II, 608.
- 2) 2-Oxy-1-[ $\beta$ -Brom-2-Methylphenylazo]naphtalin. Sm. 171° (Soc. 95, 1120 C. 1909 [2] 595).
- 3) 2-Oxy-1-[ $\beta$ -Brom-3-Methylphenylazo]naphtalin. Sm. 145° (Soc. 95, 1120 C. 1909 [2] 595).
- 4) 4-Oxy-1-[2-Brom-4-Methylphenylazo]naphtalin. Sm. 160° (B. 31, 1784). — IV, 1436.
- 5)  $\beta$ -Brom-2-Oxy-1-[2-Methylphenylazo]naphtalin. Sm. 167° (B. 19, 2491). — IV, 1436.
- 6) 5-Keto-4-Benzyliden-3-Methyl-1-[4-Bromphenyl]-4,5-Dihydropyrazol. Sm. 142° (B. 33, 2608). — \*IV, 636.
- 7) 7-Brommethylat d. 9-Oxy- $\alpha\beta$ -Naphtophenazin (B. 31, 2480). — \*IV, 708.
- $C_{17}H_{18}O_2NBr_2$  1)  $\beta\gamma$ -Dibrom- $\gamma$ -Phenylpropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 195° (B. 26, 1862). — II, 1806.
- 2) isom.  $\beta\gamma$ -Dibrom- $\gamma$ -Phenylpropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 117° (B. 26, 1857). — II, 1806.
- $C_{17}H_{18}O_2NBr_4$  1)  $\beta$ -Cyan- $\alpha\gamma$ -Di[ $\beta$ -Dibrom-4-Amidophenyl]propan- $\beta$ -Carbonsäure. Sm. 238° (G. 35 [1] 129 C. 1905 [1] 1385).
- $C_{17}H_{18}O_2NS$  1) Nitril d.  $\delta$ -Phenylsulfon- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 146° (J. pr. [2] 78, 128 C. 1908 [2] 1170).
- $C_{17}H_{18}O_2NS_2$  1) 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-[2-Methylphenyl]-tetrahydrothiazol. Sm. 150—158° (M. 26, 1193 C. 1905 [2] 1674).
- 2) 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-[3-Methylphenyl]-tetrahydrothiazol. Sm. 220° (M. 29, 402 C. 1908 [2] 1038).
- 3) 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-[4-Methylphenyl]-tetrahydrothiazol. Sm. 198° (M. 26, 1196 C. 1905 [2] 1674).
- 4) Methyläther d. 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[4-Oxybenzyliden]tetrahydrothiazol. Sm. 221° (M. 24, 509 C. 1903 [2] 836).
- $C_{17}H_{18}O_2N_2Cl$  1) Phenylimid d.  $\alpha$ -Chlor- $\beta$ -Methylphenylamidomaleinsäure. Sm. 189—190° (B. 28, 58; A. 295, 36). — \*II, 231.
- 2) 4-Methylphenylimid d.  $\alpha$ -Chlor- $\beta$ -Phenylamidomaleinsäure. Sm. 40° (A. 295, 48). — \*II, 280.
- $C_{17}H_{18}O_2N_2Br$  1) 4-Brom-2-Nitro-1-Benzylamidonaphtalin. Sm. 126—127° (Soc. 89, 1436 C. 1906 [2] 1615).

- $C_{17}H_{13}O_2N_2Br$  2) 5-Keto-4-[2-Oxybenzyliden]-3-Methyl-1-[4-Bromphenyl]-4,5-Dihydropyrazol. Sm. 196° (B. 33, 2608).  
 3) Benzoat d. 4-Brom-5-Oxy-3-Methyl-1-Phenylpyrazol. Sm. 82,5° (A. 266, 128). — IV, 513.  
 4) Benzoat d. 3-Oxy-5-Methyl-1-[4-Bromphenyl]pyrazol. Sm. 86° (A. 358, 132 C. 1908 [1] 852).
- $C_{17}H_{13}O_2N_2Br_3$  1)  $\alpha\beta$ -Dibrom- $\gamma$ -[Phenyl- $\alpha$ -Brombenzylhydrazon]crotonsäure. Zers. bei 194°. Na (B. F. HALVORSEN, Dissert. Freiburg [Schweiz] 1901).
- $C_{17}H_{13}O_2N_4Cl$  1) 7-Chlormethylat d. 10-Nitro-5-Amido- $\alpha\beta$ -Naphthophenazin. 2 +  $PtCl_4$ , +  $AuCl_3$  (B. 31, 3094). — \*IV, 858.  
 2) 5-Chlor-4-Phenylazo-3-Methyl-1-Phenylpyrazol-1'-Carbonsäure (A. 338, 208 C. 1905 [1] 1157).
- $C_{17}H_{13}O_8NCl_4$  1) Methylester d. 3,4,5,6-Tetrachlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 167° (C. 1899 [2] 372; Bl. [3] 25, 600). — \*II, 1001.
- $C_{17}H_{13}O_3NBr_4$  1) Acetat d. N-Acetylphenyl-3,4,5,6-Tetrabrom-2-Oxybenzylamin. Sm. 161—162° (A. 332, 180 C. 1904 [2] 209).
- $C_{17}H_{13}O_3NS$  1) 1-Benzylidenamidonaphtalin-4-Sulfonsäure. Na +  $H_2O$  (B. 20, 2002; A. 247, 325). — III, 31.  
 2) 1-Benzylidenamidonaphtalin-5-Sulfonsäure. Na +  $H_2O$  (A. 247, 326). — III, 31.  
 3) 2-Benzylidenamidonaphtalin-5-Sulfonsäure. Na +  $\frac{1}{2}H_2O$  (A. 275, 278). — III, 31.  
 4) 1-Benzylidenamidonaphtalin-1'-Sulfonsäure. Na (B. 24, 793). — III, 31.  
 5)  $\alpha$ -Phenyl- $\beta$ -[4-Chinolyl]äthen- $\beta^6$ -Sulfonsäure (B. 23, 2682). — IV, 455.  
 6) 2'-Methyl-1,2-Phenonaphtocarbazol-N-Sulfonsäure. Na (J. pr. [2] 77, 413 C. 1908 [1] 2177).  
 7) Benzoylamid d. Naphtalin-1-Sulfonsäure. Sm. 194—195°. K, Ca +  $H_2O$ , Ba, Ag (Z. 1871, 423; A. 114, 138). — II, 1175.
- $C_{17}H_{13}O_3NS_2$  1) 5'-Methyläther d. 2-Thiocarbonyl-4-Keto-5-[3,4-Dioxybenzyliden]-3-Phenyltetrahydrothiazol. Sm. 193° (M. 25, 163 C. 1904 [1] 894).
- $C_{17}H_{13}O_3N_2Br$  1) 1,2'-Anhydrid d. 7[oder 4]-Brom-5[oder 6]-Methyl-2-[3,4-Dimethoxyphenyl]benzimidazol-2'-Carbonsäure. Sm. 212—213° (B. 25, 1986). — IV, 619.
- $C_{17}H_{13}O_3N_2Br_3$  1) Acetat d. 2,4,6-Tribrom-3-Oxy-1-Acetylphenylhydrazonmethylbenzol. Sm. 107—110° (A. 321, 36 C. 1902 [1] 929). — \*IV, 493.
- $C_{17}H_{13}O_3N_4Br$  1) 4-[3-Nitrobenzyliden]amido-3-Keto-5-Methyl-1-[4-Bromphenyl]-2,3-Dihydropyrazol. Sm. 274° (A. 358, 138 C. 1908 [1] 853).
- $C_{17}H_{13}O_4NBr_2$  1)  $\gamma\delta$ -Dibrom- $\delta$ -Phenyl- $\alpha$ -[4-Nitrophenyl] $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 207—209° (B. 37, 1124 C. 1904 [1] 1210; A. 336, 218 C. 1904 [2] 1732; A. 336, 334 C. 1905 [1] 88).
- $C_{17}H_{13}O_4NBr_4$  1) 1-Acetat-4-Phenylamidoformiat d. 3,5,6-Tribrom-4-Oxy-2-Brommethyl-1-Oxymethylbenzol. Sm. 193° (B. 32, 3024). — \*II, 684.
- $C_{17}H_{13}O_4NS$  1) 2-[2-Naphtylsulfon]amidobenzol-1-Carbonsäure. Sm. 223° (A. 367, 112 C. 1909 [2] 698).  
 2) 1-Benzoylamidonaphtalin-4-Sulfonsäure. Na (B. 39, 1566 C. 1906 [2] 36).
- $C_{17}H_{13}O_4N_2Cl$  1)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha^2, \gamma^2$ -Dicarbonsäure. Sm. 251—253° (L. TOCHTERMANN, Dissert. Freiburg [Schweiz], 1902).  
 2)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha^3, \gamma^3$ -Dicarbonsäure. Na<sub>2</sub> +  $\frac{1}{2}H_2O$  (L. TOCHTERMANN, Dissert. Freiburg [Schweiz], 1902).  
 3)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha^4, \gamma^4$ -Dicarbonsäure. Sm. 245—250° (L. TOCHTERMANN, Dissert. Freiburg [Schweiz], 1902).
- $C_{17}H_{13}O_4N_2Br$  1)  $\beta$ -Brom- $\gamma$ -Benzoylhydrazon- $\alpha$ -Oxycrotonphenyläthersäure (Mucophenoxybromsäurebenzoylhydrazon). Sm. 146° u. Zers. (B. 34, 1016).  
 2)  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha^2, \gamma^2$ -Dicarbonsäure. Sm. 241—244° u. Zers. NH<sub>4</sub> (L. TOCHTERMANN, Dissert. Freiburg [Schweiz], 1902).



- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>N<sub>2</sub>Br** 3)  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha^3, \gamma^3$ -Dicarbon-säure (L. TOCHTERMANN, Dissert. Freiburg [Schweiz], 1902).
- 4)  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha^4, \gamma^4$ -Dicarbon-säure. Zers. oberhalb 280° (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- C<sub>17</sub>H<sub>13</sub>O<sub>4</sub>N<sub>2</sub>S** 1) 6-Oxy-2-[3-Amidophenyl]- $\alpha$ [oder  $\beta$ ]-Naphtimidazol-8-Sulfon-säure (D.R.P. 167139 C. 1906 [1] 797; D.R.P. 172319 C. 1906 [2] 644).
- 2) 6-Oxy-2-[4-Amidophenyl]- $\alpha$ -[oder  $\beta$ ]-Naphtimidazol-8-Sulfon-säure (D.R.P. 167139 C. 1906 [1] 797).
- 3) 6-Oxy-2-[3-Amidophenyl]- $\beta$ -Naphtimidazol-8-Sulfonsäure (D.R.P. 193350 C. 1908 [1] 999).
- 4) 9-Oxy-2-[3-Amidophenyl]- $\beta$ -Naphtimidazol-5-Sulfonsäure (D.R.P. 193350 C. 1908 [1] 1000).
- 5) 5-Oxy-2-[3-Amidophenyl]- $\beta\beta$ -Naphtimidazol-7-Sulfonsäure (D.R.P. 167139 C. 1906 [1] 797).
- C<sub>17</sub>H<sub>13</sub>O<sub>5</sub>NBr<sub>2</sub>** 1)  $\beta$ -[3,5-Dibromphenyl]propionsäure- $\alpha$ -Phtalaminsäure. Sm. 174° (Am. 40, 343 C. 1908 [2] 1865).
- C<sub>17</sub>H<sub>13</sub>O<sub>5</sub>NS** 1) 8-Benzoylamido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 127141 C. 1902 [1] 151).
- 2) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure-4-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- 3) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure-5-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- 4) 1-Phenylamidonaphtalin-1<sup>2</sup>-Carbonsäure-7-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- 5) 2-Phenylamidonaphtalin-2<sup>2</sup>-Carbonsäure-5-Sulfonsäure (D.R.P. 146102 C. 1903 [2] 1152).
- 6) 2-Phenylamidonaphtalin-2<sup>2</sup>-Carbonsäure-6-Sulfonsäure. Na (D.R.P. 146102 C. 1903 [2] 1152).
- C<sub>17</sub>H<sub>13</sub>O<sub>6</sub>NS<sub>2</sub>** 1) 1-Benzylidenamidonaphtalin-1<sup>3</sup>-Disulfonsäure. Na<sub>2</sub> (B. 24, 793). — III, 31.
- C<sub>17</sub>H<sub>13</sub>O<sub>6</sub>N<sub>3</sub>S<sub>2</sub>** 1) 2',4'-Dinitro-3-Acetylamido-2-Methyldiphenylendisulfid. Sm. 168° (B. 40, 2491 C. 1907 [2] 706).
- 2) 2-[3-Amidophenyl]- $\alpha$ -[oder  $\beta$ ]-Naphtimidazol-6,8-Disulfonsäure (D.R.P. 167139 C. 1906 [1] 797).
- C<sub>17</sub>H<sub>13</sub>O<sub>7</sub>N<sub>3</sub>S<sub>2</sub>** 1) 6-Oxy-2-[3-Amidophenyl]- $\alpha$ [oder  $\beta$ ]-Naphtimidazol-8,9-Disulfon-säure (D.R.P. 186883 C. 1907 [2] 1032).
- 2) 9-Oxy-2-[3-Amidophenyl]- $\beta$ -Naphtimidazol-4,7-Disulfonsäure (D.R.P. 193350 C. 1908 [1] 1000).
- 3) Aldehyd d. 2-Amido-1-Phenylazonaphtalin-1<sup>3</sup>-Carbonsäure-5,7-Disulfonsäure (D.R.P. 207935 C. 1909 [1] 1208).
- C<sub>17</sub>H<sub>13</sub>O<sub>13</sub>N<sub>7</sub>S** 1) O-Isobutyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 173° (Soc. 81, 440 C. 1902 [1] 989).
- C<sub>17</sub>H<sub>14</sub>ONCl** 1) Äthyläther d. 1-Chlor-4-Oxy-3-Phenylisochinolin. Sm. 82—83° (B. 37, 1691 C. 1904 [1] 1524).
- 2) Äthyläther d. 1-Chlor-6-[oder 7]-Oxy-3-Phenylisochinolin. Sm. 113—114° (B. 34, 3744 C. 1902 [1] 40). — \*IV, 258.
- 3) Phenacylchlorid d. Chinolin + H<sub>2</sub>O. Sm. 193—197° (wasserfrei). 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Ar. 240, 692 Anm. C. 1903 [1] 402). — \*IV, 180.
- 4) Phenacylchlorid d. Isochinolin + 2H<sub>2</sub>O. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Ar. 240, 701 Anm. C. 1903 [1] 403). — \*IV, 193.
- C<sub>17</sub>H<sub>14</sub>ONBr** 1)  $\epsilon$ -Oximido- $\sigma$ -[4-Bromphenyl]- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadien. Sm. 184,5 bis 185,5° (B. 39, 1921 C. 1906 [2] 125).
- 2) Bromphenyläther d. 1-Oxy-3-Äthylisochinolin. Sm. 58—59° (B. 27, 2240). — IV, 332.
- 3) Phenacylbromid d. Chinolin + H<sub>2</sub>O. Zers. bei 115—118° (169° wasserfrei) (B. 20, 3340; Ar. 240, 692 C. 1903 [1] 402). — IV, 253; \*IV, 180.
- 4) Phenacylbromid d. Isochinolin +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 205° (206°) wasserfrei (M. 9, 680; Ar. 240, 701 C. 1903 [1] 403). — IV, 300; \*IV, 193.
- C<sub>17</sub>H<sub>14</sub>ONBr<sub>3</sub>** 1) Nitril d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[ $\beta$ -Brom-2-Oxyphenyl]propion-äthyläthersäure. Sm. 144° u. Zers. (B. 34, 3088).

- C<sub>17</sub>H<sub>14</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1)  $\epsilon$ -[4-Chlorphenyl]amido- $\alpha$ -[4-Chlorphenyl]amido- $\delta$ -Oxy- $\alpha\gamma$ -Pentadien. HCl (B. 38, 4124 C. 1906 [1] 468).
- C<sub>17</sub>H<sub>14</sub>ON<sub>2</sub>S** 1)  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[1-Naphtyl]thioharnstoff. Sm. 119° (J. pr. [2] 78, 80 C. 1908 [2] 712).
- 2) 5-Thiocarbonyl-4-Benzoyl-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 112°. Hg, HgCl (A. 361, 283 C. 1908 [2] 521).
- 3) Benzoat d. 5-Merkapto-3-Methyl-1-Phenylpyrazol. Sm. 93° (B. 37, 2774 C. 1904 [2] 711; A. 361, 269 C. 1908 [2] 521).
- C<sub>17</sub>H<sub>14</sub>ON<sub>2</sub>Cl** 1) 5-Keto-3-Methyl-4-[4-Chlor-2-Amidobenzyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 265° (B. 37, 1873 C. 1904 [1] 1602).
- 2) 7-Methylhydroxyd d. 9-Chlor-5-Amido- $\alpha\beta$ -Naphtophenazin. Chlorid, 2 Chlorid + PtCl<sub>4</sub>, Nitrat, Bichromat (B. 34, 1097). — \*IV, 858.
- 3) Phenylamid d. 5-Chlor-3-Methyl-1-Phenylpyrazol-1'-Carbonsäure. Sm. 163° (B. 33, 2620). — \*IV, 319.
- C<sub>17</sub>H<sub>14</sub>ON<sub>2</sub>Br** 1) 4-Benzylidenamido-3-Keto-5-Methyl-1-[4-Bromphenyl]-2,3-Dihydropyrazol. Sm. 249° (A. 358, 137 C. 1908 [1] 853).
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>NCl** 1) Chlormethylat d. 2-Phenylchinolin-4-Carbonsäure + 2H<sub>2</sub>O. Sm. 209—210° u. Zers. (A. 276, 283). — IV, 445.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>NBr** 1) Brombenzylat d. Chinolin-4-Carbonsäure. Sm. 130° (B. 18, 363). — IV, 347.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>NJ** 1) Jodmethylat d. 2-Phenylchinolin-4-Carbonsäure. Sm. 182—186° u. Zers. (A. 276, 282). — IV, 445.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1)  $\alpha\beta$ -Dichlor- $\gamma$ -Phenylbenzylhydrazoncrotonsäure. Zers. bei 184°. Na + 5H<sub>2</sub>O, Ba (B. F. HALVORSEN, Dissert. Freiburg [Schweiz] 1901).
- 2) Phenylimid d.  $\beta$ -Dichlor- $\beta$ -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 138° (B. 23, 552). — II, 440.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Äthyläther d. 5-Oxy-2-Keto-4,5-Di[4-Bromphenyl]-2,5-Dihydroimidazol (A. 368, 217 C. 1909 [2] 1467).
- 2)  $\alpha\beta$ -Dibrom- $\gamma$ -Phenylbenzylhydrazoncrotonsäure. Zers. bei 174°. Na + 3H<sub>2</sub>O, K, Ag (B. F. HALVORSEN, Dissert. Freiburg [Schweiz] 1901).
- 3) isom.  $\alpha\beta$ -Dibrom- $\gamma$ -Phenylbenzylhydrazoncrotonsäure. Zers. bei 158° (B. F. HALVORSEN, Dissert. Freiburg [Schweiz] 1901).
- 4) Phenylimid d.  $\beta$ -Dibrom- $\beta$ -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 134° (B. 23, 549). — II, 440.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>S** 1) 2-Thiocarbonyl-4,5-Diketo-1,3-Di[4-Methylphenyl]tetrahydroimidazol (Di-p-Tolylthioparabansäure). Sm. 236° (B. 31, 138). — \*II, 276.
- 2) Benzylidenhydrazid d. Naphtalin-2-Sulfonsäure. Sm. 150—152° u. Zers. (J. pr. [2] 58, 183). — \*III, 30.
- 3) Verbindung (aus d. Chlorid C<sub>17</sub>H<sub>12</sub>O<sub>2</sub>NClS) (B. 5, 143). — II, 1176.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2-Methyl-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 86,5° (J. pr. [2] 62, 393). — \*IV, 1112.
- 2) 2-Methyl-1-[2-Naphtylthiosulfon]diazobenzol. Sm. 92,5° u. Zers. (J. pr. [2] 62, 393). — \*IV, 1112.
- 3) 4-Methyl-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 115° (J. pr. [2] 62, 390). — \*IV, 1112.
- 4) 4-Methyl-1-[2-Naphtylthiosulfon]diazobenzol. Sm. 92° u. Zers. (J. pr. [2] 62, 390). — \*IV, 1112.
- 5) 1-[4-Methylphenylthiosulfon]diazonaphtalin. Zers. bei 97° (J. pr. [2] 62, 399). — \*IV, 1118.
- 6) 2-[4-Methylphenylthiosulfon]diazonaphtalin. Sm. 104° u. Zers. (J. pr. [2] 62, 401). — \*IV, 1119.
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>S<sub>4</sub>** 1) Methylenester d. Benzoylamidodithioameisensäure. Sm. 130 bis 131° (C. 1902 [1] 1401).
- C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>3</sub>Cl** 1) 5-Chlor- $\beta$ -Nitro-3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 128° (B. 34, 1308).
- C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>NCl** 1) 2-[3,4-Dioxybenzoyl]methylisochinolinammoniumchlorid +  $\frac{1}{2}$ H<sub>2</sub>O (B. 27, 1969).
- 2) Chlormethylat d. 6-Oxy-2-Phenylchinolin-4-Carbonsäure. Sm. 248° (A. 282, 102). — IV, 447.
- 3) Verbindung (aus Chinolin u. Chloracetylbrenzkatechin). Sm. 139° (129°). + PtCl<sub>4</sub> + 2H<sub>2</sub>O (J. r. 25, 284; D.R.P. 71312). — IV, 253; \*IV, 180.

- $C_{17}H_{14}O_3NBr$  1) Dimethyläther d.  $\beta$ -Brom-2,5-Di[4-Oxyphenyl]oxazol. Sm. 115° (B. 32, 2209). — \*II, 1031.
- $C_{17}H_{14}O_3N_2Br_2$  1) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[3,5-Dibrom-2-Oxybenzyliden]-hydrazin. Sm. 158° (164—165°) (B. 17, 3009; A. 365, 338 C. 1909 [1] 1867). — IV, 760.
- $C_{17}H_{14}O_3N_2S$  1) 1-Benzylidenhydrazidonaphtalin-4-Sulfonsäure. Na (J. pr. [2] 79, 404 C. 1909 [2] 831).  
 2) 2-Benzylidenhydrazidonaphtalin-6-Sulfonsäure (J. pr. [2] 79, 405 C. 1909 [2] 831).  
 3) 2-Phenylimido-4-Keto-3-Phenyltetrahydrothiazol-5-Methylcarbonsäure. Sm. 187—188° (189—189,5°) (M. 16, 797; A. 280, 239). — \*II, 219.  
 4) s-Diphenylthiomonoureid d. Maleinsäure (Diphenylthiomaleinursäure). Sm. 160° (Am. 21, 530). — \*II, 216.
- $C_{17}H_{14}O_3N_2S_2$  1) Methyläther d. 2-Oxy-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 95—96° (J. pr. [2] 62, 422). — \*IV, 1122.  
 2) Methyläther d. 2-Oxy-1-[2-Naphtylthiosulfon]diazobenzol. Zers. bei 92° (J. pr. [2] 62, 422). — \*IV, 1122.  
 3) Methyläther d. 4-Oxy-1-[1-Naphtylthiosulfon]diazobenzol. Sm. 100—101° u. Zers. (J. pr. [2] 62, 419). — \*IV, 1122.  
 4) Methyläther d. 4-Oxy-1-[2-Naphtylthiosulfon]diazobenzol. Zers. bei 91,5° (J. pr. [2] 62, 420). — \*IV, 1122.
- $C_{17}H_{14}O_3N_3Br$  1) Phenylimid d.  $\beta$ -Brom- $\beta$ -Phenylamidopropan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 199,5° (B. 23, 549). — II, 440.
- $C_{17}H_{14}O_4NCl$  1) 2-[2, 3, 4 - Trioxybenzoyl] methylisochinolinammoniumchlorid. 2 +  $PtCl_4 + 4H_2O$  (B. 27, 1971).  
 2) Acetat d. 5'-Chlor-2'-Acetylamido-4-Oxydiphenylketon. Sm. 140° (B. 39, 1934 C. 1906 [2] 114).  
 3) Verbindung (aus Chinolin u. Chloracetylpyrogallol). Sm. 104° (J. r. 25, 284). — IV, 253.
- $C_{17}H_{14}O_4NBr$  1) Äthylester d.  $\alpha$ -Benzoximido-4-Bromphenylelessigsäure. Sm. 90 bis 91° (B. 42, 1938 C. 1909 [2] 200).
- $C_{17}H_{14}O_4N_2Cl_2$  1) Verbindung (aus Mukochlorsäure u. 4-Amidobenzol-1-Carbonsäure). Zers. oberhalb 300° (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- $C_{17}H_{14}O_4N_2Br_6$  1) Acetylfurfurinhexabromid (B. 10, 1192). — III, 722.
- $C_{17}H_{14}O_4N_2S$  1) 4-Benzoyl-3-Methyl-1-Phenylpyrazol-5-Sulfonsäure (A. 361, 285 C. 1908 [2] 521).  
 2) 1-Naphtylamid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 157° (B. 34, 3003).  
 3) 2-Naphtylamid d. 2-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 161° (B. 34, 3004).  
 4) 4-Nitro-1-Naphtylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 185° (D.R.P. 157859 C. 1905 [1] 416).  
 5) 1-Nitro-2-Naphtylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 159° (D.R.P. 164130 C. 1905 [2] 1477).  
 6) 8-Nitro-1-Methylphenylsulfonamidonaphtalin. Sm. 179° (Soc. 89, 12 C. 1906 [1] 938).
- $C_{17}H_{14}O_4N_2S_2$  1) 6-[ $\beta$ -Phenylthioureido]-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 132025 C. 1902 [2] 80).
- $C_{17}H_{14}O_4N_3Cl$  1) 5-Chlor-2,4-Dinitro-1-Methylbenzol + 2 Molec. 1-Amidonaphtalin. Sm. 98° (B. 33, 2507).
- $C_{17}H_{14}O_5NJ$  1)  $\beta$ -Benzoylamido- $\alpha$ -[4-Jodphenyl]äthan- $\beta$ - $\beta$ -Dicarbonsäure. Sm. 178—179° (Am. 40, 462 C. 1909 [1] 70).
- $C_{17}H_{14}O_5N_2S$  1) 6-[3-Amidobenzoyl]amido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 151017 C. 1904 [1] 1381).
- $C_{17}H_{14}O_5N_3Br$  1) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Brom-3-Nitro-2-Oxybenzyliden]-hydrazin. Sm. 203—204° (B. 37, 3936 C. 1904 [2] 1596).
- $C_{17}H_{14}O_5NBr$  1)  $\alpha$ -[2-Bromphenyl]- $\beta$ -[2-Nitro-3,4-Dimethoxyphenyl]akrylsäure. Sm. 266—267° (B. 39, 3119 C. 1906 [2] 1330).
- $C_{17}H_{14}O_5N_2S$  1) 6-[4-Nitrobenzoyl]amido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 165127 C. 1905 [2] 1755).
- $C_{17}H_{14}O_7N_2Cl_2$  1)  $\alpha$ s-Dioxy- $\gamma$ -Keto- $\alpha$ s-Di[5-Chlor-2-Nitrophenyl]pentan. Sm. 207,5 bis 208,5° u. Zers. (A. 262, 141). — III, 237.



- C<sub>17</sub>H<sub>14</sub>O<sub>7</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2-Oxy-1-[4-Methylphenylazo]naphtalindisulfonsäure. Na<sub>2</sub>, Ba. — IV, 1436.
- C<sub>17</sub>H<sub>14</sub>O<sub>9</sub>N<sub>3</sub>Cl** 1) Isomyristicin + 2-Chlor-1,3,5-Trinitrobenzol. Sm. 65–66° (C. 1905 [1] 1147).
- C<sub>17</sub>H<sub>14</sub>N<sub>3</sub>BrS** 1)  $\alpha$ -Amido- $\alpha$ -[4-Bromphenyl]- $\beta$ -[2-Naphtyl]thioharnstoff. Sm. 183° (B. 32, 1086). — \*IV, 443.  
2)  $\beta$ -[4-Bromphenyl]amido- $\alpha$ -[1-Naphtyl]thioharnstoff. Sm. 185° (B. 32, 1086). — \*IV, 443.  
3)  $\beta$ -[4-Bromphenyl]amido- $\alpha$ -[2-Naphtyl]thioharnstoff. Sm. 202° (B. 32, 1086). — \*IV, 443.
- C<sub>17</sub>H<sub>15</sub>ONS<sub>2</sub>** 1) Dithiänyl-2-Acetylamidophenylmethan. Sm. 153–154° (B. 30, 2036). — \*III, 596.  
2) Dithiänyl-3-Acetylamidophenylmethan. Sm. 115° (B. 30, 2035). — \*III, 596.  
3) Dithiänyl-4-Acetylamidophenylmethan. Sm. 142–143° (B. 30, 2036). — \*III, 596.
- C<sub>17</sub>H<sub>15</sub>ON<sub>2</sub>Cl** 1) Oxim d. Chinolinphenacylchlorid. HCl + 1½ H<sub>2</sub>O (Ar. 240, 697 C. 1903 [1] 402). — \*IV, 180.  
2) Oxim d. Isochinolinphenacylchlorid + 1½ H<sub>2</sub>O. Sm. 147° (Ar. 240, 704 C. 1903 [1] 403). — \*IV, 193.  
3) Phenylamid d. Chlorchinoliniumessigsäure + H<sub>2</sub>O. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Ar. 241, 126 C. 1903 [1] 1024). — \*IV, 180.  
4) Phenylamid d. Chlorisochininiumessigsäure. Sm. 202–206°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Ar. 240, 706 C. 1903 [1] 403; Ar. 241, 127 C. 1903 [1] 1024). — \*IV, 192.
- C<sub>17</sub>H<sub>15</sub>ON<sub>2</sub>Br** 1) Oxim d. Chinolinphenacylbromid. Sm. 207° (Ar. 240, 693 C. 1903 [1] 402). — \*IV, 180.  
2) Oxim d. Isochinolinphenacylbromid. Sm. 195–205° (Ar. 240, 701 C. 1903 [1] 403). — \*IV, 193.  
3) Phenylamid d. Bromchinoliniumessigsäure. Sm. 225–227° (Ar. 241, 126 C. 1903 [1] 1023). — \*IV, 180.  
4) Phenylamid d. Bromisochininiumessigsäure. Sm. 216–218° (Ar. 241, 127 C. 1903 [1] 1024). — \*IV, 192.
- C<sub>17</sub>H<sub>15</sub>ON<sub>3</sub>S** 1) 7-[ $\gamma$ -Phenylthiosemicarbazido]-2-Oxynaphtalin. Sm. 183° (J. pr. [2] 78, 152 C. 1908 [2] 949).  
2)  $\alpha$ -Allyl- $\beta$ -4-[ $\beta$ -Cyan- $\alpha$ -Furanyläthenyl]phenylthioharnstoff. Sm. 206–208° (B. 23, 2855). — III, 713.
- C<sub>17</sub>H<sub>15</sub>OClBr<sub>2</sub>** 1)  $\epsilon$ -Chlor- $\alpha$ - $\beta$ -Dibrom- $\gamma$ -Keto- $\alpha$ - $\epsilon$ -Diphenylbutan. Sm. 128° (B. 36, 2376 C. 1903 [2] 495).
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>NBr<sub>2</sub>** 1) Acetat d. N-Acetylphenyl-3,5-Dibrom-2-Oxybenzylamin (A. 332, 178 C. 1904 [2] 209).
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>NBr<sub>6</sub>** 1) Methyldi[2,5,6-Tribrom-3-Oxy-4-Methylbenzyl]amin. Sm. 151 bis 152° (A. 344, 184 C. 1906 [1] 1159).  
2) Methyldi[2,5,6-Tribrom-4-Oxy-3-Methylbenzyl]amin. Sm. 161° (A. 344, 177 C. 1906 [1] 1159).
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>NS** 1)  $\beta$ -Benzyläther d. Benzol-1,2-Dicarbonsäure- $\beta$ -Merkaptoäthylimid (B. 25, 3049). — II, 1801.  
2) Äthylester d.  $\alpha$ -Rhodandiphenylessigsäure. Fl. (C. 1902 [2] 578).  
3) Benzylamid d. Naphtalin-1-Sulfonsäure. Sm. 137° (Soc. 87, 162 C. 1905 [1] 1011).  
4) Benzylamid d. Naphtalin-2-Sulfonsäure. Sm. 124° (Soc. 87, 162 C. 1905 [1] 1011).  
5) 1-Naphtylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 157° (B. 27, 2371; D.R.P. 157859 C. 1905 [1] 416). — \*II, 338.  
6) 2-Naphtylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 133° (B. 27, 2371; D.R.P. 164130 C. 1905 [2] 1477). — \*II, 341.  
7) Methyl-2-Naphtylamid d. Benzolsulfonsäure. Sm. 107° (B. 39, 3141 C. 1906 [2] 1268).
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1)  $\alpha$ -Acetylimido- $\alpha$ -[Acetyl-4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 170° (J. pr. [2] 67, 456 C. 1903 [1] 1421). — \*IV, 567.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>Br** 1) Methylenäther d.  $\gamma$ -Phenylhydrazon- $\alpha$ -[ $\beta$ -Brom-3,4-Dioxyphenyl]- $\alpha$ -Buten. Sm. 158° (B. 24, 2596). — IV, 774.  
2) Phenylimid d.  $\beta$ -Brom- $\beta$ -Phenylamidopropan- $\alpha$ - $\beta$ -Dicarbonsäure. Sm. 141°. HBr + CHCl<sub>3</sub> (B. 23, 546). — II, 440.

- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N<sub>2</sub>Br<sub>3</sub>** 1) 2-Tribrom-3,6-Di[Dimethylamido]xanthon. 3HBr (*J. pr.* [2] 54, 238). — \*III, 154.
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>J** 1) Jodmethylat d. Phenylfurfuraldehydin. Sm. 192—193° (*B.* 11, 1656). — IV, 564.
- C<sub>17</sub>H<sub>15</sub>O<sub>2</sub>N<sub>3</sub>S** 1) 2-Phenylbenzylamidoformylimido-4-Ketotetrahydrothiazol. Sm. 194—195° (*Soc.* 75, 409). — \*II, 297.  
 2) Äthyläther d. 2-Benzoylimido-5-Oxy-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 136—138° (*Am.* 24, 438; *Am.* 34, 130 *C.* 1905 [2] 1030).  
 3) Äthyläther d. 3-Oxy-5-Thiocarbonyl-4-Benzoyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 136—138° (*Am.* 24, 438). — \*IV, 749.  
 4) 4-Acetylamido-1-[4-Acetylamidophenyl]benzthiazol. Sm. 272 bis 273° (*B.* 32, 3538). — \*II, 791.
- C<sub>17</sub>H<sub>16</sub>O<sub>3</sub>NCl<sub>2</sub>** 1) Methyl ester d. 3,6-Dichlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 160° (*Bl.* [3] 23, 378). — \*II, 1001.
- C<sub>17</sub>H<sub>16</sub>O<sub>3</sub>NBr<sub>2</sub>** 1) Methyl ester d. 3,6-Dibrom-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 180° (*C. r.* 142, 1275 *C.* 1906 [2] 247).
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>NBr<sub>4</sub>** 1) Tetrabrommorphin + 2H<sub>2</sub>O. HBr (2 Modif.), H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O, Oxalat, BaO + 2H<sub>2</sub>O (*Bl.* [3] 19, 707). — \*III, 669.
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>NS** 1) β-[1,2-Phtalyl]amidoäthylbenzylsulfoxyd. Sm. 143—145° (*B.* 25, 3052). — II, 1801.  
 2) 1-Benzylamidonaphtalin-4-Sulfonsäure (*J. pr.* [2] 75, 255 *C.* 1907 [2] 407).  
 3) 1-[4-Methylphenyl]amidonaphtalin-4-Sulfonsäure. Sm. 194° (*B.* 34, 3185; D.R.P. 170630 *C.* 1906 [2] 473).  
 4) 1-[4-Methylphenyl]amidonaphtalin-6-Sulfonsäure (D.R.P. 159353 *C.* 1905 [1] 975).  
 5) 1-[4-Methylphenyl]amidonaphtalin-7-Sulfonsäure (D.R.P. 159353 *C.* 1905 [1] 975).  
 6) 1-[4-Methylphenyl]amidonaphtalin-8-Sulfonsäure (D.R.P. 158923 *C.* 1905 [1] 909).  
 7) 1-[4-Methylphenyl]amidonaphtalin-2-Sulfonsäure (*J. pr.* [2] 64, 502 *C.* 1902 [1] 257).  
 8) 2-[2-Methylphenyl]amidonaphtalin-5-Sulfonsäure. Na, Ca (D.R.P. 57370). — \*II, 345.  
 9) 2-[2-Methylphenyl]amidonaphtalin-6-Sulfonsäure. Na, Ca, Ba (*C.* 1904 [1] 1013).  
 10) 2-[4-Methylphenyl]amidonaphtalin-6-Sulfonsäure. Na (*C.* 1904 [1] 1013; *J. pr.* [2] 75, 287 *C.* 1907 [2] 409).  
 11) 2-[2-Methylphenyl]amidonaphtalin-8-Sulfonsäure. Na, Ca (D.R.P. 57370). — \*II, 345.  
 12) 2-[4-Methylphenyl]amidonaphtalin-8-Sulfonsäure. Na (*C.* 1904 [1] 1013).  
 13) Benzaldehyd-2-Naphtylaminthionsulfonsäure. Sm. 112° (*A.* 274, 256). — III, 7.  
 14) Nitril d. α-[4-Methylphenyl]-β-[4-Methoxyphenyl]akrylsäure. Sm. 110° (*J. pr.* [2] 78, 130 *C.* 1908 [2] 1171).  
 15) Phenylamid d. 2-Oxynaphtalinmethyläther-6-Sulfonsäure. Sm. 79—80° (*C.* 1895 [1] 1064). — \*II, 531.  
 16) Phenylamid d. 2-Oxynaphtalinmethyläther-8-Sulfonsäure. Sm. 196° (*C.* 1895 [1] 1064). — \*II, 531.
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>N<sub>2</sub>Br** 1) Benzyläther d. 3-Brom-5-Nitro-2-Oxy-1-Methyl-1,2-Dihydrochinolin. Sm. 120° (*J. pr.* [2] 45, 189). — IV, 266.  
 2) Acetat d. α-Acetyl-α-Phenyl-β-[5-Brom-2-Oxybenzyliden]hydrazin. Sm. 136—137° (*B.* 37, 3934 *C.* 1904 [2] 1596).  
 3) Acetat d. α-Acetyl-α-[4-Bromphenyl]-β-[2-Oxybenzyliden]hydrazin. Sm. 152° (*A.* 365, 329 *C.* 1909 [1] 1867).
- C<sub>17</sub>H<sub>15</sub>O<sub>3</sub>N<sub>3</sub>S** 1) 2-[4-Methylphenyl]diazoamidonaphtalin-8-Sulfonsäure. Na (*Soc.* 89, 1506 *C.* 1906 [2] 1764).
- C<sub>17</sub>H<sub>16</sub>O<sub>4</sub>NBr<sub>2</sub>** 1) Aldehyd d. Methylid[5-Brom-4-Oxybenzyl]amin-3,3'-Dicarbonsäure. Sm. 136—141° (*A.* 344, 258 *C.* 1906 [1] 1609).  
 2) Methyl ester d. N-Acetyl-3-[3,5-Dibrom-2-Oxybenzyl]amidobenzol-1-Carbonsäure. Sm. 117—119° (*A.* 332, 196 *C.* 1904 [2] 210).

- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>NS** 1)  $\beta$ -[1,2-Phtalyl]amidoäthylbenzylsulfon. Sm. 137—139° (B. 25, 3052). — II, 1801.  
 2) 6-Äthylphenylsulfonamido-1,2-Benzpyron. Sm. 124° (Soc. 85, 1238 C. 1904 [2] 1124).  
 3) 7-[2-Methylphenyl]amido-1-Oxynaphtalin-3-Sulfonsäure (C. 1901 [2] 670).  
 4) 7-[4-Methylphenyl]amido-1-Oxynaphtalin-3-Sulfonsäure (J. pr. [2] 75, 288 C. 1907 [2] 409).  
 5) 8-[4-Methylphenyl]amido-1-Oxynaphtalin-5-Sulfonsäure (D.R.P. 181929 C. 1907 [1] 1654).  
 6) 2-Methyl-4-[4-Methoxylphenyl]chinolin-2-Sulfonsäure. Ba + 10H<sub>2</sub>O (B. 27, 911; D.R.P. 79173). — IV, 435; \*IV, 259.
- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>N<sub>2</sub>Br** 1) 7[oder 4]-Brom-5[oder 6]-Methyl-2-[3,4-Dimethoxylphenyl]benzimidazol-2<sup>2</sup>-Carbonsäure. Sm. 240° u. Zers. (B. 24, 629). — IV, 619.
- C<sub>17</sub>H<sub>15</sub>O<sub>4</sub>JHg** 1) Dibenzoat d. Quecksilber- $\beta\gamma$ -Dioxypropyljodid. Sm. 100° (B. 34, 1393).
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>N<sub>2</sub>Br<sub>3</sub>** 1) Methyläther d.  $\beta\delta\delta$ -Tribrom- $\beta\delta$ -Dinitro- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylbutan. Sm. 176—177° u. Zers. (185°) (B. 38, 473 C. 1905 [1] 741; A. 355, 265 C. 1907 [2] 1622).
- C<sub>17</sub>H<sub>15</sub>O<sub>5</sub>N<sub>3</sub>S** 1) 6-[4-Amidophenyl]ureido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 151017 C. 1904 [1] 1382).
- C<sub>17</sub>H<sub>15</sub>O<sub>6</sub>NS<sub>2</sub>** 1) 1-Benzylamidonaphtalin-4,7-Disulfonsäure (J. pr. [2] 74, 261 C. 1907 [2] 407).  
 2) 1-Benzylamidonaphtalin-4,8-Disulfonsäure. Na (J. pr. [2] 75, 261 C. 1907 [2] 407).  
 3) 2-[4-Methylphenyl]amidonaphtalin-6,8-Disulfonsäure (C. 1904 [1] 1013).  
 4) 1-Amido-2-Phenylsulfonoxynaphtalin-4-Sulfonsäure. Sm. 150 bis 160° (D.R.P. 193099 C. 1908 [1] 428).  
 5) 1-Amido-2-Phenylsulfonoxynaphtalin-6-Sulfonsäure (D.R.P. 193099 C. 1908 [1] 428).
- C<sub>17</sub>H<sub>15</sub>O<sub>7</sub>NS<sub>2</sub>** 1) 8-[4-Methylphenyl]amido-1-Oxynaphtalin-3,5-Disulfonsäure (D.R.P. 181929 C. 1907 [1] 1654).  
 2) 8-[4-Methylphenyl]amido-1-Oxynaphtalin-3,6-Disulfonsäure (D.R.P. 181929 C. 1907 [1] 1654).  
 3) 8-[4-Methylphenyl]amido-1-Oxynaphtalin-4,6-Disulfonsäure (D.R.P. 181929 C. 1907 [1] 1654).
- C<sub>17</sub>H<sub>15</sub>O<sub>8</sub>NS<sub>2</sub>** 1) 8-[4-Methoxylphenyl]amido-1-Oxynaphtalin-3,6-Disulfonsäure (D.R.P. 181929 C. 1907 [1] 1654).
- C<sub>17</sub>H<sub>15</sub>NCl<sub>4</sub>J** 1) 4-Methylphenyl-(6-Methyl-8-Chinolyl]jodoniumchlorid. Sm. 194° u. Zers. 2 + PtCl<sub>4</sub> (B. 38, 1810 C. 1905 [1] 1651).
- C<sub>17</sub>H<sub>15</sub>NBr<sub>4</sub>J** 1) 4-Methylphenyl-(6-Methyl-8-Chinolyl]jodoniumbromid. Sm. 164° (B. 38, 1810 C. 1905 [1] 1651).
- C<sub>17</sub>H<sub>15</sub>N<sub>2</sub>Cl<sub>2</sub>Br** 1) Isochinolin +  $\beta\beta$ -Dichlor- $\gamma$ -Brom- $\alpha$ -Phenylamidopropan. 2 + \*PtCl<sub>4</sub> + AuCl<sub>3</sub> (Ar. 241, 121 C. 1903 [1] 1023). — \*IV, 192.
- C<sub>17</sub>H<sub>15</sub>N<sub>4</sub>Cl<sub>3</sub>S** 1) Methyläther d. 3-Chlor-5-Merkapto-4-[4-Methylphenyl]azo-1-Phenylpyrazol. Sm. 109° (A. 338, 225 C. 1905 [1] 1158).
- C<sub>17</sub>H<sub>16</sub>ONCl** 1) 1-Phenylchloracetyl-amido-2,3-Dihydroinden. Sm. 149—150° (Soc. 79, 445).  
 2) isom. 1-Phenylchloracetyl-amido-2,3-Dihydroinden. Sm. 123 bis 124° (Soc. 79, 446).
- C<sub>17</sub>H<sub>16</sub>ONBr** 1) 8-Brom-5-Benzoylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 202 bis 203° (Soc. 85, 746 C. 1904 [2] 447).  
 2) 9-[ $\alpha$ -Bromisovaleryl]carbazol. Sm. 130° (B. 31, 2850). — \*IV, 233.
- C<sub>17</sub>H<sub>16</sub>ONJ** 1) 4-Methylphenyl-[6-Methyl-8-Chinolyl]jodoniumhydroxyd. Salze, siehe (B. 38, 1810 C. 1905 [1] 1651).
- C<sub>17</sub>H<sub>16</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) 4,5-Dibrom-2-Keto-1,3-Dimethyl-4,5-Diphenyltetrahydroimidazol. Sm. 140° u. Zers. (A. 368, 208 C. 1909 [2] 1466).
- C<sub>17</sub>H<sub>16</sub>ON<sub>2</sub>Br<sub>4</sub>** 1)  $\beta$ -Tetrabrom-4,4'-Di[Dimethylamido]diphenylketon. Sm. 172° (B. 22, 1883). — III, 186.
- C<sub>17</sub>H<sub>16</sub>ON<sub>2</sub>S** 1) s-Cinnamoyl-2-Methylphenylthioharnstoff. Sm. 182—183° (Soc. 67, 1047). — \*II, 852.  
 2) s-Cinnamoyl-4-Methylphenylthioharnstoff. Sm. 194—194,5° (Soc. 67, 1047). — \*II, 852.



- C<sub>17</sub>H<sub>16</sub>ON<sub>2</sub>S** 3) Methyläther d. 2-Merkapto-5-Keto-1-Methyl-4,4-Diphenyl-4,5-Dihydroimidazol. Sm. 168° (B. 42, 1798 C. 1909 [2] 204).
- 4) 2-Thiocarbonyl-5-Keto-1,3-Dimethyl-4,4-Diphenyltetrahydroimidazol. Sm. 141—142° (B. 42, 1799 C. 1909 [2] 204).
- 5) 2-[2-Methylphenyl]imido-4-Keto-3-[2-Methylphenyl]tetrahydrothiazol. Sm. 151—152° (160°) (C. 1903 [1] 1258; C. r. 139, 1032 C. 1905 [1] 226).
- 6) 2-[4-Methylphenyl]imido-4-Keto-3-[4-Methylphenyl]tetrahydrothiazol. Sm. 115° (C. r. 139, 1032 C. 1905 [1] 226).
- 7) 1-[Acetyl-2-Methylphenyl]amido-4-Methylbenzthiazol. Sm. 77° (B. 36, 3130 C. 1903 [2] 1070).
- 8) 1-[Acetyl-4-Methylphenyl]amido-5-Methylbenzthiazol. Sm. 158° (B. 36, 3131 C. 1903 [2] 1070).
- C<sub>17</sub>H<sub>16</sub>ON<sub>4</sub>Br<sub>2</sub>** 1)  $\beta\delta$ -Di[4-Bromphenylhydrazon]- $\gamma$ -Ketopentan. Sm. 145° u. Zers. (B. 40, 2730 C. 1907 [2] 327).
- C<sub>17</sub>H<sub>16</sub>ON<sub>4</sub>S** 1) 4-[ $\beta$ -Phenylthioureido]-3-Keto-5-Methyl-1-Phenyl-2,3-Dihydro-pyrazol. Sm. 221° (A. 350, 304 C. 1907 [1] 735).
- 2) Benzyläther d. 5-Acetylamido-3-Merkapto-1-Phenyl-1,2,4-Triazol. Sm. 81° (A. 348, 197 C. 1906 [2] 794; A. 355, 208 C. 1907 [2] 1327).
- C<sub>17</sub>H<sub>16</sub>ON<sub>4</sub>S<sub>2</sub>** 1) 1-Phenylthioureido-2-Thiocarbonyl-4-Keto-5-Methyl-3-Phenyl-tetrahydroimidazol. Sm. 223° u. Zers. (C. 1904 [2] 1027).
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>NCl** 1) Chlormethylat d. Akridin-5-Äthyl- $\beta$ -Carbonsäure (B. 39, 2426 C. 1906 [2] 802).
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>Cl<sub>2</sub>** 1)  $\alpha\gamma$ -Di[Benzoylchloramido]propan. Sm. 84° (Soc. 87, 388 C. 1905 [1] 1587).
- 2) Äthyläther d. 1,5-Dichlor-4-Oxy-2-Keto-4,5-Diphenyltetrahydroimidazol (A. 368, 194 C. 1909 [2] 1464).
- 3) Chlorid d.  $\alpha\gamma$ -Trimethylendi[Phenylamidoameisensäure]. Sm. 102° (B. 20, 783). — II, 374.
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Äthyläther d. Dibenzoylamidoimidomerkaptomethan. Sm. 104 bis 105° (Am. 35, 304 C. 1906 [1] 1544).
- 2) Äthyläther d. Benzoylamidobenzoylimidomerkaptomethan. Sm. 110—111° (Am. 35, 305 C. 1906 [1] 1545).
- 3) Methyläther d.  $\alpha$ -Benzoyl- $\beta$ -[ $\alpha$ -Oxy- $\beta$ -Phenyläthyliden]thioharnstoff. Sm. 116—117° (Am. Soc. 22, 376). — \*II, 815.
- 4) Äthyläther d.  $\alpha$ -Benzoyl- $\beta$ -[ $\alpha$ -Oxybenzyliden]thioharnstoff (Benzoylthiocarbamidimidoäthylbenzoat). Sm. 131—132° (C. 1900 [2] 531). — \*II, 760.
- 5) 3,4-Methylenäther d. 2-Phenylimido-5-[3,4-Dioxyphenyl]-3-Methyltetrahydrothiazol? Sm. 155° (B. 41, 4160 C. 1909 [1] 372).
- 6) 5-Benzylsulfon-3-Methyl-1-Phenylpyrazol. Sm. 92° (A. 331, 238 C. 1904 [1] 1221).
- 7) 4,4'-Dimethyläther d. 2-Merkapto-4,5-Di[4-Oxyphenyl]imidazol. Sm. noch nicht bei 280° (A. 284, 24). — III, 227.
- 8) 2-Acetat d. 2-Merkapto-6-Oxy-1-Phenylbenzimidazol-6-Äthyläther. Sm. 163—164° (B. 36, 3849 C. 1904 [1] 89).
- 9) 1-Naphtylamid d. 2-Amido-1-Methylbenzol-4-Sulfonsäure. HCl (B. 34, 3004).
- 10) 8-Amido-1-Methylphenylsulfonamidonaphtalin. Sm. 161—162° (Soc. 89, 12 C. 1906 [1] 938).
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) Benzoyldithiocarbaminsäuremethylethanilid. Sm. 152° (C. 1901 [2] 276).
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>N<sub>3</sub>Cl** 1) 4-[ $\alpha$ -Chlor-2-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 128—130° (B. 24, 248). — IV, 597.
- 2) 4-[ $\alpha$ -Chlor-3-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 225—227° (B. 24, 251). — IV, 597.
- 3) 4-[ $\alpha$ -Chlor-4-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 185° (B. 24, 248). — IV, 597.
- 4) Äthylester d. 3-Chlor-4,6-Dimethyl-2-Phenyl-2,1,5-Benztriazol-2<sup>3</sup>-Carbonsäure. Sm. 124° (A. 366, 400 C. 1909 [2] 290).
- C<sub>17</sub>H<sub>16</sub>O<sub>2</sub>N<sub>3</sub>Br** 1) 4-[ $\alpha$ -Brom-2-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 172—173° (B. 24, 248). — IV, 597.

- $C_{17}H_{16}O_2N_3Br$  2) 4-[ $\alpha$ -Brom-3-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 145–147° (B. 24, 252). — IV, 597.
- 3) 4-[ $\alpha$ -Brom-4-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 172–173° (B. 24, 248). — IV, 597.
- $C_{17}H_{16}O_2N_4S$  1) 5-Methylsulfon-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 156° (A. 338, 197 C. 1905 [1] 1156).
- $C_{17}H_{16}O_2Cl_2S$  1) Diäthyläther d. Di[ $\beta$ -Chlor- $\beta$ -Oxyphenyl]thioketon. Sm. 141 bis 142° (B. 28, 2873). — III, 211.
- $C_{17}H_{16}O_3NCl$  1) Acetat d. 4-Chlor-1-[Acetyl-2-Oxybenzyl]amidobenzol (Ar. 240, 685 C. 1903 [1] 395).
- 2) Benzoat d. 6-Chlor-4-Oximido-1-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 128–129° (A. 310, 98). — \*III, 272.
- 3) Benzoat d. 3-Chlor-1-Oximido-4-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 126–127° (A. 310, 103). — \*III, 272.
- $C_{17}H_{16}O_3NBr$  1)  $\beta\delta$ -Lakton d.  $\delta$ -Brom- $\beta$ -Oxypentan- $\beta\delta$ -Dicarbonsäure- $\beta$ -[2-Naphthyl]amid. Sm. 186° (A. 292, 232). — \*II, 341.
- 2) Acetat d. 4-Brom-1-[Acetyl-2-Oxybenzyl]amidobenzol (Ar. 240, 686 C. 1903 [1] 395).
- 3) Benzoat d. 6-Brom-4-Oximido-1-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 130–131° (A. 310, 98). — \*III, 272.
- 4) Benzoat d. 3-Brom-1-Oximido-4-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 119–120° (A. 310, 103). — \*III, 272.
- $C_{17}H_{16}O_3NBr_3$  1) Tribrommorphin. HBr (Bl. [3] 19, 709). — \*III, 668.
- $C_{17}H_{16}O_3NJ$  1) Benzoat d. 6-Jod-4-Oximido-1-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 144° (A. 310, 99). — \*III, 273.
- 2) Benzoat d. 3-Jod-1-Oximido-4-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 144° (A. 310, 104). — \*III, 273.
- $C_{17}H_{16}O_3N_2Cl_2$  1) N-Acetylderivat d.  $\alpha$ -Oximido- $\alpha$ -Hydroxylamidomethandi-[4-Chlorbenzyläther]. Sm. 102–103,4° (B. 33, 1987). — \*II, 303.
- 2)  $\beta$ -Dichlor- $\gamma$ -Keto- $\beta\delta$ -Di[Phenylamido]butan- $\beta$ -Carbonsäure. Sm. 151° (B. 23, 552). — II, 439.
- $C_{17}H_{16}O_3N_2Br_2$  1) N-Acetylderivat d.  $\alpha$ -Oximido- $\alpha$ -Hydroxylamidomethandi-[4-Brombenzyläther]. Sm. 94–95° (B. 33, 1987). — \*II, 304.
- 2)  $\alpha\beta$ -Diacetyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm. 224° (A. 360, 6 C. 1908 [1] 2031).
- 3) Dibromid d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[2-Acetoxybenzyliden]hydrazin (B. 17, 3007). — IV, 759.
- $C_{17}H_{16}O_3N_2S$  1) Dimethyläther d. 2-Thiocarbonyl-5-Keto-4,4-Di[4-Oxyphenyl]-tetrahydroimidazol. Sm. 188° (B. 42, 1799 C. 1909 [2] 204).
- 2) 2,3-Dimethyläther d. 2-[2-Oxyphenyl]imido-4-Keto-3-[2-Oxyphenyl]tetrahydrothiazol. Sm. 190° (B. 21, 1867). — II, 712.
- 3) Benzolsulfonat d. 3-Oxy-4,5-Dimethyl-1-Phenylpyrazol. Sm. 97° (A. 350, 322 C. 1907 [1] 737).
- 4) Benzolsulfonat d. 3-Oxy-5-Methyl-1-[2-Methylphenyl]pyrazol. Sm. 80° (A. 338, 313 C. 1905 [1] 1162).
- 5) Benzolsulfonat d. 3-Oxy-5-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 55° (A. 338, 313 C. 1905 [1] 1162).
- $C_{17}H_{16}O_3ClJ$  1) 4-Benzoat d. 3,4-Dioxy-1-[ $\alpha$ -Chlor- $\beta$ -Jodpropyl]benzol-3-Methyläther (C. 1904 [2] 506).
- 2) 4-Benzoat d. 3,4-Dioxy-1-[ $\beta$ -Chlor- $\gamma$ -Jodpropyl]benzol-3-Methyläther. Sm. 91° (C. 1904 [2] 506).
- $C_{17}H_{16}O_4NCl$  1) Chlormethylat d. Papaverolin. Sm. 235° (J. pr. [2] 56, 344). — \*IV, 264.
- $C_{17}H_{16}O_4NBr$  1)  $\alpha$ -[2-Bromphenyl]- $\beta$ -[2-Amido-3,4-Dimethoxyphenyl]akrylsäure. Sm. 218° (B. 39, 3119 C. 1906 [2] 1330).
- $C_{17}H_{16}O_4NJ$  1) Jodmethylat d. Papaverolin. Sm. 77° (J. pr. [2] 56, 345). — \*IV, 264.
- $C_{17}H_{16}O_4N_2S$  1) 5-Keto-3-Methyl-4-Benzyl-1-Phenyl-4,5-Dihydropyrazol-2[ $\beta$ ]-Sulfonsäure. Sm. noch nicht bei 300° (Am. 16, 440). — IV, 941.
- 2) d- $\alpha$ -Phenylsulfonamido- $\beta$ -[3-Indolyl]propionsäure. Sm. 185° u. Zers. (H. 55, 22 C. 1908 [1] 2180).
- 3) r- $\alpha$ -Phenylsulfonamido- $\beta$ -[3-Indolyl]propionsäure. Sm. 185° u. Zers. (H. 55, 23 C. 1908 [1] 2180).
- 4) Benzolsulfonat d. 3-Oxy-5-Keto-4,4-Dimethyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 99° (B. 41, 3866 C. 1909 [1] 296).

- $C_{17}H_{16}O_4N_3Br$  1)  $\delta$ -Brom- $\rho$ -Nitroso- $\gamma$ -Keto- $\beta\delta$ -Di[Phenylamido]butan- $\beta$ -Carbon-säure (B. 23, 551). — II, 439.
- $C_{17}H_{16}O_4N_4Cl_2$  1) Dichlorricinin. Sm. 240° (C. 1895 [1] 853).
- $C_{17}H_{16}O_5NBr$  1) Trimethyläther d.  $\alpha$ -[5-Brom-2-Oxyphenyl]- $\beta$ -[2-Nitro-3,4-Dioxyphenyl]äthen. Sm. 136—138° (B. 42, 3501 C. 1909 [2] 1459).
- $C_{17}H_{16}O_5N_2Br_2$  1) Methyläther d.  $\rho$ -Dibrom- $\beta\delta$ -Dinitro- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenyläthan. Sm. 186° u. Zers. (A. 355, 267 C. 1907 [2] 1622).  
2) Methyläther d. isom.  $\rho$ -Dibrom- $\beta\delta$ -Dinitro- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenyläthan. Sm. 156° (A. 355, 267 C. 1907 [2] 1622).
- $C_{17}H_{16}O_5N_2S_2$  1) Verbindung (aus Pyridin u. Sulfanilsäure). Na (J. pr. [2] 69, 131 C. 1904 [1] 816).
- $C_{17}H_{16}O_{10}NCl_3$  1) Verbindung (aus Morphin) (B. 4, 127). — III, 901.
- $C_{17}H_{16}N_3ClS$  1)  $\alpha$ -Allylamidothioformylimido- $\alpha$ -[4-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 169—171° (J. pr. [2] 67, 463 C. 1903 [1] 1422). — \*IV, 567.
- $C_{17}H_{16}N_4ClJ$  1) Jodmethylat d. 5-Chlor-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 170° (B. 39, 1955 C. 1906 [2] 346).
- $C_{17}H_{17}ONCl_4$  1) 2,3,5,6-Tetrachlor-4'-Diäthylamido-4-Oxydiphenylmethan. Sm. 135°. HBr (A. 349, 92 C. 1906 [2] 1255).
- $C_{17}H_{17}ONS_2$  1) 1-Phenyl-2-[2-Methylphenyl]-3-Äthylimidoxanthid. Sm. 76—77° (B. 35, 2472 C. 1902 [2] 441; C. 1907 [1] 1205).  
2) 3,5-Dimethylbenzylester d. Benzoylamidodithioameisensäure. Sm. 114,5° (Am. 26, 205).
- $C_{17}H_{17}ON_2Br$  1) Verbindung (aus 4-Amido-1-Methylbenzol u.  $\alpha\beta$ -Dibromakrylsäure). Sm. 164° (B. 22, 3309). — II, 494.
- $C_{17}H_{17}ON_2J$  1) Jodäthylat d.  $\alpha$ -Imido  $\alpha$ -Benzoylmethylenamido- $\alpha$ -Phenylmethan. Zers. bei 180° (B. 34, 3026). — \*IV, 569.
- $C_{17}H_{17}ON_3S$  1)  $\beta$ -Benzoylamido- $\alpha$ -Isopropylidenamido- $\alpha$ -Phenylthioharnstoff. Sm. 136° (Am. 32, 369 C. 1904 [2] 1507).  
2) 1-Phenylamido-2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyl-tetrahydroimidazol. Sm. 206° (C. 1904 [2] 1028).
- $C_{17}H_{17}O_2NBr_2$  1) 2,5-Dibrom-6-Oxy-4-Acetylphenylamidomethyl-1,3-Dimethylbenzol. Sm. 216—218° (B. 35, 136 C. 1902 [1] 466).  
2) 3,6-Dibrom-5-Oxy-2-Phenylacetylamidomethyl-1,4-Dimethylbenzol. Sm. 223—225° (B. 28, 2907; A. 332, 184 C. 1904 [2] 209). — \*II, 454.  
3) N-Acetyl-[2,4-Dimethylphenyl]-[3,5-Dibrom-4-Oxybenzyl]amin. Sm. 175° (B. 41, 1056 C. 1908 [1] 1775).  
4) N-Acetyl-[2,5-Dimethylphenyl]-[3,5-Dibrom-4-Oxybenzyl]amin. Sm. 240—241° (B. 41, 1057 C. 1908 [1] 1775).  
5) N-Acetyl-[2,6-Dimethylphenyl]-[3,5-Dibrom-2-Oxybenzyl]amin (A. 365, 279 Anm. C. 1909 [1] 1863).  
6) N-Acetylderivat d. Phenyl-[2,6-Dibrom-4-Oxy-3,5-Dimethylbenzyl]amin. Sm. 238° (A. 344, 248 C. 1906 [1] 1164).  
7) Acetat d. Phenyl-[3,5-Dibrom-4-Oxy-2,6-Dimethylbenzyl]amin. Sm. 145—146° (A. 344, 274 C. 1906 [1] 1610).  
8) Acetat d. 3,6-Dibrom-5-Oxy-2-Phenylamidomethyl-1,4-Dimethylbenzol. Sm. 120° (A. 301, 271; A. 332, 183 C. 1904 [2] 209). — \*II, 454.
- $C_{17}H_{17}O_2NS$  1) Diäthyläther d. 4-Oxy-1-[4-Oxyphenyl]benzthiazol. Sm. 163° (J. pr. [2] 59, 588). — \*II, 915.  
2)  $\alpha$ -Acetat-4-Äthyläther d. anti- $\alpha$ -Oximido-4-Merkaptodiphenylmethan. Sm. 58—60° (B. 27, 1736). — III, 211.  
3)  $\alpha$ -Acetat-4-Äthyläther d. syn- $\alpha$ -Oximido-4-Merkaptodiphenylmethan. Sm. 99—100° (B. 27, 1736). — III, 210.
- $C_{17}H_{17}O_2NS_2$  1) Diphenylamid d. Äthylxanthogenessigsäure. Sm. 111° (Ar. 244, 85 C. 1906 [1] 1875).
- $C_{17}H_{17}O_2N_2Cl$  1) Dimethyläther d.  $\beta$ -Chlor- $\gamma$ -[2-Oxyphenyl]imido- $\alpha$ -[2-Oxyphenyl]amidopropen. Sm. 138°. HCl (O. LANGHAMMER, Dissert. Berlin 1905).  
2) Dimethyläther d.  $\beta$ -Chlor- $\gamma$ -[4-Oxyphenyl]imido- $\alpha$ -[4-Oxyphenyl]amidopropen. Sm. 158°. HCl + C<sub>2</sub>H<sub>6</sub>O, HCl + C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> (O. LANGHAMMER, Dissert. Berlin 1905).



- $C_{17}H_{17}O_2N_2Cl$  3) 5-Chlor-2-Acetylamido-4'-Dimethylamidodiphenylketon. Sm. 132° (B. 38, 4121 C. 1906 [1] 363).
- 4) Verbindung (aus Phenylisocyanid u. d. Phenylamid d.  $\alpha$ -Chlor- $\alpha$ -Oxybuttersäure). Sm. 101,5—104,5° (B. 21, 302). — II, 404.
- $C_{17}H_{17}O_2N_2Br$  1) Dimethyläther d.  $\beta$ -Brom- $\gamma$ -[2-Oxyphenyl]imido- $\alpha$ -[2-Oxyphenyl]amidopropen. Sm. 145°. HBr (O. LANGHAMMER, Dissert. Berlin 1905).
- 2) Dimethyläther d.  $\beta$ -Brom- $\gamma$ -[4-Oxyphenyl]imido- $\alpha$ -[4-Oxyphenyl]amidopropen. Sm. 141°. HBr (O. LANGHAMMER, Dissert. Berlin 1905).
- 3) 2-Brom-6-Benzoylazo-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 209° (A. 340, 108 C. 1905 [2] 323).
- 4) Dimethyläther d. 4'-Brom-5,6-Dioxy-3-Allylazobenzol. Sm. 92 bis 94° (C. 1908 [1] 24).
- 5) 4-Oxybromphenylat d. 2-[4-Oxyphenyl]amido-1,2-Dihydropyridin. Sm. 181° (J. pr. [2] 69, 130 C. 1904 [1] 815).
- $C_{17}H_{17}O_2N_2J$  1) Di[Methylphenylamid] d. Jodmalonsäure. Sm. bei 164° u. Zers. (B. 31, 1827). — \*II, 210.
- $C_{17}H_{17}O_2N_3Br_2$  1) Phenylamid d. 3,6-Dibrom-4-Oxy-5-Isopropyl-2-Methylphenyl-azoameisensäure. Sm. 199—200° (A. 334, 197 C. 1904 [2] 835).
- $C_{17}H_{17}O_2N_3S$  1) 4-Diacetylamido-s-Diphenylthioharnstoff. Sm. 220—221° (J. pr. [2] 50, 410). — I, 591.
- 2) 3-Phenylsulfonimido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 211° (B. 36, 3286 C. 1903 [2] 1190).
- 3) Phenylamid d. 3-Methyl-1-[4-Methylphenyl]pyrazol-5-Sulfonsäure. Sm. 118° (A. 361, 298 C. 1908 [2] 522).
- $C_{17}H_{17}O_2N_3S_2$  1) Äthylester d.  $\beta$ -Benzoyl- $\alpha$ -Phenylthioharnstoff- $\alpha$ -Amidothio-ameisensäure. Sm. 148—150° (Am. 24, 439). — \*IV, 450.
- $C_{17}H_{17}O_2N_4Cl$  1) 3-Chlor-4,6-Di[Acetylamido]-2-Methylazobenzol. Sm. 251° (Soc. 81, 98 C. 1902 [1] 186). — \*IV, 1023.
- $C_{17}H_{17}O_2N_4Br$  1) 4'-Brom-4,6-Di[Acetylamido]-3-Methylazobenzol. Sm. 228° (Soc. 81, 1384 C. 1902 [2] 1190). — \*IV, 1023.
- $C_{17}H_{17}O_3NBr_2$  1) 2-Phenylamidoformiat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol-5-Methyläther. Sm. 157—158° (B. 29, 2339). — \*II, 690.
- 2) Methyl ester d. 5,8-Dibrom-2,4,4-Trimethyl-3,4-Dihydrochino- $\beta$ -Methylcumarilsäure. Sm. 138° (B. 32, 3703). — \*IV, 230.
- $C_{17}H_{17}O_3NS$  1)  $\beta$ -Benzoylamidoäthylbenzylsulfid-2,2'-Dicarbonsäure (Äthylbenzylsulfidphthalamidsäure). Ag (B. 25, 3050). — II, 1796.
- 2) 4-[4-Methylphenyl]merkaptophenylamid d. Oxalsäuremonoäthylester (p-Thiotolylphenyloxamäthan). Sm. 121° (J. pr. [2] 68, 268 C. 1903 [2] 993).
- $C_{17}H_{17}O_3N_2Br$  1)  $\delta$ -Brom- $\gamma$ -Keto- $\beta\delta$ -Di[Phenylamido]butan- $\beta$ -Carbonsäure. Sm. 157°. Na + 3H<sub>2</sub>O (B. 23, 550). — II, 439.
- $C_{17}H_{17}O_3N_3S$  1) 4-Phenylsulfonamido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 245° (A. 352, 206 C. 1907 [1] 1051).
- $C_{17}H_{17}O_4NS$  1) 1-Naphthylaminbenzoylsulfid (A. 171, 137). — III, 7.
- $C_{17}H_{17}O_4N_2Br$  1) 6-Brom-3,4-Dimethoxyl-1-Methylphenylhydrazonmethylbenzol-2-Carbonsäure (Bromopiansäuremethylphenylhydrazon). Sm. 291° (B. 25, 1999). — IV, 716.
- 2) Verbindung (aus d. Verb. C<sub>20</sub>H<sub>15</sub>O<sub>9</sub>). Sm. 161—163° u. Zers. (B. 40, 3588 C. 1907 [2] 1746).
- $C_{17}H_{17}O_4N_3S$  1) 6-Methyläther d. 1,3-Di[Acetylamido]-6-Oxyphenazthioniumhydroxyd. Bichromat, Methylsulfat (A. 322, 62 C. 1902 [2] 225). — \*IV, 838.
- $C_{17}H_{17}O_5NS$  1) 4-Diacetylamidophenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 101° (B. 34, 238).
- $C_{17}H_{17}O_5NS$  1) 2-[3,4-Dioxybenzoyl]methyl-1,2,3,4-Tetrahydrochinolin- $\beta$ -Sulfonsäure (B. 27, 1974). — IV, 215.
- $C_{17}H_{17}O_7NS$  1) 2-[2,3,4-Trioxymethyl]methyl-1,2,3,4-Tetrahydrochinolin- $\beta$ -Sulfonsäure. Sm. 188° (B. 27, 1972). — IV, 215.
- $C_{17}H_{17}N_2ClS$  1)  $\alpha$ -[ $\beta$ -Chlorallyl]- $\beta$ -Phenyl- $\beta$ -Benzylthioharnstoff. Sm. 77—78° (Soc. 79, 558).

- C<sub>17</sub>H<sub>17</sub>N<sub>3</sub>JS** 1) Jodmethylat d. 5-Merkapto-1,3-Diphenylpyrazol-3-Methyläther. Sm. 185° (A. 358, 174 C. 1908 [1] 857).  
2) Jodmethylat d. 3-Merkapto-1,5-Diphenylpyrazol-3-Methyläther. Sm. 213° (A. 358, 164 C. 1908 [1] 856).
- C<sub>17</sub>H<sub>13</sub>ONBr** 1) Diphenylamid d. α-Bromisovaleriansäure. Sm. 110,5° (B. 31, 2682). — \*II, 177.  
2) Phenylbenzylamid d. α-Brombuttersäure. Sm. 50–54° (B. 31, 2677). — \*II, 295.  
3) Phenylbenzylamid d. α-Bromisobuttersäure. Fl. (B. 31, 2677). — \*II, 295.
- C<sub>17</sub>H<sub>13</sub>ONBr<sub>3</sub>** 1) 3,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 99–100°. HBr (A. 334, 297 C. 1904 [2] 985).  
2) 2,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 135°. HBr (A. 334, 323 C. 1904 [2] 987).
- C<sub>17</sub>H<sub>18</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) Di[2-Brom-4-Dimethylamidophenyl]keton. Sm. 130–131° (Bl. [3] 19, 609). — \*III, 150.
- C<sub>17</sub>H<sub>18</sub>ON<sub>2</sub>S** 1) α-Acetyl-αβ-Dibenzylthioharnstoff. Sm. 93° (Soc. 59, 406). — II, 529.  
2) Acetyldi[2-Methylphenyl]isothioharnstoff. Sm. 103°. Hg, + HgCl<sub>2</sub> (B. 32, 3656). — \*II, 254.  
3) Acetyldi[4-Methylphenyl]isothioharnstoff. Sm. 108° (B. 32, 3657). — \*II, 273.  
4) β-Propionyl-α-Phenyl-α-Benzylthioharnstoff. Sm. 101–102° (Soc. 69, 859). — \*II, 298.  
5) Äthyläther d. α-Acetylphenylamido-α-Phenylimido-α-Merkapto-methan. Fl. (Am. Soc. 22, 197). — \*II, 198.  
6) Äthyläther d. Benzoylimido-4-Methylphenylamidomerkapto-methan (Benzoyl-p-Tolylthioläthylpseudothioharnstoff). Sm. 93° (Am. 26, 414).  
7) Propyläther d. Benzoylimidophenylamidomerkapto-methan (Benzoylphenylthiolpropylpseudothioharnstoff). Sm. 78–79° (Am. 26, 415).  
8) 3,6-Di[Dimethylamido]thioxanthon. Sm. 288°. + 2CHCl<sub>3</sub>, 2HCl + 3½ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 65, 506 C. 1902 [2] 372). — \*III, 597.  
9) 6-Äthyläther d. 2-Merkapto-6-Oxy-4-Methyl-1-[2-Methylphenyl]benzimidazol. Sm. 240° (B. 36, 3854 C. 1904 [1] 90).  
10) 6-Äthyläther d. 2-Merkapto-6-Oxy-5-Methyl-1-[2-Methylphenyl]benzimidazol. Sm. 253° (A. 287, 190). — \*II, 427.  
11) 6-Äthyläther d. 2-Merkapto-6-Oxy-5-Methyl-1-[4-Methylphenyl]benzimidazol. Sm. 205–206° (A. 287, 202; B. 36, 3855 C. 1904 [1] 90). — \*II, 428.  
12) Verbindung (aus s-Di[2-Methylphenyl]thioharnstoff u. Acetylchlorid). HCl (Soc. 91, 138 C. 1907 [1] 1110).
- C<sub>17</sub>H<sub>13</sub>ON<sub>2</sub>S<sub>2</sub>** 1) Methyl-Benzyläther d. α-Dimerkaptomethylen-β-Acetyl-β-Phenylhydrazin. Fl. (J. pr. [2] 61, 343).  
2) Dimethyläther d. 5-Merkapto-2-Oxy-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 95° (J. pr. [2] 67, 260 C. 1903 [1] 1266). — \*IV, 590.  
3) 5-Methyläther-2-Äthyläther d. 5-Merkapto-2-Oxy-2,3-Diphenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 106° (J. pr. [2] 67, 224 C. 1903 [1] 1261). — \*IV, 590.
- C<sub>17</sub>H<sub>13</sub>ON<sub>2</sub>Br** 1) 4-[α-Bromisovaleryl]amidoazobenzol. Sm. 190° (B. 31, 2853). — \*IV, 1011.
- C<sub>17</sub>H<sub>13</sub>ON<sub>4</sub>S** 1) Acetylderivat d. α-Imido-α-Phenylamido-α'-Merkapto-α'-[4-Methylphenyl]imidodimethylamin. Sm. 225° (A. 361, 312 C. 1908 [2] 881).
- C<sub>17</sub>H<sub>13</sub>ON<sub>4</sub>S<sub>2</sub>** 1) s-Di[4-Methylphenylamidothioformyl]harnstoff. Sm. 172° (Soc. 83, 94 C. 1903 [1] 230, 447).
- C<sub>17</sub>H<sub>18</sub>O<sub>2</sub>NCl** 1) α-Chloromorphid. Sm. 190° u. Zers. (192°; 204°). HCl, HBr (Soc. 77, 1029; 79, 579; B. 39, 3131 C. 1906 [2] 1334; B. 41, 977 C. 1908 [1] 1708). — \*III, 670.  
2) β-Chloromorphid. Sm. 188° (B. 40, 4282 C. 1907 [2] 1851).  
3) Benzoylderivat d. isom. Chlornitrocampfananhydrid. Sm. 166° (Soc. 79, 1007).

- $C_{17}H_{18}O_2NBr$  1) 6-Brom-2-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 162—164° (*G.* 19, 67). — II, 1179.  
 2) Bromomorphid. Sm. 169—170° u. Zers.  $HCl + H_2O$ ,  $HBr + H_2O$  (*Soc.* 77, 1032; 79, 573; *B.* 39, 3132 *C.* 1906 [2] 1334). — \*III, 671.  
 3) 2-Brombenzoat d. d.-Carvoxim (*Ph. Ch.* 14, 404). — III, 114; \*III, 85.  
 4) 3-Brombenzoat d. d.-Carvoxim (*Ph. Ch.* 14, 404). — III, 114; \*III, 85.  
 5) 4-Brombenzoat d. d.-Carvoxim (*Ph. Ch.* 14, 404). — III, 114; \*III, 85.  
 6) Benzoylderivat d. Verb.  $C_{10}H_{14}ONBr$ . Sm. 174—176° (*Soc.* 75, 1147). — \*II, 10.
- $C_{17}H_{18}O_2N_2Br$  1) Bromderivat d.  $\gamma\delta$ [oder  $\gamma\epsilon$ ]-Dioximido- $\alpha\epsilon$ -Diphenylpentan. Sm. 172° u. Zers. (*C.* 1906 [1] 136).
- $C_{17}H_{18}O_2N_2Br_2$  1)  $\alpha\beta$ -Dibrom- $\gamma$ -Phenylhydrazido- $\alpha$ -Phenylbutan- $\delta$ -Carbonsäure. Phenylhydrazinsalz (*A.* 367, 31 *C.* 1909 [2] 527).
- $C_{17}H_{18}O_2N_2S$  1) S-Äthyläther d. Benzoylamido-4-Methoxyphenylamidomerkapto-methan (Benzoyl-p-Anisylthioläthylpseudothioharnstoff). Sm. 99—100° (*Am.* 26, 414).  
 2) 4,5-Dioxy-2-Thiocarbonyl-1,3-Dimethyl-4,5-Diphenyltetrahydroimidazol. Sm. 158—159° u. Zers. (*B.* 42, 1798 *C.* 1909 [2] 204).  
 3) 2,3-Dimethyläther d. 2-[2-Oxyphenyl]imido-3-[2-Oxyphenyl]-tetrahydrothiazol. Sm. 128°. ( $2HCl$ ,  $PtCl_4$ ) (*B.* 21, 1864). — II, 711.  
 4) Äthylester d.  $\alpha$ -Phenyl- $\alpha$ -Benzylthioharnstoff- $\beta$ -Carbonsäure. Sm. 93—94° u. Zers. (*Soc.* 69, 332). — \*II, 299.  
 5) Äthylester d.  $\alpha$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -Phenylelessigsäure. Sm. 162° (*B.* 24, 4151). — II, 1326.  
 6) Benzylester d.  $\alpha$ -Äthyl- $\alpha$ -Phenylharnstoff- $\beta$ -Thiocarbonsäure. Sm. 119,5—120,5° (*Soc.* 75, 406). — \*II, 639.
- $C_{17}H_{18}O_2N_3Br$  1) Phenylamid d. 3-Brom-4-Oxy-5-Isopropyl-2-Methylphenylazo-ameisensäure. Sm. 203° (*A.* 334, 196 *C.* 1904 [2] 835).
- $C_{17}H_{18}O_2N_4S$  1) Thiocarbonyldi[4-Methylbenzenylamidoxim]. Sm. 115° (*B.* 28, 2233). — \*II, 828.
- $C_{17}H_{18}O_2N_5Br$  1)  $\beta$ -Methyl- $\alpha$ -Phenylhydrazid d.  $\alpha$ -Oximido- $\beta$ -[4-Bromphenyl]-hydrazonbuttersäure. Sm. 205° u. Zers. + Essigsäureäthylester (*A.* 328, 74 *C.* 1903 [2] 249). — \*IV, 462.
- $C_{17}H_{18}O_3NBr$  1) Brommorphin +  $\frac{1}{2}H_2O$ . Sm. 170°.  $HCl + 3H_2O$  (*A.* 297, 209; *Soc.* 79, 573). — \*III, 668.  
 2) Verbindung (aus Thebain) (*M.* 18, 388).
- $C_{17}H_{18}O_3N_2S$  1) 2,2'-Sulfon d. Di[4-Dimethylamidophenyl]keton. Sm. 317° (*B.* 33, 965). — \*III, 152.  
 2) Inn. Anhydrid d.  $\alpha$ -[ $\alpha\beta$ -Di(4-Methylphenyl)ureido]äthan- $\beta$ -Sulfonsäure. Sm. 204° (*M.* 25, 683 *C.* 1904 [2] 1122).
- $C_{17}H_{18}O_3N_4Br_2$  1) Di[4-Bromphenylhydrazon] d. Apiose. Sm. 211—212° (209°) (*A.* 318, 129; *A.* 321, 76 *C.* 1902 [1] 912; *B.* 39, 237 *C.* 1906 [1] 748). — \*IV, 519.  
 2) Di[4-Bromphenylhydrazon] d. l-Arabinose. Sm. 196—200° (171° u. Zers.) (*B.* 32, 3387 Anm.; *Soc.* 83, 1235 *C.* 1904 [1] 86; *B.* 42, 3251 *C.* 1909 [2] 1477). — \*IV, 520.  
 3) Di[4-Bromphenylhydrazon] d. r-Arabinose. Sm. 200—202° (*B.* 33, 2252). — \*IV, 520.  
 4) Di[4-Bromphenylhydrazon] d. d-Ribose. Sm. 180—185° (*B.* 42, 3249 *C.* 1909 [2] 1477).  
 5) Di[4-Bromphenylhydrazon] d. l-Xylose. Sm. 208° (204°) (*B.* 32, 3387; *B.* 42, 3135 *C.* 1909 [2] 1476). — \*IV, 520.
- $C_{17}H_{18}O_4NCl$  1)  $\alpha$ -Chlor- $\alpha'$ -[3-Nitrobenzoyl]campher. Sm. 72—74° (*Soc.* 81, 412 *C.* 1902 [1] 873). — \*III, 220.  
 2)  $\alpha'$ -Chlor- $\alpha$ -[3-Nitrobenzoyl]campher. Sm. 110° (*Soc.* 81, 413 *C.* 1902 [1] 873). — \*III, 220.
- $C_{17}H_{18}O_4NBr$  1)  $\alpha$ -Brom- $\alpha'$ -[3-Nitrobenzoyl]campher. Sm. 93—94° (*Soc.* 81, 409 *C.* 1902 [1] 873). — \*III, 220.  
 2)  $\alpha'$ -Brom- $\alpha$ -[3-Nitrobenzoyl]campher. Sm. 101—102° (*Soc.* 81, 409 *C.* 1902 [1] 873). — \*III, 220.



- $C_{17}H_{18}O_4NBr$  3) Benzoat d.  $\beta$ -Bromcamphoryloxim. Sm.  $134^\circ$  (Soc. 83, 966 C. 1903 [1] 1411; C. 1903 [2] 666).
- $C_{17}H_{18}O_4N_3Cl$  4) Benzoat d.  $\pi$ -Brom- $\alpha$ -Isonitrosocampher. Sm.  $185^\circ$  (Soc. 83, 967 C. 1903 [1] 1611; C. 1903 [2] 666).
- $C_{17}H_{18}O_5N_2S$  1) Amid u. 9-Diäthylamido-2,3-Dioxyphenoxazoniumchlorid-5-Carbonsäure (Cölestinblau B) (J. pr. [2] 72, 257 C. 1905 [2] 1450).
- $C_{17}H_{18}O_5N_2S$  2) 2,4-Di[Acetylamido]phenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm.  $167^\circ$  (B. 41, 1874 C. 1908 [2] 154).
- $C_{17}H_{18}O_6NBr$  1) Diäthylester d.  $\alpha$ -Brom- $\gamma$ -Phtalylamidopropan- $\alpha$ -Dicarbonsäure. Sm.  $76-78^\circ$ ; Zers. bei  $220-230^\circ$  (B. 34, 2901).
- $C_{17}H_{18}O_6N_3Br$  1) Dimethylamidobenzol + 4-Brom-3,5-Dinitrobenzol-1-Carbonsäure. Sm.  $56^\circ$  (B. 37, 179 C. 1904 [1] 653).
- $C_{17}H_{18}O_{12}N_3Cl$  1) Triäthylester d. 5-Chlor-2,4,6-Trinitrobenzol-1-Methylcarbonsäure-3-Methyldicarbonsäure. Sm.  $147-148^\circ$  (Am. 32, 179 C. 1904 [2] 951).
- $C_{17}H_{19}ONBr_2$  1) 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm.  $124^\circ$ . HCl, HBr,  $HNO_3$ ,  $H_2SO_4$  (B. 28, 2910; A. 334, 287, 307 C. 1904 [2] 984, 986). — \*III, 287.
- $C_{17}H_{19}ONBr_2$  2) 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm.  $128^\circ$ . HBr (A. 334, 319 C. 1904 [2] 987).
- $C_{17}H_{19}ONBr_2$  3) 2,3-Dimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.  $158^\circ$  (A. 344, 294 C. 1906 [1] 1612).
- $C_{17}H_{19}ONBr_2$  4) 2,4-Dimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.  $144,5-145,5^\circ$  (A. 344, 294 C. 1906 [1] 1612).
- $C_{17}H_{19}ONBr_2$  5) 2,5-Dimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.  $155,5-157^\circ$  (A. 344, 296 C. 1906 [1] 1613).
- $C_{17}H_{19}ONBr_2$  6) 2,6-Dimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.  $144,5-146^\circ$  (A. 344, 295 C. 1906 [1] 1612).
- $C_{17}H_{19}ONBr_2$  7) 3,4-Dimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.  $120^\circ$  (A. 344, 294 C. 1906 [1] 1612).
- $C_{17}H_{19}ONBr_2$  8) 3,5-Dimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.  $153,5-155^\circ$  (A. 344, 296 C. 1906 [1] 1613).
- $C_{17}H_{19}ONBr_2$  9) Methyläther d. Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.  $90-91^\circ$  (A. 334, 304 C. 1904 [2] 985).
- $C_{17}H_{19}ONS$  1) Phenylamid d.  $\alpha$ -Merkaptobutterbenzyläthersäure. Sm.  $89^\circ$  (J. pr. [2] 74, 37 C. 1906 [2] 753).
- $C_{17}H_{19}ONS$  2) 2-Methylphenylamid d. 6-Oxy-1-Methylbenzoläthyläther-3-Thiocarbonsäure. Sm.  $137^\circ$  (J. pr. [2] 59, 585). — \*II, 921.
- $C_{17}H_{19}ONS$  3) 4-Methylphenylamid d. 6-Oxy-1-Methylbenzoläthyläther-3-Thiocarbonsäure. Sm.  $185^\circ$  (J. pr. [2] 59, 586). — \*II, 921.
- $C_{17}H_{19}ONS$  4) 2,4-Dimethylphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm.  $139-140^\circ$  (B. 25, 3530; J. pr. [2] 59, 587). — II, 1541.
- $C_{17}H_{19}ON_2Cl$  1) Nikotinbenzoylchlorid. Fl. Pikrat (B. 24, 1376; 27, 2865; Ar. 233, 586). — IV, 857.
- $C_{17}H_{19}ON_2Br$  1) 5-Brom-4-Oxy-3-Phenylhydrazonmethyl-1-tert. Butylbenzol. Sm.  $152^\circ$  (Am. 16, 644). — IV, 761.
- $C_{17}H_{19}ON_2Br$  2)  $\alpha$ -Bromisovaleryl-s-Diphenylhydrazin. Sm.  $106^\circ$  (B. 31, 3244). — IV, 1496.
- $C_{17}H_{19}ON_3S$  1)  $\alpha$ -Butyrylamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm.  $117-118^\circ$  (B. 27, 1518). — IV, 681.
- $C_{17}H_{19}ON_3S$  2)  $\alpha$ -Phenylbenzylamidoformyl- $\beta$ -Äthylthioharnstoff. Sm.  $67-68^\circ$  (Soc. 75, 408). — \*II, 297.
- $C_{17}H_{19}ON_3S$  3)  $\alpha$ -Äthylphenylamidoformyl- $\beta$ -[2-Methylphenyl]thioharnstoff. Sm.  $124-125^\circ$  (Soc. 75, 405). — \*II, 255.
- $C_{17}H_{19}ON_3S$  4)  $\alpha$ -Äthylphenylamidoformyl- $\beta$ -[4-Methylphenyl]thioharnstoff. Sm.  $174^\circ$  (Soc. 75, 406). — \*II, 274.
- $C_{17}H_{19}ON_3S_2$  1) Dimethyläther d.  $\alpha$ -Dimerkaptomethylenamido- $\alpha$ -[2-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm.  $98^\circ$  (B. 36, 1370 C. 1903 [1] 1342). \*IV, 531.
- $C_{17}H_{19}ON_3S_2$  2) Dimethyläther d.  $\alpha$ -Dimerkaptomethylenamido- $\alpha$ -[3-Methylphenyl]- $\beta$ -Phenylharnstoff. Sm.  $127^\circ$  (B. 36, 1373 C. 1903 [1] 1343). — \*IV, 532.

- C<sub>17</sub>H<sub>19</sub>OClS** 1) Methyläthyl-desylsulfinchlorid.  $2 + \text{PtCl}_4$  (Soc. 77, 1178). — \*III, 165.
- C<sub>17</sub>H<sub>19</sub>OBrS** 1) Methyläthyl-desylsulfimbromid (Soc. 77, 1178). — \*III, 165.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>NS** 1) Äthylester d. 4-Merkapto-2-Methylphenylamidoameisen-4-Methylphenyläthersäure. Sm. 81° (*J. pr.* [2] 68, 285 C. 1903 [2] 995).  
 2) Phenylamid d. 2,4-Dioxybenzoldiäthyläther-1-Thiocarbonsäure. Sm. 121° (*J. pr.* [2] 59, 581). — \*II, 1027.  
 3) 4-Äthoxyphenylamid d. 4-Oxybenzoldiäthyläther-1-Carbonsäure. Sm. 151° (*J. pr.* [2] 59, 588). — \*II, 915.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>N<sub>2</sub>S** 1) S-Methyläther-O-Äthyläther d.  $\alpha\beta$ -Diphenylsemicarbazomer-kaptooxymethan. Sm. 108–109° (*Am.* 24, 441). — \*IV, 448.  
 2) Äthylester d. 2-Methyl-5-[ $\beta$ -Phenylthioureido]phenylamidoameisensäure (Thiocarbaniltoluylenurethan). Sm. 154–155° (*A.* 268, 316). — IV, 603.  
 3) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -Phenylamidothioformylhydrazidoessigsäure. Sm. 155–156° (*B.* 28, 1227). — IV, 739.
- C<sub>17</sub>H<sub>19</sub>O<sub>2</sub>ClS** 1) Chlorid d. 2-Methyl-5-Isopropylidiphenylmethan- $\beta$ -Sulfonsäure. Sm. 134° (*B.* 40, 2373 C. 1907 [2] 335).
- C<sub>17</sub>H<sub>19</sub>O<sub>3</sub>NS** 1) 2,5-Dimethylphenylamid d. 4-Methylphenylsulfonessigsäure. Sm. 160° (*C.* 1900 [2] 1269). — \*II, 486.  
 2) 3,4-Dimethylphenylamid d. 4-Methylphenylsulfonessigsäure. Sm. 153–154° (*C.* 1900 [2] 1269). — \*II, 486.  
 3) Benzoylamid d. 4-Isopropyl-1-Methylbenzolsulfonsäure. Sm. 153° (*B.* 5, 142). — II, 1175.  
 4) Benzoylisobutylamid d. Benzolsulfonsäure. Sm. 113–114° (*C.* 1897 [2] 848). — \*II, 737.
- C<sub>17</sub>H<sub>19</sub>O<sub>3</sub>N<sub>2</sub>S<sub>2</sub>** 1) 1, 2, 3, 4-Tetrahydrochinolindimethylanilinthiosulfonsäureindamin +  $\frac{1}{2}\text{H}_2\text{O}$  (*B.* 23, 379). — IV, 196.
- C<sub>17</sub>H<sub>19</sub>O<sub>4</sub>NS** 1) 4-Äthoxyphenylamid d. 4-Methylphenylsulfonessigsäure. Sm. 156° (*C.* 1900 [2] 1269). — \*II, 486.  
 2) Benzoyl-4-Äthoxyphenylamid d. Äthansulfonsäure. Sm. 117° (*Ar.* 242, 586 C. 1905 [1] 166).
- C<sub>17</sub>H<sub>19</sub>O<sub>5</sub>NS** 1) Äthylester d. 4-[4-Methylphenylsulfon]amidophenoxylessigsäure. Sm. 90° (*B.* 42, 4109 C. 1909 [2] 2073).  
 2) 4-Methylbenzolsulfonat d. 4-Oxyphenylamidoessigsäureäthylester +  $\text{H}_2\text{O}$ . Sm. 205° (*B.* 42, 4110 C. 1909 [2] 2073).
- C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>NS** 1) Morphinschwefelsäure +  $2\text{H}_2\text{O}$  (*H.* 8, 242). — III, 900.
- C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>NS<sub>2</sub>** 1)  $\alpha\alpha$ -Di[Äthylsulfon]- $\alpha$ -Phenyl- $\alpha$ -[3-Nitrophenyl]methan. Sm. 175° (*B.* 35, 2351 C. 1902 [2] 517).  
 2)  $\alpha\alpha$ -Di[Äthylsulfon]- $\alpha$ -Phenyl- $\alpha$ -[4-Nitrophenyl]methan. Sm. 193,5° (*B.* 35, 2351 C. 1902 [2] 517).
- C<sub>17</sub>H<sub>19</sub>O<sub>6</sub>N<sub>2</sub>P** 1) Trimethylester d. Phosphorsäuredi[Phenylamid]-2,2'-Dicarbonsäure. Sm. 174° (*B.* 36, 1828 C. 1903 [2] 201).
- C<sub>17</sub>H<sub>19</sub>NBrJ** 1) l-Methylallyl-4-Bromphenylbenzylammoniumjodid. Sm. 134 bis 135° (*Soc.* 93, 1238 C. 1908 [2] 780).  
 2) i-Methylallyl-4-Bromphenylbenzylammoniumjodid. Sm. 133 bis 134° (*Soc.* 93, 1236 C. 1908 [2] 780).
- C<sub>17</sub>H<sub>19</sub>N<sub>2</sub>ClS** 1) Dehydrothio-p-Toluidintrimethylammoniumchlorid.  $2 + \text{PtCl}_4$  (*B.* 22, 971). — II, 822.  
 2) Thiopyroninchlorid.  $\text{HCl}$ ,  $2 + \text{PtCl}_4$  (*J. pr.* [2] 65, 504 C. 1902 [2] 372). — \*III, 597.
- C<sub>17</sub>H<sub>19</sub>N<sub>2</sub>JS** 1) Dehydrothio-p-Toluidintrimethylammoniumjodid (*B.* 22, 971). — II, 822.  
 2) 2-Jodmethylat d. 6-Methyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 260° u. Zers. (*J. pr.* [2] 73, 226 C. 1906 [1] 1262).
- C<sub>17</sub>H<sub>20</sub>ONBr** 1) 6-Brom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 155–157° (*A.* 334, 335 C. 1904 [2] 989).  
 2) Methyläthylphenylphenacylammoniumbromid. Zers. bei 145° (*B.* 41, 2804 C. 1908 [2] 1346).
- C<sub>17</sub>H<sub>20</sub>ONBr<sub>5</sub>** 1) Bromderivat d. Base C<sub>17</sub>H<sub>21</sub>ON (aus  $\alpha$ -Oxybenzylidencampher). Sm. 173° (*Soc.* 83, 108 C. 1903 [1] 233, 458).
- C<sub>17</sub>H<sub>20</sub>ONJ** 1) Jodäthylat d.  $\alpha$ -[2-Äthoxyphenyl]- $\beta$ -[2-Pyridyl]äthen. Sm. 217,5° (*B.* 23, 2699). — IV, 395.

- C<sub>17</sub>H<sub>20</sub>ON<sub>2</sub>Br<sub>2</sub>** 1) 3,6-Dibrom-6'-Dimethylamido-3'-Amido-4-Oxy-2,5-Dimethyldi-phenylmethan. Sm. 141—142°. HBr (*A.* 334, 313 *C.* 1904 [2] 986).
- C<sub>17</sub>H<sub>20</sub>ON<sub>2</sub>S** 1) d- $\alpha$ -[ $\alpha$ -Methyl- $\beta$ -Phenylthioureido]- $\beta$ -Oxy- $\alpha$ -Phenylpropan. Sm. 122° (*Ar.* 246, 574 *C.* 1909 [1] 29).  
 2) l- $\alpha$ -[ $\alpha$ -Methyl- $\beta$ -Phenylthioureido]- $\beta$ -Oxy- $\alpha$ -Phenylpropan. Sm. 115° (*Ar.* 246, 574 *C.* 1909 [1] 29).  
 3)  $\alpha$ -Äthyl- $\beta$ -[ $\beta$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthyl]thioharnstoff. Sm. 148—149° (*B.* 28, 1901). — \*II, 661.  
 4) Äthyläther d. 6-Oxy-3,4'-Dimethyl-s-Diphenylthioharnstoff. Sm. 158° (*B.* 36, 3356 *C.* 1904 [1] 90).
- C<sub>17</sub>H<sub>20</sub>ON<sub>3</sub>Cl** 1) 3,9-Di[Dimethylamido]-4-Methylphenoxazoniumchlorid (Capri-blau) (*C.* 1902 [2] 378; D.R.P. 62367; *A.* 322, 16). — \*IV, 841.
- C<sub>17</sub>H<sub>20</sub>ON<sub>3</sub>J** 1) 3,9-Di[Dimethylamido]-4-Methylphenoxazoniumjodid (*C.* 1902 [2] 378). — \*IV, 841.  
 2) Jodäthylat d. 3-Keto-1,4,6-Trimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol + H<sub>2</sub>O. Sm. 200° (*A.* 366, 390 *C.* 1909 [2] 289).
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>NCl** 1) Benzoat d. act. Hydrochlorcarvoxim. Sm. 114—115° (*B.* 18, 2222; *A.* 270, 179). — \*III, 394.  
 2) Benzoat d.  $\beta$ -Chlorcampheroxim. Sm. 86° (*Soc.* 81, 273 *C.* 1902 [1] 660, 809). — \*III, 367.  
 3) Benzoylderivat d. Limonennitrosylechlorid. Sm. 109—110° (*A.* 270, 176). — III, 524.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>NBr** 1) Benzoat d.  $\beta$ -Bromcampheroxim. Sm. 71—73° (*Soc.* 81, 271 *C.* 1902 [1] 660, 809). — \*III, 367.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>NBr<sub>3</sub>** 1) Methylhydroxyd d. Verb. C<sub>16</sub>H<sub>16</sub>ONBr<sub>3</sub>. Sm. 179° (*B.* 29, 2353). — \*II, 445.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>NJ** 1) Jodmethylat d. 2,6-Dimethyl-4-Phenylpyridin-3-Carbonsäure-äthylester. Sm. 205—206° (*B.* 17, 2913; D.R.P. 32280). — IV, 383; \*IV, 229.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>NP** 1) Phenylamid d. Diäthylphenylphosphinoxid-4-Carbonsäure. Sm. 198° (*A.* 293, 290). — IV, 1673.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>N<sub>2</sub>S** 1) Dimethyläther d. s-Di[4-Oxybenzyl]thioharnstoff. Sm. 149—150° (*B.* 20, 2409). — II, 755.  
 2) Diäthyläther d. Di[4-Oxyphenyl]thioharnstoff. Sm. 169° (170°) (D.R.P. 66550; *J. pr.* [2] 65, 378 *C.* 1902 [1] 1329; *A.* 356, 184 *C.* 1907 [2] 1797). — \*II, 406.  
 3) Äthyläther d. 2-Methoxyphenylamido-2-Methoxyphenylimido-merkaptomethan. Sm. 82,5°. (2HCl, PtCl<sub>4</sub>), HJ (*B.* 21, 1863). — II, 711.  
 4)  $\alpha$ -[p-Methyl-p-Isopropylphenyl]sulfonimido- $\alpha$ -Amido- $\alpha$ -Phenylmethan. Sm. 188° (*B.* 5, 142). — IV, 847.  
 5) 4,4'-Di[Dimethylamido]diphenylmethansulfon. Sm. 216° (D.R.P. 54621). — \*IV, 648.
- C<sub>17</sub>H<sub>20</sub>O<sub>2</sub>N<sub>4</sub>S** 1)  $\alpha$ -Phenylhydrazid d.  $\alpha$ -[4-Methylphenyl]hydrazin- $\alpha$ -Thiocarbon-säure- $\beta$ -Carbonsäureäthylester. Sm. 125° (*B.* 34, 2331). — \*IV, 536.  
 2)  $\alpha$ -[4-Methylphenyl]hydrazid d.  $\alpha$ -Phenylhydrazin- $\alpha$ -Thiocarbon-säure- $\beta$ -Carbonsäureäthylester. Sm. 133° (*B.* 34, 2330) — \*IV, 534.
- C<sub>17</sub>H<sub>20</sub>O<sub>3</sub>NP** 1) Diphenylester d. 1-Piperidylphosphinsäure. Sm. 70° (*A.* 326, 187 *C.* 1903 [1] 820). — \*IV, 9.
- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>NCl** 1) o-Chlor-d-Cocain. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 27, 1875). — III, 867.  
 2) o-Chlor-l-Cocain. Sm. 63—64°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HJ (*B.* 27, 1874). — III, 867.
- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>NP** 1) Diäthylester d. 4-[ $\alpha$ -Oximidobenzyl]phenylphosphinsäure (*A.* 315, 48). — \*IV, 1184.
- C<sub>17</sub>H<sub>20</sub>O<sub>4</sub>N<sub>2</sub>S** 1) Tetramethyläther d. s-Di[2,4-Dioxyphenyl]thioharnstoff. Sm. 159—160° (*B.* 22, 2380). — II, 928.  
 2) Tetramethyläther d. s-Di[2,5-Dioxyphenyl]thioharnstoff. Sm. 109° (*B.* 17, 2123). — II, 948.  
 3) Tetramethyläther d. s-Di[2,6-Dioxyphenyl]thioharnstoff. Sm. 170° (*B.* 40, 4007 *C.* 1907 [2] 1840).  
 4) 4-Äthyläther- $\alpha$ -Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[4-Oxyphenyl]sulfonäthan. Sm. 130° (*J. pr.* [2] 78, 13 *C.* 1908 [2] 507).  
 5) 4-Oxy-2,4'-Dimethyl-5-Isopropylazobenzol-p-Sulfonsäure. Na, Ba (*B.* 14, 2795). — IV, 1425.



- $C_{17}H_{20}O_4N_2S_2$  1) Diphenylsulfontrimethylenäthylendiamin. Sm. 148—149° (B. 32, 1826). — \*II, 71.
- $C_{17}H_{20}O_5N_2S$  1) Äthylester d.  $\alpha$ -d-[2-Naphtylsulfonamidopropionyl]amidoessigsäure. Sm. 104° (B. 36, 2596 C. 1903 [2] 618).
- $C_{17}H_{20}O_5N_4Br_2$  1) 4-Bromphenylhydrazid einer Arabinose-p-Bromphenylhydrazonsäure. Sm. 112° u. Zers. (Soc. 83, 1287 C. 1904 [1] 86).
- $C_{17}H_{20}O_5N_4S$  1) ?-Nitroso-?-Nitro-4-Dimethylamidophenyl-4-Dimethylamidobenzylsulfon. Sm. 170° (B. 41, 3387 C. 1908 [2] 1807; B. 42, 385 C. 1909 [1] 736).
- $C_{17}H_{20}O_6N_8S_2$  1) Pentamethylenetetraminbis-4-Diazobenzolsulfonsäure.  $Na_2 + 6H_2O$ ,  $Ba + 3H_2O$  (A. 288, 246). — IV, 1493.
- $C_{17}H_{20}N_3ClS$  1) Homomethylenblau (B. 25, 3136). — II, 826.
- $C_{17}H_{21}ONBr_2$  1) Methylester d. Acetylhydrocotarninessigsäuredibromid. Sm. 121° (B. 38, 2875 C. 1905 [2] 1103).
- $C_{17}H_{22}O_2NS$  1) Phenylamid d.  $\beta$ -Phenylpentan-?-Sulfonsäure. Sm. 60—61° (B. 36, 3690 C. 1903 [2] 1426).
- 2) Phenylamid d. 1-Äthyl-4-Propylbenzol-?-Sulfonsäure. Sm. 97 bis 98° (B. 23, 3196). — II, 425.
- 3) Phenylamid d. 1-Äthyl-4-Isopropylbenzol-?-Sulfonsäure. Sm. 110° (92—93°) (B. 23, 3194; B. 36, 1641 C. 1903 [2] 27). — II, 425.
- 4) Phenylamid d. 1,2-Dimethyl-4-Propylbenzol-?-Sulfonsäure. Sm. 213—214° (B. 23, 2350). — II, 425.
- 5) Phenylamid d. 1,3-Dimethyl-4-Propylbenzol-?-Sulfonsäure. Sm. 180—182° (B. 23, 2350). — II, 425.
- 6) Phenylamid d. 1,4-Dimethyl-2-Propylbenzol-?-Sulfonsäure. Sm. 215—216° (B. 23, 2350). — II, 425.
- 7) Phenylamid d. 1,2-Dimethyl-4-Isopropylbenzol-?-Sulfonsäure. Sm. 186—187° (B. 39, 2311 C. 1906 [2] 516).
- 8) Phenylamid d. isom. 1,2-Dimethyl-4-Isopropylbenzol-?-Sulfonsäure. Sm. 135—136° (B. 39, 2312 C. 1906 [2] 516).
- 9) Phenylamid d. 1,3-Dimethyl-4-Isopropylbenzol-?-Sulfonsäure. Sm. 207° (B. 23, 2351). — II, 425.
- 10) Phenylamid d. 1,3,5-Trimethyl-2-Äthylbenzol-4-Sulfonsäure. Sm. 123—124° (B. 36, 1644 C. 1903 [2] 27).
- $C_{17}H_{21}O_3N_2Cl$  1) Benzoat d. 1-Chlor-1-Nitrohydroxylamin camphan. Sm. 164° (Soc. 79, 1008).
- $C_{17}H_{21}O_3N_2Br$  1) d- $\alpha$ -[ $\alpha$ -Bromisocapronyl]amido-d- $\beta$ -[3-Indolyl]propionsäure (d- $\alpha$ -Bromisocapronyl-d-Tryptophan). Sm. 118° (B. 40, 2743 C. 1907 [2] 464).
- 2) Benzoat d. Verb.  $C_{10}H_{17}O_3N_2Br$ . Sm. 180° u. Zers. (Soc. 79, 656).
- $C_{17}H_{21}O_3N_3S_2$  1) Tetramethylhomöindaminthiosulfonat +  $H_2O$  (B. 25, 3136). — II, 826.
- $C_{17}H_{21}O_4NS$  1)  $\beta$ -Oxyäthyl- $\beta$ -Phenoxyäthylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 73° (C. 1901 [1] 1074).
- $C_{17}H_{21}O_4NS_2$  1) Methyldi[ $\beta$ -Phenylsulfonäthyl]amin. Fl. HCl (J. pr. [2] 30, 335). — II, 781.
- 2)  $\alpha\alpha$ -Di[Phenylsulfon]- $\alpha$ -Phenyl- $\alpha$ -[3-Amidophenyl]methan. Sm. 183—184° (B. 35, 2354 C. 1902 [2] 518).
- 3) Isoamylimid d. Benzolsulfonsäure. Sm. 71,5° (C. 1897 [2] 848). — \*II, 70.
- $C_{17}H_{21}O_7N_2Cl$  1) Methylcarbonat d. l- $\alpha$ -Chloracetyl-amido- $\beta$ -[4-Oxyphenyl]propionylamidoessigsäureäthylester. Sm. 130° (C. 1908 [2] 314; B. 41, 2864 C. 1908 [2] 1251).
- $C_{17}H_{21}O_9NS$  1) 2-Naphtylsulfongalaheptosaminsäure. Sm. 201° u. Zers. (B. 35, 3785 C. 1902 [2] 1470).
- $C_{17}H_{22}ON_2S$  1) Phenylthioharnstoff d.  $\alpha$ -Anhydropulegonhydroxylamin. Sm. 134° (B. 37, 957 C. 1904 [1] 1087).
- $C_{17}H_{22}O_2NCl$  1)  $\beta$ -Chlor- $\alpha$ -Phenylpropionyltropein. Fl. HCl (B. 41, 729 C. 1908 [1] 1557).
- $C_{17}H_{22}O_2NBr$  1)  $\beta$ -Brom- $\alpha$ -Phenylpropionyltropein. HBr (B. 41, 730 C. 1908 [1] 1557).
- $C_{17}H_{22}O_2N_2S$  1) Diäthyläther d.  $\alpha$ -[ $\beta\beta$ -Dioxyäthyl]- $\beta$ -[1-Naphtyl]thioharnstoff. Sm. 112° (B. 25, 2371). — II, 609.
- 2) 4,4'-Di[Dimethylamido]phenylbenzylsulfon. Sm. 199° (B. 41, 3386 C. 1908 [2] 1807).

- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>2</sub>S** 3) Methyl-5-Dimethylamido-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 122—123° (*Soc.* 91, 367 *C.* 1907 [1] 1404).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>3</sub>J** 1) Jodmethylat d. 4-Phenylhydrazido-2,6-Dimethylpyridin-3-Carbonsäureäthylester. Sm. 203° (*A.* 366, 380 *C.* 1909 [2] 288).  
2) Jodpropylat d. 4-Phenylhydrazon-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 207° (*A.* 366, 364 *C.* 1909 [2] 286).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>5</sub>Cl** 1) 4-Chlorbenzoldiazopseudosemicarbazidocampher. Sm. 157° u. Zers. (*Soc.* 89, 236 *C.* 1906 [1] 1431).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>N<sub>5</sub>Br** 1) 4-Brommethylat d. 2-Nitro-4,4'-Di[Dimethylamido]azobenzol. Sm. 176,5—177,5° u. Zers. (*J. pr.* [2] 66, 312 Anm.). — \*IV, 1014.  
2) 4-Brombenzoldiazopseudosemicarbazidocampher. Sm. 155 bis 160° (*Soc.* 89, 237 *C.* 1906 [1] 1431).
- C<sub>17</sub>H<sub>22</sub>O<sub>2</sub>ClBr** 1) l-Menthylester d. 2-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 31—32°; Sd. 237—239°<sub>29</sub> (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
2) l-Menthylester d. 2-Chlor-4-Brombenzol-1-Carbonsäure. Sd. 224—226° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
3) l-Menthylester d. 2-Chlor-5-Brombenzol-1-Carbonsäure. Sm. 34—35°; Sd. 224° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
4) l-Menthylester d. 2-Chlor-6-Brombenzol-1-Carbonsäure. Sm. 144—145° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
5) l-Menthylester d. 3-Chlor-2-Brombenzol-1-Carbonsäure. Sd. 227 bis 229° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
6) l-Menthylester d. 3-Chlor-4-Brombenzol-1-Carbonsäure. Sm. 46—47°; Sd. 225—227° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
7) l-Menthylester d. 3-Chlor-5-Brombenzol-1-Carbonsäure. Sd. 226—228° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
8) l-Menthylester d. 3-Chlor-6-Brombenzol-1-Carbonsäure. Sm. 36,5—37,5° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
9) l-Menthylester d. 4-Chlor-2-Brombenzol-1-Carbonsäure. Sd. 221—223° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).  
10) l-Menthylester d. 4-Chlor-3-Brombenzol-1-Carbonsäure. Sm. 35 bis 36°; Sd. 223—225° (*Soc.* 85, 1264 *C.* 1904 [2] 1302).
- C<sub>17</sub>H<sub>22</sub>O<sub>3</sub>N<sub>2</sub>S** 1) Di[4-Dimethylamidophenyl]methan- $\alpha$ -Sulfonsäure. Zers. oberhalb 120°. Na (*B.* 27, 1405; D.R.P. 67434, 69948). — II, 1079; \*II, 659.  
2) Di[4-Dimethylamidophenyl]methan- $\beta$ -Sulfonsäure (D.R.P. 65017, 88085). — \*IV, 648.
- C<sub>17</sub>H<sub>22</sub>O<sub>4</sub>NCl** 1) l-Menthylester d. 4-Chlor-2-Nitrobenzol-1-Carbonsäure. Sm. 63—66° (*Soc.* 89, 458 *C.* 1906 [1] 1697).  
2) l-Menthylester d. 5-Chlor-2-Nitrobenzol-1-Carbonsäure. Sm. 80—82° (*Soc.* 89, 459 *C.* 1906 [1] 1697).  
3) l-Menthylester d. 6-Chlor-2-Nitrobenzol-1-Carbonsäure. Sm. 127—129° (*Soc.* 89, 459 *C.* 1906 [1] 1697).  
4) l-Menthylester d. 4-Chlor-3-Nitrobenzol-1-Carbonsäure. Sm. 112—113° (*Soc.* 89, 461 *C.* 1906 [1] 1697).  
5) l-Menthylester d. 5-Chlor-3-Nitrobenzol-1-Carbonsäure. Sm. 42—44° (*Soc.* 89, 461 *C.* 1906 [1] 1697).  
6) l-Menthylester d. 6-Chlor-3-Nitrobenzol-1-Carbonsäure. Sm. 55—57° (*Soc.* 89, 458 *C.* 1906 [1] 1697).  
7) l-Menthylester d. 2-Chlor-4-Nitrobenzol-1-Carbonsäure. Fl. (*Soc.* 89, 457 *C.* 1906 [1] 1697).  
8) l-Menthylester d. 3-Chlor-4-Nitrobenzol-1-Carbonsäure. Sm. 54—56° (*Soc.* 89, 460 *C.* 1906 [1] 1697).
- C<sub>17</sub>H<sub>22</sub>O<sub>4</sub>N<sub>2</sub>S<sub>2</sub>** 1)  $\alpha\epsilon$ -Di[Phenylsulfonamido]pentan. Sm. 119° (*B.* 37, 3588 *C.* 1904 [2] 1407).  
2)  $\alpha\beta$ -Di[4-Methylphenylsulfonamido]propan. Sm. 103—104°. Na, (*B.* 33, 762). — \*II, 77.  
3)  $\alpha\gamma$ -Di[4-Methylphenylsulfonamido]propan (Trimethylenamid d. 1-Methylbenzol-4-Sulfonsäure). Sm. 148° (*B.* 32, 2038). — \*II, 77.  
4) Di[Äthylphenylsulfonamido]methan (*M.* 23, 119 *C.* 1902 [1] 1088).  
5) Di[Äthylphenylamid] d. Methandisulfonsäure. Sm. 112—114°. Na, K (*B.* 38, 3392 *C.* 1905 [2] 1525).
- C<sub>17</sub>H<sub>22</sub>O<sub>6</sub>N<sub>2</sub>S<sub>2</sub>** 1) 4,4'-Di[Dimethylamido]diphenylmethan-3,3'-Disulfonsäure (*B.* 41, 3301 *C.* 1908 [2] 1776).

- $C_{17}H_{22}O_6N_2S_2$  2) Di[4-Äthoxyphenylamid] d. Methandisulfonsäure. Sm. 221° (B. 38, 3393 C. 1905 [2] 1526).
- $C_{17}H_{22}O_6N_3Cl$  1) Methylester d.  $\alpha$ -[ $\alpha$ -Chloracetylamidopropionylamidoacetyl]-amido- $\beta$ -[4-Oxyphenyl]propionsäure. Sm. 163—164,5° (B. 41, 855 C. 1908 [1] 1456).
- $C_{17}H_{22}N_3SP$  1) Di[Phenylamid] d. 1-Piperidylthiophosphinsäure. Sm. 199° (A. 326, 215 C. 1903 [1] 822). — \*IV, 9.
- $C_{17}H_{23}ON_3S$  1) Camphorylphenylthiosemicarbazid. Sm. 183° (Soc. 91, 1888 C. 1908 [1] 258).  
2) isom. Camphorylphenylthiosemicarbazid. Sm. 163° (Soc. 91, 1889 C. 1908 [1] 259).
- $C_{17}H_{23}O_3NS$  1) 4-Methylphenylamid d. Campher- $\beta$ -Sulfonsäure. Sm. 141° (Soc. 95, 338 C. 1909 [1] 1563).
- $C_{17}H_{23}O_3N_3S$  1) Äthylester d. 2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyl-tetrahydroimidazol-1- $\alpha$ -Amidoisobuttersäure. Sm. 84° (C. 1904 [2] 1028).
- $C_{17}H_{23}O_4N_2Br$  1)  $\alpha$ -[ $\alpha$ -Bromisocapronyl]amidoacetyl-amido- $\beta$ -Phenylpropionsäure. Sm. 163—164° (B. 37, 3314 C. 1904 [2] 1307).
- $C_{17}H_{24}ONCl$  1) 2-Chlormethyl-5-Benzoylamidomethyl-1,1,2-Trimethyl-R-Pentamethylen. Sm. 113° (B. 42, 1432 C. 1909 [1] 1873).
- $C_{17}H_{24}ON_2S$  1) Pulegonaminphenylthioharnstoff. Sm. 198° (A. 262, 15). — III, 510.
- $C_{17}H_{24}ON_3J$  1) Jodmethylat d. 3-Keto-1,5-Dimethyl-2-Phenyl-4-[1-Hexahydropyridyl]-2,3-Dihydropyrazol. Sm. 206° (B. 38, 4047 C. 1906 [1] 469).
- $C_{17}H_{24}ON_3P$  1) Amylamid-Di[Phenylamid] d. Phosphorsäure. Sm. 117° (A. 326, 174 C. 1903 [1] 819).
- $C_{17}H_{24}O_2N_2S$  1) Äthylester d. 2-[ $\beta$ -Phenylthioureido]-1-Methylhexahydrobenzol-2-Carbonsäure. Sm. 198—199° (B. 41, 2937 C. 1908 [2] 1515).  
2) Äthylester d. 4-[ $\beta$ -Phenylthioureido]-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 205—206° (B. 41, 2934 C. 1908 [2] 1514).
- $C_{17}H_{24}O_3NCl$  1) Diäthyläther d. 4-Chlor-1-Benzoyl-3-Dioxymethylhexahydropyridin. Sm. 35—40° (B. 40, 4693 C. 1908 [1] 377).
- $C_{17}H_{24}O_3NBr$  1) Brommethylat d. Homoatropin. Sm. 180—181° (192—196°) (D.R.P. 145996 C. 1903 [2] 1226; Soc. 91, 97 C. 1907 [1] 1137).
- $C_{17}H_{24}O_3N_3Cl_3$  1) Verbindung (aus Butylchloral u. 4-Dimethylamido-3-Keto-1,3-Dimethyl-2-Phenyl-2,3-Dihydropyrazol). Sm. 85—86° (D.R.P. 150799 C. 1904 [1] 1379).
- $C_{17}H_{24}O_4NCl$  1) Chlormethylat d. Anhydromethylcotarninaceton. 2 +  $PtCl_4$  (B. 37, 213 C. 1904 [1] 590).
- $C_{17}H_{24}O_4NJ$  1) Jodmethylat d. Anhydromethylcotarninaceton. Sm. 144° (B. 37, 213 C. 1904 [1] 590).
- $C_{17}H_{24}O_5NJ$  1) Jodmethylat d. Methylhydrocotarninessigsäuremethylester. Sm. 119° (B. 38, 2874 C. 1905 [2] 1103).
- $C_{17}H_{24}N_5SP$  1) Di[Phenylhydrazid] d. 1-Piperidylthiophosphinsäure. Sm. 158° (A. 326, 215 C. 1903 [1] 822).
- $C_{17}H_{25}ONBr_4$  1) Diisoamyl-3,4,5,6-Tetrabrom-2-Oxybenzylamin. HCl (A. 344, 152 C. 1906 [1] 1157).  
2) Diisoamyl-2,4,5,6-Tetrabrom-3-Oxybenzylamin. Sm. 167—168° (A. 344, 156 C. 1906 [1] 1157).  
3) Diisoamyl-2,3,5,6-Tetrabrom-4-Oxybenzylamin (A. 344, 169 C. 1906 [1] 1158).
- $C_{17}H_{26}ON_2Cl$  1) Hydrochlordipentinnitrolbenzylamin. Sm. 150° (A. 270, 193). — III, 529.  
2) Hydrochlorldimonennitrolbenzylamin. Sm. 103—104° (A. 270, 192). — III, 526.
- $C_{17}H_{26}ON_4P$  1) Di[Phenylhydrazid] d. Isoamylphosphinsäure. Sm. 134—135° (B. 32, 1580). — \*IV, 475.
- $C_{17}H_{26}N_2S_2P$  1) Phenyl-di[1-Piperidyl]phosphin + Schwefelkohlenstoff. Sm. 144° (B. 31, 1042). — IV, 1682.
- $C_{17}H_{26}ON_2S$  1) 3-Oxy-4-[ $\alpha$ -Phenylthioureidoisopropyl]-1-Methylhexahydrobenzol. Sm. 132° (B. 37, 2286 C. 1904 [2] 441).  
2) Thioharnstoff (aus Tetrahydro- $\alpha$ -Anhydropulegonhydroxylamin). Sm. 132° (D.R.P. 173775 C. 1906 [2] 1094).



- $C_{17}H_{26}ON_5P$  1) Amylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 122° (A. 326, 174 C. 1903 [1] 819). — \*IV, 424.
- $C_{17}H_{26}O_3NJ$  1) Jodmethylat d. Isobutylhydrocotarnin. Sm. 189—190° (B. 39, 2229 C. 1906 [2] 440).
- $C_{17}H_{26}O_4NJ$  1) Jodmethylat d. Isobutoxylhydrocotarnin +  $H_2O$ . Sm. bei 120° (A. 254, 365). — III, 917.
- $C_{17}H_{26}O_4N_2S_2$  1)  $\alpha\gamma$ -Di[Phenylsulfonamido]heptan. Sm. 104° (B. 38, 2207 C. 1905 [2] 239).
- $C_{17}H_{27}ONBr_2$  1) Diisoamyl-3,5-Dibrom-2-Oxybenzylamin. HCl (A. 344, 145 C. 1906 [1] 1157).  
2) Diisoamyl-3,5-Dibrom-4-Oxybenzylamin. Sm. 97° (A. 344, 162 C. 1906 [1] 1158).
- $C_{17}H_{27}ON_2Cl$  1) Chloräthylat d. Anagyrin. +  $AuCl_3$  (C. 1900 [1] 1163). — \*III, 601.
- $C_{17}H_{27}ON_3J$  1) Jodäthylat d. Anagyrin +  $H_2O$  (C. 1900 [1] 1163). — \*III, 601.
- $C_{17}H_{27}ON_2P$  1) 4-Methylphenyldi[1-Piperidyl]phosphinoxid. Sm. 60° B. 31, 1046). — IV, 1682.  
2) Methyläther d. 4-Oxyphenyldi[1-Piperidyl]phosphin. Sm. 69° (B. 31, 1047). — \*IV, 1185.
- $C_{17}H_{27}O_3N_2Br$  1) Diisoamyl-5-Brom-3-Nitro-4-Oxybenzylamin. Sm. 129—129,5° (A. 344, 270 C. 1906 [1] 1610).
- $C_{17}H_{27}O_6NS_2$  1)  $\alpha\alpha$ -Di[Isoamylsulfon]- $\alpha$ -[3-Nitrophenyl]methan. Sm. 120—122° (B. 35, 2348 C. 1902 [2] 516).  
2)  $\alpha\alpha$ -Di[Isoamylsulfon]- $\alpha$ -[4-Nitrophenyl]methan. Sm. 108—110° (B. 35, 2349 C. 1902 [2] 517).  
3) 4-Äthoxyphenylamid d.  $\gamma\gamma$ -Di[Äthylsulfon]valeriansäure. Sm. 136° (B. 32, 2810). — \*II, 409.
- $C_{17}H_{27}N_2SP$  1) 4-Methylphenyldi[1-Piperidyl]phosphinsulfid. Sm. 88° (B. 31, 1046). — IV, 1682.
- $C_{17}H_{28}ONCl$  1) Chlorbenzylat d. N-Äthylconhydrin. 2 +  $PtCl_4$  (B. 38, 1291 C. 1905 [1] 1411).
- $C_{17}H_{28}ONJ$  1)  $\alpha$ -Jodbenzylat d. N-Äthylconhydrin. Sm. 163° (B. 38, 1291 C. 1905 [1] 1411).  
2)  $\beta$ -Jodbenzylat d. N-Äthylconhydrin. Sm. 188° (B. 38, 1291 C. 1905 [1] 1411).
- $C_{17}H_{28}ON_3P$  1) Methylphenylamid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 86° (A. 326, 255 C. 1903 [1] 869). — \*IV, 10.  
2) 2-Methylphenylamid-1,1'-Dipiperidid d. Phosphorsäure. Sm. 146° (A. 326, 197 C. 1903 [1] 821). — \*IV, 10.
- $C_{17}H_{28}O_2NBr$  1) Verbindung (aus  $\alpha$ -Nitrosocaryophyllen). Sm. 185—186° u. Zers. (A. 359, 248 C. 1908 [1] 1933).
- $C_{17}H_{28}O_2N_2S$  1) Diäthyläther d.  $\alpha$ -[ $\beta\beta$ -Dioxyäthyl]- $\alpha$ -Butyl- $\beta$ -Phenylthioharnstoff. Sm. 51—54° (Ar. 246, 313 C. 1908 [2] 229).
- $C_{17}H_{28}N_2ClP$  1) Methylphenyldi[1-Piperidyl]phosphoniumchlorid. Sm. 130°. 2 +  $PtCl_4$  (B. 31, 1044). — IV, 1682.
- $C_{17}H_{28}N_2BrP$  1) Methylphenyldi[1-Piperidyl]phosphoniumbromid (B. 31, 1044).
- $C_{17}H_{28}N_2JP$  1) Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm. 167° (B. 31, 1043). — IV, 1682.
- $C_{17}H_{28}N_3SP$  1) 4-Methylphenylmonamid-1,1'-Dipiperidid d. Thiophosphorsäure. Sm. 157° (A. 326, 218 C. 1903 [1] 822).
- $C_{17}H_{29}O_2NS$  1) sec. Undekylamid d. Benzolsulfonsäure. Sm. 64—65° (C. 1899 [2] 868). — \*II, 70.
- $C_{17}H_{29}O_5N_2Br$  1) Bromäthylat d. Isopilocarpoessäurediäthylester. Fl. 2 +  $PtCl_4$  (B. 38, 1521 C. 1905 [1] 1568).
- $C_{17}H_{31}ONS$  1) Rhodanid d. Palmitinsäure. Fest. Sd. 200—205°<sub>10</sub> u. Zers. (Soc. 69, 1595). — \*I, 723.
- $C_{17}H_{32}O_2NCl$  1) Chlormethylat d. Diäthylamidoessigsäurebornylester +  $H_2O$ . Zers. bei 130° (Ar. 240, 651 C. 1903 [1] 399).
- $C_{17}H_{32}O_2NJ$  1) Jodmethylat d. Diäthylamidoessigsäurebornylester. Sm. 194° (Ar. 240, 650 C. 1903 [1] 399).
- $C_{17}H_{32}O_7N_4S_2$  1) Verbindung (aus Oxalmalonsäureäthylester u. Pseudoäthylthioharnstoff). Sm. 181° (Am. 38, 366 C. 1907 [2] 1635).
- $C_{17}H_{34}ON_2S$  1) Palmitat d. Imidoamidomerkaptomethan. HCl (Soc. 91, 923 C. 1907 [2] 227).

- $C_{17}H_{34}O_2NCl$  1) Chlormethylat d. Diäthylamidoessigsäurementhylester +  $H_2O$ . Sm.  $185^\circ$  (Ar. 240, 648 C. 1903 [1] 399).
- $C_{17}H_{34}O_2NJ$  1) Jodmethylat d. Diäthylamidoessigsäurementhylester. Sm.  $157^\circ$  (Ar. 240, 647 C. 1903 [1] 399).
- $C_{17}H_{35}N_3JP$  1) Äthyl-1-Tripiperidylphosphoniumjodid. Sm.  $178-179^\circ$  (B. 28, 2210). — IV, 11.
- $C_{17}H_{39}N_2J_2P$  1) Methyldi[Diisobutylamido]jodphosphoniumjodid. Sm.  $132^\circ$  (A. 326, 168 C. 1903 [1] 762).

### $C_{17}$ -Gruppe mit fünf Elementen.

- $C_{17}H_9O_4NBrS$  1) Brombenzanthrionsulfonsäure (D.R.P. 193959 C. 1908 [1] 1113).
- $C_{17}H_{10}O_5N_2Cl_2Br_4$  1)  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha\epsilon$ -Di[5-Chlor-2-Nitrophenyl]pentan. Sm.  $199-200^\circ$  u. Zers. (A. 262, 144). — III, 237.
- $C_{17}H_{11}ONClBr$  1) 1-Chlor-4-Brom-2-Benzoylamidonaphtalin. Sm.  $185-186^\circ$  (Soc. 67, 911). — \*II, 732.
- $C_{17}H_{11}O_2NClBr$  1) 3-Chlor- $\beta$ -Brom-2-[2-Methylphenyl]amido-1,4-Naphtochinon. Sm.  $212^\circ$  (B. 15, 487). — III, 378.
- 2) 3-Chlor- $\beta$ -Brom-2-[4-Methylphenyl]amido-1,4-Naphtochinon. Sm.  $185^\circ$  (B. 15, 487). — III, 378.
- $C_{17}H_{11}O_4N_2ClS$  1) 3,12-Anhydro-10-Chlor-5-Oxy- $\alpha\beta$ -Naphtophenazin-3-Sulfonsäure-12-Methylhydroxyd (B. 34, 1100). — \*IV, 711.
- $C_{17}H_{12}ON_2ClBr$  1) 2-Oxy-1-[2-Chlor-6-Brom-4-Methylphenyl]azonaphtalin. Sm.  $129-130^\circ$  (Soc. 91, 1571 C. 1907 [2] 1787).
- $C_{17}H_{12}O_2NCIS$  1) Verbindung (aus d. Benzoylamid d. Naphtalin-1-Sulfonsäure). Sm.  $92-94^\circ$  (B. 5, 142). — II, 1175.
- $C_{17}H_{12}O_2NBrS$  1) Nitril d.  $\delta$ -[4-Bromphenyl]sulfon- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm.  $176^\circ$  (J. pr. [2] 78, 135 C. 1908 [2] 1171).
- $C_{17}H_{12}O_3NCIS$  1) Chlorid d. 2-[2-Naphtylsulfon]amidobenzol-1-Carbonsäure. Sm.  $132^\circ$  (A. 367, 112 C. 1909 [2] 698).
- $C_{17}H_{12}O_5N_2ClBr$  1) Farbstoff (aus Dibromgallussäure u. Nitrosodimethylanilin) (Bl. [3] 15, 405).
- $C_{17}H_{13}ON_2BrS$  1) Benzoat d. 4-Brom-5-Merkapto-3-Methyl-1-Phenylpyrazol. Sm.  $116^\circ$  (A. 361, 270 C. 1908 [2] 521).
- $C_{17}H_{14}O_3NCIS$  1) Benzylchloramid d. Naphtalin-1-Sulfonsäure. Sm.  $94^\circ$  (C. 1905 [1] 231).
- 2) Benzylchloramid d. Naphtalin-2-Sulfonsäure. Sm.  $117^\circ$  (Soc. 87, 162 C. 1905 [1] 1011).
- $C_{17}H_{15}ON_2Br_3S$  1) Tribrom-3,6-Di[Dimethylamido]thioxanthon. Sm.  $235^\circ$  (J. pr. [2] 65, 511 C. 1902 [2] 372). — \*III, 598.
- $C_{17}H_{15}ON_4BrS$  1) 4-[ $\beta$ -Phenylthioureido]-3-Keto-5-Methyl-1-[4-Bromphenyl]-2,3-Dihydropyrazol. Sm.  $262^\circ$  (A. 358, 141 C. 1908 [1] 853).
- $C_{17}H_{15}O_2N_4ClS$  1) 3-Chlor-5-Methylsulfon-4-[4-Methylphenyl]azo-1-Phenylpyrazol. Sm.  $152^\circ$  (A. 338, 226 C. 1905 [1] 1159).
- $C_{17}H_{16}ON_2Br_4S$  1) Verbindung (aus Acetyl-sym-Di[2-Methylphenyl]thioharnstoff). Sm.  $141^\circ$  u. Zers. (B. 36, 3130 C. 1903 [2] 1070).
- $C_{17}H_{16}O_2N_3JS$  1) Jodmethylat d. 5-Merkapto-3-Phenyl-1-[3-Nitrophenyl]pyrazol-5-Methyläther. Sm.  $202^\circ$  (Am. 358, 181 C. 1908 [1] 858).
- 2) Jodmethylat d. 3-Merkapto-5-Phenyl-1-[3-Nitrophenyl]pyrazol-3-Methyläther. Sm.  $172^\circ$  (A. 358, 169 C. 1908 [1] 856).
- $C_{17}H_{16}O_3NBrS$  1) Phenylester d.  $\alpha$ -Acetylamido- $\alpha$ -Merkaptopropion-4-Bromphenyläthersäure. Sm.  $96^\circ$  (H. 20, 436). — \*II, 472.
- $C_{17}H_{17}ON_2ClS$  1) Propyläther d. Benzoylimido-3-Chlorphenylamidomerkapto-methan (Benzoyl-m-Chlorphenylthiolpropylpseudothioharnstoff). Sm.  $59-59,5^\circ$  (Am. 26, 415).
- $C_{17}H_{18}O_2N_2J_2S$  1) Diäthyläther d. s-Di[3-Jod-4-Oxyphenyl]thioharnstoff. Sm.  $163^\circ$  (B. 29, 2596). — \*II, 419.
- $C_{17}H_{18}O_5NCIS$  1)  $\beta$ -Chloromorphidsulfonsäure +  $H_2O$  (B. 40, 4283 C. 1907 [2] 1851).
- $C_{17}H_{19}ONBr_3J$  1) Jodmethylat d. Verb.  $C_{16}H_{16}ONBr_3$ . Sm.  $154^\circ$  (B. 29, 2353). — \*II, 445.
- $C_{17}H_{20}ONBrJ$  1) 1-Methylallyl-4-Bromphenylbenzylammoniumhydroxyd. Jodid, d-Camphersulfonat (Soc. 93, 1237 C. 1908 [2] 780).
- $C_{17}H_{23}O_2NClBr$  1) Brommethylat d. Phenylchloracetyl tropein. Zers. bei  $240$  bis  $242^\circ$  (Soc. 95, 1025 C. 1909 [2] 543).

**C<sub>18</sub>-Gruppe mit einem Element.****C<sub>18</sub>H<sub>12</sub>**

C 94,7 — H 5,3 — M. G. 228.

- 1) Chrysen. Sm. 250°; Sd. 448°<sub>760</sub> (subl. bei 169°). Lit. bedeutend). — II, 291; \*II, 129.
- 2) Triphenylen (Isochrysen). Sm. 196° (198—198,5°) (A. 147, 229; 203, 135; B. 40, 159 C. 1907 [1] 565). — II, 292.
- 3) Naphtacen. Sm. bei 335° (B. 31, 1279). — \*II, 129.
- 4) Naphtanthracen. Sm. 141°. Pikrat (B. 19, 2211; 33, 447; A. 340, 258 C. 1905 [2] 486). — II, 292; \*II, 129.
- 5) Truxen (oder C<sub>27</sub>H<sub>18</sub>). Sm. 365—368° (B. 22, 786, 2022; 26 [2] 607; 27, 1417; 32, 2476; Soc. 65, 269, 495; B. 36, 644 C. 1903 [1] 717; B. 36, 645 C. 1903 [1] 718). — II, 293; \*II, 129.
- 6) Kohlenwasserstoff (aus Teer). Sm. 122° (B. 9, 1208). — II, 293.
- 7) Kohlenwasserstoff (aus Naphtalin u. Phtalsäureanhydrid). Sm. 181 bis 186° (Bl. 34, 532). — II, 293.

**C<sub>18</sub>H<sub>14</sub>**

C 93,9 — H 6,1 — M. G. 230.

- 1) 1,3-Diphenylbenzol (Isodiphenylbenzol). Sm. 85°; Sd. 363° (369°<sub>760</sub>) (A. 174, 233; 203, 129; B. 26, 1999; 27, 3385; Soc. 69, 983). — II, 286; \*II, 126.
- 2) 1,4-Diphenylbenzol. Sm. 205°; Sd. 383° (404—427°) (A. 164, 170; 174, 230; 203, 124; B. 9, 11; 11, 1338; 26, 1998; 27, 3385; 29, 116; Soc. 37, 712; 69, 981; B. 36, 1410 C. 1903 [1] 1358). — II, 286.
- 3) 1-Diphenylmethylen-R-Penten (Diphenylfulven). Sm. 82° (B. 33, 672). — \*II, 126.
- 4) 1-Cinnamylideninden. Sm. 190° (B. 33, 3399). — \*II, 126.
- 5) α-Phenyl-α-[1-Naphtyl]äthen. Sm. 60°; Sd. 350—355° (B. 37, 2757 C. 1904 [2] 707; B. 37, 4167 C. 1904 [2] 1643).
- 6) α-Phenyl-β-[1-Naphtyl]äthen? Sm. 205—207° (B. 32, 1297). — \*II, 127.
- 7) 5,12-Dihydronaphtacen. Sm. 206—207°; Sd. bei 400° (B. 31, 1276; B. 36, 553 C. 1903 [1] 720). — \*II, 126.

**C<sub>18</sub>H<sub>16</sub>**

C 93,1 — H 6,9 — M. G. 232.

- 1) αζ-Diphenyl-αγε-Hexatriën. Sm. 194° (C. 1907 [2] 1411; Soc. 93, 373 C. 1908 [1] 1691).
- 2) α-Phenyl-β-[2-Naphtyl]äthan (Benzylnaphtylmethan) (B. 12, 1078). — III, 282.
- 3) 2-Methyl-7-[4-Methylphenyl]naphtalin. Sm. 140—141° (B. 36, 1873 C. 1903 [2] 286; B. 36, 3909 C. 1903 [2] 1438).

**C<sub>18</sub>H<sub>18</sub>**

C 92,3 — H 7,7 — M. G. 234.

- 1) βε-Diphenyl-βδ-Hexadiën. Sm. 138° (C. r. 135, 1348 C. 1903 [1] 328).
- 2) γδ-Diphenyl-βδ-Hexadiën? Sm. 99°; Sd. 158°<sub>8</sub> (M. 26, 1565 C. 1906 [1] 937).
- 3) Reten. Sm. 98,5°; Sd. 390° (135°) (A. 106, 388; 185, 75; 229, 102; A. ch. [6] 13, 298; Bl. 7, 231; 8, 389; J. 1858, 440; 1860, 475; Z. 1869, 73; D.R.P. 43802; G. 30 [1] 159; B. 29, 2241; C. 1899 [2] 905; Ar. 240, 571 C. 1903 [1] 163; B. 36, 4200 C. 1904 [1] 288; Ar. 241, 581 C. 1904 [1] 166; M. 25, 452 C. 1904 [2] 450; A. 359, 139 C. 1908 [1] 1545; M. 29, 763 C. 1908 [2] 1601). — II, 276; \*II, 124.
- 4) 9-Isobutylantracen. Sm. 57°. Pikrat (B. 14, 802; A. 212, 107). — II, 275.
- 5) 1,3,5,7-Tetramethylantracen (aus 1,3-Dimethylbenzol). Sm. 280° u. Zers. (A. 235, 174; Soc. 85, 218 C. 1904 [1] 656, 939). — II, 275.
- 6) 2-Tetramethylantracen. Sm. 162—163° (A. ch. [6] 11, 268). — II, 275.
- 7) isom. Tetramethylantracen (aus 1,4-Dimethylbenzol). Sm. bei 280° (A. 235, 175). — II, 276.
- 8) isom. Tetramethylantracen (aus 1,4-Dimethylbenzol). Sm. oberhalb 280° (A. 235, 175). — II, 276.
- 9) Kohlenwasserstoff (aus Abiäten). Sm. 86° (Soc. 85, 1248 C. 1904 [2] 107, 1308).
- 10) Kohlenwasserstoff (aus Allocinnamylidenmalonsäure). Sm. 56°; Sd. 212—215°<sub>12</sub> (B. 39, 152 C. 1907 [1] 535).
- 11) Kohlenwasserstoff (aus Pseudocumol). Sm. 290° (A. ch. [6] 11, 268). — II, 275.



$C_{18}H_{20}$ 

C 91,5 — H 8,5 — M. G. 236.

- 1)  $\alpha\alpha$ -Diphenyl- $\alpha$ -Hexen. Sd.  $314^\circ$  (C. r. 135, 534 C. 1902 [2] 1209).
- 2)  $\beta\epsilon$ -Diphenyl- $\beta$ -Hexen. Sd.  $175^\circ_{16}$  (C. 1907 [1] 1200).
- 3)  $\alpha\alpha$ -Diphenyl- $\delta$ -Methyl- $\alpha$ -Penten. Sd.  $178^\circ_{16}$  (B. 41, 2715 C. 1908 [2] 1355).
- 4) bim.  $\beta$ -Phenylpropen. Sm.  $52-53^\circ$ ; Sd.  $158-159^\circ_8$  ( $302-305^\circ$ ) (C. 1901 [2] 624; B. 35, 2639 C. 1902 [2] 585; C. 1907 [1] 1200).
- 5)  $\alpha\beta$ -Di[4-Äthylphenyl]äthen. Sm.  $134,5^\circ$  (B. 7, 1414). — II, 254.
- 6)  $\alpha\alpha$ -Di[3,4-Dimethylphenyl]äthen. Sm.  $73-74^\circ$  (B. 38, 843 C. 1905 [1] 875).
- 7)  $\alpha\beta$ -Di[2,4-Dimethylphenyl]äthen. Sm.  $105-106^\circ$  (B. 7, 1416; J. pr. [2] 39, 300; [2] 47, 46). — II, 253.
- 8)  $\alpha\beta$ -Di[2,5-Dimethylphenyl]äthen. Sm.  $157^\circ$  (B. 7, 1417; J. pr. [2] 47, 47; C. 1906 [1] 27). — II, 254.
- 9) 1,2-Diphenylhexahydrobenzol. Sm.  $171^\circ$  (A. 318, 316).
- 10) 1-Methyl-2,3-Diphenyl-R-Pentamethylen. Sm.  $62-63^\circ$  (Soc. 71, 153; 79, 1033). — \*II, 120.
- 11) 2,3-Dimethyl-1-Phenyl-1,2,3,4-Tetrahydronaphtalin (Methronol). Sd.  $322-323^\circ$  (A. 227, 249). — II, 254.
- 12) 9-Isobutyl-9,10-Dihydroanthracen. Fl. (A. 212, 79; B. 14, 462). — II, 254.
- 13) 9,9-Diäthyl-9,10-Dihydroanthracen. Sm.  $48-50^\circ$  (B. 21, 1182). — II, 254.
- 14) 1,3,5,7-Tetramethyl-9,10-Dihydroanthracen. Sm.  $132-133^\circ$ ; Sd.  $350^\circ_{783}$  (B. 33, 470). — \*II, 136.
- 15) 2,7,9,10-Tetramethyl-9,10-Dihydroanthracen. Sm.  $171-171,5^\circ$ . Pikrat (A. 235, 317; C. r. 141, 355 C. 1905 [2] 827). — II, 254.
- 16) Kohlenwasserstoff (aus Benzol, sec. Butylchlorid, Al u.  $HgCl_2$ ). Sm.  $123-124^\circ$ ; Sd. oberhalb  $250^\circ$  (B. 33, 440). — \*II, 120.

 $C_{18}H_{22}$ 

C 90,8 — H 9,2 — M. G. 238.

- 1)  $\alpha\alpha$ -Diphenylhexan. Sd.  $164^\circ_{10}$  (C. r. 135, 534 C. 1902 [2] 1209).
- 2)  $\gamma\delta$ -Diphenylhexan. Sm.  $88^\circ$  ( $92^\circ$ ); Sd.  $175^\circ_{20}$  (B. 32, 2533; Am. 35, 395 C. 1906 [2] 47). — \*II, 116.
- 3)  $\beta\gamma$ -Diphenyl- $\beta\gamma$ -Dimethylbutan? Sm.  $55-56^\circ$ ; Sd.  $138-140^\circ_{15}$  (C. 1899 [2] 1048). — \*II, 116.
- 4)  $\alpha\alpha$ -Di[2,4-Dimethylphenyl]äthan. Sd.  $323-325^\circ$  (A. 235, 326). — II, 241.
- 5)  $\alpha\beta$ -Di[3,5-Dimethylphenyl]äthan. Sm.  $77-78^\circ$ ; Sd.  $330^\circ$  (B. 27, 2522; 32, 2532; 33, 340). — \*II, 116.
- 6) 2,4,6,3',5'-Pentamethyldiphenylmethan. Sm.  $67-68^\circ$ ; Sd.  $328,5$  bis  $329^\circ_{783}$  (B. 27, 2523; 32, 1911; 33, 340, 464). — \*II, 117.
- 7) 2,4,5,2',4',5'-Hexamethylbiphenyl. Sm.  $52^\circ$ ; Sd.  $320^\circ_{738}$  (A. 332, 47 C. 1904 [2] 40).
- 8) 2,4,6,2',4',6'-Hexamethylbiphenyl. Sm.  $100,5^\circ$ ; Sd.  $296^\circ_{735}$  (A. 332, 48 C. 1904 [2] 40).
- 9) Tetrahydroreten. Sd.  $280^\circ_{60}$  (B. 20, 3076). — II, 276.
- 10) Kohlenwasserstoff (aus  $\alpha$ -Oxyisopropylbenzol). Sm.  $119-120^\circ$  (B. 35, 2638 C. 1902 [2] 585).
- 11) Kohlenwasserstoff (aus d. Verb.  $C_{18}H_{20}O$ ). Sd.  $281-283^\circ$  (G. 39 [1] 352 C. 1909 [2] 195).

 $C_{18}H_{24}$ 

C 90,0 — H 10,0 — M. G. 240.

- 1) Phenylbutadiänyltrimethylecyklopentan. Sd.  $180^\circ_{10}$  (B. 38, 117 C. 1905 [1] 527; B. 38, 760 C. 1905 [1] 873).
- 2) Dodekahydrotriphenylen. Sm.  $232-233^\circ$  ( $230^\circ$ ) (B. 40, 154 C. 1907 [1] 563; A. 369, 100 C. 1909 [2] 2004).

 $C_{18}H_{26}$ 

C 89,2 — H 10,8 — M. G. 242.

- 1) 1,3-Di[Hexahydrophenyl]benzol. Fl. (A. 318, 318).

 $C_{18}H_{28}$ 

C 88,5 — H 11,5 — M. G. 244.

- 1) Hexadekahydrochrysen. Sd. bei  $360^\circ$  (B. 22, 135). — II, 292.
- 2) Dinormenthadien. Sd.  $170-172^\circ_{16}$  (Soc. 87, 668 C. 1905 [2] 241).
- 3) Abieten. Sd.  $340-345^\circ_{760}$  (Soc. 85, 1244 C. 1904 [2] 107, 1308).
- 4) Harzöl. Sd.  $330-355^\circ$  (B. 33, 2267).
- 5) Kohlenwasserstoff (aus 4-Methyl-2,3-Dihydro-R-Penten 3-Carbonsäure). Sd.  $170-172^\circ_{18}$  (Soc. 93, 597 C. 1908 [1] 1784).

- C<sub>18</sub>H<sub>30</sub>** C 87,8 — H 12,2 — M. G. 246.  
 1) **P-Tri[tert. Butyl]benzol.** Sm. 128°; Sd. 291—292°<sub>736,6</sub> (B. 23, 2421). — II, 39.  
 2) **Hexaäthylbenzol.** Sm. 129° (126°); Sd. 305° (292°) (Bl. 31, 464; B. 16, 1747; 21, 2817; 26 [2] 693; 31, 1716; R. 12, 175; J. pr. [2] 68, 227 C. 1903 [2] 1114). — II, 39; \*II, 23.  
 3) **Dodekahydroreten (Dihydroabieten).** Sd. 330—340° (336°) (B. 22, 780, 3365; Soc. 85, 1247 C. 1904 [2] 107, 1308; B. 42, 2096 C. 1909 [2] 342). — II, 276.  
**C<sub>18</sub>H<sub>32</sub>** 4) **Oktadekahydrochrysen.** Sm. 115°; Sd. 353° (B. 22, 135). — II, 292. C 87,1 — H 12,9 — M. G. 248.  
 1) **Tetradekahydroreten.** Sd. 300—315° (B. 42, 2096 C. 1909 [2] 342).  
 2) **Dicampholen.** Sd. 165—168°<sub>30</sub> (A. ch. [7] 4, 353). — \*I, 29.  
 3) **Fichtelit.** Sm. 46°; Sd. 355°<sub>719</sub> (A. 37, 304; 103, 237; B. 22, 499, 3362; C. 1908 [1] 1793). — II, 177.  
 4) **Kohlenwasserstoff (aus Petroleum).** Sd. 210—215°<sub>60</sub> (Am. 33, 273 C. 1905 [1] 1350).  
**C<sub>18</sub>H<sub>34</sub>** C 86,4 — H 13,6 — M. G. 250.  
 1) **β-Methyl-βγ-Heptadekadien.** Sd. 185—188°? (C. 1901 [2] 1201).  
 2) **α-Oktadekin (Hexadekylacetylen).** Sm. 26°; Sd. 180°<sub>15</sub>. Ag + AgNO<sub>3</sub> (B. 25, 2248). — \*I, 30.  
 3) **β-Oktadekin (s-Methylpentadekylacetylen).** Sm. 30°; Sd. 184°<sub>15</sub> (B. 17, 1374; 25, 2248). — I, 137; \*I, 30.  
**C<sub>18</sub>H<sub>36</sub>** 4) **Chaulmoogren.** Sd. 193—194°<sub>20</sub> (Soc. 85, 859 C. 1904 [2] 348, 604). C 85,7 — H 14,3 — M. G. 252.  
 1) **α-Oktadeken.** Sm. 18°; Sd. 179°<sub>15</sub> (B. 16, 3024). — I, 125.  
 2) **Hexapropylen.** Sd. 330—340° (J. 1873, 320, 321). — I, 125.  
 3) **Anthemen.** Sm. 63—64°; Sd. 440° (Bl. 41, 484). — I, 125.  
**C<sub>18</sub>H<sub>38</sub>** C 85,0 — H 15,0 — M. G. 254.  
 1) **norm. Oktadekan.** Sm. 28°; Sd. 317° (98°) (B. 15, 1703; 19, 2221; 21, 2261; 29, 1323; R. 15, 57; C. 1900 [2] 452; Am. 28, 177 C. 1902 [2] 1081; B. 40, 4788 C. 1908 [1] 451). — I, 106; \*I, 14.  
 2) **Kohlenwasserstoff (aus Lichesterinsäure).** Sd. 190—200° (Ar. 241, 21 C. 1903 [1] 698).  
**C<sub>18</sub>Cl<sub>14</sub>** 1) **Perchlor-1,4-Diphenylbenzol.** Subl. (B. 16, 2884). — II, 286.

### C<sub>18</sub>-Gruppe mit zwei Elementen.

- C<sub>18</sub>H<sub>2</sub>Cl<sub>10</sub>** 1) **Dekachlorchrysen (A. 158, 313).** — II, 292.  
**C<sub>18</sub>H<sub>7</sub>Br<sub>5</sub>** 1) **Pentabromchrysen (J. pr. [2] 9, 277).** — II, 292.  
**C<sub>18</sub>H<sub>8</sub>O<sub>2</sub>** C 84,4 — H 3,1 — O 12,5 — M. G. 256.  
 1) **Verbindung (aus Anhydrobisdiketodihydroinden) oder C<sub>36</sub>H<sub>16</sub>O<sub>4</sub>.** Sm. noch nicht bei 310° (A. 277, 372; B. 31, 2089, 2936). — III, 276; \*III, 214.  
**C<sub>18</sub>H<sub>8</sub>O<sub>4</sub>** C 75,0 — H 2,8 — O 22,2 — M. G. 288.  
 1) **5,6,11,12-Tetraketo-5,6,11,12-Tetrahydronaphtacen (Naphtacendichinon).** Sm. 330—333° (B. 31, 1283; B. 36, 727 C. 1903 [1] 774). — \*III, 331.  
 2) **Verbindung (aus d. Verb. C<sub>19</sub>H<sub>12</sub>O<sub>6</sub>).** (C. 1899 [1] 254).  
**C<sub>18</sub>H<sub>8</sub>O<sub>5</sub>** C 71,0 — H 2,6 — O 26,3 — M. G. 304.  
 1) **Anhydrid d. 2,2'-Bi-2-Oxy-1,3-Diketo-2,3-Dihydroinden.** Sm. 216 bis 218° u. Zers. (B. 31, 1166). — \*III, 249.  
**C<sub>18</sub>H<sub>8</sub>N<sub>2</sub>** 2) **Naphtacendichinonoxyd.** Sm. 240° (B. 38, 4020 C. 1906 [1] 242). C 85,7 — H 3,2 — N 11,1 — M. G. 252.  
 1) **Nitril d. Pyrendicarbonsäure.** Sm. oberhalb 300° (M. 4, 255). — II, 1912.  
**C<sub>18</sub>H<sub>8</sub>Cl<sub>4</sub>** 1) **Verbindung d. Kohlenw. C<sub>18</sub>H<sub>12</sub> (aus Braunkohlenteer)** (B. 9, 1207). — II, 293.  
**C<sub>18</sub>H<sub>8</sub>Br<sub>4</sub>** 1) **Tetrabromchrysen (J. pr. [2] 9, 277).** — II, 292.  
 2) **Verbindung d. Kohlenw. C<sub>18</sub>H<sub>12</sub> (aus Braunkohlenteer)** (B. 9, 1207). — II, 293.  
**C<sub>18</sub>H<sub>8</sub>N<sub>7</sub>** C 66,9 — H 2,8 — N 30,3 — M. G. 323.  
 1) **Diazin (aus 1,2-Diamidobenzol u. 4,5,6,7-Tetraketo-4,5,6,7-Tetrahydro-1,2,3-Benzotriazol).** Sm. noch nicht bei 260° (A. 311, 311). — \*IV, 994.

- $C_{18}H_9Cl_3$  1) Trichlorchrysen. Sm. oberhalb  $300^\circ$  (*J. pr.* [2] 9, 279). — II, 292.
- $C_{18}H_9Br_3$  1) Verbindung d. Kohlenw.  $C_{18}H_{12}$  (aus Braunkohlenteer) (*B.* 9, 1208). — II, 293.
- $C_{18}H_{10}O_2$  C 83,7 — H 3,9 — O 12,4 — M. G. 258.
- 1) Chrysochinon. Sm.  $235^\circ$  ( $239,5^\circ$  corr.) (*A.* 158, 309; 311, 262; *J. pr.* [2] 9, 284; *B.* 7, 784; 9, 284; 23, 2437; *B.* 35, 344 *C.* 1902 [1] 590). — III, 462; \*III, 328.
- 2) Naphtacenchinon (5,12-Diketo-5,12-Dihydronaphtacen). Sm.  $294^\circ$  (*B.* 31, 1277). — \*III, 328.
- 3)  $\alpha\beta$ -Naphtanthrachinon. Sm.  $168^\circ$  (*B.* 19, 2209; *A.* 340, 256 *C.* 1905 [2] 486; *C.* 1905 [1] 236; *B.* 41, 3633 *C.* 1908 [2] 1928). — III, 463; \*III, 328.
- $C_{18}H_{10}O_3$  C 78,8 — H 3,6 — O 17,5 — M. G. 274.
- 1) Anhydrobisdiketodihydroinden (Biindon). Sm.  $206-208^\circ$  u. Zers. Na, K, Ca, Cu (*A.* 252, 76; 277, 371; *B.* 30, 2143, 3138; 31, 1165, 2935; 33, 546, 2441). — III, 275; \*III, 214.
- 2) 6-Oxy-5,12-Naphtacenchinon. Sm.  $303^\circ$  (D.R.P. 134985 *C.* 1902 [2] 1085; *B.* 36, 549 *C.* 1903 [1] 719).
- 3) Chrysoketoncarbonsäure. Sm.  $283^\circ$  (*A.* 311, 275; *A.* 335, 119 *C.* 1904 [2] 1132). — \*II, 1021.
- 4) Allochrysoketoncarbonsäure. Sm.  $285-286^\circ$  u. Zers. ( $288^\circ$ ). Na, K (*B.* 40, 3387 *C.* 1907 [2] 905; *C.* 1908 [2] 1360).
- 5) Anhydrid d. 1-Phenylnaphtalin-2,3-Dicarbonsäure. Sm.  $255^\circ$  ( $252$  bis  $253^\circ$ ;  $257-259^\circ$ ) (*Am.* 20, 90; *B.* 32, 2480; *B.* 35, 1408 *C.* 1902 [1] 1156; *Soc.* 87, 1394 *C.* 1905 [2] 1542; *B.* 39, 1911 *C.* 1906 [2] 345; *B.* 40, 3378 *C.* 1907 [2] 904). — \*II, 1106.
- 6) Anhydrid d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm.  $146^\circ$  (*A.* 335, 118 *C.* 1904 [2] 1132).
- 7) Verbindung (aus 1,3-Diketo-2,3-Dihydroinden-2-Carbonsäureäthylester) (*B.* 33, 2439). — \*II, 1080.
- $C_{18}H_{10}O_4$  C 74,5 — H 3,4 — O 22,1 — M. G. 290.
- 1) Diphtalyläthan. Sm. oberhalb  $200^\circ$ . K (*B.* 30, 385; 31, 1160 Anm.).
- 2) 1,6 [oder 1,11]-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 280 bis  $300^\circ$  (*Soc.* 91, 421 *C.* 1907 [1] 1420).
- 3) 2,6 [oder 2,11]-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. noch nicht bei  $330^\circ$  (*Soc.* 91, 422 *C.* 1907 [1] 1420).
- 4) 6,10-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen (*Soc.* 91, 1593 *C.* 1907 [2] 1628).
- 5) 6,11-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen (Isoäthindiphtalid). Sm.  $346-347^\circ$ . K, Na (*B.* 17, 2774; 30, 386; 31, 1162, 1272; 33, 446; 34, 2152; D.R.P. 138324, 138325 *C.* 1903 [1] 371; *B.* 36, 721 *C.* 1903 [1] 773; *B.* 36, 2328 *C.* 1903 [2] 442; *B.* 38, 4021 *C.* 1906 [1] 242). — II, 2034; \*II, 1187.
- 6) 2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm. noch nicht bei  $350^\circ$ .  $K_2 + H_2O$  (*B.* 26, 2582; 31, 1162; *B.* 35, 3960 *C.* 1903 [1] 32). — III, 325; \*III, 247.
- 7) Chinon (aus d.  $\beta$ -Diäthylester d. Dibenzoylbernsteinsäure). Sm. 288 bis  $289^\circ$ .  $+ 2HNO_2$  (*B.* 27, 1167; *A.* 293, 110). — II, 2033; \*II, 1187.
- 8) Pyrendicarbonsäure. Sm. oberhalb  $300^\circ$  (*M.* 4, 260). — II, 1912.
- 9) Anhydrid d. 2,5-Diphenylfuran-3,4-Dicarbonsäure. Sm.  $254-255^\circ$  u. Zers. (*B.* 17, 62; *Soc.* 47, 269). — III, 719.
- 10) Anhydrid d. Pulvinsäure. Sm.  $220-221^\circ$  (*B.* 13, 1630; 15, 1551; *A.* 219, 9; 282, 11; *J. pr.* [2] 57, 317, 440; [2] 58, 516; [2] 62, 333). — II, 2031; \*II, 1185.
- 11) Dicumarin (Anhydrid d. Dicumarsäure) (*Soc.* 51, 63). — II, 1982.
- 12) Dilakton d.  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien-2,2'-Dicarbonsäure (Äthindiphtalid). Sm.  $328^\circ$  (*B.* 10, 1560; 17, 2620; 19, 837; 31, 1160, 1162 Anm.). — II, 2033; \*II, 1187.
- $C_{18}H_{10}O_5$  C 70,6 — H 3,2 — O 26,1 — M. G. 306.
- 1) 2-Oxy-2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm.  $171^\circ$  (*B.* 31, 1171). — \*III, 248.
- 2) 2,6,9 [oder 2,8,11]-Trioxy-5,12-Diketo-5,12-Dihydronaphtacen (*Soc.* 91, 424 *C.* 1907 [1] 1421).



- $C_{18}H_{10}O_5$  3) 6,8,11-Trioxy-5,12-Diketo-5,12-Dihydronaphtacen? (B. 36, 725 C. 1903 [1] 774).  
 4) 6,9,10-Trioxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. noch nicht bei 360° (Soc. 91, 1592 C. 1907 [2] 1628).  
 5) 6,11,p-Trioxy-5,12-Diketo-5,12-Dihydronaphtacen (Soc. 91, 417 C. 1907 [1] 1419).  
 6) 6,11,p-Trioxy-5,12-Diketo-5,12-Dihydroacenaphten (B. 36, 2329 C. 1903 [2] 442).  
 7) p-Trioxy-5,12-Diketo-5,12-Dihydronaphtacen? Sm. 300° (B. 36, 727 C. 1903 [1] 774).  
 8) 1,9-Lakton d. 1-Oxy-4-Acetoxy-10-Keto-9,10-Dihydroanthracen-9-Methenylcarbonsäure (m-Acetoxyanthracumarin). Sm. 255° (B. 20, 3142). — II, 1980.  
 9) Anhydrid d. Oxypulvinsäure. Sm. 196° (J. pr. [2] 57, 314). — \*II, 1190.  
 10) Anhydroverbindung d. 1-[ $\alpha\beta$ -Dioxyäthyl]benzol-2-Carbonsäure- $\alpha$ ,2-Lakton. Sm. 240° (B. 40, 75 C. 1907 [1] 554).  
 11) Acetat d. Dehydro- $\alpha$ -Naphtochinonresorcin. Sm. 289° (B. 32, 924). — \*III, 327.
- $C_{18}H_{10}O_6$  C 67,1 — H 3,1 — O 29,8 — M. G. 322.  
 1) 2,2'-Bi-2-Oxy-1,3-Diketo-2,3-Dihydroinden. Sm. 168—170° (B. 31, 1164). — \*III, 248.  
 2) Säure (aus Naphtacendichinondichlorid). Sm. 185°.  $Ag_2 + H_2O$  (B. 38, 4018 C. 1906 [1] 242).  
 3) isom. Säure (aus Trioxynaphtacenchinonbromid). Sm. 199° (B. 38, 4020 C. 1906 [1] 242).  
 4) Säure (aus Vasculose) (Bl. 37, 409). — I, 1079.
- $C_{18}H_{10}O_7$  C 63,9 — H 2,9 — O 33,1 — M. G. 338.  
 1) Anhydrid d. Dibenzoxylmaleinsäure. Sm. 167—168° (Soc. 69, 551). — \*II, 724.
- $C_{18}H_{10}O_8$  C 61,0 — H 2,8 — O 36,2 — M. G. 354.  
 1) Diacetylkatellagsäure. Sm. 322—324° (Soc. 87, 1418 C. 1905 [2] 323, 1589; C. 1905 [2] 621).  
 2) Diacetat d. Verb.  $C_{14}H_6O_6$ . Sm. 281—282° (M. 26, 849 C. 1905 [2] 620).
- $C_{18}H_{10}O_9$  C 58,4 — H 2,7 — O 38,9 — M. G. 370.  
 1) Monacetat d. Verb.  $C_{16}H_8O_8$ . Sm. 216—220° u. Zers. (Soc. 65, 929). — III, 454.
- $C_{18}H_{10}O_{11}$  C 53,7 — H 2,5 — O 43,8 — M. G. 402.  
 1) Diphenylketon-2,4,6,3',5'-Pentacarbonsäure. Sm. 350—355° (B. 33, 343). — \*II, 1231.
- $C_{18}H_{10}N_2$  C 85,0 — H 3,9 — N 11,0 — M. G. 254.  
 1)  $\alpha\alpha$ -Naphtochinoxalin (Acenaphtenphenylendiazin). Sm. 234°. HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (C. 1899 [2] 338). — \*IV, 727.  
 2) Verbindung (aus d.  $\beta$ -Oxy- $\alpha$ -Phenylakrylsäurenitril). Sm. 186—187° (J. pr. [2] 55, 341). — \*II, 957.
- $C_{18}H_{10}N_4$  C 76,6 — H 3,5 — N 19,8 — M. G. 282.  
 1) 6,6'-Azodichinoyl. Sm. 248° (A. 310, 86; B. 39, 746). — \*IV, 1085.  
 2) Chinoxalonaphtazin. Sm. 290° u. Zers. (A. 319, 272 C. 1902 [1] 359). — \*IV, 973.  
 3) Azin (aus 6-Amidochinolin). Sm. oberhalb 420°. (2HCl, PtCl<sub>4</sub>) (B. 39, 746 C. 1906 [1] 1008).
- $C_{18}H_{10}Cl_2$  1) Dichlorchrysen. Sm. 267° (J. pr. [2] 9, 278). — II, 292.  
 $C_{18}H_{10}Br_2$  1) Dibromchrysen. Sm. 273° (J. pr. [2] 9, 275; A. 158, 309). — II, 292.  
 2) Dibromtruxen (B. 26 [2] 608; Soc. 65, 287). — II, 293.
- $C_{18}H_{10}Br_4$  1) 4-Brom-3-(4-Bromphenyl)-1-[3,4-Dibromphenyl]benzol? Sm. 181° (B. 27, 3391). — \*II, 126.  
 2) p-Dibrom-1,4-Di[4-Bromphenyl]benzol. Sm. 245° (B. 27, 3396). — \*II, 126.
- $C_{18}H_{11}N_3$  C 80,3 — H 4,1 — N 15,6 — M. G. 269.  
 1)  $\beta$ -Naphtindophenazin. Sm. oberhalb 300° (B. 31, 253). — IV, 1212.
- $C_{18}H_{12}O$  C 83,5 — H 4,9 — O 6,5 — M. G. 244.  
 1) 9-Furalfluoren (A. 347, 302 C. 1906 [2] 961).  
 2) Methylbenzanthron. Sm. 199° (D.R.P. 200335 C. 1908 [2] 655).

$C_{18}H_{12}O_2$ 

C 83,1 — H 4,6 — O 12,3 — M. G. 260.

- 1) 1,2-Dioxychrysen. Sm. 152—154° (D.R.P. 151981 C. 1904 [2] 167).
- 2) 2,5-Diphenyl-1,4-Benzochinon. Sm. 214° (B. 22, 2131). — III, 462.
- 3) 2,6-Diphenyl-1,4-Benzochinon. Sm. 137—138° (135—136°) (B. 32, 2939; 33, 1241; A. 312, 230; Am. 24, 8). — \*III, 327.
- 4) 1,3-Diketo-2-Cinnamyliden-2,3-Dihydroinden. Sm. 150—151° (B. 30, 2142). — \*III, 236.
- 5) Methyläther d. 5-Oxy-11-Keto- $\alpha$ -Naphtofluoren. Sm. 183° (B. 39, 4338 C. 1907 [1] 347).
- 6) 2-Methyl- $\gamma$ -Phenonaphtoxanthon. Sm. 158—159° (B. 34, 4146 C. 1902 [1] 315). — \*III, 585.
- 7) Lakton d. Phenyl-2-Oxy-1-Naphtylessigsäure. Sm. 184° (186°) (B. 30, 130; 31, 2822). — \*II, 1018.
- 8) Lakton (aus d. 1-Phenylnaphtalin-2,3-Dicarbonsäureanhydrid). Sm. 135 bis 137° (Am. 20, 101; C. 1908 [2] 1359). — \*II, 1018.

 $C_{18}H_{12}O_3$ 

C 78,3 — H 4,3 — O 17,4 — M. G. 276.

- 1) 2,5-Dibenzoylfuran. Sm. 107° (Am. 25, 457). — \*III, 522.
- 2) 2-Oxy-1,1'-Diketo-2,3-Dihydro-2,2'-Biinden. Zers. bei 230—250° (Soc. 71, 247; B. 29 [2] 869). — \*III, 236.
- 3) Methyläther d. 9-Oxynaphtoxanthon. Sm. 256° (B. 38, 2124 C. 1905 [2] 247).
- 4) Chrysooxyessigsäure (B. 18, 1933). — II, 1722.
- 5) 2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 173,5°. Ba (Bl. 34, 531; B. 29, 827; 33, 448, 719; A. 340, 249 C. 1905 [2] 485; M. 25, 1171 C. 1905 [1] 363; C. 1905 [1] 236; D.R.P. 193961 C. 1908 [1] 1113; B. 41, 3632 C. 1908 [2] 1928). — II, 1721; \*II, 1019.
- 6) 2-[2-Naphtoyl]benzol-1-Carbonsäure (C. 1905 [1] 236).
- 7) Säure (aus Dehydrobenzoylessigsäure). Sm. 112° (Soc. 47, 287). — II, 1721.
- 8) Anhydrid d.  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure (A. d. Dibenzalbernsteinsäure). Sm. 203—204° (C. 1900 [2] 562; B. 37, 2244 C. 1904 [2] 328; B. 37, 2465 C. 1904 [2] 329). — \*II, 1103.
- 9) Anhydrid d. Allodibenzalbernsteinsäure. Sm. 223° (C. 1900 [2] 562). — \*II, 1103.
- 10) Anhydrid d. Isodibenzalbernsteinsäure. Sm. 254—255° (C. 1900 [2] 562). — \*II, 1103.
- 11) Anhydrid d. isom. Dibenzalbernsteinsäure. Sm. 172—175° (C. 1900 [2] 562).
- 12) Anhydrid d. Fluoren-9-[Propyliden- $\alpha\beta$ -Dicarbonsäure]. Sm. 147 bis 148° (B. 39, 1069 C. 1906 [1] 1432).
- 13)  $\alpha,2'$ -Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl-2-Oxy-1-Naphtylmethan-2'-Carbon-säure. Sm. 224—235° (B. 31, 2802). — \*II, 1103.
- 14)  $\alpha,2'$ -Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl-4-Oxy-1-Naphtylmethan-2'-Carbon-säure. Sm. 222—223° (B. 31, 2802). — \*II, 1103.
- 15) Acetat d. 3-Oxybrasan. Sm. 196—197° (B. 41, 2376 C. 1908 [2] 714).
- 16) Verbindung (aus d. Verb.  $C_{33}H_{22}O_7$ ). Sm. 251° (B. 38, 1271 C. 1905 [1] 1397).
- 17) Verbindung (aus 1-Naphtylmagnesiumbromid u. Phtalsäure) (C. 1905 [1] 236).

 $C_{18}H_{12}O_4$ 

C 74,0 — H 4,1 — O 21,9 — M. G. 292.

- 1) 3,6-Dioxy-2,5-Diphenyl-1,4-Benzochinon. Zers. bei 280—300° (A. 361, 381 C. 1908 [2] 590).
- 2)  $\alpha\gamma$ -Diketo- $\beta$ -Phtalyl- $\alpha$ -Phenylbutan (Phtalylbenzoylacetone). Sm. 175° (B. 37, 579 C. 1904 [1] 939).
- 3) Biscumarin. Sm. noch nicht bei 275° (B. 37, 1385 C. 1904 [1] 1344).
- 4) Isomethylenphtalid. Sm. 215—216,5° (B. 17, 2620, 2660). — II, 1647.
- 5) 3-Benzoyl-4-Keto-6-Phenyl-3,4-Dihydro-1,2-Pyron. Sm. 171—172°. Ag (B. 17, 64; Soc. 47, 278). — II, 1909.
- 6) Methyläther d. 3-Oxy-1-Methylbrasanchinon. Sm. 240° (B. 42, 824 C. 1909 [1] 1162).
- 7) 1,2-Bis[4-Methylcumaran]indigo. Sm. 264° (B. 41, 4290 C. 1909 [1] 381).
- 8) 1,2-Bis[5-Methylcumaran]indigo. Sm. 279° (B. 41, 4292 C. 1909 [1] 381).

- $C_{18}H_{12}O_4$
- 9) 1-[4-Methyleumaran]-2-[5-Methyleumaran]indigo. Sm. 286° (*B.* 41, 4292 *C.* 1909 [1] 381).
  - 10) 1-[5-Methyleumaran]-2-[4-Methyleumaran]indigo. Sm. 258° (*B.* 41, 4292 *C.* 1909 [1] 381).
  - 11) 2-[1-Oxy-2-Naphtoyl]benzol-1-Carbonsäure. Sm. 186°; *Sd.* 265 bis 270° (*B.* 36, 554 *C.* 1903 [1] 720; *D.R.P.* 134985 *C.* 1902 [2] 1085; *D.R.P.* 141025 *C.* 1903 [1] 1197).
  - 12) 2-[2-Oxy-1-Naphtoyl]benzol-1-Carbonsäure. Sm. 256° u. *Zers.* Na, Ba + 2H<sub>2</sub>O, Ag (*B.* 15, 2177; 16, 299; *B.* 38, 3269 *C.* 1905 [2] 1493). — II, 1909.
  - 13) 1-Phenylnaphtalin-2,3-Dicarbonsäure. + (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>O, Na<sub>2</sub> + 4<sup>1</sup>/<sub>2</sub> H<sub>2</sub>O, Ca + 3H<sub>2</sub>O, Ba + 3H<sub>2</sub>O, Ag<sub>2</sub>, Piperidinsalz (*Am.* 20, 93; *B.* 32, 2478; 33, 3083; *B.* 35, 1407 *C.* 1902 [1] 1155; *Soc.* 87, 1394 *C.* 1905 [2] 1542; *B.* 39, 1912 *C.* 1906 [2] 345; *B.* 40, 3379 *C.* 1907 [2] 904; *B.* 41, 70 *C.* 1908 [1] 524; *C.* 1908 [2] 1357). — \*II, 1105.
  - 14) 1-Phenylnaphtalin-1<sup>2</sup>,3-Dicarbonsäure. Sm. 288° (*C.* 1908 [2] 1360).
  - 15) 2-Phenylnaphtalin-1,2<sup>3</sup>-Dicarbonsäure (Chrysodiphenssäure). Sm. 199°. Ag<sub>2</sub> (*B.* 35, 2745 *C.* 1902 [2] 642; *A.* 335, 114 *C.* 1904 [2] 1132).
  - 16) Phenanthroxilenacetessigsäure. Sm. 188° (*M.* 17, 344). — \*II, 1105.
  - 17) Isophenanthroxilenacetessigsäure. Sm. 267—269° u. *Zers.* Cu + 9H<sub>2</sub>O, Ag (*Soc.* 59, 11). — II, 1908.
  - 18) 2,6-Diphenyl-1,4-Pyron-3-Carbonsäure. Sm. 201° u. *Zers.* NH<sub>4</sub>, Ba + 6H<sub>2</sub>O, 2Ag + AgNO<sub>3</sub> (*B.* 23, 3731). — II, 1910.
  - 19) Säure (aus Anhydroacetonbenzilcarbonsäure). Sm. 205—207° u. *Zers.* Ag (*Soc.* 71, 143). — \*II, 1106.
  - 20) Dilakton d.  $\alpha\delta$ -Di[ $\beta$ -Oxyphenyl]- $\alpha$ -Buten- $\beta\gamma$ -Dicarbonsäure (Hydrodicumarin). Sm. 256° (262°) (*Soc.* 51, 66; *B.* 35, 4130 *C.* 1903 [1] 160). — II, 2026.
  - 21) Inn. Anhydrid d. 1-[ $\beta$ -Oxyäthenyl]benzol-2-Carbonsäure. Sm. 234 bis 235° (*B.* 27, 210). — II, 1641.
  - 22) Anhydrid d.  $\gamma$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha\delta$ -Dicarbonsäure (*A.* d. Carboxylcornicularsäure). Sm. 215°. Ag (*B.* 15, 1547, 1550; *A.* 219, 20). — II, 1987.
  - 23) Acetat d. 3-Oxy-2-Phenyl-1,4-Naphtochinon. Sm. 112—113,5° (*A.* 296, 21). — \*III, 327.
  - 24) Acetat d.  $\beta$ -Oxy- $\beta$ -Phenyl-1,4-Naphtochinon. Sm. 110—111° (*A.* 226, 34). — III, 461.
  - 25) Acetat d. 1,3-Diketo-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Sm. 124—125° (*B.* 30, 2140). — \*III, 235.
  - 26) Acetat d. 1,3-Diketo-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 140° (*B.* 30, 2141). — \*III, 235.
  - 27) Acetat d. 1,3-Diketo-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 162° (*B.* 30, 2141). — \*III, 235.
  - 28) Verbindung (aus Oxybisdiketohydrinden). Sm. 150° (*B.* 31, 1172). C 70,1 — H 3,9 — O 26,0 — M. G. 308.
- $C_{18}H_{12}O_5$
- 1) Calycin. Sm. 240° (243°). K + 2H<sub>2</sub>O (*B.* 13, 1816; 30, 365, 1984; *A.* 284, 125; 306, 286; 314, 110; *J. pr.* [2] 58, 536; [2] 62, 338; *C.* 1903 [2] 121). — II, 621; \*III, 459.
  - 2) 1-Oxy-2-[4(oder 5)-Oxybenzoyl]naphtalin-2<sup>3</sup>-Carbonsäure. Sm. 215 bis 216° (*Soc.* 91, 421 *C.* 1907 [1] 1420).
  - 3) 1,5-Dioxy-2-Benzoylnaphtalin-2<sup>3</sup>-Carbonsäure. Sm. 221° (*Soc.* 91, 424 *C.* 1907 [1] 1421).
  - 4) 2,5-Diphenylfuran-3,4-Dicarbonsäure. Sm. 238°. Ag<sub>2</sub> (*B.* 17, 61; *Soc.* 47, 266; 49, 168; 57, 954). — III, 719.
  - 5) Pulvinsäure ( $\alpha\gamma$ -Lakton d.  $\beta\gamma$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha\delta$ -Dicarbonsäure). Sm. 214—215°. Ca + H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Cu, Ag, Ag<sub>2</sub> + H<sub>2</sub>O (*B.* 13, 1631; 15, 1550; *J. pr.* [2] 62, 339; *A.* 219, 6; 282, 14; 284, 116). — II, 2029; \*II, 1185.
  - 6) Lakton d. 4-Oxy-7-Acetoxy-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Sm. 157,5—158° (*B.* 36, 1949 *C.* 1903 [2] 296).
  - 7) Anhydrid d.  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan-2,2'-Dicarbonsäure. Sm. 200—202° (*B.* 18, 3116; *B.* 38, 3287 *C.* 1905 [2] 1591). — II, 2033.
  - 8) Anhydrid d. 5,6-Dioxyphenanthren-5,6-Dimethyläther-1,10-Dicarbonsäure. Sm. 283—284° (*B.* 39, 3116 *C.* 1906 [2] 1330).



- $C_{18}H_{11}O_5$  9) Verbindung (aus Formononetin  $C_{19}H_{14}O_5$ ). Sm. bei  $300^\circ$  (*M.* 23, 146 *C.* 1902 [1] 1104; *M.* 24, 148 *C.* 1903 [1] 1033). — \*III, 445.  
C 66,7 — H 3,7 — O 29,6 — M. G. 324.
- $C_{18}H_{12}O_6$  1) Trimethyltricumarin (*B.* 20, 1331). — II, 2092.  
2) Diphenyläther d. 2,3,5,6-Tetraoxy-1,4-Benzochinon. Sm.  $276^\circ$  (*Am.* 17, 648). — III, 355.  
3) Dimethyläther d. Dioxybisbenzaronyl. Sm.  $310^\circ$  (*Soc.* 83, 1132 *C.* 1903 [2] 1059).  
4) cis- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\beta$ -Buten- $\beta\gamma$ -Dicarbonsäure (Dibenzoyl-maleinsäure).  $K_2$ ,  $Ag_2$  (*B.* 33, 3791). — \*II, 1189.  
5) trans- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\beta$ -Buten- $\beta\gamma$ -Dicarbonsäure (Dibenzoyl-fumarsäure).  $K_2$ ,  $Ag_2$  (*B.* 33, 3794). — \*II, 1190.  
6) 7-Oxy-4-Methyl-1,2-Benzpyron-3-o-Phtalylaldehydsäure. Sm.  $180^\circ$  (*B.* 38, 478 *C.* 1905 [1] 749).  
7) Cetrapinsäure. Sm.  $147^\circ$ .  $K + H_2O$  (*B.* 30, 361).  
8) Oxypulvinsäure. Sm.  $207^\circ$  (wasserfrei).  $Ba + H_2O$  (*J. pr.* [2] 57, 313). — \*II, 1190.  
9) Lakton d.  $\beta\gamma$ -Dioxy- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\alpha^2$ -Carbonsäure- $\delta^2$ -Carbonsäurealdehyd. Sm.  $211^\circ$  (*B.* 42, 466 *C.* 1909 [1] 756).  
10) Diacetat d. 1,2-Dioxy-9,10-Anthrachinon. Sm.  $179$ — $183^\circ$  ( $160^\circ$ ;  $184^\circ$ ) (*J.* 1873, 447; *Soc.* 75, 448; *B.* 9, 1232; *B.* 36, 4021 *C.* 1904 [1] 184; *A.* 342, 88 *C.* 1905 [2] 1594). — III, 422; \*III, 302.  
11) Diacetat d. 1,3-Dioxy-9,10-Anthrachinon. Sm.  $183$ — $184^\circ$  (*A.* 183, 215). — III, 425.  
12) Diacetat d. 1,4-Dioxy-9,10-Anthrachinon. Sm.  $200^\circ$  (*B.* 8, 1647; *B.* 35, 2924 *C.* 1902 [2] 1049; *B.* 39, 3537 *C.* 1906 [2] 1617). — III, 426.  
13) Diacetat d. 1,5-Dioxy-9,10-Anthrachinon. Sm.  $244$ — $245^\circ$  (*B.* 11, 1178, 1616; *B.* 34, 2928 *C.* 1902 [2] 1050). — III, 427.  
14) Diacetat d. 1,6-Dioxy-9,10-Anthrachinon. Sm.  $205$ — $206^\circ$  (*B.* 40, 1049 *C.* 1907 [1] 1203; *D.R.P.* 202398 *C.* 1908 [2] 1476).  
15) Diacetat d. 1,7-Dioxy-9,10-Anthrachinon. Sm.  $199^\circ$  (*B.* 11, 972; *D.R.P.* 202398 *C.* 1908 [2] 1476). — III, 429.  
16) Diacetat d. 1,8-Dioxy-9,10-Anthrachinon. Sm.  $227$ — $232^\circ$  (*B.* 12, 186; *B.* 35, 2931 *C.* 1902 [2] 1051). — III, 427.  
17) Diacetat d. 2,3-Dioxy-9,10-Anthrachinon. Sm.  $205$ — $207^\circ$  (*B.* 21, 2505; *B.* 36, 2939 *C.* 1903 [2] 886; *A.* 242, 103 *C.* 1905 [2] 1594). — III, 430.  
18) Diacetat d. 2,6-Dioxy-9,10-Anthrachinon. Sm.  $228$ — $229^\circ$  (*J.* 1873, 449; *B.* 9, 382). — III, 430.  
19) Diacetat d. 2,7-Dioxy-9,10-Anthrachinon. Sm.  $195^\circ$  (*B.* 9, 382). — III, 431.  
20) Diacetat d. Isochrysazin. Sm.  $160$ — $165^\circ$  (*B.* 17, 897). — III, 431.  
21) Diacetat d. 2,7-Dioxy-9,10-Phenanthrenchinon. Sm.  $235$ — $236^\circ$  u. Zers. (*B.* 36, 3742 *C.* 1904 [1] 37).  
22) Diacetat d. 3,4-Dioxy-9,10-Phenanthrenchinon. Sm.  $196^\circ$  (*B.* 32, 1521). — \*III, 318.  
23) Verbindung  $+ 2H_2O$  (aus d. Lakton  $C_{18}H_{12}O_6$ ). Sm.  $240^\circ$  (*B.* 42, 468 *C.* 1909 [1] 756).  
 $C_{18}H_{11}O_7$  C 63,5 — H 3,5 — O 32,9 — M. G. 340.  
1) 5,7-Dioxy-4-Methyl-1,2-Benzpyron-3-o-Phtalylaldehydsäure (*B.* 38, 481 *C.* 1905 [1] 749).  
2) 7,8-Dioxy-4-Methyl-1,2-Benzpyron-3-o-Phtalylaldehydsäure. Sm.  $237^\circ$  (*B.* 38, 482 *C.* 1905 [1] 749).  
3) Anhydrid d. Dibenzoylweinsäure. Sm.  $174^\circ$  (*B.* 13, 1178; *J.* 1882, 855). — II, 1155.  
4) Diacetat d. 1,2,6-Trioxy-9,10-Anthrachinon. Sm.  $238^\circ$ . Subl. bei  $160^\circ$  (*B.* 10, 1822). — III, 435.  
5) Diacetat d. 1,2,7-Trioxy-9,10-Anthrachinon. Sm.  $175$ — $178^\circ$  (*C.* 1901 [1] 548; 1901 [2] 250). — \*III, 312.  
 $C_{18}H_{12}O_8$  C 60,7 — H 3,3 — O 36,0 — M. G. 356.  
1) Diacetylderivat d. Säure  $C_{14}H_8O_6$ . Sm.  $267$ — $268^\circ$  (*Soc.* 87, 1420 *C.* 1905 [2] 324, 1589).  
 $C_{18}H_{12}O_9$  C 58,1 — H 3,2 — O 38,7 — M. G. 372.  
1) 2,4,6-Trimethyl-1,3,5-Benztrifuran-1,3,5-Tricarbonsäure.  $Ba_3 + 7H_2O$  (*B.* 19, 2936). — III, 736.

**C<sub>18</sub>H<sub>12</sub>O<sub>10</sub>**

C 55,7 — H 3,1 — O 41,2 — M. G. 388.

- 1) **1,5-Dioxy-9,10-Anthrachinon-3,7-Di[Oxyessigsäure]**. Sm. oberhalb 290° (D. R. P. 158277 C. 1905 [1] 703).
- 2) **Säure** (aus 1-Phenylnaphtalin-2,3-Dicarbonsäure). Sm. 195—205° u. Zers. (C. 1908 [2] 1358).

**C<sub>18</sub>H<sub>12</sub>N<sub>2</sub>**

C 84,4 — H 4,7 — N 10,9 — M. G. 256.

- 1) **Triphenyldiamin**. HCl (B. 8, 1611). — **IV**, 600.
  - 2) **2-Phenyl- $\alpha$ -Naphtodiazin**. Sm. 187° (B. 28, 3174; B. 41, 2350 C. 1908 [2] 526). — **IV**, 1071.
  - 3) **2-Phenyl-1,4-Naphtisodiazin**. Sm. 153° (B. 41, 392 C. 1908 [1] 862; B. 41, 2351 C. 1908 [2] 526).
  - 4) **3-Phenyl-1,4-Naphtisodiazin**. Sm. 163° (B. 41, 395 C. 1908 [1] 863; B. 41, 2351 C. 1908 [2] 526).
  - 5) **2-Phenyl-1,7-Naphtisodiazin**. Sm. 129°. (2HCl, PtCl<sub>4</sub>) (B. 33, 2933). — **\*IV**, 721.
  - 6) **3-Phenyl-4,7-Naphtisodiazin**. Sm. 183° (B. 33, 2924). — **\*IV**, 721.
  - 7) **2,3'-Bichinolyl**. Sm. 176—177°; Sd. oberhalb 400°. HCl, 2HCl + 4H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + 2H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (M. 2, 491; 7, 306; 8, 121; B. 23, 2895; A. 287, 42). — **IV**, 1066.
  - 8) **2,5'-Bichinolyl**. Sm. 144°. (2HCl, PtCl<sub>4</sub>) (M. 8, 140). — **IV**, 1068.
  - 9) **2,7'-Bichinolyl**. Sm. 192,5° (191°). (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (M. 2, 501; Soc. 39, 174; B. 17, 1899, 1965; B. 37, 1243 C. 1904 [1] 1362). — **IV**, 1066.
  - 10) **6,6'-Bichinolyl**. Sm. 178° (181°). 2HCl + 4H<sub>2</sub>O, (2HCl, SnCl<sub>2</sub>), (2HCl, Cl<sub>2</sub>J<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub> + 2H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> + 3H<sub>2</sub>O, 2H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (M. 5, 418; B. 17, 1817, 2380, 2444, 2767; A. 332, 80 C. 1904 [2] 43). — **IV**, 1069.
  - 11) **6,7'(P)-Bichinolyl**. Sm. 148°. 2HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub>, Pikrat (M. 6, 548; B. 17, 2450). — **IV**, 1070.
  - 12) **8,8'-Bichinolyl**. Sm. 205—207°. 2HCl, (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>), 2HBr, 2HJ, 2HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (B. 38, 764 C. 1905 [1] 883).
  - 13) **isom. Bichinolyl**. Sm. 116—117°. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 20, 634). — **IV**, 1071.
  - 14) **isom. Bichinolyl**. Sm. 115°. 2HCl + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 18, 1913; J. 1885, 1021). — **IV**, 1070.
  - 15) **isom. Bichinolyl**. Sm. 122°. (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 20, 632). — **IV**, 1071.
  - 16) **isom. Bichinolyl**. Sm. 159°. 2HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 18, 1911; J. 1885, 1021). — **IV**, 1070.
  - 17) **isom. Bichinolyl**. Sm. 182° (B. 42, 646 C. 1909 [1] 1011).
  - 18) **Biisochinolyl?** (2HCl, PtCl<sub>4</sub>) (B. 25, 735). — **IV**, 1071.
  - 19) **Nitril d.  $\alpha$ -[1-Naphtyl]imido- $\alpha$ -Phenylelessigsäure**. Sm. 103°; Sd. 345 bis 346° (B. 35, 3333 C. 1902 [2] 1192).
  - 20) **Nitril d.  $\alpha$ -[2-Naphtyl]imido- $\alpha$ -Phenylelessigsäure**. Sm. 124°; Sd. oberhalb 360° (B. 35, 3333 C. 1902 [2] 1192).
- C 76,0 — H 4,2 — N 19,7 — M. G. 284.
- 1) **2,2'-Azochinolin**. Sm. 230—231°. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (B. 33, 1894). — **\*IV**, 1076.
  - 2) **6,6'-Azochinolin**. Sm. 248° (A. 310, 84). — **\*IV**, 1076.
  - 3) **6,7-Diphenyl-1,3,5,8-Benzotetrazin**. Sm. 170,5° (B. 39, 261 C. 1906 [1] 661).
  - 4) **Homofluorindin** (Phenofluorindin). 2HCl (B. 23, 2791; B. 34, 3731 C. 1902 [1] 54; B. 35, 4306). — **IV**, 1300; **\*IV**, 971.
  - 5) **Naphtofluoavin**. Sm. oberhalb 300° (A. 319, 271 C. 1902 [1] 359; B. 36, 4047 C. 1904 [1] 184). — **\*IV**, 972.
  - 6) **isom. Naphtofluoavin**. Sm. oberhalb 300° (A. 319, 274 C. 1902 [1] 360). — **\*IV**, 972.
  - 7) **bim. Nitril d. Phenylmalonsäure**. Sm. 87—88°. + C<sub>6</sub>H<sub>6</sub>, Ag (Am. 39, 65 C. 1908 [1] 825).
  - 8) **polym. Nitril d. Benzol-1-Carbonsäure-2-Methylcarbonsäure** = (C<sub>6</sub>H<sub>5</sub>N<sub>2</sub>)<sub>2</sub>. Sm. 260—261° u. Zers. (B. 27, 2241; 29, 2392 Anm.). — **II**, 1843.

**C<sub>18</sub>H<sub>12</sub>Br<sub>2</sub>**

- 1) **1,4-Di[4-Bromphenyl]benzol**. Sm. 304° (B. 27, 3394). — **\*II**, 125.

- C<sub>18</sub>H<sub>12</sub>J<sub>2</sub>** 1) Di[3-Jodphenyl]-1,3-Phenylendijodoniumjodid. Zers. bei 140° (B. 37, 1310 C. 1904 [1] 1340).
- C<sub>18</sub>H<sub>12</sub>S** 1) Verbindung (aus Diphenylsulfid). Sm. 197°; Sd. oberhalb 330° (A. 174, 186). — II, 803.
- C<sub>18</sub>H<sub>13</sub>N** 1) Amidochrysen. Sm. 199° (201—203°). (2HCl, PtCl<sub>4</sub>) (B. 23, 793, 2445). — II, 643.
- 2) 2-[1-Naphtyl]indol. Sm. 196°. Pikrat (A. 272, 204). — IV, 465.
- 3) 1-Phenyl-β-Naphtindol. Sm. 211° u. Zers. Pikrat (A. 253, 40). — IV, 465.
- 4) 2-Phenyl-β-Naphtindol. Sm. 129—130°. Pikrat (A. 253, 43). — IV, 465.
- 5) 8-Methyl-α-Phenakridin. Sm. 143° (D.R.P. 123260 C. 1901 [2] 568). — \*IV, 280.
- 6) 10-Methyl-α-Phenakridin. Sm. 158°; Sd. bei 460°. HCl, HNO<sub>3</sub>, Pikrat (B. 33, 907, 911; C. 1901 [1] 348, 978). — \*IV, 279.
- 7) Base (aus Anhydroformaldehyd-p-Toluidin u. β-Naphtylamin). Sm. 178 bis 179° (Soc. 73, 545). — \*IV, 280.
- 8) Nitril d. Phenyl-β-Naphtylelessigsäure. Sm. 97°; Sd. 280°<sub>45</sub> (B. 25, 1618). — II, 1480.
- C<sub>18</sub>H<sub>18</sub>N<sub>3</sub>** C 79,7 — H 4,8 — N 15,5 — M. G. 271.
- 1) Di[β-Cyan-β-Phenyläthenyl]amin (Diphenyldicyanvinylamin). Sm. 175° (J. pr. [2] 55, 335). — \*II, 849.
- 2) 2-Phenyl-5-[2-Naphtyl]-1,3,4-Triazol. Sm. 217° (B. 30, 1883; A. 298, 42). — IV, 1211.
- 3) 1,3-Diphenyl-1,2,7-Benztriazol. (2HCl, PtCl<sub>4</sub>), (HJ, 3HgCl<sub>2</sub> + H<sub>2</sub>O), HJ, (HJ, PtCl<sub>4</sub>), (HBr, Br<sub>2</sub>), HNO<sub>3</sub>, Pikrat (G. 33 [2] 55 C. 1903 [2] 1057; G. 36 [1] 473 C. 1906 [2] 789; C. 1907 [2] 456).
- 4) 6-Amido-2-Phenyl-1,7-Naphtisodiazin. Sm. 232°. (2 + 2HCl, PtCl<sub>4</sub>) (B. 33, 2934). — \*IV, 877.
- 5) 6-Amido-3-Phenyl-4,7-Naphtisodiazin. Sm. 222°. 2 + 3(2HCl, PtCl<sub>4</sub>) (B. 33, 2925). — \*IV, 877.
- 6) Aposafranin. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (B. 21, 1590; 28, 2288; 30, 2624; A. 286, 188; Bl. [4] 1, 470 C. 1907 [2] 257). — IV, 1176; \*IV, 833.
- 7) Azimid (aus d. Base C<sub>18</sub>H<sub>16</sub>N<sub>2</sub> aus Diphenylhydrazophenyl). Sm. 82,5° (C. 1908 [2] 948).
- 8) Base (aus Aposafranin). Sm. 203—204° (206°). HCl, HNO<sub>3</sub> (B. 26, 1655; 28, 1712, 2285; A. 272, 312; 286, 189; Soc. 77, 210).
- 9) Nitril d. ββ'-Di[2-Cyanphenyl]isobuttersäure. Sm. 130° (B. 25, 3027). — II, 1470.
- 10) Nitril d. α-Phenylimido-α-[1-Naphtyl]amidoessigsäure. Sm. 121° (D.R.P. 153418 C. 1904 [2] 679).
- 11) Nitril d. α-Phenylimido-α-[2-Naphtyl]amidoessigsäure. Sm. 146° (D.R.P. 153418 C. 1904 [2] 679).
- C<sub>18</sub>H<sub>18</sub>Cl** 1) 4'-Chlor-4-Phenylbiphenyl. Sm. 220—220,5° (B. 30, 2801). — \*II, 125.
- C<sub>18</sub>H<sub>18</sub>Br** 1) cis-β-Brom-α-Phenyl-α-[1-Naphtyl]äthen. Sm. 54° (B. 37, 4168 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 2) trans-β-Brom-α-Phenyl-α-[1-Naphtyl]äthen. Sm. 71—72°; Sd. 240 bis 260°<sub>15</sub> (B. 37, 2757 C. 1904 [2] 707; B. 37, 4167 C. 1904 [2] 1643; A. 342, 2 C. 1905 [2] 1592).
- 3) 4-Brom-1,3-Diphenylbenzol? Sm. 31° (B. 27, 3387). — \*II, 126.
- 4) 4'-Brom-4-Phenylbiphenyl. Sm. 228° (B. 27, 3393). — \*II, 125.
- C<sub>18</sub>H<sub>14</sub>O** C 87,8 — H 5,7 — O 6,5 — M. G. 246.
- 1) 2-Oxy-1,4-Diphenylbenzol. Sm. 194°; Sd. 260° (B. 36, 1408 C. 1903 [1] 1358).
- 2) 2-Naphtyläther d. α-Oxy-α-Phenyläthen. Sd. 212°<sub>10</sub> (Soc. 77, 990). — \*II, 652.
- 3) Äther d. γ-Oxy-γ-Phenylpropin. Sd. 155—160°<sub>10</sub> (C. 1904 [2] 943).
- 4) 1-Keto-2-Benzyliden-4-Phenyl-2,3-Dihydro-R-Penten. Sm. 186 bis 187°; Sd. 260°<sub>10</sub> (B. 41, 201 C. 1908 [1] 944).
- 5) α-Keto-β-Phenyl-α-[1(β)-Naphtyl]äthan (Benzylnaphtylketon). Sm. 57° (B. 12, 1078). — III, 256.
- 6) 9-Furylfluoren. Sm. 91—92° (A. 347, 302 C. 1906 [1] 961).
- 7) Anhydrobishydrindon. Sm. 142—143° (Soc. 65, 495). — III, 256.
- 8) Anhydrobis-2-Hydrindon. Sm. bei 170° (B. 32, 32). — \*III, 195.



$C_{18}H_{14}O_3$ 

C 82,4 — H 5,3 — O 12,2 — M. G. 262.

- 1) 2,5-Dioxy-1,3-Diphenylbenzol. Sm. 177—178° (179—180°) (B. 32, 2939; 33, 1241; A. 312, 230; Am. 24, 9). — \*II, 608.
- 2) Diphenyläther d. 1,2-Dioxybenzol. Sm. 93° (A. 350, 96 C. 1907 [1] 159).
- 3) Diphenyläther d. 1,3-Dioxybenzol. Sm. 61,5° (A. 350, 96 C. 1907 [1] 159).
- 4) Diphenyläther d. 1,4-Dioxybenzol. Sm. 74—75° (77°); Sd. 371—372°<sub>720</sub> (B. 34, 1071; B. 38, 2212 C. 1905 [2] 321; A. 350, 97 C. 1907 [1] 159).
- 5) 1-Keto-2-[2-Oxybenzyliden]-4-Phenyl-2,3-Dihydro-R-Penten. Sm. 183—184° (B. 41, 202 C. 1908 [1] 944).
- 6) 2-Naphtyläther d. Oxymethylphenylketon. Sm. 104—106° (B. 28, 3031). — III, 133.
- 7) Phenyl-2-Naphtylelessigsäure. Sm. 141° (B. 25, 1619). — II, 1480.
- 8) Lakton d.  $\alpha$ -Oxy- $\beta$ -Methyl- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ - $\gamma$ -Butadien- $\gamma$ -Carbonsäure. Sm. 128—128,5° (A. 306, 170). — \*II, 1018.
- 9) Methylester d. 2-Phenylnaphtalin-1-Carbonsäure. Sm. 75° (A. 335, 131 C. 1904 [2] 1134).
- 10) Methylester d. 2-Phenylnaphtalin-2'-Carbonsäure. Sm. 63° (A. 335, 131 Anm. C. 1904 [2] 1134).
- 11) Acetat d. 2-[4-Oxyphenyl]naphtalin. Sm. 128° (M. 23, 827 C. 1902 [2] 1470).
- 12) Benzoat d. 2-Oxy-1-Methylnaphtalin. Sm. 117° (D.R.P. 161450 C. 1905 [2] 183; G. 36 [2] 658 C. 1907 [1] 966; C. 1907 [2] 1415).
- 13) Verbindung (aus  $\alpha\gamma\delta\zeta$ -Tetraketo- $\alpha\zeta$ -Diphenylhexan). Sm. 120—140° (B. 28, 1207). — III, 324.
- 14) Verbindung (aus d. Verb.  $C_{18}H_{14}O_3$ ). Sm. 119—120° (B. 28, 1210). — III, 325.

 $C_{18}H_{14}O_3$ 

C 77,7 — H 5,0 — O 17,3 — M. G. 278.

- 1) 3,4-Methylenäther d.  $\gamma$ -Keto- $\epsilon$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\delta$ -Pentadien. Sm. 115°. + 2HCl (B. 31, 728; G. 38 [2] 87 C. 1908 [2] 1102). — \*III, 191.
- 2) 5-Oxy-1,3-Diketo-2-Methyl-2,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 167°. Ag (A. 284, 266). — III, 321.
- 3) 4-Methyläther d. 2-Oxyphenyl-4-Oxy-1-Naphtylketon. Sm. 124° (B. 39, 4338 C. 1907 [1] 348).
- 4) Methyläther d. 5-Oxy-1,3-Diketo-2,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 94—95° (A. 284, 269). — III, 320.
- 5) Methylenäther d.  $\epsilon$ -Keto- $\epsilon$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Pentadien. Sm. 133° (137,5°) (B. 28, 1194; B. 41, 2380 C. 1908 [2] 890). — III, 251.
- 6) Äthyläther d. 1,3-Diketo-2-[2-Oxybenzyliden]-2,3-Dihydroinden. (2 Modif.). Sm. 135° (B. 30, 2140). — \*III, 235.
- 7) Äthyläther d. 1,3-Diketo-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 131—132° (B. 30, 2141). — \*III, 235.
- 8) Äthyläther d. 1,3-Diketo-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 139° (B. 30, 2142). — \*III, 235.
- 9) 2<sup>34</sup>-Methylenäther-6-Äthyläther d. 6-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 205° (B. 33, 329).
- 10) Anisumin (A. 151, 47). — II, 1119.
- 11) 1- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[1-Naphtyl]essigsäure. Ba (Soc. 89, 374 C. 1906 [1] 1614).
- 12) 1- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[1-Naphtyl]essigsäure + 2H<sub>2</sub>O. Sm. 108—115° (148° wasserfrei; 143—144°) (A. 266, 12; Soc. 89, 377 C. 1906 [1] 1614). — II, 1721.
- 13)  $\alpha$ -Phenyl- $\alpha$ -[2-Oxy-1-Naphtyl]essigsäure. Ba + 2H<sub>2</sub>O, Ba + 3H<sub>2</sub>O (B. 31, 2822). — \*II, 1018.
- 14) 2-Oxy-1-Benzylnaphtalin-1'-Carbonsäure? Sm. 261° u. Zers. Ag (B. 16, 304). — II, 1721.
- 15) 1-Keto-3-Phenylinden-2-[Äthyl- $\alpha$ -Carbonsäure]. Sm. 168° (B. 39, 1067 C. 1906 [1] 1432).
- 16) Anhydrid d.  $\alpha\alpha$ -Diphenyl- $\alpha$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sm. 146° (B. 39, 1067 C. 1906 [1] 1432).

$C_{18}H_{14}O_3$ 

- 17) Anhydrid d.  $\beta$ -Phenylakrylsäure. Sm. 136° (135°; 132—133°) (A. 87, 76; B. 21, 3373; 27, 284; 34, 186, 2075). — II, 1407; \*II, 851.
- 18) Anhydrid d. Allo- $\beta$ -Phenylakrylsäure. Fl. (B. 27, 2045). — II, 1423.
- 19) Anhydrid d. 1-Phenyl-1,2,3,4-Tetrahydronaphtalin-2,3-Dicarbonsäure. Sm. 145—150° (155°) (Am. 20, 99; B. 40, 3382 C. 1907 [2] 905). — \*II, 1102.
- 20) Anhydrid d.  $\alpha$ -Truxillsäure (B. 22, 682, 2245, 2261). — II, 1901; \*II, 1101.
- 21) Anhydrid d.  $\beta$ -Truxillsäure. Sm. 116° (B. 22, 128, 680, 2260). — II, 1902.
- 22) Anhydrid d.  $\gamma$ -Truxillsäure. Sm. 191° (B. 22, 126, 2245). — II, 1903.
- 23) Anhydrid d. Säure  $C_{18}H_{16}O_4$ . Sm. 146—148° (A. 356, 92 C. 1907 [2] 1701).
- 24) Lakton d.  $\epsilon$ -Keto- $\gamma$ -Oxy- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Penten- $\epsilon$ -Carbonsäure. Sm. 179° (A. 333, 267 C. 1904 [2] 1392).
- 25) Lakton d.  $\alpha$ -Oxy- $\epsilon$ -Keto- $\alpha$ - $\epsilon$ -Diphenyl- $\alpha$ -Penten- $\gamma$ -Carbonsäure. Sm. 162° (Bl. [3] 23, 526). — \*II, 1101.
- 26) Lakton d. 1-Oxy-3-Keto-1-Phenyl-2,3-Dihydroinden-2-[Äthyl- $\alpha$ -Carbonsäure]. Sm. 94° (B. 39, 1068 C. 1906 [1] 1432).
- 27) Methylester d. 2,5-Diphenylfuran-3-Carbonsäure. Sm. 63° (A. 306, 175). — \*III, 508.
- 28) 4-Methylphenylester d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 90 bis 90,5° (B. 34, 4145 C. 1902 [1] 315).
- 29) 2-Naphtylester d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 103 bis 104° (J. pr. [2] 61, 552). — \*II, 920.
- 30) Acetat d. 1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Sm. 150° (Soc. 91, 1087 C. 1907 [2] 602).
- 31) Acetat d. 7-Oxy-4-Methylen-2-Phenyl-1,4-Benzpyran.  $\alpha$ -Modif. Sm. 155—160;  $\beta$ -Modif. Sm. oberhalb 300° (B. 34, 1790). — \*III, 547.
- 32) 3-Benzooat d. 2,3-Dioxynaphtalin-2-Methyläther. Sm. 133° (J. pr. [2] 65, 536 C. 1902 [2] 368).
- 33) Verbindung (aus d. Verb.  $C_{18}H_{16}O_4$ ).  $\alpha$ -Modif. Sm. 142°;  $\beta$ -Modif. Sm. 172—173° (B. 28, 1209). — III, 324.
- 34) Verbindung (aus d. Verb.  $C_{18}H_{14}O_4$ ) (B. 41, 4290 C. 1909 [1] 381).  
C 73,5 — H 4,7 — O 21,8 — M. G. 294.

 $C_{18}H_{14}O_4$ 

- 1)  $\alpha\gamma\delta\zeta$ -Tetraketo- $\alpha\zeta$ -Diphenylhexan. Sm. 179—180°. Cu (B. 21, 1134; 28, 1206). — III, 324.
- 2) Triesorcin +  $2\frac{1}{2}H_2O$ .  $HCl + H_2O$ ,  $4 + 5HBr$  (A. 289, 61). — \*II, 565.
- 3) 3,4-Methylenäther d.  $\gamma$ -Keto- $\epsilon$ -[2-Oxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\delta$ -Pentadien. Sm. 168° (B. 31, 729). — \*III, 191.
- 4) Dimethyläther d. 1,3-Diketo-2-[2,5-Dioxyphenyl]-2,3-Dihydroinden. Sm. 149° (B. 40, 2354 C. 1907 [2] 309).
- 5)  $\alpha\gamma$ -Diketo- $\beta$ -Phthalidyl- $\alpha$ -Phenylbutan. Sm. 119° (B. 37, 586 C. 1904 [1] 940).
- 6)  $\alpha$ -Phenyl- $\delta$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Butadien-3,4-Methylenäther- $\alpha$ -Carbonsäure ( $\alpha$ -Phenylpiperinsäure). Sm. 208—209° (B. 28, 1189). — II, 1899.
- 7) 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten-2-Carbonsäure +  $H_2O$  (Anhydroacetonbenzylcarbonsäure). Sm. 167—168°. Ag (Soc. 71, 140; 75, 1025). — \*II, 1104.
- 8) 2-Oxy-1-[2-Oxy-1-Naphtyl]methylbenzol-3-Carbonsäure (Epicarin). Sm. 166° (C. 1900 [1] 620).
- 9) 2,5-Dioxybenzol-2-[2-Naphtyl]äther-5-Methyläther-1-Carbonsäure. Sm. 160° (B. 38, 2123 C. 1905 [2] 247).
- 10) Benzoylphenyltetrinsäure. Sm. 110° (B. 21, 2609). — II, 1682.
- 11)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure (Dibenzalbernsteinsäure). Sm. 218° u. Zers. (201° u. Zers.). +  $(CH_3)_2O$ , +  $C_2H_4O_2$ ,  $Na_2$  +  $H_2O$ ,  $4Ba$  +  $7H_2O$ ,  $Ag_2$ , Piperidinsalz (C. 1900 [2] 561; B. 27, 2406; B. 37, 2241 C. 1904 [2] 328). — II, 1906; \*II, 1103.
- 12) Allodibenzalbernsteinsäure. Sm. 203—210° (C. 1900 [2] 562).
- 13) Isodibenzalbernsteinsäure (C. 1900 [2] 562).
- 14)  $\alpha$ -Biphenyl- $\alpha\gamma$ -Butadien- $\beta$ ,2-Dicarbonsäure. Sm. 295°.  $Ba + 2H_2O$ ,  $Ag_2$  (B. 16, 279). — II, 1906.

- C<sub>18</sub>H<sub>14</sub>O<sub>4</sub>** 15) **Fluoren-9-[Propyliden- $\alpha\beta$ -Dicarbonsäure]** ( $\alpha$ -Methyl- $\gamma\gamma$ -Biphenylen-  
itakonsäure). Sm. 158° u. Zers. (B. 39, 1068 C. 1906 [1] 1432).
- 16) **Polyporsäure**. Sm. über 300°. (NH<sub>4</sub>)<sub>2</sub> + 2H<sub>2</sub>O, Na<sub>2</sub> + 2H<sub>2</sub>O, K<sub>2</sub> +  
2H<sub>2</sub>O, Mg + 3H<sub>2</sub>O, Ca + 3H<sub>2</sub>O, Sr + H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Ag (A. 187,  
177, 180; 195, 365). — II, 1906.
- 17) **Säure** (aus Dehydrobenzoylessigsäure). Sm. 145—150° u. Zers. (Soc. 47,  
289). — II, 1906.
- 18) **Gemischtes Anhydrid d. Phenylelessigsäure u.  $\beta$ -Benzoylakrylsäure**.  
Sm. 118° (C. r. 147, 250 C. 1908 [2] 868).
- 19)  **$\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenyl- $\beta$ -Buten- $\beta\gamma$ -Dicarbonsäure**. Sm.  
180—181°. Ca, Ag (B. 39, 1072 C. 1906 [1] 1433).
- 20) **lab.  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure**.  
Sm. 95°. + C<sub>6</sub>H<sub>6</sub> (A. 308, 171). — \*II, 1151.
- 21) **stab.  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure +**  
**1½H<sub>2</sub>O**. Sm. 210—214° u. Zers. Ca, Ba, Ag (A. 308, 168). — \*II, 1151.
- 22) **Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha\beta$ -Diphenylbutan- $\beta$ -Carbonsäure**. Sm. 115°  
(A. 333, 231 C. 1904 [2] 1389).
- 23)  **$\alpha\gamma$ -Lakton d.  $\gamma$ -Oxy- $\beta$ -Benzoxyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure**.  
Sm. 100° (B. 36, 2256 C. 1903 [2] 437).
- 24) **Lakton d.  $\gamma$ -Oxy- $\gamma$ -Acetoxyl- $\beta\gamma$ -Diphenylpropen- $\alpha$ -Carbonsäure**.  
Sm. 116° (A. 319, 175 C. 1902 [1] 105). — \*II, 1016.
- 25)  **$\alpha\gamma$ - $\beta\delta$ -Dilakton d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylbutan- $\gamma\delta$ -Dicarbonsäure**.  
Sm. 189—191° (A. 308, 166). — \*II, 1183.
- 26) **Dilakton d.  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenylbutan-2,2'-Dicarbonsäure**. Sm.  
208—210° (B. 10, 2209). — II, 2024.
- 27) **Dilakton d.  $\alpha\delta$ -Di[2-Oxyphenyl]butan- $\beta\gamma$ -Dicarbonsäure** ( $\alpha$ -Tetra-  
hydrodicumarin). Sm. 284° (A. 362, 37 C. 1908 [2] 793). — II, 2023.
- 28) **Dilakton d. isom.  $\alpha\beta$ -Di[2-Oxyphenyl]butan- $\beta\gamma$ -Dicarbonsäure**  
( $\beta$ -Tetrahydrodicumarin). Sm. 256° (Soc. 51, 70; A. 362, 38 C. 1908  
[2] 793).
- 29) **Äthylenester d.  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure** (Ä. d. Diphenyl-  
maleinsäure). Sm. 112° (A. 280, 194). — II, 1897.
- 30) **Acetat d. 7-Oxy-2-Benzyl-1,4-Benzpyron**. Sm. 114° (B. 35, 868 C.  
1902 [1] 813). — \*III, 567.
- 31) **Acetat d. 7-Oxy-5-Methyl-2-Phenyl-1,4-Benzpyron**. Sm. 147° (B.  
41, 796 C. 1908 [1] 1555).
- 32) **Acetat d. 5-Oxy-7-Methyl-2-Phenyl-1,4-Benzpyron**. Sm. 132° (B.  
39, 4041 C. 1907 [1] 267).
- 33) **Diacetat d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthin**. Sm. 198° (A. 335, 185, 187  
C. 1904 [2] 1130).
- 34) **Diacetat d. 1,2-Dioxyanthracen**. Sm. 145° (B. 36, 4021 C. 1904 [1]  
168; A. 345, 88 C. 1905 [2] 1594).
- 35) **Diacetat d. 1,4-Dioxyanthracen**. Sm. 169° (B. 39, 3537 C. 1906 [2] 1617).
- 36) **Diacetat d. 1,5-Dioxyanthracen**. Sm. 196—198° (198°) (B. 11, 1616;  
B. 42, 1414 C. 1909 [1] 1711). — II, 999.
- 37) **Diacetat d. 1,8-Dioxyanthracen**. Sm. 184° (B. 12, 186; B. 42, 1415  
C. 1909 [1] 1711). — II, 999.
- 38) **Diacetat d. 2,3-Dioxyanthracen**. Sm. 155—160° (B. 28, 1534; A. 342,  
107 C. 1905 [2] 1594). — \*II, 608.
- 39) **Diacetat d. 2,9-Dioxyanthracen**. Sm. 141—142° (B. 31, 2794). —  
\*II, 695.
- 40) **Diacetat d. 2,10-Dioxyanthracen**. Sm. 155° (A. 212, 28; B. 14, 1264).  
— II, 1112.
- 41) **Diacetat d. 9,10-Dioxyanthracen** (Diacyloxanthranol). Sm. 260° u.  
Zers. (A. 212, 66; B. 21, 1172). — III, 244.
- 42) **Diacetat d. isom. Dioxyanthracen**. Sm. 254—255° (B. 15, 1809). —  
II, 1000.
- 43) **Diacetat d. 3,4-Dioxyphenanthren**. Sm. 159° (B. 19, 793; 27, 1148;  
A. 212, 28). — II, 1000.
- 44) **Diacetat d. 9,10-Dioxyphenanthren**. Sm. 202° (A. 167, 149; B. 35,  
2736 C. 1902 [2] 644; B. 35, 3125 C. 1902 [2] 1212; B. 38, 1270 C.  
1905 [1] 1397). — II, 1001.
- 45) **3-Salicylat d. 2,3-Dioxy-naphtalin-2-Methyläther**. Sm. 138° (J. pr.  
[2] 65, 536 C. 1902 [2] 368).



- $C_{18}H_{14}O_4$  46) Verbindung (aus Acenaphtenchinon u. Acetessigsäureäthylester). Sm. 150° (*G.* 32 [2] 366 *C.* 1903 [1] 639).
- 47) Verbindung (aus Essigsäurephenylester). Sm. 138° (*Soc.* 37, 481). — II, 662.
- 48) Verbindung (aus Chlormethyl-6-Oxy-3-Methylphenylketon). Sm. 215° u. Zers. (*B.* 41, 4289 *C.* 1909 [1] 381).
- $C_{18}H_{14}O_5$  C 69,7 — H 4,5 — O 25,8 — M. G. 310.
- 1) 1<sup>3</sup>,1<sup>4</sup>-Methylenäther-5-Äthyläther d. 5-Oxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 150° (*B.* 32, 310). — \*III, 533.
- 2) 2<sup>3</sup>,2<sup>4</sup>-Methylenäther-6-Äthyläther d. 6-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 205° (*B.* 33, 329). — \*III, 566.
- 3) Anhydro-1-[β-Oxyäthenyl]benzol-2-Carbonsäure. Sm. 183—184°. Pb, Cu, Ag<sub>2</sub> (*B.* 27, 209). — II, 1641.
- 4) 4-Acetoxy-3-Methoxyphenanthren-9-Carbonsäure. Sm. 244° (*B.* 35, 4414 *C.* 1903 [1] 344).
- 5) Diacetophenoncarbonsäure. Sm. 132—135° (*B.* 17, 2667). — II, 1647.
- 6) γ-Keto-αδ-Diphenyl-α-Buten-αδ-Dicarbonsäure (Carboxylcornicularsäure) (*A.* 219, 19; *B.* 15, 1550). — II, 1981.
- 7) 7-Oxy-4-Methyl-3-Benzyl-1,2-Benzpyron-3<sup>2</sup>-Carbonsäure. Sm. 283° (*B.* 38, 482 *C.* 1905 [1] 749).
- 8) Säure (aus γ-Benzyliden-γ-Phenylbrenzweinsäure). Sm. 203—204° (*A.* 308, 162). — \*II, 1101.
- 9) Lakton d. αδ-Di[β-Oxyphenyl]-α-Buten-βγ-Dicarbonsäure (Hydrodicumarinsäure). Ba + xH<sub>2</sub>O, Ag (*Soc.* 51, 64). — II, 2026.
- 10) Anhydrid d. αβ-Diphenylpropan-β,2,2'-Tricarbonsäure. Sm. 183 bis 184° (*B.* 27, 2498). — II, 2026.
- 11) Äthylester d. 9,10-Anthrachinon-1-Oxyessigsäure. Sm. 174—175° (*D.R.P.* 158277 *C.* 1905 [1] 703).
- 12) Äthylester d. 9,10-Anthrachinon-2-Oxyessigsäure. Sm. 135° (*D.R.P.* 158277 *C.* 1905 [1] 703).
- 13) Äthylester d. 3,4-β-Naphtopyron-2-[β-Ketopropionsäure]. Sm. 151 bis 152° (*B.* 37, 4495 *C.* 1905 [1] 250).
- 14) 2-Acetat d. γ-Keto-γ-[2-Oxyphenyl]-α-[3,4-Dioxyphenyl]propen-3,4-Methylenäther. Sm. 95—96,5° (*B.* 32, 316). — \*III, 182.
- 15) Monacetat d. 1,3-Dioxy-2-Methyl-9,10-Anthrachinonmonomethyläther. Sm. 173° (*Soc.* 91, 1912 *C.* 1908 [1] 397).
- 16) Monoacetat d. Chrysophansäuremonomethyläther. Sm. 204—205° (*Ar.* 243, 439 *C.* 1905 [2] 897).
- 17) Acetat d. 1,2-Dioxy-9,10-Anthrachinonäthyläther. Sm. 141° (*Soc.* 65, 186). — III, 422.
- 18) 5-Acetat d. 1,5-Dioxy-9,10-Anthrachinon-1-Äthyläther. Sm. 172 bis 173° (*B.* 35, 2930 *C.* 1902 [2] 1050).
- 19) Diacetat d. β-Dioxy-9-Keto-9,10-Dihydroanthracen (D. d. Desoxyisoanthraflavinsäure). Sm. 173° (*B.* 15, 1044). — III, 246.
- 20) Monacetat d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyronmonomethyläther. Sm. 142° (*B.* 27, 420; *G.* 27 [1] 576). — III, 248; \*II, 1145.
- 21) 3-Acetat d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron-6-Methyläther. Sm. 164—166° (*B.* 37, 777 *C.* 1904 [1] 1156).
- 22) 3-Acetat d. 3,7-Dioxy-2-Phenyl-1,4-Benzpyron-7-Methyläther. Sm. 140° (*B.* 37, 1181 *C.* 1904 [1] 1275).
- 23) Acetat d. 5,7-Dioxy-2-Phenyl-1,4-Benzpyronmethyläther (*A.* d. Chrysinmethyläther). Sm. 148° (149°) (*B.* 26, 2903; 27, 21). — III, 628.
- 24) 3-Acetat d. 3-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>-Methyläther. Sm. 117—118° (*B.* 38, 934 *C.* 1905 [1] 1026).
- 25) 3-Acetat d. 3-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>4</sup>-Methyläther. Sm. 138—139° (*B.* 38, 1509 *C.* 1905 [1] 1405).
- 26) Verbindung (aus 6-Phenylcumalin u. Salicylsäure). Sm. 93° (*B.* 29, 1676; *G.* 26 [2] 343).
- $C_{18}H_{14}O_6$  C 66,3 — H 4,3 — O 29,4 — M. G. 326.
- 1) 3',4'-Methylenäther-3,5-Dimethyläther d. 3,5-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 220—224° (*B.* 30, 2154). — \*III, 533.

$C_{18}H_{14}O_6$ 

- 2) 3',4'-Methylenäther-5,7-Dimethyläther d. 5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 232° (B. 33, 3414). — \*III, 440.
- 3) Dimethyläther d. Dioxybisketocumaran. Sm. 166° (Soc. 83, 1133 C. 1903 [2] 1060).
- 4) d-Dibenzylidenweinsäure. Sm. 145° (R. 25, 162 C. 1906 [2] 22).
- 5)  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure (Dibenzoylbernsteinsäure). Ca, Ag<sub>2</sub> (B. 17, 60; Soc. 57, 950). — II, 2032.
- 6)  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan-2,2'-Dicarbonsäure? (o-Äthylendibenzoyldicarbonsäure). Sm. 172° (165,5—166,5°). Ag<sub>2</sub> (B. 10, 1561; 18, 3116). — II, 2033.
- 7)  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan-4,4'-Dicarbonsäure. Subl. Ag<sub>2</sub> (A. 312, 117). — \*II, 1188.
- 8) 5,7-Dioxy-4-Methyl-3-Benzyl-1,2-Benzpyron-3<sup>2</sup>-Carbonsäure (B. 38, 485 C. 1905 [1] 749).
- 9) 7,8-Dioxy-4-Methyl-3-Benzyl-1,2-Benzpyron-3<sup>2</sup>-Carbonsäure. Sm. 259—260° (B. 38, 485 C. 1905 [1] 749).
- 10)  $\alpha$ ,2-Lakton d.  $\alpha$ -Oxydiphenylmethan- $\alpha$ ,2,2'-Tricarbonsäure- $\alpha$ ,2'-Dimethylester. Sm. 147—148° (A. 242, 235). — II, 2055.
- 11) Lakton d. r-Dibenzoylerythronsäure. Sm. 118° (A. 357, 250 C. 1908 [1] 237).
- 12) 1<sup>2</sup>,2-Lakton d. 2,5-Dioxy-1-[4,5-Dioxyphenyl]benzofuran-1<sup>4</sup>,1<sup>5</sup>,5-Trimethyläther-1<sup>2</sup>-Carbonsäure (Trimethoxycumaronisocumarin). Sm. 152° (Soc. 95, 401 C. 1909 [1] 1572).
- 13) Dimethylester d. Diphtalysäure. Sm. 191—192° (190—191°) (A. 242, 225; 311, 266). — II, 2028.
- 14) Monoäthylester d. Diphtalysäure. Sm. 174° (A. 242, 226; 311, 267). — II, 2029.
- 15) Äthylester d. 1-Oxy-9,10-Anthrachinon-2-Oxyessigsäure. Sm. 165 bis 166° (D.R.P. 158277 C. 1905 [1] 703).
- 16) Äthylester d. 4-Acetoxy-1,2- $\beta\beta$ -Naphtopyron-3-Carbonsäure. Sm. 157° (A. 367, 257 C. 1909 [2] 1239).
- 17) 3-Acetat d. 1,2,3-Trioxy-9,10-Anthrachinon-1,2-Dimethyläther. Sm. 176—178° (Soc. 91, 2068 C. 1908 [1] 646).
- 18) Acetat d. 1,2,3-Trioxy-9,10-Anthrachinondimethyläther.  $\alpha$ -Modif. Sm. 213—215°;  $\beta$ -Modif. Sm. 175°;  $\gamma$ -Modif. Sm. 160° (Soc. 63, 1169; 67, 824). — III, 433.
- 19) Acetat d. 1,2,3-Trioxy-9,10-Anthrachinondimethyläther. Sm. 167° (M. 23, 1016 C. 1903 [1] 291).
- 20) 1-Acetat d. 1,2,6-Trioxy-9,10-Anthrachinon-2,6-Dimethyläther. Sm. 210° (A. 349, 214 C. 1906 [2] 1337).
- 21) 4-Acetat d. 3,4,6-Trioxy-9,10-Phenanthrenchinon-3,6-Dimethyläther (Acetylthebaolchinon). Sm. 208° (corr.) (203°) (B. 28, 942; 30, 1390; B. 35, 4410 C. 1903 [1] 343). — \*III, 319.
- 22) Diacetat d. 1,7-Dioxy-3-Methylxanthon. Sm. 163° (B. 27, 1993). — III, 216.

- 23) Verbindung (aus Diphtalysäure). Sm. 275—276° (A. 242, 227). — II, 2028.
- 24) Verbindung (aus 2-Oxy-5-Keto-3-Phenyltetrahydroisoxazol). Sm. 148 bis 149° (B. 39, 3528 C. 1906 [2] 1608).

 $C_{18}H_{14}O_7$ 

- C 63,2 — H 4,1 — O 32,7 — M. G. 342.
- 1) Triphloroglucid + 2H<sub>2</sub>O (A. 276, 336). — II, 1020.
- 2) Xanthoeridol. Sm. 258° (Soc. 95, 84 C. 1909 [1] 1165).
- 3) Anhydrid d. 2-Acetoxybenzol-1-Carbonsäure. Sm. 85° (D.R.P. 201325 C. 1908 [2] 997).
- 4)  $\beta$ -Oxy- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure (Dibenzoyl-äpfelsäure). Sm. 157—158° u. Zers. Ag<sub>2</sub> (B. 30, 1998; 33, 3794). — \*II, 1208.
- 5) Benzoat d. Cotarnlaktonsäurelaktone. Sm. 184° (A. 254, 344). — II, 2040.
- 6) Acetat d. Methyluteolin. Sm. 235—236° (239—240°) (Soc. 77, 1318).
- 7) 1,3-Diacetat d. 1,3,7-Trioxyxanthon-7-Methyläther (Gentisindiacetat). Sm. 196—196,5° (A. 175, 74; M. 16, 924). — III, 210.
- C 60,3 — H 3,9 — O 35,8 — M. G. 358.
- 1) Hydräskuletin. Zers. bei 300° (Z. 1868, 727; B. 34, 2614; B. 35, 2920 C. 1902 [2] 1046). — III, 569; \*III, 429.

 $C_{18}H_{14}O_8$

- $C_{16}H_{14}O_8$
- 2) 4,4'-Di[Acetoxyl]biphenyl-2,2'-Dicarbonsäure. Sm. 222—223° u. Zers. (B. 38, 3773 C. 1906 [1] 38).
  - 3) 2,2'-Succinoxylbenzol-1-Carbonsäure (Succinylsalicylsäure). Sm. 176 bis 178° (D.R.P. 196634 C. 1908 [1] 1348).
  - 4) Acetylcardenasäure. Sm. 244° u. Zers. (A. 200, 320). — III, 633.
  - 5) Dibenzoylweinsäure +  $H_2O$ . Sm. 90° (132° wasserfrei) (B. 15, 2242; Ph. Ch. 8, 473). — II, 1155.
  - 6) Diacetylrufohydroellagsäure (B. 8, 1497). — II, 2022.
  - 7) Säure (aus Diacetylitrakonfluorescein) (B. 29, 2825).
  - 8) 2,6'-2',6-Dilakton d. 4,5,6,4',5',6'-Hexaoxybiphenyl-4,5,4',5'-Tetramethyläther-2,2'-Dicarbonsäure (Ellagtetramethyläthersäure) (M. 26, 1147 C. 1905 [2] 1590; M. 29, 267 C. 1908 [2] 311).
  - 9) Diäthylester d. 1,3,4,6-Tetraketo-2,3,4,5-Tetrahydroindacen-2,5-Dicarbonsäure.  $Na_2$  (B. 34, 2783).
- $C_{18}H_{14}O_9$
- C 57,8 — H 3,7 — O 35,5 — M. G. 374.
  - 1) Purpurogallin (Pyrogallochinon). Sm. oberhalb 220° (Z. 1870, 86; A. 163, 162; B. 5, 848; 20, 1278, 3260; J. pr. [2] 15, 324; J. 1882, 682, 683, 684). — III, 345.
  - 2) Ramalinsäure. Zers. bei 240—245° (J. pr. [2] 68, 24 C. 1903 [2] 511; J. pr. [2] 73, 118 C. 1906 [1] 1101; A. 340, 305 C. 1905 [2] 898).
  - 3) Anhydro-5-Oxy-1-Methylbenzol-2,4-Dicarbonsäure (Anhydrooxyvinitinsäure) (B. 8, 886). — II, 1948.
  - 4) Acetylderivat d.  $\alpha$ -Diresorcinessigsäure. Sm. 133° (C. 1895 [1] 530).
  - 5) Verbindung (aus Acetaldehyd u. Gallussäure) (B. 31, 150).
- $C_{18}H_{14}O_{10}$
- C 55,4 — H 3,6 — O 41,0 — M. G. 390.
  - 1) Säure +  $3H_2O$  (aus Anhydrotetransäure u. Acetaldehyd). Sm. 247° u. Zers. (wasserfrei) (A. 315, 162).
  - 2) Di[Methylcarbonat] d. 4-[3,4-Dioxybenzoxyl]benzol-1-Carbonsäure. Sm. 187,5° (corr.) (B. 42, 1484 C. 1909 [1] 1992).
- $C_{18}H_{14}O_{11}$
- C 53,2 — H 3,4 — O 43,4 — M. G. 406.
  - 1) Säure (aus Vasculose) (Bl. 37, 409). — I, 1079.
- $C_{18}H_{14}N_2$
- C 83,7 — H 5,4 — O 10,8 — M. G. 258.
  - 1) 3-Amido-1-Benzylamidobenzol. Fl. 2HCl (Soc. 55, 597). — IV, 573.
  - 2) 7-Phenylhydrazonacenaphthen. Sm. 90° (A. 290, 200). — IV, 775.
  - 3) 4-Phenylazobenzol. Sm. 150° (151°) (B. 9, 132; 21, 912; B. 34, 3969 C. 1902 [1] 199; C. 1904 [1] 1491; 1907 [1] 1789). — IV, 1402; \*IV, 1029.
  - 4) o-Diphenylazophenylen. Sd. 270° (C. 1907 [1] 1789).
  - 5) p-Diphenylazophenylen. Sm. 176—180° (M. 7, 375; 8, 478; C. 1902 [1] 526). — II, 337.
  - 6) Dichinolin. HCl (J. 1878, 891). — IV, 1064.
  - 7) 2-Benzyl-peri-Naphtimidazol. Sm. 194°. HCl,  $HNO_3$ , Pikrat (A. 365, 95 C. 1909 [1] 1412).
  - 8) 9-Amido-10-Methyl- $\alpha$ -Phenakridin. Sm. 244°. HCl, (2HCl,  $PtCl_4$ ) (B. 33, 917; D.R.P. 104667, 130721). — \*IV, 718.
  - 9) 5-Phenyl-5,10-Dihydrophenazin. Sm. 143° (A. 322, 69 C. 1902 [2] 225). — \*IV, 665.
  - 10) Dimethyl-1,5-Naphtodichinolin. Sm. 238—240°. Pikrat (J. pr. [2] 79, 448 C. 1909 [2] 133).
  - 11) Nitril d.  $\alpha$ -[1-Naphtyl]amido- $\alpha$ -Phenylessigsäure. Sm. 106° (113°; 116—117°; 119°) (B. 35, 3333 C. 1902 [2] 1192; D.R.P. 144536 C. 1903 [2] 779; B. 37, 4080 C. 1904 [2] 1722; D.R.P. 157617 C. 1905 [1] 316; B. 39, 1009 C. 1906 [1] 1343).
  - 12) Nitril d.  $\alpha$ -[2-Naphtyl]amido- $\alpha$ -Phenylessigsäure. Sm. 119—120° (B. 35, 3333 C. 1902 [2] 1192; D.R.P. 157617 C. 1905 [1] 316; B. 39, 2812 C. 1906 [2] 1491).
- $C_{18}H_{14}N_4$
- C 75,5 — H 4,9 — N 19,6 — M. G. 286.
  - 1) 1,2-Di[Phenylazo]benzol (Disazobenzol). Sm. 98° (B. 21, 2145). — IV, 1370.
  - 2) 1,3-Di[Phenylazo]benzol. Sm. 167—168° (B. 29, 103).
  - 3) 1,4-Di[Phenylazo]benzol. Sm. 168—169° (Soc. 67, 929). — IV, 1370.
  - 4) s-Di[2-Chinoly]hydrazin. Sm. 229°. 2HCl, 2 Pikrat (B. 33, 1894). — \*IV, 1097.



- C<sub>18</sub>H<sub>14</sub>N<sub>4</sub>** 5) **s-Phenosafranin** (Indophenosafranin). HCl + 1½(5)H<sub>2</sub>O, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Oxalat (*Bl.* [3] 33, 1191 *C.* 1906 [1] 60; *Bl.* [3] 35, 860 *C.* 1906 [2] 1767).
- 6) **uns-Phenosafranin** (Azophenosafranin). HCl + 1½(5)H<sub>2</sub>O, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O, Oxalat (*Bl.* [3] 33, 995 *C.* 1905 [2] 1187; *Bl.* [3] 33, 1191 *C.* 1906 [1] 60; *Bl.* [3] 35, 860 *C.* 1906 [2] 1767).
- C<sub>18</sub>H<sub>14</sub>Br<sub>2</sub>** 1) **Dibromid d. 1-Diphenylmethylen-R-Penten** (D. d. Diphenylfulven). Sm. 102—102,5° (*A.* 348, 13 *C.* 1906 [2] 1051).
- C<sub>18</sub>H<sub>14</sub>Br<sub>4</sub>** 1) **Tetrabromid d. 1-Diphenylmethylen-R-Penten** (T. d. Diphenylfulven). Sm. 123° (*A.* 348, 14 *C.* 1906 [2] 1051).
- 2) **Tetrabromreten**. Sm. 210—212° (*A.* 185, 84). — II, 277.  
C 88,2 — H 6,1 — N 5,7 — M. G. 245.
- C<sub>18</sub>H<sub>15</sub>N** 1) **Triphenylamin**. Sm. 127° (125°); Sd. 347—348°. HF (*B.* 6, 1514; 18, 2156; 31, 2987; 34, 40 Anm.; *J.* 1877, 481; *G.* 23 [2] 43; *B.* 40, 2451 *C.* 1907 [2] 244; *B.* 41, 3672 *C.* 1908 [2] 1861). — II, 342; \*II, 158.
- 2) **1-[2-Methylphenylimido]methylnaphtalin** (α-Naphtobenzylidentoluidin). Sm. 59° (*B.* 22, 2150). — III, 63.
- 3) **1-[4-Methylphenylimido]methylnaphtalin**. Sm. 93° (*B.* 22, 2150). — III, 63.
- 4) **2-Methyl-4,6-Diphenylpyridin**. Sm. 156° (*J. pr.* [2] 78, 529 *C.* 1908 [2] 594).
- 5) **3-Methyl-2,6-Diphenylpyridin**. Sd. 253—255°<sub>25</sub>. (2HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*B.* 32, 1939). — \*IV, 274.
- 6) **2-Phenyl-6-[4-Methylphenyl]pyridin**. Sm. 89°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 36, 847 *C.* 1903 [1] 975). — \*IV, 274.
- 7) **2-[2-Naphtyl]-1,3-Dihydroisindol**. Sm. 232° (*B.* 31, 1158). — \*IV, 140.
- 8) **α-[4-Methylphenyl]-β-[2-Chinolyl]äthen**. HCl (*B.* 35, 1958 *C.* 1902 [2] 130). — \*IV, 274.
- 9) **α-Phenyl-β-[6-Methyl-2-Chinolyl]äthen**. Sm. 137°. Pikrat (*B.* 38, 3700 *C.* 1906 [1] 50).
- 10) **α-Phenyl-β-[8-Methyl-2-Chinolyl]äthen**. Sm. 72°. HCl, (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (2HCl, AuCl<sub>3</sub>), Pikrat (*B.* 38, 3709 *C.* 1906 [1] 52).
- 11) **10-Methyl-7,12-Dihydro-α-Phenakridin**. Sm. 190—193,5° (212°) (*B.* 33, 909; *B.* 40, 861 *C.* 1907 [1] 1053). — \*IV, 274.
- 12) **Nitril d. αδ-Diphenyl-αγ-Pentadien-γ-Carbonsäure**. Sd. 210°<sub>13</sub> (*Soc.* 95, 487 *C.* 1909 [1] 1757).
- 13) **Verbindung (Base aus Zimtaldehyd)**. Fl. HCl, (2HCl, PtCl<sub>4</sub>), 2 + PtCl<sub>4</sub> (*A.* 100, 57). — II, 342.  
C 79,1 — H 5,5 — N 15,4 — M. G. 273.
- C<sub>18</sub>H<sub>15</sub>N<sub>3</sub>** 1) **2-Amido-1,4-Di[Phenylimido]-1,4-Dihydrobenzol**. Sm. 167° (*B.* 34, 1272). — \*III, 259.
- 2) **2-Phenylamido-4-Phenylimido-I-Imido-1,4-Dihydrobenzol** (*B.* 26, 384). — IV, 1136.
- 3) **α-Amido-α-Benzylidenhydrazon-α-[2-Naphtyl]methan** (Benzyliden-2-Naphtenylhydrazidin). Sm. 96°. Pikrat (*B.* 30, 1880; *A.* 298, 36). — IV, 1168.
- 4) **Diphenyldiazoamidobenzol**. Sm. 47°. HCl (*C. r.* 138, 1104 *C.* 1904 [1] 1595).
- 5) **4-Phenylamidoazobenzol**. Sm. 82° (*B.* 12, 259). — IV, 1356.
- 6) **2-[α-Phenylhydrazonbenzyl]pyridin**. Sm. 136—137° (*C.* 1902 [1] 206). — \*IV, 529.
- 7) **4-[α-Phenylhydrazonbenzyl]pyridin**. Sm. 181—182° (*C.* 1902 [1] 206). — \*IV, 529.
- 8) **5-Äthylamido-αβ-Naphtophenazin**. Sm. 169°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 23, 3804). — IV, 1203.
- 9) **5-Dimethylamido-αβ-Naphtophenazin**. Sm. 221°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (*B.* 23, 3808). — IV, 1203.
- 10) **9-Dimethylamido-αβ-Naphtophenazin** (Dimethylnaphteurhodin). Sm. 205° (*B.* 21, 721). — IV, 1200.
- 11) **5,7-Anhydrid d. 5-Amido-10-Methyl-αβ-Naphtophenazin-7-Methylhydroxyd** (D. R. P. 77226, 78222, 79540, 79960, 88365). — \*IV, 875.
- 12) **2-[2-Methylphenyl]amido-peri-Naphtimidazol**. Sm. 240—241° (*A.* 365, 146 *C.* 1909 [1] 1822).

- C<sub>18</sub>H<sub>15</sub>N<sub>3</sub>** 13) 2-[4-Methylphenyl]amido-*peri*-Naphtimidazol. Sm. 247° (A. 365, 147 C. 1909 [1] 1822).  
 14) 4,6-Dimethyl-2-[2-Naphtyl]-2,1,5-Benzotriazol. Sm. 175° (A. 366, 407 C. 1909 [2] 290).  
 15) 3-Methyl-2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. HCl, (2HCl, PtCl<sub>4</sub>) (B. 24, 1004). — IV, 1393.  
 16) Azodiphenylblau. HCl, Pikrat (B. 5, 472; 8, 1613; 20, 1541; D.R.P. 54617). — IV, 1210; \*IV, 876.  
 17) Emeraldin (B. 40, 288 C. 1907 [1] 802).  
 C 71,8 — H 5,0 — N 23,2 — M. G. 301.
- C<sub>18</sub>H<sub>15</sub>N<sub>5</sub>** 1) Bisdiazobenzolanilid. Zers. bei 80–81° (78,5°) (B. 27, 704, 1861, 2597; C. r. 140, 92 C. 1905 [1] 517). — IV, 1519.  
 2) 4-Phenylazo-1-Diazoamidobenzol. Sm. 112° (C. r. 140, 92 C. 1905 [1] 517).  
 3) 4-Phenylazo-1-[4-Amidophenylazo]benzol (Amidodisazobenzol). Sm. 170° (B. 21, 2145). — IV, 1371.  
 4) 5-Amido-*p*-Phenylazo-2-Methyl- $\alpha$ [oder  $\beta$ ]-Naphtimidazol. Sm. 220 bis 221° (Soc. 77, 1166). — \*IV, 1086.  
 5) isom. 5-Amido-*p*-Phenylazo-2-Methyl- $\alpha$ [oder  $\beta$ ]-Naphtimidazol + H<sub>2</sub>O. Sm. 257–260° u. Zers. (wasserfrei). HCl + H<sub>2</sub>O (Soc. 75, 1016; 77, 1168). — \*IV, 1086.  
 6) 2-Amido-3-[2-Amidophenyl]amido-5,10-Naphtdiazin. 2HCl (B. 34, 3730 C. 1902 [1] 54). — \*IV, 952.  
 7) Amidophenosafrafin (Bl. [3] 33, 997 C. 1905 [2] 1187).
- C<sub>18</sub>H<sub>15</sub>P** 1) Triphenylphosphin. Sm. 79°; Sd. oberhalb 360° (i. H-Strom). (2HCl, PtCl<sub>4</sub>), HJ, + HgCl<sub>2</sub> (B. 15, 801, 1610; 34, 569; A. 229, 295; G. 24 [1] 34; C. r. 139, 675 C. 1904 [2] 1638; B. 37, 4621 C. 1905 [1] 147). — IV, 1658; \*IV, 1176.
- C<sub>18</sub>H<sub>15</sub>As** 1) Triphenylarsin. Sm. 58–59° (60°); Sd. oberhalb 360° (i. CO<sub>2</sub>). (2HCl, PtCl<sub>4</sub>) (A. 201, 237; B. 15, 1954, 2876; 19, 1031; 34, 569; A. 321, 160 C. 1902 [2] 43; B. 37, 4621 C. 1905 [1] 147; B. 41, 2768 C. 1908 [2] 1170). — IV, 1688; \*IV, 1189.
- C<sub>18</sub>H<sub>15</sub>Bi** 1) Wismuthtriphenyl. Sm. 78° (u. 75°) (B. 20, 55; A. 251, 324; B. 37, 4622 C. 1905 [1] 148). — IV, 1698.
- C<sub>18</sub>H<sub>15</sub>Sb** 1) Antimontriphenyl. Sm. 48°; Sd. oberhalb 360° u. Zers. (A. 233, 43; B. 34, 569; G. 24 [1] 317; B. 37, 4621 C. 1905 [1] 147). — IV, 1694; \*IV, 1205.
- C<sub>18</sub>H<sub>16</sub>O** C 87,1 — H 6,4 — O 6,4 — M. G. 248.  
 1) Methyläther d. 3-Methyl-1-[4-Oxybenzyliden]inden. Sm. 113° (A. 347, 266 C. 1906 [2] 957).  
 2) *s*-Keto- $\beta$ -Methyl- $\alpha$ -Diphenyl- $\alpha\gamma$ -Pentadiën. Sm. 81° (B. 32, 1938). — \*III, 193.  
 3) *s*-Keto- $\alpha$ -Phenyl- $\epsilon$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadiën. Sm. 89° (B. 36, 846 C. 1903 [1] 975).  
 4) *s*-Keto- $\epsilon$ -Phenyl- $\alpha$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadiën. Sm. 100° (B. 36, 851 C. 1903 [1] 975).  
 5) 1-Keto-3,5-Diphenyl-1,2,3,4-Tetrahydrobenzol. Sm. 70–72° (82 bis 83°) (A. 281, 59; B. 36, 2133 C. 1903 [2] 366; Am. 37, 385 C. 1907 [1] 1541). — III, 253.  
 6) 2-Keto-1-Methyl-4,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 77–78° (Soc. 79, 1032). — \*III, 192.  
 7) Verbindung (aus  $\alpha\delta$ -Diketo- $\alpha\delta$ -Di[4-Methylphenyl]butan). Sm. 164° (B. 6, 72). — III, 300.  
 8) Verbindung (aus Anthrachinon). Sm. 159° (B. 41, 936 C. 1908 [1] 1697).  
 C 81,8 — H 6,0 — O 12,1 — M. G. 264.
- C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>** 1) 2-Methyläther d.  $\alpha$ -Oxyphenyl-2-Oxy-1-Naphtylmethan. Sm. 237° (B. 42, 2589 C. 1909 [2] 534).  
 2) Dimethyläther d. 5,6-Dioxy-1-Äthenylphenanthren. Sm. 80°. Pikrat (B. 35, 4391 C. 1903 [1] 339; B. 40, 1992 C. 1907 [2] 156).  
 3) Methyläther d. *s*-Keto- $\epsilon$ -Phenyl- $\alpha$ -[4-Oxyphenyl]- $\alpha\gamma$ -Pentadiën. Sm. 118° (B. 36, 854 C. 1903 [1] 976).  
 4) Methyläther d. *s*-Keto- $\epsilon$ -[4-Oxyphenyl]- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadiën. Sm. 95,5–96,5° (B. 39, 1919 C. 1906 [2] 125).

- $C_{18}H_{16}O_2$
- 5) Methyläther d.  $\gamma$ -Keto- $\alpha$ -Phenyl- $\epsilon$ -[4-Oxyphenyl]- $\alpha\delta$ -Pentadien (Benzal-p-Anisalacetone). Sm. 96,5° (B. 35, 3022 C. 1902 [2] 1113).
  - 6)  $\alpha\delta$ -Diketo- $\alpha\beta$ -Diphenyl- $\beta$ -Hexen (Desylenmethyläthylketon). Sm. 157° (Soc. 79, 1030). — \*III, 234.
  - 7) 1-Oxy-3-Keto-2-Methyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 179° (180°) (Soc. 51, 431; 71, 129; 75, 1019; 79, 1030; Soc. 87, 679 C. 1905 [2] 244). — III, 253; \*III, 192.
  - 8) 1-Oxy-3-Keto-4-Methyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 118° (133,5°) (Soc. 79, 1028; Soc. 83, 276 C. 1903 [1] 569, 877; Soc. 83, 289 C. 1903 [1] 569, 877). — \*III, 192.
  - 9) Methyläther d.  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenyl- $\alpha$ -[2-Furanyl]methan. Sd. 206 bis 207°<sub>28</sub> (Am. 35, 71 C. 1906 [1] 852).
  - 10) 1,3-Diketo-5-Methyl-2-Äthyl-2-Phenyl-2,3-Dihydroinden. Sm. 91 bis 93° (B. 29, 2378). — \*III, 233.
  - 11) 1,3-Diketo-2-Äthyl-2-[2-Methylphenyl]-2,3-Dihydroinden. Sm. 179° (B. 33, 2821). — \*III, 234.
  - 12) 1,3-Diketo-2-Äthyl-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm. 63 bis 65° (B. 28, 1391). — II, 303.
  - 13) 4,7-Dimethyl-3-Benzyl-1,2-Benzpyron. Sm. 117° (A. 362, 27 C. 1908 [2] 792).
  - 14) Retenchinon. Sm. 197—197,5°. Subl. (Z. 1869, 73; A. 188, 75; 229, 117; B. 17, 695; Bl. [3] 19, 514; B. 36, 4202 Anm. C. 1904 [1] 289). — III, 458; \*III, 326.
  - 15) Dihydrotruxon. Sm. 127° (B. 15, 20; 32, 2476; 33, 3082). — \*II, 137.
  - 16)  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Pentadien- $\epsilon$ -Carbonsäure. Sm. 190°. +  $C_6H_6$  (Sm. 140°), Ag (B. 36, 1407 C. 1903 [1] 1358).
  - 17) Laktone d.  $\alpha$ -Oxy- $\alpha\beta$ -Diphenyl- $\gamma$ -Methyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 105—106° (Soc. 83, 308 C. 1903 [1] 879).
  - 18) Methylester d.  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 82 bis 83° (J. pr. [2] 68, 527 C. 1904 [1] 451).
  - 19) Methylester d.  $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\beta$ -Carbonsäure. Fl. (A. 306, 154).
  - 20)  $\gamma$ -Phenylallylester d.  $\beta$ -Phenylakrylsäure (Styracin, Zimtsäurestyrylester). Sm. 44° (A. 31, 273; 70, 1; 97, 91; 188, 200; B. 13, 1072; 15, 2624; C. 1901 [2] 857). — II, 1406.
  - 21) Acetat d. 9-( $\alpha$ -Oxyäthyl)phenanthren. Sm. 100°; Sd. 230—235°<sub>12</sub> (B. 39, 3129 C. 1906 [2] 1333).
  - 22) Benzoat d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Pentin. Sm. 59° (C. r. 148, 1524 C. 1909 [2] 182).
- $C_{18}H_{16}O_3$
- C 77,1 — H 5,7 — O 17,1 — M. G. 280.
- 1)  $\zeta$ -Oxy- $\gamma\delta$ -Diketo- $\alpha\zeta$ -Diphenyl- $\alpha$ -Hexen. Sm. 114—115° (B. 28, 1210). — III, 325.
  - 2) Dimethyläther d. 1-Keto-2-[2,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 127° (Soc. 91, 1094 C. 1907 [2] 603).
  - 3) Dimethyläther d. 5,6-Dioxy-1-Keto-2-Benzyliden-2,3-Dihydroinden. Sm. 174° (Soc. 91, 1102 C. 1907 [2] 604).
  - 4) Methyläther d. Thebenol (Methylthebenol). Sm. 133—134° (135°) (B. 30, 1381; 32, 181; B. 37, 2790 C. 1904 [2] 716). — \*III, 677.
  - 5) 6-Oxy-2-[4-Isopropylphenyl]-1,4-Benzpyron. Sm. 182—183° (B. 40, 3670 C. 1907 [2] 1421).
  - 6) Äthyläther d. 7-Oxy-2-Benzyl-1,4-Benzpyron. Sm. 154° (B. 35, 867 C. 1902 [1] 813). — \*III, 567.
  - 7) Xanthen-9-Acetylacetone. Sm. 141—142° (C. r. 143, 241 C. 1906 [2] 886).
  - 8)  $\gamma$ -Benzoyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 183—185° u. Zers. Na + 2 $\frac{1}{2}$  H<sub>2</sub>O (A. 306, 168). — \*II, 1018.
  - 9) Anhydrid d. cis- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 104° (B. 37, 2666 C. 1904 [2] 524).
  - 10) Anhydrid d. trans- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 155° (B. 37, 2667 C. 1904 [2] 524).
  - 11) Methylester d.  $\gamma$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm. 95° (A. 306, 221). — \*II, 1016.
  - 12) Methylester d.  $\delta$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 79,5 bis 80° (A. 306, 161). — \*II, 1017.



- C<sub>18</sub>H<sub>16</sub>O<sub>3</sub>** 13) Methylester d.  $\gamma$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure (*J. pr.* [2] 55, 348).  
 14) Methylester d. Säure C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>. Sm. 73° (*A.* 341, 51 *C.* 1905 [2] 821).  
 15) Äthylester d.  $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropen- $\beta$ -Carbonsäure (Ä. d. Benzylidenbenzoylessigsäure). Sm. 98—99° (*Soc.* 47, 259; *Soc.* 83, 720 *C.* 1903 [2] 54; *G.* 33 [2] 146 *C.* 1903 [2] 1270). — II, 1720.  
 16) Äthylester d. 9-Methylfluoren-9-Ketocarbonsäure. Sd. 210—215°<sub>12</sub> (*B.* 35, 762 *C.* 1902 [1] 814).  
 17) Methylderivat d. Laktone d.  $\beta$ -Oxy- $\delta$ -Keto- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 102° (*B.* 27, 2226). — II, 1894.  
 18) Acetat d.  $\gamma$ -Keto- $\gamma$ -[4-Oxy-3-Methylphenyl]- $\alpha$ -Phenylpropen. Sm. 72° (*M.* 27, 1152 *C.* 1907 [1] 721).  
 19) Acetat d.  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[6-Oxy-3-Methylphenyl]propen (*B.* 31, 713 Anm.). — \*III, 185.  
 20) Acetat d.  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[2-Oxyphenyl]propen. Sm. 112° (*B.* 29, 239). — III, 249.  
 21) Acetat d. 7-Oxy-4-Methyl-2-Phenyl-1,4-Benzpyran. Sm. 115—120° (*B.* 34, 1794).  
 22) Acetat d. Verb. C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>. Sm. 103° (*B.* 12, 1307). — III, 443.  
 23) Verbindung (aus Diäthylcarbocarbonsäure). Sm. 120° (*A.* 261, 302). — II, 1476.

- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>** C 72,9 — H 5,4 — O 21,6 — M. G. 296.  
 1) Phenochinon. Sm. 71°. Na<sub>2</sub> (*B.* 5, 249, 846; 12, 1981; 28, 1614; *A.* 240, 251; 215, 134; *Am.* 18, 14). — III, 343.  
 2)  $\gamma$ -Oxy- $\alpha\beta\delta$ -Triketo- $\alpha\delta$ -Di[4-Methylphenyl]butan (p-Tolylformoin). Sm. 161° (*B.* 25, 3473). — III, 320.  
 3)  $\alpha$ -Äthyläther d.  $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten ( $\alpha$ -Äthylbenzoylformoin). Sm. 137—138° (*B.* 27, 717). — III, 317.  
 4)  $\beta$ -Äthyläther d.  $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten ( $\beta$ -Äthylbenzoylformoin) (*B.* 25, 3471; 27, 712). — III, 317.  
 5) 5,6-Dimethyläther d. 5,6-Dioxy-1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Sm. 225° u. Zers. HCl, K (*Soc.* 91, 1095 *C.* 1907 [2] 603).  
 6) Diäthyläther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 162° (*M.* 5, 228; *A.* 349, 212 *C.* 1906 [2] 1337). — III, 422.  
 7) Diäthyläther d. 1,3-Dioxy-9,10-Anthrachinon. Sm. 170° (*B.* 9, 1204). — III, 425.  
 8) Diäthyläther d. 1,4-Dioxy-9,10-Anthrachinon. Sm. 176—177° (*B.* 21, 1169). — III, 426.  
 9) Diäthyläther d. 1,5-Dioxy-9,10-Anthrachinon. Sm. 178° (*B.* 35, 2930 *C.* 1902 [2] 1050).  
 10) Diäthyläther d. 2,3-Dioxy-9,10-Anthrachinon. Sm. 160—163° (*B.* 22, 684). — III, 430.  
 11) Diäthyläther d. 2,6-Dioxy-9,10-Anthrachinon. Sm. 232° (*B.* 9, 383; 15, 1799; *Ph. Ch.* 18, 561). — III, 430.  
 12) Diäthyläther d. 2,7-Dioxy-9,10-Anthrachinon. Sm. 193—194° (*B.* 9, 383). — III, 431.  
 13) 7-Oxy-4-Methylen-5-Methyl-2-[4,6-Dioxy-2-Methylphenyl]-1,4-Benzpyran (Orcacetein) (*J. pr.* [2] 26, 55; *B.* 36, 733 *C.* 1903 [1] 840). — III, 146.  
 14) 3,7-Dioxy-2-[4-Isopropylphenyl]-1,4-Benzpyron. Sm. 243° (*B.* 40, 3672 *C.* 1907 [2] 1421).  
 15) 2<sup>4</sup>-Methyläther-6-Äthyläther d. 6-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 134—135° (*B.* 32, 1928). — \*III, 562.  
 16) 2<sup>4</sup>-Methyläther-7-Äthyläther d. 7-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 144—145° (*B.* 32, 323). — \*III, 563.  
 17) Nepodin. Sm. 158° (*A.* 291, 310; 309, 49). — III, 453; \*III, 324.  
 18) 5,6-Dioxy-1-Methylphenanthren-5,6-Dimethyläther-10-Carbonsäure. Sm. 178—180° (*B.* 39, 3109 *C.* 1906 [2] 1328).  
 19) 5,6-Dioxy-3-Methylphenanthren-5,6-Dimethyläther-10-Carbonsäure. Sm. 253° (*B.* 39, 3114 *C.* 1906 [2] 1329).  
 20)  $\gamma$ -Acetoxyl- $\beta\gamma$ -Diphenylpropen- $\gamma$ -Carbonsäure. Sm. 145—146° (*Soc.* 71, 138). — \*II, 1011.

- $C_{18}H_{16}O_4$  21)  $\delta$ -Keto- $\beta\gamma$ -Diphenylpentan- $\beta\gamma$ -Oxyd- $\alpha$ -Carbonsäure. Sm. 131—132° u. Zers. Ag (*Soc.* 83, 291 *C.* 1903 [1] 877).
- 22)  $\alpha\epsilon$ -Diketo- $\alpha\epsilon$ -Diphenylpentan- $\gamma$ -Carbonsäure ( $\alpha\gamma$ -Dibenzoylpropan- $\beta$ -Carbonsäure). Sm. 132—133°. Na, Ca + 6H<sub>2</sub>O, Ba + 6H<sub>2</sub>O, Ag (*B.* 19, 3147; 22, 3228; 26, 912; 28, 2102; *C. r.* 130, 1255; *C. r.* 147, 477 *C.* 1908 [2] 1178). — II, 1900; \*II, 1101.
- 23)  $\alpha\delta$ -Diketo- $\alpha$ -[4-Methylphenyl]- $\delta$ -Phenylbutan- $\delta^4$ -Carbonsäure. Sm. 225—230°. Ba (*A.* 312, 116). — \*II, 1101.
- 24)  $\alpha\gamma$ -Diketo- $\beta$ -Phtalidyl- $\alpha$ -Phenylbutan- $\beta^2$ -Carbonsäure. Sm. 136° (*B.* 37, 587 *C.* 1904 [1] 940).
- 25)  $\alpha\alpha$ -Diphenyl- $\alpha$ -Buten- $\beta\gamma$ -Dicarbonsäure ( $\alpha$ -Methyl- $\gamma$ -Diphenylitakonsäure). Sm. 179—180° u. Zers. Ca, Ba, Ag (*B.* 28, 3193; *B.* 39, 1071 *C.* 1906 [1] 1432). — \*II, 1102.
- 26)  $\alpha\beta$ -Diphenyl- $\alpha$ -Buten- $\gamma\delta$ -Dicarbonsäure + 2H<sub>2</sub>O ( $\gamma$ -Benzyliden- $\gamma$ -Phenylbrenzweinsäure). Sm. 151—152°. + C<sub>6</sub>H<sub>6</sub> (Sm. 110°), Ca, Ba + 3H<sub>2</sub>O, Ag<sub>2</sub> (*A.* 308, 156). — \*II, 1101.
- 27)  $\alpha\gamma$ -Diphenyl- $\alpha$ -Buten- $\delta\delta$ -Dicarbonsäure. Sm. 166° u. Zers. K + H<sub>2</sub>O (*Am.* 38, 231 *C.* 1907 [2] 1241).
- 28)  $\beta\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha\gamma$ -Dicarbonsäure (*Soc.* 75, 250). — \*II, 1101.
- 29) 1-Phenyl-1,2,3,4-Tetrahydronaphtalin-2,3-Dicarbonsäure. Sm. 195 bis 198° (204°). Ag<sub>2</sub> (*Am.* 20, 98; *B.* 40, 3382 *C.* 1907 [2] 904). — \*II, 1102.
- 30) 1,2-Diphenyl-R-Tetramethylen-3,4-Dicarbonsäure? ( $\beta$ -Truxillsäure;  $\delta$ -Isatropasäure). Sm. 206°. (NH<sub>3</sub>)<sub>2</sub> + H<sub>2</sub>O, Na<sub>2</sub> + 2H<sub>2</sub>O, Ca + 3H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Cu + 4H<sub>2</sub>O, Ag<sub>2</sub> (*B.* 21, 2347; 22, 2257; *A.* 271, 193). — II, 1902.
- 31) 1,3-Diphenyl-R-Tetramethylen-2,4-Dicarbonsäure ( $\alpha$ -Truxillsäure;  $\gamma$ -Isatropasäure; Cocasäure). Sm. 274°. Na<sub>2</sub> + 10H<sub>2</sub>O, Ca + H<sub>2</sub>O, Ba + 8½H<sub>2</sub>O, Pb + H<sub>2</sub>O, Ag, Ag<sub>2</sub> (*B.* 21, 2346; 22, 2246; 27, 1414; *Ph. Ch.* 6, 318; *B.* 35, 2413 *C.* 1902 [2] 444; *Am.* 28, 235 *C.* 1902 [2] 1047; *B.* 35, 2908 *C.* 1902 [2] 1045; *J. pr.* [2] 66, 419 *C.* 1903 [1] 528; *B.* 39, 4090 *C.* 1907 [1] 248). — II, 1901.
- 32)  $\gamma$ -Truxillsäure ( $\epsilon$ -Isatropasäure). Sm. 228°. Ca + 3½H<sub>2</sub>O, Ba + 11H<sub>2</sub>O, Ag, Ag<sub>2</sub> (*B.* 22, 127, 2258; 27, 1414; *Ph. Ch.* 6, 318). — II, 1903.
- 33)  $\delta$ -Truxillsäure. Sm. 174°. Ca, Ba + 4H<sub>2</sub>O, Cu + 2H<sub>2</sub>O, Ag<sub>2</sub> (*B.* 22, 2250; *A.* 271, 205). — II, 1903.
- 34)  $\beta$ -Cocasäure. Sm. 189°. Cu + 2H<sub>2</sub>O, Ag<sub>2</sub> (*A.* 271, 202). — II, 1404.
- 35)  $\alpha$ -Isatropasäure. Sm. 237—237,5°. Ca + 2H<sub>2</sub>O, Ba + 2½H<sub>2</sub>O (*A.* 138, 237; 148, 246; 195, 167; 206, 36; 217, 109; *B.* 28, 140). — II, 1403.
- 36)  $\beta$ -Isatropasäure ( $\beta$ -Isococasäure). Sm. 206°. + C<sub>6</sub>H<sub>6</sub>, Ca + 3H<sub>2</sub>O, Ba (*Lit.* siehe die  $\alpha$ -Säure u. *A.* 206, 38; *B.* 28, 140; *J. pr.* [2] 66, 420 *C.* 1903 [1] 528). — II, 1403.
- 37) Säure (aus d. Säure C<sub>20</sub>H<sub>16</sub>O<sub>8</sub>). Sm. 167—168° (*A.* 356, 92 *C.* 1907 [2] 1701).
- 38) isom. Säure (aus d. isom. Säure C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>). Sm. 155—157° (*A.* 356, 92 *C.* 1907 [2] 1701).
- 39) Gem. Anhydrid d. Essigsäure u. 2-[3,4-Dimethylbenzoyl]benzol-1-Carbonsäure. Sm. 102° (*A.* 312, 100). — \*II, 1009.
- 40) Methylester d.  $\alpha$ -Phenyl- $\beta$ -[4-Acetoxyphenyl]akrylsäure. Sm. 108° (*A.* 349, 111 *C.* 1906 [2] 1256).
- 41)  $\alpha$ -Äthylester d.  $\beta$ -Benzoxyl- $\alpha$ -Phenylakrylsäure. Sd. 245—246°<sub>18</sub> (*A.* 312, 46). — \*II, 956.
- 42)  $\beta$ -Äthylester d.  $\beta$ -Benzoxyl- $\alpha$ -Phenylakrylsäure. Sm. 87—88°; Sd. 241—242°<sub>18</sub> (*A.* 291, 194; 312, 47). — \*II, 956.
- 43) Äthylester d. 2-Cinnamoyloxybenzol-1-Carbonsäure. Sm. 66—67° (*C.* 1907 [1] 1118).
- 44) Äthylester d.  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure (Ä. d. Dibenzoylessigsäure). Sm. 112°. Cu (*Soc.* 47, 426; 59, 1000; *B.* 16, 2133; *A.* 282, 158; *B.* 35, 934 *C.* 1902 [1] 808; *A.* 363, 52 *C.* 1908 [2] 1722). — II, 1896.
- 45) Äthylester d. 9-Acetoxyfluoren-9-Carbonsäure. Sm. 103—104° (*B.* 39, 3899 *C.* 1907 [1] 167).

- $C_{18}H_{16}O_4$
- 46) Dibenzylester d. Fumarsäure. Sm. 64°; Sd. 239°<sub>14</sub> (B. 35, 4089 C. 1903 [1] 75).
  - 47) Dibenzylester d. Maleinsäure. Sd. 241°<sub>14</sub> (B. 35, 4090 C. 1903 [1] 75).
  - 48) Di[4-Methylphenylester] d. Fumarsäure. Sm. 162° (B. 18, 1948).
  - 49)  $\gamma$ -Acetat d.  $\alpha\gamma$ -Dioxy- $\delta$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 98° (B. 36, 2419 C. 1903 [2] 501; Am. 35, 140 C. 1906 [1] 1094).
  - 50) isom. Acetat d.  $\alpha\gamma$ -Dioxy- $\delta$ -Keto- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Fl. (Am. 35, 140 C. 1906 [1] 1095).
  - 51) 2-Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropen-4-Methyläther. Sm. 83–84° (B. 32, 312). — \*III, 182.
  - 52)  $\alpha^2$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -[2-Oxyphenyl]propen- $\gamma^4$ -Methyläther. Sm. 129–130° (B. 41, 1337 C. 1908 [1] 1981).
  - 53)  $\gamma^2$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[4-Oxyphenyl]propen- $\alpha^4$ -Methyläther. Sm. 84° (B. 32, 319). — \*III, 181.
  - 54) 6-Acetat d. 1,5,6-Trioxyphenanthren-1,5-Dimethyläther. Sm. 96 bis 97° (B. 33, 182). — \*II, 627.
  - 55) 4-Acetat d. 3,4,6-Trioxyphenanthren-3,6-Dimethyläther (A. d. Thebaol). Sm. 118–122° (B. 28, 942; 30, 1386). — \*III, 627.
  - 56) Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthen. Sm. 153° (A. 306, 143). — \*II, 675.
  - 57) Diacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthen. Sm. 118° (110°) (A. 306, 143; 308, 289; Am. 29, 607 C. 1903 [2] 198). — \*II, 675.
  - 58) Diacetat d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 213° (B. 7, 1203; A. 335, 189 C. 1904 [2] 1131). — II, 998.
  - 59) Diacetat d. 9,10-Dioxy-1,2-Dihydroanthracen. Sm. 220° (C. r. 140, 251 C. 1905 [1] 679).
  - 60) Diacetat d. 1,9-Dioxy-9,10-Dihydroanthracen. Sm. 84–85° (B. 35, 2925 C. 1902 [2] 1050).
  - 61) Diacetat d. Verb.  $C_{14}H_{12}O_2$  (A. 325, 28 C. 1903 [1] 460).
  - 62) Verbindung (aus 2-Benzoyl-1,3-Diketo-2,3-Dihydroinden). Na (B. 27, 107).
  - 63) Verbindung (aus  $\alpha\gamma\delta\zeta$ -Tetraketo- $\alpha\zeta$ -Diphenylhexan). Sm. 79°. Cu (B. 28, 1207). — III, 324.
  - 64) Verbindung (aus Tropasäure). Fl. (B. 12, 947; 25, 936). — II, 1579.
  - 65) Verbindung (aus Rumex nepalensis). Sm. 158° (B. 29, 325). C 69,2 — H 5,1 — O 25,6 — M. G. 312.
- $C_{18}H_{16}O_5$
- 1)  $\gamma\gamma$ -Dioxy- $\alpha\beta\delta$ -Tri keto- $\alpha\delta$ -Di[4-Methylphenyl]butan. Sm. 88° (B. 25, 3474). — III, 324.
  - 2) 3,4-Methylenäther-3,5-Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[3,5-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 139° (Soc. 89, 1653 C. 1907 [1] 406).
  - 3)  $\alpha^{3,4}$ -Methylenäther- $\gamma^4$ -Äthyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 160° (B. 31, 704). — \*III, 183.
  - 4) 5,6-Dimethyläther d. 5,6-Dioxy-1-Keto-2-[2,4-Dioxybenzyliden]-2,3-Dihydroinden + 2H<sub>2</sub>O. Zers. bei 240° (Soc. 91, 1097 C. 1907 [2] 604; Soc. 93, 1154 C. 1908 [2] 613).
  - 5) Dimethyläther d. Brasileïn (Soc. 93, 1132 C. 1908 [2] 611).
  - 6) Trimethyläther d. Aloeemodin. Sm. 163° (Ar. 246, 115 C. 1908 [1] 1547).
  - 7) Trimethyläther d. Trioxymethylantrachinon (aus Frangularinde). Sm. 225° (Ar. 246, 114 C. 1908 [1] 1547; Ar. 246, 321 C. 1908 [2] 808).
  - 8) Trimethyläther d. Morindon. Sm. 229° (Ar. 245, 551 C. 1908 [1] 371).
  - 9) Diäthyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 134° (B. 21, 1169). — III, 433.
  - 10) isom. Diäthyläther d. 1,2,3-Trioxo-9,10-Anthrachinon. Sm. 198° (B. 21, 1170). — III, 433.
  - 11) Diäthyläther d. 1,2,4-Trioxo-9,10-Anthrachinon (J. 1864, 543). — III, 434.
  - 12) Diäthyläther d. 1,2,6-Dioxy-9,10-Anthrachinon. Sm. 209° (B. 21, 1171; Ph. Ch. 18, 562). — III, 435.
  - 13) Diäthyläther d. 1,2,7-Trioxo-9,10-Anthrachinon.  $\alpha$ -Modif. Sm. 162°;  $\beta$ -Modif. Sm. 170° (B. 21, 1170; Ph. Ch. 18, 560). — III, 436.
  - 14) Trimethyläther d. 5-Oxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 189° (B. 38, 3590 C. 1905 [2] 1732).



- $C_{18}H_{16}O_5$  15) 3,7,8-Trioxo-2-[4-Isopropylphenyl]-1,4-Benzpyron. Sm. 265° (B. 40, 3675 C. 1907 [2] 1422).
- 16) 2<sup>3</sup>,2<sup>4</sup>-Dimethyläther d. 5-Oxy-7-Methyl-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 147° (B. 41, 792 C. 1908 [1] 1554).
- 17) 2<sup>3,4</sup>-Methylenäther-6-Äthyläther d. 6-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 144° (B. 33, 328). — \*III, 560.
- 18) Trimethyläther d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 156° (B. 33, 1991). — \*III, 565.
- 19) Trimethyläther d. 7-Oxy-2-[3,5-Dioxyphenyl]-1,4-Benzpyron. Sm. 181—182° (B. 35, 2886 C. 1902 [2] 1054).
- 20) Lapodin. Sm. 206° u. Zers. (A. 309, 52). — \*III, 475.
- 21) Ononetin. Sm. 145—150° (B. 33, 3539; M. 23, 142 C. 1902 [1] 1104; M. 25, 566 C. 1904 [2] 907). — \*III, 445.
- 22) 3,4,6-Trioxophenanthrentrimethyläther-9-Carbonsäure. Sm. 203° (B. 35, 4406 C. 1903 [1] 342).
- 23) 3,4,8-Trioxophenanthrentrimethyläther-9-Carbonsäure. Sm. 250° (B. 40, 2003 C. 1907 [2] 158).
- 24) isom.  $\beta$ -Trioxophenanthrentrimethyläthercarbonsäure. Sm. 201° (B. 38, 3158 C. 1905 [2] 1440).
- 25) isom.  $\beta$ -Trioxophenanthrentrimethyläthercarbonsäure. Sm. 219 bis 221° (B. 37, 2790 C. 1904 [2] 716).
- 26)  $\alpha$ -Keto- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta\delta$ -Dicarbonsäure. Sm. 144° (A. 294, 332).
- 27) 2,5-Diphenyltetrahydrofuran-2<sup>2</sup>,5<sup>2</sup>-Dicarbonsäure. Sm. 208—210°. Ba + 3H<sub>2</sub>O, Ag<sub>2</sub> (B. 31, 1578). — \*II, 1182.
- 28) Säure (aus  $\gamma$ -Benzyliden- $\gamma$ -Phenylbrenzweinsäure). Sm. 169—171,5°. +  $\frac{1}{2}$ C<sub>6</sub>H<sub>6</sub> (A. 308, 173). — \*II, 1151.
- 29) Mekoninmethylphenylketon ( $\alpha$ ,2-Lakton d.  $\gamma$ -Keto- $\alpha$ -Oxy- $\gamma$ -Phenyl- $\alpha$ -[3,4-Dimethoxyphenyl]propan-2-Carbonsäure). Sm. 127—128° (M. 12, 476; 13, 664; 20, 704). — II, 2022; \*II, 1182.
- 30) Anhydrid d.  $\alpha$ -Tetrahydrocumarinsäure. Sm. 222° (A. Spl. 8, 36). — II, 2024.
- 31) Äthylester d. 4,7-Dioxy-2-Phenyl-1,4-Benzpyran-4-Carbonsäure. Pikrat (B. 36, 1950 C. 1903 [2] 296).
- 32) Äthylester d. 4-Äthoxyl-1,2- $\alpha$ -Naphtopyron-3-Carbonsäure. Sm. 147° (A. 368, 44 C. 1909 [2] 1443).
- 33) Diacetat d.  $\alpha$ -Keto- $\alpha$ - $\beta$ -Di[4-Oxyphenyl]äthan. Sm. 125° (A. 325, 76 C. 1903 [1] 463).
- 34) Diacetat d.  $\alpha$ -Keto- $\alpha$ -[2,4-Dioxyphenyl]- $\beta$ -Phenyläthan. Sm. 107° (M. 26, 1126 C. 1905 [2] 1181).
- 35) Diacetat d.  $\alpha$ -Keto- $\alpha$ -[2,5-Dioxyphenyl]- $\beta$ -Phenyläthan. Sm. 105° (M. 26, 1137 C. 1905 [2] 1182).
- 36) Diacetat d. 4,4'-Dioxy-3-Methyldiphenylketon. Sm. 148—150° (A. 179, 197). — III, 211.
- 37) Diacetat d.  $\beta$ -Dioxy- $\beta$ -Methyldiphenylketon (D. d. Benzomethylresorcin). Sm. 120° (B. 28, 2306 Anm.). — III, 216.
- 38) Diacetat d. Verbindung C<sub>14</sub>H<sub>12</sub>O<sub>5</sub>. Sm. 150—151° (B. 40, 1452 C. 1907 [1] 1416).  
C 65,8 — H 4,9 — O 29,2 — M. G. 328.
- $C_{18}H_{16}O_6$  1) Chinonbrenzkatechin. Sm. 116° (M. 29, 1088 C. 1909 [1] 527).
- 2)  $\alpha^3,4$ -Methylenäther- $\gamma^2,4$ -Dimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxophenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 162—163° (B. 32, 2267). — \*III, 184.
- 3) Tetramethyläther d.  $\beta$ -Tetraoxy-9,10-Anthrachinon. Sm. 239° (Soc. 93, 437 C. 1908 [1] 1697).
- 4) 2<sup>4</sup>,5,7-Trimethyläther d. 3,5,7-Trioxo-2-[4-Oxyphenyl]-1,4-Benzpyron + H<sub>2</sub>O. Sm. 151—152° (wasserfrei) (B. 37, 2098 C. 1904 [2] 121).
- 5) 2<sup>3</sup>,7,8-Trimethyläther d. 3,7,8-Trioxo-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 212—214° (B. 37, 2630 C. 1904 [2] 539).
- 6) 2<sup>3</sup>,7,8-Trimethyläther d. 3,7,8-Trioxo-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 188—189° (B. 37, 2633 C. 1904 [2] 540).
- 7) 2<sup>4</sup>,7,8-Trimethyläther d. 3,7,8-Trioxo-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 198° (B. 38, 2750 C. 1905 [2] 1257).
- 8) 2<sup>2</sup>,2<sup>4</sup>,6-Trimethyläther d. 3,6-Dioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 193° (B. 39, 90 C. 1906 [1] 678).

- $C_{18}H_{16}O_6$
- 9) 2<sup>3</sup>,2<sup>4</sup>,6-Trimethyläther d. 3,6-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 189—190° (B. 37, 780 C. 1904 [1] 1156).
  - 10) 2<sup>3</sup>,2<sup>4</sup>,7-Trimethyläther d. 3,7-Dioxy-2-[2,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 205° (B. 39, 94 C. 1906 [1] 679).
  - 11) 2<sup>3</sup>,2<sup>4</sup>,7-Trimethyläther d. 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 186° (B. 38, 3588 C. 1905 [2] 1732).
  - 12) Trimethyläther d. 5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Tr. d. Luteolin). Sm. 161—163° (Soc. 77, 1319). — \*III, 440.
  - 13) Dimethyläther d. Maleinfluoresscein (B. 18, 2864). — II, 2050.
  - 14)  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[2,4-Dioxyphenyl]akryl-3,4-Methylenäther-2,4-Dimethyläthersäure. Sm. 203° (B. 38, 942 C. 1905 [2] 1019).
  - 15)  $\alpha\beta$ -Diphenylpropan- $\beta$ ,2,2'-Tricarbonsäure. Sm. 160° (B. 27, 2497). — II, 2026.
  - 16)  $\alpha\gamma$ -Diphenylpropan- $\beta$ ,4,4'-Tricarbonsäure. Sm. 270—271°. Ag<sub>3</sub> (B. 33, 2626). — \*II, 1184.
  - 17) bim. o-Cumarsäure. Sm. noch nicht bei 275° (B. 37, 1384 C. 1904 [1] 1343).
  - 18) Methylester d. d- $\alpha\beta$ -Dibenzoxypropionsäure. Sm. 58—59° (Soc. 69, 105; 75, 499). — \*II, 722.
  - 19) Methylester d. i- $\alpha\beta$ -Dibenzoxypropionsäure. Sm. 44—46° (Soc. 69, 106). — \*II, 722.
  - 20) Dimethylester d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure (D. d. p-Benzöindicarbonsäure). Sm. 126° (B. 19, 1817). — II, 2024.
  - 21) Acetat d. Genisteindimethyläther. Sm. 202—204° (Soc. 75, 835; 77, 1310). — \*III, 489.
  - 22) 2,6-Diacetat d. 2,4,6-Trioxydiphenylketon-4-Methyläther (D. d. Cotoïn). Sm. 94° (91—92°) (A. 199, 27; 282, 192; B. 27, 411, 1184, 1627). — III, 203.
- $C_{18}H_{16}O_7$
- 23) Verbindung (aus d. Verb. C<sub>20</sub>H<sub>22</sub>O<sub>7</sub>). Sm. 275° (Am. 25, 408). — \*III, 473. C 62,8 — H 4,6 — O 32,6 — M. G. 344.
  - 1) Trimethyläther d. 3,5,7-Triox-2-[2,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 165° (B. 39, 627 C. 1906 [1] 1028).
  - 2) 2<sup>3</sup>,2<sup>4</sup>,7-Trimethyläther d. 3,5,7-Triox-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Tr. d. Quercetin). Sm. 154° (Ar. 242, 241 C. 1904 [1] 1652; Ar. 246, 247 C. 1908 [2] 252).
  - 3) Rocellinin. Sm. 182° (A. 68, 69; J. pr. [2] 57, 271). — III, 647; \*III, 475.
  - 4) d-USninsäure. Sm. 195—196° (203°). Na + 2H<sub>2</sub>O, K + 3H<sub>2</sub>O, Ca + 4H<sub>2</sub>O, Ba + 4H<sub>2</sub>O, Sr + 2H<sub>2</sub>O, Pb + 2H<sub>2</sub>O, Cu, Ag (A. 48, 8; 49, 104; 68, 97; 117, 344; 155, 51; 284, 159, 173; 300, 355; 310, 243; 314, 98; 317, 137; Soc. 39, 234; B. 30, 357; C. 1903 [2] 121; J. pr. [2] 57, 236, 273, 317, 435; [2] 58, 481; [2] 62, 325, 431; [2] 63, 524; A. 319, 391 C. 1902 [1] 434; A. 324, 139 C. 1902 [2] 1511; A. 325, 341 C. 1903 [1] 722). — II, 2056; \*II, 1202.
  - 5) l-USninsäure. Sm. 203° (197°; 191,4°). Na + 2H<sub>2</sub>O, K + 3H<sub>2</sub>O (A. 310, 243; 314, 98; 317, 115, 117; J. pr. [2] 62, 325; A. 325, 341 C. 1903 [1] 722). — \*II, 1203.
  - 6) r-USninsäure. Sm. 191—192° (192°). Na + 2H<sub>2</sub>O, K + H<sub>2</sub>O (A. 310, 244; 314, 98; J. pr. [2] 62, 325; A. 325, 339 C. 1903 [1] 722). — \*II, 1203.
  - 7) Carbounsinsäure. Sm. 199—201°. Na + 2H<sub>2</sub>O, K + 3H<sub>2</sub>O, Cu (A. 137, 241; 284, 171; 288, 51; B. 8, 1459; 10, 1325; 16, 427; J. 1875, 612; 1878, 830, 831; G. 12, 432). — II, 2057.
  - 8) Usnolsäure (oder C<sub>26</sub>H<sub>24</sub>O<sub>10</sub>). Sm. 213,5° (206—208°; 240° u. Zers.) (A. 284, 168; 306, 294; 314, 110; Soc. 39, 234; G. 12, 247; A. 324, 171 C. 1902 [2] 1512; J. pr. [2] 68, 7 C. 1903 [2] 510). — II, 2057; \*II, 1205.
  - 9)  $\alpha,\alpha^2$ -Lakton d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha$ -[4,5-Dimethoxyphenyl]- $\beta$ -[2-Oxy-4-Methoxyphenyl]äthan- $\alpha^2$ -Carbonsäure. Sm. 181° (Soc. 95, 404 C. 1909 [1] 1572).
  - 10) Monacetat d. 2,4,6,3',4'-Pentaoxydiphenylketon-3',4'-Methylenäther-?-Dimethyläther (Acetylprotocotoïn). Sm. 103° (B. 24, 2984). — III, 209.
  - 11) Diacetat d. Jacarandin. Sm. 192—194° (Soc. 81, 218 C. 1902 [1] 532). — \*III, 486.

$C_{18}H_{18}O_8$ 

C 60,0 — H 4,4 — O 35,6 — M. G. 360.

- 1) Tetramethyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 220° (235—237°) (B. 10, 885; C. 1904 [2] 709). — III, 439.
- 2) Irigenin. Sm. 186° (B. 26, 2011). — III, 596.
- 3) Dioxessigdi[3-Acetoxyphenyl]äthersäure? Sm. 252° (A. ch. [7] 1, 107; Soc. 69, 1265; 71, 1084). — II, 918; \*II, 566.
- 4) Cetrarsäure (oder  $C_{30}H_{30}O_{12}$ ; oder  $C_{28}H_{20}O_{12}$ ).  $(NH_4)_2$ , Pb (A. 55, 156; 300, 356; B. 23, 464). — II, 2082.
- 5) Usnonsäure. Zers. oberhalb 160°.  $(NH_4)_2$  (A. 310, 279, 300). — \*II, 1205.
- 6) Tetraacetat d. 1,2,3,4-Tetraoxynaphtalin. Sm. 220° (A. 307, 17). — \*II, 631.
- 7) Tetracetat d. 1,2,5,8-Tetraoxynaphtalin. Sm. 277—279° u. Zers. (B. 27, 3463; 28, 1457; A. 286, 38). — \*II, 631.
- 8) Verbindung (aus Acetaldehyd u.  $\beta$ -Resorcyssäure) (B. 31, 150). — \*II, 1026.

 $C_{18}H_{16}O_{10}$ 

- 1) Articulatssäure +  $H_2O$ . Zers. bei 240—260° (J. pr. [2] 76, 6 C. 1907 [2] 1082).
- 2) Säure (aus Vasculose) (Bl. 37, 409). — I, 1079.

 $C_{18}H_{16}N_2$ 

- C 83,1 — H 6,1 — N 10,8 — M. G. 260.
- 1) 4-Amido-4'-Phenylamidobiphenyl. Sm. 136—137° (B. 40, 2101 C. 1907 [2] 32).
- 2) 1,3-Di[Phenylamido]benzol. Sm. 95°. 2HCl (B. 16, 2795). — IV, 572; \*IV, 371.
- 3) 1,4-Di[Phenylamido]benzol. Sm. 146°. 2HCl (B. 16, 2805; 21, 2615; 22, 2911; 25, 2717; M. 8, 475; 9, 418; B. 39, 1694 Anm. C. 1906 [2] 57). — IV, 585.
- 4) 4-Amidotriphenylamin. Sm. 146—147,5° (136°); Sd. oberhalb 360°. HCl (B. 23, 2537; B. 39, 2763 C. 1906 [2] 1488; C. 1907 [1] 1789; B. 41, 3511 C. 1908 [2] 1824). — IV, 584.
- 5)  $\alpha$ -Methylimido- $\alpha$ -[2-Naphtyl]amido- $\alpha$ -Phenylmethan (Benzenyl- $\beta$ -Naphtylamid-Methylimidin). Sm. 204°. Pikrat (B. 28, 2368). — IV, 845.
- 6)  $\alpha$ -[2-Naphtyl]hydrazon- $\alpha$ -Phenyläthan. Sm. bei 150° u. Zers. (A. 253, 42). — IV, 930.
- 7)  $\alpha$ -Phenylhydrazon- $\alpha$ -[1-Naphtyl]äthan. Sm. 173° (146°) (B. 19, 2898, 3180). — IV, 775.
- 8) Triphenylhydrazin. Sm. 136—138° (142°) (C. 1907 [1] 1789; B. 40, 2100 C. 1907 [2] 32).
- 9) 4-Phenyl-s-Diphenylhydrazin. Sm. 127° (122°) (B. 21, 911; C. 1904 [1] 1491; 1907 [1] 1789). — IV, 1504.
- 10) 2-Phenylazo-1,4-Dimethylnaphtalin. Sm. 83—84° (G. 26 [1] 26; C. 1907 [1] 1340). — \*II, 537.
- 11) Di[2,3-Dihydro-1-Indenyl]hydrazin (Hydrindonazin). Sm. 164 bis 165° u. Zers. (Soc. 71, 250). — \*III, 128.
- 12) Cinnamalazin. Sm. 162° (J. pr. [2] 39, 49). — III, 61.
- 13) 2,5-Dimethyl-3,6-Diphenyl-1,4-Diazin. Sm. 125—126°. (2HCl,  $PtCl_4$ ), Pikrat (A. 291, 268, 272; Bl. [3] 17, 70; B. 22, 3253; 30, 1524; B. 41, 1148 C. 1908 [1] 1895). — IV, 1041.
- 14) 2,5-Di[4-Methylphenyl]-1,4-Diazin. Sm. 204° (B. 35, 2295 C. 1902 [2] 362). — \*IV, 699.
- 15) 3-[2-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 155—158° (J. pr. [2] 52, 413). — IV, 637.
- 16) 3-[4-Methylphenyl]- $\alpha$ -Naphtimidazol. Sm. bei 200° (B. 27, 2778). — IV, 918.
- 17) 2-Methyl-2-Phenyl-2,3-Dihydro-peri-Naphtimidazol. Sm. 213° (A. 365, 164 C. 1909 [1] 1823).
- 18) 2,2'-Dimethylbiindol. Sm. 270° (A. 239, 212). — IV, 1041.
- 19)  $\alpha$ -[3-Amidophenyl]- $\beta$ -[6-Methyl-2-Chinolyl]äthen. Sm. 160,5°. 2HCl (C. 1907 [2] 1528).
- 20)  $\alpha$ -[4-Amidophenyl]- $\beta$ -[6-Methyl-2-Chinolyl]äthen. Sm. 173°. HCl (C. 1907 [2] 1528).
- 21) Dihydrobichinolin. Sm. 118° (B. 18, 1533). — IV, 1041.
- 22) 9-Amido-10-Methyl-7,12-Dihydro- $\alpha$ -Phenakridin. Sm. 195—198° (B. 33, 917). — \*IV, 700.



- $C_{18}H_{16}N_2$  23) Nitril d.  $\beta\gamma$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 227° (B. 25, 289). — II, 1894.
- 24) Base (aus Diphenylhydrazophenyl). Sm. 141°. HCl,  $H_2SO_4$  (C. 1908 [2] 948).
- $C_{18}H_{16}N_4$  25) isom. Base (aus Diphenylhydrazophenyl). 2HCl,  $H_2SO_4$  (C. 1908 [2] 948). C 75,0 — H 5,6 — N 19,4 — M. G. 288.
- 1) Benzenyl-2-Naphtenylhydrazidin (B. 30, 1883; A. 298, 41). — IV, 1298.
- 2) 4-Amido-4'-Phenylamidoazobenzol. Sm. 90–91° (Soc. 43, 440). — IV, 1362.
- 3) 3,6-Dimethyl-1,4-Diphenylbipyrazol. Sm. 163° (B. 36, 528 C. 1903 [1] 642). — \*IV, 950.
- 4) 3-Methyl-2-[4-Amidophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 173–174°. +  $\frac{1}{2}CH_3O$  (Soc. 59, 712). — IV, 1396.
- 5) Dinitril d. 2,3-Diphenyl-2,3,5,6-Tetrahydro-1,4-Diazin-1,4-Dicarbonsäure. Sm. 203–204° (Soc. 63, 1296). — III, 284. C 68,3 — H 5,1 — N 26,6 — M. G. 316.
- $C_{18}H_{16}N_6$  1) Phenylazo-m-Diamidoazobenzol. Sm. 185°. 2HCl, (2HCl,  $PtCl_4$ ) (B. 16, 2033). — IV, 1371.
- 2) 1,3-Diamido- $\beta$ -Di[Phenylazo]benzol. Sm. 250°. HCl, (2HCl,  $PtCl_4$ ) (B. 16, 2028; C. 1908 [2] 1589). — IV, 1371.
- 3) 5,5'-Dimethyl-1,1'-Diphenyl-3,3'-Bi-1,2,4-Triazol. Sm. 222–223°. 2HCl, (2HCl,  $PtCl_4$  +  $\frac{1}{2}H_2O$ ) (B. 21, 3064). — IV, 1331.
- 4) Verbindung (aus Tetrazobenzolchlorid) (B. 19, 317). — IV, 1528.
- $C_{18}H_{16}Br_2$  1) Dibromreten. Sm. 180° (A. 185, 83). — II, 276.
- $C_{18}H_{16}Br_6$  1)  $\alpha\beta\gamma\delta\epsilon\zeta$ -Hexabrom- $\alpha\zeta$ -Diphenylhexan. Sm. 228–230° u. Zers. (Soc. 93, 374 C. 1908 [1] 1691).
- 2)  $\beta$ -Hexabrom- $\alpha\beta$ -Di[3,5-Dimethylphenyl]äthan. Sm. 280° (B. 27, 2525; 33, 340). — \*II, 117.
- 3) Dibromretentetetrabromid (A. 185, 84). — II, 277.
- $C_{18}H_{16}J_2$  1) 4-Äthylphenyl-1-Naphtyljodoniumjodid. Sm. 48° (A. 327, 299 C. 1903 [2] 352).
- $C_{18}H_{16}S$  1) 2,5-Di[4-Methylphenyl]thiophen. Sm. 171° (B. 6, 74). — III, 749.
- 2) 2,4-Dimethylphenyläther d. 1-Merkaptonaphtalin. Sd. 239,5°<sub>11</sub> (B. 28, 2329). — II, 509.
- 3) 2,5-Dimethylphenyläther d. 1-Merkaptonaphtalin. Sm. 36,2°; Sd. 235°<sub>11</sub> (B. 28, 2329). — \*II, 509.
- 4) 3,4-Dimethylphenyläther d. 1-Merkaptonaphtalin. Sd. 246°<sub>11</sub> (B. 28, 2328). — \*II, 509.
- 5) 2,4-Dimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 39,6°; Sd. 243,5°<sub>11</sub> (B. 28, 2329). — \*II, 529.
- 6) 2,5-Dimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 36,7°; Sd. 240°<sub>11</sub> (B. 28, 2329). — \*II, 529.
- 7) 3,4-Dimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 68°; Sd. 251,5°<sub>11</sub> (B. 28, 2329). — \*II, 529.
- 8) Verbindung (aus Reten). Sm. 225,5–226° (A. 359, 140 C. 1908 [1] 1545).
- $C_{18}H_{16}Si$  1) Siliciumtriphenyl. Sm. 200–203° (B. 40, 2278 C. 1907 [2] 322). C 87,5 — H 6,9 — N 5,6 — M. G. 247.
- $C_{18}H_{17}N$  1) 1-[ $\beta$ -Dimethylphenyl]amidonaphtalin. Sd. 243–245°<sub>18</sub> (Bl. 20, 68). — II, 600.
- 2) 2-[2,4-Dimethylphenyl]amidonaphtalin. Sm. 40° (J. pr. [2] 75, 272 C. 1907 [2] 408).
- 3) Äthylphenyl-2-Naphtylamin. Sm. 58° (55–56°) (C. 1898 [2] 240; 1900 [2] 652). — \*II, 333.
- 4) Methyl-4-Methylphenyl-2-Naphtylamin. Sm. 75° (C. 1900 [2] 652). — \*II, 333.
- 5) 5-Methyl-2-Phenyl-1-[2-Methylphenyl]pyrrol. Sm. 44°; Sd. 325 bis 328° (B. 18, 2596). — IV, 333.
- 6) 5-Methyl-2-Phenyl-1-[4-Methylphenyl]pyrrol. Sm. 91°; Sd. oberhalb 350° (B. 18, 2597). — IV, 333.
- 7) 2,5-Di[4-Methylphenyl]pyrrol. Sm. 197° (R. 6, 73). — IV, 444.
- 8) 2-[4-Isopropylphenyl]chinolin. Sm. 60°. (2HCl,  $PtCl_4$  + 2H<sub>2</sub>O), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (A. 249, 103). — IV, 444.

- $C_{18}H_{17}N$  9) Nitril d.  $\delta\epsilon$ -Diphenyl- $\alpha$ -Penten- $\delta$ -Carbonsäure. Sd. 320—330° (B. 23, 2069). — II, 1477.  
C 78,5 — H 6,2 — N 15,3 — M. G. 275.
- $C_{18}H_{17}N_3$  1) 4-Amido-1,3-Di[Phenylamido]benzol. Sm. 107° (A. 255, 146; 286, 177). — IV, 1122.  
2) 2-Amido-1,4-Di[Phenylamido]benzol. Sm. 83° (B. 34, 1273). — \*IV, 776.  
3) 2-Diamidotriphenylamin. Sm. 187° u. Zers. 2HCl (B. 23, 2539). — IV, 585.  
4) Di[ $\alpha$ -Cyan- $\beta$ -Phenyläthyl]amin ( $\alpha$ -Phenylimidopropionitril). Sm. 86 bis 87° (105—106° u. 108—109°). HCl (A. 219, 191; J. 1883, 482). — II, 1365.  
5) 2-[Methyl-4-Methylphenyl]amidodiazonaphtalin. Sm. 114° (Soc. 57, 797). — IV, 1574.  
6) 2-Äthylamido-1-Phenylazonaphtalin. Sm. 106° (102—103°) (B. 17, 2669; 26, 193). — IV, 1393, 1396.  
7) 4-Äthylamido-1-Phenylazonaphtalin. Sm. 58—59° (B. 17, 2671). — IV, 1396.  
8) isom. 4-Äthylamido-1-Phenylazonaphtalin. Sm. 88° (A. 256, 256; B. 23, 3803). — IV, 1396.  
9) 4-Dimethylamido-1-Phenylazonaphtalin. HCl (B. 23, 3803). — IV, 1396.  
10) 1-[4-Dimethylamidophenyl]azonaphtalin (B. 23, 1908). — IV, 1396.  
11) 2-[4-Dimethylamidophenyl]azonaphtalin. Sm. 174° (B. 25, 1373). — IV, 1396.  
12) 3-Imido-4-Benzoyl-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 155° (B. 41, 2675 C. 1908 [2] 1365).  
13) 6-Methylphenylamido-4-Methyl-2-Phenyl-1,3-Diazin. Sm. 113°. HJ + 2H<sub>2</sub>O (Am. 20, 486). — IV, 1168.  
14) 6-Phenylamido-4-Methyl-2-[4-Methylphenyl]-1,3-Diazin. Sm. 120 bis 121°. HCl (Am. 40, 146 C. 1908 [2] 1107).  
15) 2-Methyl-4,6-Di[4-Methylphenyl]-1,3,5-Triazin. Sm. 159° (152 bis 153°); Sd. 245°<sub>15</sub> (B. 21, 2657; 23, 2387; A. 298, 9). — IV, 1192.  
16) 2-Propyl-4,6-Diphenyl-1,3,5-Triazin. Sm. 78,5°; Sd. 239°<sub>15</sub>. (2HCl, PtCl<sub>4</sub>) (B. 22, 807). — IV, 1192.  
17) 3-[ $\alpha$ -Phenylhydrazonäthyl]-2-Methylchinolin. Sm. 130° (B. 25, 1757). — IV, 374.  
18) 6-[ $\alpha$ -Phenylhydrazonäthyl]-2-Methylchinolin. Sm. 193° (B. 25, 2549). — IV, 374.  
C 71,3 — H 5,6 — N 23,1 — M. G. 303.
- $C_{18}H_{17}N_5$  1) 2-Di[4-Methylphenylazo]pyrrol. Sm. 179° (B. 19, 2254). — IV, 1483.
- $C_{18}H_{18}O$  C 86,4 — H 7,2 — O 6,4 — M. G. 250.  
1) Di[ $\gamma$ -Phenyläthyl]äther (Styryläther). Fl. (J. 1858, 447). — II, 1070.  
2) 9,10-Diäthyl-9,10-Dihydrophenanthren-9,10-Oxyd. Sm. 65° (A. 362, 253 C. 1908 [2] 952).  
3) Äthyläther d. 10-Oxy-9-Äthylanthracen. Sm. 77°. Pikrat (B. 21, 2506). — II, 902.  
4)  $\gamma$ -Keto- $\alpha\alpha$ -Diphenyl- $\delta$ -Methyl- $\alpha$ -Penten. Sd. 210—211°<sub>15</sub> (Am. 38, 537 C. 1908 [1] 227).  
5)  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trimethylphenyl]- $\alpha$ -Phenylpropen. Sm. 63°; Sd. 230—235°<sub>15</sub> (Am. 38, 554 C. 1908 [1] 229).  
6) 10-Keto-9,9-Diäthyl-9,10-Dihydroanthracen. Sm. 136° (B. 21, 1180). — III, 250.  
C 81,2 — H 6,7 — O 12,0 — M. G. 266.
- $C_{18}H_{18}O_2$  1)  $\gamma\delta$ -Dioxy- $\alpha\epsilon$ -Diphenyl- $\alpha\epsilon$ -Hexadien (Hydrocinnamoïn). Sm. 153—154° (B. 32, 1296). — \*II, 675.  
2) Dimethyläther d.  $\alpha\delta$ -Di[4-Oxyphenyl]- $\alpha\gamma$ -Butadien. Sm. 225° (A. 255, 307; B. 41, 1994 C. 1908 [2] 600). — II, 1001.  
3) Diäthyläther d.  $\alpha\beta$ -Di[4-Oxyphenyl]äthin. Sm. 162° (A. 279, 338; 306, 80). — II, 999.  
4) 9,10-Dioxyreten (9,10-Dioxy-8-Methyl-5-Isopropylphenanthren) (A. 229, 125). — II, 1001.  
5) o-Dioxyreten (D.R.P. 151981 C. 1904 [2] 167).  
6) Isobutyloxanthranol. Sm. 130° (A. 212, 72; B. 14, 462). — III, 244.

- $C_{19}H_{18}O_2$
- 7) Diäthyläther d. 1,5-Dioxyanthracen. Sm. 179° (*B.* 42, 1416 *C.* 1909 [1] 1711).
  - 8) Diäthyläther d. 1,8-Dioxyanthracen. Sm. 139° (*B.* 42, 1417 *C.* 1909 [1] 1711).
  - 9) Diäthyläther d. 9,10-Dioxyanthracen (*B.* 18, 3038). — II, 1000.
  - 10) Diäthyläther d. isom. Dioxyanthracen. Sm. 229° (*B.* 15, 1809). — II, 1000.
  - 11) Phenyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Hexen. Sm. 55°; Sd. 206 bis 209°<sub>11</sub> (*C. r.* 139, 210 *C.* 1904 [2] 649).
  - 12)  $\beta$ -Keto- $\gamma$ - $\delta$ -Diphenylhexan- $\gamma$ - $\delta$ -Oxyd. Sm. 98—99° (*Soc.* 83, 297 *C.* 1903 [1] 878).
  - 13)  $\alpha$ - $\zeta$ -Diketo- $\alpha$ - $\zeta$ -Diphenylhexan. Sm. 102—103° (*C.* 1896 [2] 1091). — \*III, 231.
  - 14)  $\beta$ - $\delta$ -Diketo- $\gamma$ -Diphenylmethylpentan. Sm. 116° (*C. r.* 145, 1291 *C.* 1908 [1] 643).
  - 15)  $\alpha$ - $\delta$ -Diketo- $\alpha$ - $\delta$ -Di[4-Methylphenyl]butan. Sm. 159° (161°) (*B.* 20, 1377; *A.* 312, 116; *R.* 6, 76). — III, 300; \*III, 230.
  - 16)  $\alpha$ - $\gamma$ -Diketo- $\alpha$ - $\gamma$ -Di[ $\beta$ -Methylphenyl]- $\beta$ -Methylpropan. Sm. 192°; Sd. 240—250°<sub>20</sub> (*A. ch.* [6] 22, 352). — III, 300.
  - 17) 3-Methyl-2,6-Diphenyltetrahydro-1,4-Pyron. Sm. 82—83° (*Soc.* 85, 1489 *C.* 1905 [1] 173).
  - 18) isom. 3-Methyl-2,6-Diphenyltetrahydro-1,4-Pyron. Sm. 102—103° (*Soc.* 85, 1489 *C.* 1905 [1] 173).
  - 19) 1,2-Diphenyl-R-Pentamethylen-4-Carbonsäure. Sm. 186—187° (*B.* 28, 2105). — \*II, 876.
  - 20) Allo-1,2-Diphenyl-R-Pentamethylen-4-Carbonsäure. Sm. 150—152° (*B.* 28, 2105). — \*II, 876.
  - 21)  $\alpha$ -[ $\beta$ -Isopropylphenyl]- $\beta$ -Phenylakrylsäure. Sm. 183—184°. Ca, Ag (*G.* 15, 509). — II, 1476.
  - 22) Diäthylcarbобензonsäure. Sm. 102° (100°); Sd. 238—240°<sub>11</sub>. Ag (*A.* 155, 67; 184, 164; *B.* 20, 1392; *B.* 35, 1988 *C.* 1902 [2] 367). — II, 1476.
  - 23) Isodiäthylcarbобензonsäure. Sm. 132—134° (*A.* 155, 67; 261, 301). — II, 1476.
  - 24) Retensäure. Sm. 222°. Na, Ba, Pb, Ag (*A.* 185, 111). — II, 1477.
  - 25) Lakton d.  $\delta$ -Oxy- $\gamma$ - $\delta$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 106° (*Soc.* 83, 311 *C.* 1903 [1] 880).
  - 26) Lakton d.  $\gamma$ -Oxy- $\gamma$ -Di[4-Methylphenyl]buttersäure. Sm. 156—157° (*A.* 312, 117). — \*II, 999.
  - 27) Methylester d.  $\alpha$ - $\alpha$ -Diphenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 120° (*B.* 41, 2986 *C.* 1908 [2] 1648).
  - 28) Methylester d. 1-Phenyl-1,2,3,4-Tetrahydronaphtalin-3-Carbonsäure. Sm. 82° (*A.* 306, 234). — \*II, 876.
  - 29) Äthylester d.  $\alpha$ - $\gamma$ -Diphenylpropen- $\beta$ -Carbonsäure. Sm. 44—45° (*B.* 39, 3048 *Anm. C.* 1906 [2] 1263).
  - 30)  $\gamma$ -Phenylpropylester d.  $\beta$ -Phenylakrylsäure. Fl. (*A.* 189, 353; *B.* 15, 2624). — II, 1406.
  - 31) Benzoat d.  $\gamma$ -[2-Oxyphenyl]- $\beta$ -Penten. Sd. 212—213,5°<sub>30</sub> (*B.* [3] 29, 354 *C.* 1903 [1] 1222).
  - 32) Verbindung (Phenol aus  $\alpha$ -Hydrindon). Sm. bei 104° (*A.* 275, 349). — II, 1001.
  - 33) Verbindung (aus  $\alpha$ -Benzaläthylmethylketon). Sm. 68,5° (*B.* 35, 968 *C.* 1902 [2] 871). — \*III, 132.
- $C_{18}H_{18}O_3$
- C 76,6 — H 6,4 — O 17,0 — M. G. 282.
- 1) 3-Methyläther-4-Benzoylmethyläther d. 3,4-Dioxy-1-Allylbenzol (Phenacylengenol; Eugenolacetophenon). Sm. 47,5° (*B.* 27, 2461). — III, 133.
  - 2) 3-Methyläther-4-Benzoylmethyläther d. 3,4-Dioxy-1-Propenylbenzol (Isoeugenolacetophenon). Sm. 83° (*B.* 27, 2462). — III, 133.
  - 3) 4-Methyläther- $\alpha$ -Äthyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propen. Fl. (*C.* 1900 [2] 1015).
  - 4) 2-Methoxyphenyläther d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Penten. Sm. 76 bis 77° Sd. 231°<sub>17</sub> (*C. r.* 139, 210 *C.* 1904 [2] 649).



$C_{15}H_{15}O_3$ 

- 5) Diäthyläther d. 3,4-Dioxy-9-Keto-9,10-Dihydroanthracen. Sm. 128° (A. 349, 209 C. 1906 [2] 1337).
- 6) Naphtalidmethylnormalbutylketon. Sm. 75° (M. 23, 840 C. 1902 [2] 1471).
- 7) Dimethyläther d. 5,6-Dioxy-1,2-Hydrindochroman. Sm. 120° (Soc. 91, 1096 C. 1907 [2] 604).
- 8) 3-Methylphenyläther d. 4-Oxy-4,7-Dimethyl-3,4-Dihydro-1,2-Benzpyron. Sm. 220° (A. 362, 13 C. 1908 [2] 791).
- 9)  $\delta$ -Keto- $\gamma$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure ( $\alpha$ -Desylisobuttersäure). Sm. 218° u. Zers. Ag (Soc. 83, 309 C. 1903 [1] 879).
- 10) 2,3,5,6-Tetramethyldiphenylketon-2'-Carbonsäure. Sm. oberhalb 260°. Ca + H<sub>2</sub>O, Ba + H<sub>2</sub>O (A. ch. [6] 14, 454). — II, 1718.
- 11) Dibenzylacetessigsäure. Sm. 89° (B. 6, 1085; 10, 785; A. 187, 24; 268, 123). — II, 1717.
- 12) Retenoxyessigsäure. Cu, Ag (A. 229, 132; M. 29, 770 C. 1908 [2] 1602). — II, 1718.
- 13) Xanthen-9-Isovaleriansäure. Sm. 147—150° (C. r. 143, 61 C. 1906 [2] 612).
- 14) Lakton d. 1-[ $\alpha$ -Oxy- $\gamma$ -Keto- $\delta\delta$ -Dimethylamyl]naphtalin-8-Carbonsäure. Sm. 113—114° (M. 26, 759 C. 1905 [2] 828).
- 15) Methylester d.  $\alpha$ -Keto- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 94° (Am. 37, 390 C. 1907 [1] 1541).
- 16) Methylester d.  $\delta$ -Keto- $\alpha\delta$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 63,5° (A. 306, 187). — \*II, 1013.
- 17) Methylester d.  $\gamma$ -Benzoyl- $\gamma$ -Phenylbuttersäure. Sm. 63—64° (B. 21, 1352). — II, 1716.
- 18) Methylester d. Dihydrocornicularsäure. Sm. 67—68° (B. 14, 1691; A. 219, 28). — II, 1717.
- 19) Äthylester d.  $\beta$ -Phenyl- $\beta$ -[2-Methoxyphenyl]akrylsäure. Sd. 215 bis 220°<sub>20</sub> (B. 41, 333 C. 1908 [1] 835).
- 20) Äthylester d.  $\alpha$ -Oxy- $\beta$ -Phenylakryl-4-Methylphenyläthersäure. Sm. 71°; Sd. 221°<sub>15</sub> (B. 38, 1967 C. 1905 [2] 134).
- 21) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-2-Methylphenyläthersäure. Sd. 212—213°<sub>10</sub> (Soc. 77, 987). — \*II, 962.
- 22) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-3-Methylphenyläthersäure. Sd. 217°<sub>12</sub> (Soc. 77, 1120). — \*II, 962.
- 23) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-4-Methylphenyläthersäure. Sd. 216—217°<sub>10</sub> (Soc. 77, 988). — \*II, 962.
- 24) Äthylester d.  $\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]äthan- $\alpha\beta$ -Oxyd- $\beta$ -Carbonsäure. Sd. 225°<sub>18</sub> (C. r. 148, 419 C. 1909 [1] 1094).
- 25) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -Benzoylpropionsäure. Sm. 37° (A. 284, 3; B. 28, 963). — II, 1713.
- 26) Äthylester d.  $\beta$ -Phenyl- $\alpha$ -Benzoylpropionsäure. Sd. 265—270°<sub>80</sub> (Soc. 59, 1006). — II, 1713.
- 27) Äthylester d.  $\beta$ -Keto- $\alpha\gamma$ -Diphenylpropan- $\alpha$ -Carbonsäure. Sm. 78 bis 79° (A. 296, 1; J. pr. [2] 55, 348, 354). — \*II, 1009.
- 28) Eugenolester d. 1-Methylbenzol-4-Carbonsäure (A. 108, 322). — II, 1340.
- 29) Acetat d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 100° (B. 22, 381). — III, 235.
- 30) Verbindung (aus Phenol). Sm. 74—76° (C. 1901 [1] 23).  
C 72,5 — H 6,0 — O 21,5 — M. G. 298.

 $C_{15}H_{15}O_4$ 

- 1) Tetramethyläther d.  $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthin. Sm. 156° (A. 329, 45 C. 1903 [2] 1448).
- 2) 3,4-Dimethyläther d. 3,4-Dioxy- $\beta$ -[ $\alpha\beta$ -Dioxyäthyl]phenanthren. Sm. 145° (B. 39, 3126 C. 1906 [2] 1333).
- 3) Dibenzylidenäther d. d-Erythrit. Sm. 231° (Bl. [3] 25, 741). — \*III, 5.
- 4) Dibenzylidenäther d. l-Erythrit. Sm. 231° (204—205°) (Bl. [3] 25, 741; B. 34, 1371). — \*III, 5.
- 5) Dibenzylidenäther d. r-Erythrit. Sm. 220° (Bl. [3] 25, 744). — \*III, 5.
- 6) Dibenzylidenäther d. i-Erythrit. Sm. 201—202° (corr.) (B. 27, 1535; R. 18, 151). — III, 8; \*III, 5.

- $C_{18}H_{18}O_4$
- 7) Dimethyläther d.  $\alpha\delta$ -Diketo- $\alpha\delta$ -Di[4-Oxyphenyl]butan. Sm. 154° (B. 10, 216). — III, 298.
  - 8) Dimethyläther d. 4,6-Dioxy-2-Methyldibenzoylmethan. Sm. 76 bis 77° (B. 41, 795 C. 1908 [1] 1555).
  - 9) Dimethyläther d. 2,6-Dioxy-4-Methyldibenzoylmethan. Sm. 98–99° (B. 39, 4040 C. 1907 [1] 267).
  - 10)  $\alpha^4$ -Methyläther- $\gamma^4$ -Äthyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[4-Oxyphenyl]propen. Sm. 110–111° (B. 32, 323). — \*III, 182.
  - 11) 2-Methyläther-3'-Äthyläther d. 2,3'-Dioxydibenzoylmethan. Sm. 63° (B. 34, 1692). — \*III, 227.
  - 12) Dimethyläther d. 6-[3,4-Dioxybenzoyl]-3,4-Dihydrobenzopyran. Sm. 103–104° (B. 40, 3668 C. 1907 [2] 1420).
  - 13) 2<sup>4</sup>-Methyläther-6-Äthyläther d. 6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzopyron. Sm. 131–132° (B. 32, 1927). — \*III, 559.
  - 14) Ceropten. Sm. 135° (C. 1904 [1] 39).
  - 15)  $\beta$ -Acetoxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 106° (B. 14, 1688; A. 219, 47). — II, 1701.
  - 16)  $\alpha$ -Acetoxydi[4-Methylphenyl]essigsäure. Sm. 92° (B. 39, 3589 C. 1907 [1] 36).
  - 17) 1,2-Dioxy-1,2-Diphenyl-R-Pentamethylen-4-Carbonsäure. Sm. bei 200° u. Zers. (B. 28, 2103). — II, 1894.
  - 18) Allo-1,2-Dioxy-1,2-Diphenyl-R-Pentamethylen-4-Carbonsäure. Sm. 162–164° (B. 28, 2104). — II, 1894.
  - 19)  $r$ - $\alpha$ -Oxyphenylessigeugenoläthersäure. Sm. 101–102° (D. R. P. 82924). — \*II, 923.
  - 20)  $r$ - $\alpha$ -Oxyphenylessigisoeugenoläthersäure. Sm. 91–92° (D. R. P. 82924). — \*II, 923.
  - 21) 1-Oxymethylbenzoleugenoläther-4-Carbonsäure. Sm. 141° (D. R. P. 82924). — \*II, 927.
  - 22) 1-Oxymethylbenzolisoeugenoläther-4-Carbonsäure. Sm. 185° (D. R. P. 82924). — \*II, 927.
  - 23)  $cis$ - $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 203° u. Zers. (C. 1900 [2] 562; B. 37, 2666 C. 1904 [2] 524). — \*II, 1098.
  - 24)  $trans$ - $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 204° (B. 37, 2667 C. 1904 [2] 524). — \*II, 1098.
  - 25)  $\alpha\delta$ -Diphenylbutan-2,2'-Dicarbonsäure. Sm. 196–198°.  $Ag_2$  (B. 10, 2208). — II, 1894.
  - 26)  $\beta\gamma$ -Diphenylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 270° (276°). +  $C_2H_6O$ , Ca, Ba + 3  $H_2O$  (A. 348, 23 C. 1906 [2] 1052; B. 39, 4090 C. 1907 [1] 248).
  - 27) isom.  $\beta\gamma$ -Diphenylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 169–170° (A. 348, 28 C. 1906 [2] 1052).
  - 28)  $\alpha$ -Phenyl- $\alpha$ -[4-Methylphenyl]propan- $\beta\gamma$ -Dicarbonsäure. Sm. 150 bis 153° (C. 1905 [1] 1388).
  - 29) Retendiphensäure.  $Ag_2$  (A. 229, 129). — II, 1894.
  - 30) Hydriopolyorsäure. Sm. 162–163°.  $Na_2$  + 4  $H_2O$ , Mn + 3  $H_2O$ ,  $Ag_2$  (A. 195, 366). — II, 1907.
  - 31) Aldehyd d. 6,6'-Dioxybiphenyldiäthyläther-3,3'-Dicarbonsäure. Sm. 128° (A. 357, 383 C. 1908 [1] 359).
  - 32) Dialdehyd d. 5-Oxy-1-Methylbenzoläthylenäther-2-Carbonsäure. Sm. 125–126° (A. 357, 378 C. 1908 [1] 358).
  - 33) Dialdehyd d. 6-Oxy-1-Methylbenzoläthylenäther-3-Carbonsäure. Sm. 150° (A. 357, 377 C. 1908 [1] 358).
  - 34) Methylester d. 2-[4-Isopropylbenzoxyl]benzol-1-Carbonsäure (A. 89, 362). — II, 1497.
  - 35) Dimethylester d.  $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. Sm. 100 bis 101° (103°) (A. 239, 67; B. 37, 3219 C. 1904 [2] 1120). — II, 1889.
  - 36) Dimethylester d.  $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. Sm. 119° (B. 37, 3216 C. 1904 [2] 1120).
  - 37) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-2-Methoxyphenyläthersäure. Sd. 230–231°<sub>15</sub> (Soc. 77, 1180). — \*II, 962.
  - 38) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-3-Methoxyphenyläthersäure. Sd. 232–234°<sub>12</sub> (Soc. 83, 1134 C. 1903 [2] 1060).
  - 39) Äthylester d.  $\alpha$ -Phenyl- $\alpha$ -[4-Methoxyphenyl]äthan- $\alpha\beta$ -Oxyd- $\beta$ -Carbonsäure. Sd. 240°<sub>20</sub> (C. r. 148, 419 C. 1909 [1] 1094).

- $C_{18}H_{18}O_4$
- 40) Äthylester d.  $\alpha$ -Acetoxyl- $\alpha\alpha$ -Diphenylessigsäure. Sm. 65° (B. 22, 1539). — II, 1697.
  - 41) Äthylester d.  $\alpha\alpha$ -Dibenzoylpropionsäure. Fl. (Soc. 59, 1005). — II, 1900.
  - 42) Äthylester d. 4-Oxydiphenylketonäthyläther-3-Carbonsäure. Sm. 56° (A. 290, 167). — \*II, 1094.
  - 43) Monoäthylester d.  $\alpha\alpha$ -Diphenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 165 bis 166° (Ann. 34, 135 C. 1905 [2] 1022).
  - 44) Monäthylester d.  $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 140° (B. 5, 1048, 1050). — II, 1890.
  - 45) Diäthylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 42° (A. 193, 128). — II, 1884.
  - 46) Diäthylester d. Biphenyl-2,3'-Dicarbonsäure. Fl. (A. 200, 11). — II, 1883.
  - 47) Diäthylester d. Biphenyl-3,3'-Dicarbonsäure. Sm. 68° (B. 31, 2577). — \*II, 1093.
  - 48) Diäthylester d. Biphenyl- $\beta$ -Dicarbonsäure. Sm. 112° (A. 172, 121). — II, 1887.
  - 49) Diäthylester d. 3,4-Dimethylindacen-2,5-Dicarbonsäure. Sm. 165 bis 166°. Ag (B. 34, 2791).
  - 50) Dibenzylester d. Bernsteinsäure. Sm. 41,5–42,5° (45°; 49–50°); Sd. 238°, <sub>14</sub> (B. 14, 2242; G. 11, 256; B. 35, 4078 C. 1903 [1] 74; B. 41, 2460 C. 1908 [2] 767). — II, 1052.
  - 51) Di[2-Methylphenylester] d. Bernsteinsäure. Sd. 238–240°, (B. 35, 4079 C. 1903 [1] 74).
  - 52) Di[3-Methylphenylester] d. Bernsteinsäure. Sm. 60° (B. 35, 4080 C. 1903 [1] 74).
  - 53) Di[4-Methylphenylester] d. Bernsteinsäure. Sm. 121° (B. 35, 4080 C. 1903 [1] 74).
  - 54) Di[2,4-Dimethylphenylester] d. Oxalsäure. Sm. 144° (B. 35, 3444 C. 1902 [2] 1303).
  - 55) Di[2,5-Dimethylphenylester] d. Oxalsäure. Sm. 111° (B. 35, 3444 C. 1902 [2] 1303).
  - 56) Di[3,4-Dimethylphenylester] d. Oxalsäure. Sm. 106° (B. 35, 3444 C. 1902 [2] 1303).
  - 57) Mono[6-Isopropyl-3-Methylphenyl]ester d. Benzol-1,2-Dicarbonsäure. Sm. 132,5° (C. 1899 [2] 92; Soc. 75, 664). — \*II, 1047.
  - 58) Diacetat d.  $\alpha$ -Oxy- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Phenyläthan. Sm. 178° (A. 363, 278 C. 1909 [1] 176).
  - 59) Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\alpha$ -Diphenyläthan. Sm. 145,5° (B. 39, 2292 C. 1906 [2] 523).
  - 60) Diacetat d.  $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Dioxyäthan. Sm. 134° (A. 160, 275; 168, 73; 182, 275; J. pr. [2] 61, 174; B. 15, 1818; 16, 636). — II, 1101; \*II, 674.
  - 61) Diacetat d. Isohydrobenzoïn. Sm. 117–118° (A. 168, 77; 182, 282). — II, 1102.
  - 62) Diacetat d. 4,4'-Dioxy-2,2'-Dimethylbiphenyl. Sm. 75° (C. 1902 [2] 1448).
  - 63) Diacetat d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 131° (B. 21, 1067). — II, 993.
  - 64) Dibenzocat d.  $\alpha\delta$ -Dioxybutan. Sm. 81–82° (R. 9, 101). — II, 1141.
  - 65) Verbindung (aus m-Xylylendiacetessigsäure). Sm. noch nicht bei 300° (B. 34, 2793).  
C 68,8 — H 5,7 — O 25,5 — M. G. 314.
- $C_{18}H_{18}O_5$
- 1) Dimethylenäther d. Di[ $\alpha$ -3,4-Dioxyphenyläthyl]äther. Sm. 111° (Bl. [3] 25, 275; G. 34 [1] 372 C. 1904 [2] 214; G. 34 [2] 171 C. 1904 [2] 648, 982).
  - 2) Trimethyläther d. 2,4,6-Trioxydibenzoylmethan. Sm. 100° (B. 32, 2448; 33, 333 Anm.). — \*III, 227.
  - 3)  $\alpha^2, \alpha^4, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha\gamma$ -Di[2,4-Dioxyphenyl]propan. Sm. 157° (B. 39, 93 C. 1906 [1] 679).
  - 4)  $\alpha^2, \alpha^4, \gamma^5$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2,4-Dioxyphenyl]- $\gamma$ -[2,5-Dioxyphenyl]propan. Sm. 118° (B. 39, 88 C. 1906 [1] 678).
  - 5)  $\alpha^3, \alpha^4, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen (Tr. d. Buteïn). Sm. 156–157° (C. 1904 [2] 451).



$C_{18}H_{18}O_5$ 

- 6)  $\alpha^2, \gamma^3, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[2-Oxyphenyl]- $\gamma$ -[2,3,4-Trioxyphe-nyl]propen. Sm. 105° (B. 37, 2628 C. 1904 [2] 539).
- 7)  $\alpha^3, \gamma^3, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[3-Oxyphenyl]- $\gamma$ -[2,3,4-Trioxyphe-nyl]propen. Sm. 127—128° (B. 37, 2631 C. 1904 [2] 539).
- 8)  $\alpha^4, \gamma^3, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\gamma$ -[2,3,4-Trioxyphe-nyl]propen. Sm. 131—132° (B. 38, 2749 C. 1905 [2] 1257).
- 9)  $\alpha^4, \gamma^2, \gamma^4$ -Trimethyläther d.  $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\gamma$ -[2,4,6-Trioxyphe-nyl]propen. Sm. 113° (B. 37, 792 C. 1904 [1] 1158).
- 10) Trimethyläther d. 4-[3,4,5-Trioxybenzoyl]-1,2-Dihydrobenzofuran. Sm. 110—111° (B. 40, 3668 C. 1907 [2] 1420).
- 11) Trimethyläther d. 6-Oxy-2-[2,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 160° (B. 38, 89 C. 1906 [1] 678).
- 12) Trimethyläther d. 6-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 175—176° (B. 37, 779 C. 1904 [1] 1156).
- 13) Trimethyläther d. 7-Oxy-2-[2,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 139° (B. 39, 93 C. 1906 [1] 679).
- 14) Trimethyläther d. 7-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron (Tr. d. Butin). Sm. 119—121° (C. 1904 [2] 451; B. 38, 3587 C. 1905 [2] 1731).
- 15) Trimethyläther d. 5,7-Dioxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 125° (B. 37, 2097 C. 1904 [2] 121).
- 16) Trimethyläther d. 7,8-Dioxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 112° (B. 37, 2629 C. 1904 [2] 539).
- 17) Trimethyläther d. 7,8-Dioxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 79° (B. 37, 2632 C. 1904 [2] 539).
- 18) Trimethyläther d. 7,8-Dioxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 115° (B. 38, 2750 C. 1905 [2] 1257).
- 19) Dimethyläther d. Brasilin (B. 21, 3012; 27, 526). — III, 652.
- 20) Diäthyläther d. Genistein. Sm. 132—134° (Soc. 77, 1313). — \*III, 489.
- 21) Gymnogrammen. Sm. 159° (C. 1906 [2] 691).
- 22) Sesamin. Sm. 118° (B. 26 [2] 591).
- 23)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[3,4-Dioxyphenyl]akryltrimethyläthersäure. Sm. 185—186° (B. 42, 833 C. 1909 [1] 1164).
- 24) 2',4'-Dioxydiphenylketondiäthyläther-2-Carbonsäure. Sm. 175 bis 176° (B. 28, 29). — II, 1972.
- 25) Säure (aus d. Verb.  $C_{20}H_{22}O_5$ ). Sm. 212—214° (B. 42, 1412 C. 1909 [1] 1888).
- 26) Diäthylester d. 1-Naphtoxylfumarsäure. Sd. 246—248°<sub>16</sub> (Soc. 81, 426 C. 1902 [1] 758).
- 27) Diäthylester d. 2-Naphtoxylfumarsäure. Sd. 240—242°<sub>12</sub> (Soc. 81, 422 C. 1902 [1] 757).
- 28) Monacetat d. 2',4',6'-Trioxy-4-Methyldiphenylketondimethyläther. Sm. 150° (B. 27, 418). — III, 216.
- 29) Diacetat d. 1,8-Dioxy-2-Isobutyrylnaphtalin. Sm. 105—106° (C. 1901 [2] 1287). — \*III, 143.
- 30) Diacetat d. 1,8-Dioxy-2-Acetyl-3,6-Dimethylnaphtalin. Sm. 167 bis 168° (Soc. 63, 335; Soc. 69, 298). — III, 176; \*III, 143.
- 31) Dibenzocat d. Di[ $\alpha$ -Oxyäthyl]äther (A. 226, 227). — II, 1153.
- 32) Verbindung (aus Natracetessigsäureäthylester u. Methoxymethylenacetessigsäureäthylester). Sm. 133° (B. 39, 2077 C. 1906 [2] 423).

 $C_{18}H_{18}O_6$ 

- 1) Di[4-Acetoxyphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 137—138° (A. 280, 203). — II, 941.
- 2) Tetramethyläther d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan (Veratril). Sm. 219—220° (A. 329, 53 C. 1903 [2] 1448; Soc. 93, 738 C. 1908 [1] 2036).
- 3) Dehydrodiacetovanillin. Sm. oberhalb 300° (B. 24, 2868). — III, 138.
- 4) Dimethyläther d. Dehydrovanillin. Sm. 137—138° (B. 18, 3494). — III, 110.
- 5)  $\alpha\delta$ -Di[2-Oxyphenyl]butan- $\beta\gamma$ -Dicarbonsäure. ( $\alpha$ -Tetrahydrodicumar-säure). Sm. 280—282°.  $Na_2 + 10H_2O$ ,  $Ca + 2H_2O$ ,  $Pb$ ,  $Cu + 2H_2O$ ,  $Ag_2$  (A. Spl. 8, 32; A. 362, 37 C. 1908 [2] 793). — II, 2024.
- 6) isom.  $\alpha\delta$ -Di[2-Oxyphenyl]butan- $\beta\gamma$ -Dicarbonsäure ( $\beta$ -Tetrahydrodi-cumarsäure). Sm. 158°.  $Na_2$ ,  $Ca + 6H_2O$ ,  $Ag_2$  (Soc. 51, 68; A. 362, 39 C. 1908 [2] 793). — II, 2023.

- $C_{18}H_{18}O_6$
- 7)  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylbutan- $\alpha\gamma$ -Dicarbonsäure.  $Ag_2$  (*Soc.* 83, 293 *C.* 1903 [1] 877).
  - 8)  $\beta\gamma$ -Dioxy- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 212°. K (*B.* 38, 3124 *C.* 1905 [2] 1428).
  - 9)  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenylbutan-2,2'-Dicarbonsäure (o-Äthylenbenzhydrilcarbonsäure) (*B.* 10, 2209; 31, 1579). — II, 2023; \*II, 1182.
  - 10) Diäthylester d. 2,5-Dimethyl-o-Benzdifuran-1,6-Dicarbonsäure. Sm. 155° (*B.* 20, 1337). — III, 734.
  - 11) Diäthylester d. 2,4-Dimethyl-m- $\alpha$ -Benzdifuran-1,5-Dicarbonsäure. Sm. 186° (*B.* 19, 2931). — III, 735.
  - 12) Diäthylester d. 2,6-Dimethyl-m- $\beta$ -Benzdifuran-1,5-Dicarbonsäure. Sm. 140–141° (*B.* 19, 2932). — III, 735.
  - 13) Diäthylester d. 2,3-Dimethyl-p- $\alpha$ -Benzdifuran-1,4-Dicarbonsäure. Sm. 150° (*B.* 20, 1335). — III, 736.
  - 14) Diäthylester d. 1,4-Dimethyl-p- $\beta$ -Benzdifuran-2,5-Dicarbonsäure. Sm. 184° (*J. pr.* [2] 45, 78). — III, 735.
  - 15) Di[2-Methoxyphenylester] d. Bernsteinsäure. Sm. 136° (135°) (*C.* 1895 [1] 209; *B.* 35, 4083 *C.* 1903 [1] 74).
  - 16) Diacetat d. Curcumin (oder  $C_{25}H_{24}O_8$ ). Sm. 154° (*Am.* 6, 78; *B.* 30, 193). — III, 660.
  - 17) 4,4'-Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 192° (*B.* 19, 356). — II, 1118.
  - 18) Diacetat d. Verb.  $C_{14}H_{14}O_4$ . Sm. 282° (*A. ch.* [7] 1, 99). — II, 919.
  - 19) Dibenzzoat d. Erythrit. Sm. 154–157° (*A.* 301, 102). — \*II, 715.
- $C_{18}H_{18}O_7$
- C 62,4 — H 5,2 — O 32,4 — M. G. 346.
- 1) Trimethyläther d. Katechon. Sm. 210° u. Zers. (*B.* 35, 1869 *C.* 1902 [2] 51; *B.* 35, 2409 *C.* 1902 [2] 448; *B.* 39, 4012 *C.* 1907 [1] 260). — \*III, 497.
  - 2) Asebogenin +  $H_2O$  (*R.* 2, 99). — III, 572.
  - 3) Vasculose (*Bl.* 37, 409). — I, 1079.
  - 4) ?-Tetraoxydiphenylketontetramethyläther-2-Carbonsäure. Sm. 193 bis 194° (*Soc.* 93, 437 *C.* 1908 [1] 1697).
  - 5) Armorsäure +  $H_2O$ . Sm. 226–228° u. Zers. (*J. pr.* [2] 76, 8 *C.* 1907 [2] 1082).
  - 6) Verbindung (aus Aloin). Zers. oberhalb 260° (*C.* 1896 [1] 561, 562).
- $C_{18}H_{18}O_8$
- C 59,7 — H 5,0 — O 35,3 — M. G. 362.
- 1) Asebofouscin (*R.* 2, 201). — III, 572.
  - 2) Katechin. Sm. 140° (*M.* 2, 547). — III, 687.
  - 3) 3,4-Dioxybenzoldimethyläthylenäther-1-Carbonsäure (*Bl.* 29, 270). — II, 1744.
  - 4)  $\pi$ -Oxy- $\beta$ -Keto- $\alpha$ -[4,5-Dimethoxyphenyl]- $\beta$ -[2-Oxy-4-Methoxyphenyl]äthan- $\alpha^2$ -Carbonsäure. Sm. 195° (*Soc.* 95, 404 *C.* 1909 [1] 1572).
  - 5) ?-Pentaoxydiphenylketontetramethyläther-2-Carbonsäure. Sm. 190° (*Soc.* 93, 438 *C.* 1908 [1] 1697).
  - 6) Dimethyldehydrodivanillinsäure (Dehydrodiveratumsäure). Sm. 308° u. Zers. (*C.* 1909 [2] 1807).
  - 7) Usnidinsäure +  $2H_2O$ . Sm. 195° u. Zers. (*J. pr.* [2] 63, 526). — \*II, 1205.
  - 8) Tetraacetat d. Gentiogenin. Sm. 207–210° (*Bl.* [3] 33, 1069 *C.* 1905 [2] 1432).
- $C_{18}H_{18}O_9$
- C 57,1 — H 4,8 — O 38,1 — M. G. 378.
- 1) Atranorinsäure +  $H_2O$ . Sm. 157° (*B.* 30, 359; *J. pr.* [2] 57, 292). — \*II, 1220.
  - 2) Trimethyltricumarinsäure.  $Na_3$  +  $6H_2O$  (*B.* 20, 1331). — II, 2091.
- $C_{18}H_{18}O_{10}$
- C 54,8 — H 4,5 — O 40,6 — M. G. 394.
- 1) Diäthylester d. Difuranoylweinsäure. Sm. 76° (*Soc.* 79, 518). — \*III, 503.
- $C_{18}H_{18}O_{11}$
- C 52,7 — H 4,4 — O 42,9 — M. G. 410.
- 1) Verbindung (aus Malonsäurediäthylester). Sm. 177–178° (*B.* 32, 1281). — \*I, 281.
- $C_{18}H_{18}O_{12}$
- C 50,7 — H 4,2 — O 45,1 — M. G. 426.
- 1) Tetramethylester d. 3,6-Diacetoxylbenzol-1,2,4,5-Tetracarbonsäure. Sm. 147° (*A.* 258, 291). — II, 2095.

- $C_{18}H_{18}O_{12}$  2) Hexamethylester d. Benzolhexacarbonsäure. Sm. 187° (*J.* 1862, 281; *A.* 177, 273; *J. pr.* [2] 40, 353; *B.* 31, 502; *M.* 25, 1209 *C.* 1905 [1] 366). — II, 2105; \*II, 1232.
- $C_{18}H_{18}N_2$  3) Hexacetat d. Hexaoxybenzol. Sm. 203° (*B.* 18, 507, 1836). — II, 1040. *C* 82,4 — *H* 6,9 — *N* 10,7 — *M. G.* 262.
- 1)  $\epsilon$ -Phenylimido- $\alpha$ -Methylphenylamido- $\alpha\gamma$ -Pentadien. HCl (*A.* 338, 134 *C.* 1905 [1] 454).
- 2) 5,7-Diamido-6-[2-Methylphenyl]-1-Methylnaphtalin. Sm. 136°. 2HCl (*Soc.* 95, 266 *C.* 1909 [1] 1480).
- 3) 5,7-Diamido-6-[3-Methylphenyl]-1-Methylnaphtalin. Sm. 143°. 2HCl (*Soc.* 95, 269 *C.* 1909 [1] 1480).
- 4) 5,7-Diamido-6-[4-Methylphenyl]-1-Methylnaphtalin. Sm. 160°. 2HCl (*Soc.* 95, 272 *C.* 1909 [1] 1480).
- 5) 1-Äthylamido-2-Phenylamidonaphtalin. Sm. 71°. HBr (*B.* 26, 189). — IV, 918.
- 6) 2-[3-Dimethylamidophenyl]amidonaphtalin. Sm. 110° (*D. R. P.* 73378). — \*IV, 373.
- 7) 1-[4-Dimethylamidophenyl]amidonaphtalin. Sm. 129° (*D. R. P.* 73378). — \*IV, 383.
- 8) 2-[4-Dimethylamidophenyl]amidonaphtalin. Sm. 131° (*D. R. P.* 73378). — \*IV, 383.
- 9) 1,3-Di[Methylamido]-2-Phenylnaphtalin. Sm. 164—165°. 2HCl (*Soc.* 91, 1296 *C.* 1907 [2] 991).
- 10) isom. 1,3-Di[Methylamido]-2-Phenylnaphtalin. Sm. 158—159°. 2HCl (*Soc.* 91, 1298 *C.* 1907 [2] 991).
- 11) Diallylidendiphenyldiamin. (2HCl, PtCl<sub>4</sub>) (*A. Spl.* 3, 359). — II, 445.
- 12)  $\epsilon$ -Phenylhydrazon- $\alpha$ -Phenyl- $\alpha\gamma$ -Hexadien. Sm. 180° (*B.* 18, 2323). — IV, 774.
- 13) 1-Diphenylmethyl-3,5-Dimethylpyrazol. Sm. 108—109° (*J. pr.* [2] 67, 172 *C.* 1903 [1] 874). — \*IV, 339.
- 14) 2-Propyl-4,5-Diphenylimidazol. Sm. 205,5°. HCl, Oxalat (*C.* 1909 [1] 1883).
- 15) 2-Isopropyl-4,5-Diphenylimidazol. Sm. 246°. HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (*C.* 1909 [1] 1883).
- 16) 2-Methyl-1-Äthyl-4,5-Diphenylimidazol. Sm. 125,5°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 67, 43). — IV, 1031.
- 17) 3,6-Dimethyl-2,5-Diphenyl-2,5-Dihydro-1,4-Diazin. Sm. 140°. HCl (*B.* 41, 1153 *C.* 1908 [1] 1895).
- 18) 2,5-Dimethyl-3,6-Diphenyl-2,5-Dihydro-1,4-Diazin (Dimethyldiphenyldihydropyrazin). Sm. 102°. 2HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O), Oxalat (*A.* 291, 274; *B.* 41, 1148 *C.* 1908 [1] 1895). — IV, 1034.
- 19) 2-Methyl-3-[4-Dimethylamidobenzyliden]pseudoindol? Sm. 305° (*B.* 36, 309; *B.* 38, 2644 *C.* 1905 [2] 629). — \*IV, 694.
- 20)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Amido-2-Chinolyl]äthan. Sm. 173°. 2HCl (*B.* 38, 3721 *C.* 1906 [1] 54).
- 21)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[8-Amido-2-Chinolyl]äthan. Sm. 161°. 2HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 38, 3718 *C.* 1906 [1] 54).
- 22) Hydrochinolin = (C<sub>9</sub>H<sub>9</sub>N)<sub>2</sub>. Sm. 161—162° (*B.* 12, 101, 252, 1481; 14, 100; *G.* 24 [2] 97). — IV, 253.
- 23) p-Tetroliditöyl. Sm. 86° (*J. pr.* [2] 6, 154; *B.* 14, 933, 2093, 2094). — IV, 1034.
- 24) Base (aus d. Base C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>Cl). (2HCl, PtCl<sub>4</sub>) (*A.* 214, 207). — IV, 1035.
- 25) Nitril d.  $\beta$ -Imido- $\alpha\gamma$ -Di[2-Methylphenyl]buttersäure. Sd. 270—280°<sub>18</sub> (*Soc.* 95, 265 *C.* 1909 [1] 1480).
- 26) Nitril d.  $\beta$ -Imido- $\alpha\gamma$ -Di[3-Methylphenyl]buttersäure. Sd. 275—280°<sub>18</sub> (*Soc.* 95, 267 *C.* 1909 [1] 1480).
- 27) Nitril d.  $\beta$ -Imido- $\alpha\gamma$ -Di[4-Methylphenyl]buttersäure. Sd. 280—283°<sub>18</sub> (*Soc.* 95, 270 *C.* 1909 [1] 1480). *C* 74,5 — *H* 6,2 — *N* 19,3 — *M. G.* 290.
- $C_{18}H_{18}N_4$  1) Tri[p-Amidophenyl]amin. Sm. 230°. 3HCl, 3(2HCl, PtCl<sub>4</sub>), 3 Pikrat (*B.* 18, 2157; 19, 759). — IV, 1295.
- 2) 4,6-Diamido-1,3-Di[Phenylamido]benzol. Sm. 207° (*B.* 30, 1668). — IV, 1243.



- $C_{18}H_{18}N_4$  3)  $\alpha\beta$ -Di[Cyanmethylphenylamido]äthan. Sm. 131° (*B.* 41, 2107 *C.* 1908 [2] 695).  
 4) 4,4'-Di[Methylecyanmethyldamido]biphenyl. Sm. 203° (*B.* 41, 2106 *C.* 1908 [2] 695).  
 5) 1-Phenylhydrazon-5-Benzolazo-1,2,3,4-Tetrahydrobenzol (*A.* 278, 40). — II, 906.  
 6) 7-Amido-2-[4-Dimethylamidophenyl]azonaphtalin. Sm. 259—260° (*B.* 40, 3263 *C.* 1907 [2] 1073).  
 7) 4-[4-Methylphenyl]azo-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 121°. HCl (*A.* 338, 216 *C.* 1905 [1] 1158).  
 8) 2,6-Di[Phenylamido]-4,5-Dimethyl-1,3-Diazin. Sm. 133—134° (*B.* 34, 2827). — \*IV, 912.  
 9) Verbindung (aus Chinondiimin u. Benzidin). Sm. 145° u. Zers. (*A.* 368, 279 *C.* 1909 [2] 1453).  
 10) Verbindung (aus Bromcyan u. Methylphenylamidoessigsäurenitril). Sm. 103° (*B.* 41, 2104 *C.* 1908 [2] 694).  
 $C_{18}H_{18}N_6$  C 67,9 — H 5,7 — N 26,4 — M. G. 318.  
 1) 1,4-Di[2,5-Diamidophenylimido]-1,4-Dihydrobenzol. Sm. 230—231° (238—238,5° u. Zers.) (*B.* 27, 480; *M.* 10, 124; *B.* 37, 1506 *C.* 1904 [1] 1414; *C.* 1905 [2] 1809; D.R.P. 167769 *C.* 1906 [1] 1127). — IV, 595; \*IV, 393.  
 $C_{18}H_{18}N_8$  C 62,4 — H 5,2 — N 32,4 — M. G. 346.  
 1) 1,3-Di[2,4-Diamidophenylazo]benzol (Phenylen-m-disazo-m-Phenylendiamin). 3 + 2C<sub>6</sub>H<sub>6</sub> (Sm. 118°); + C<sub>6</sub>H<sub>6</sub>O (Sm. 136°) (*B.* 30, 2115, 2901; 33, 2898). — IV, 1372; \*IV, 1017.  
 2) *p*-Di[3-Amidophenylazo]-1,3-Diamidobenzol. + C<sub>6</sub>H<sub>6</sub> (Sm. 116—118°) (*B.* 31, 190). — IV, 1372.  
 3) *p*-[3-Amidophenyl]azo-3-[2,4-Diamidophenyl]azo-1-Amidobenzol. 3 + 2C<sub>6</sub>H<sub>6</sub> (Sm. 134°) (*B.* 31, 189). — IV, 1372.  
 4)  $\alpha\beta$ -Di[3-Imido-1-Phenyl-2,3-Dihydro-1,2,4-Triazolyl-5-]äthan. Sm. 390°. Pikrat (*G.* 29 [1] 102). — \*IV, 995.  
 $C_{18}H_{18}Cl_2$  1)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[2,4-Dimethylphenyl]äthen. Sm. 112° (*J. pr.* [2] 39, 300; [2] 47, 47). — II, 253.  
 2)  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[2,5-Dimethylphenyl]äthen. Sm. 93° (*J. pr.* [2] 39, 300; [2] 47, 47). — II, 254.  
 $C_{18}H_{18}Br_2$  1)  $\delta\epsilon$ -Dibrom- $\gamma\delta$ -Diphenyl- $\beta$ -Hexen? Zers. bei 90° (*M.* 26, 1566 *C.* 1906 [1] 937).  
 2) 9,10-Dibrom-*p*-Tetramethyl-9,10-Dihydroanthracen (*A.* 235, 321). — II, 254.  
 $C_{18}H_{18}Br_4$  1) *p*-Tetrabrom- $\alpha\beta$ -Di[3,5-Dimethylphenyl]äthan. Sm. 170—171° (*B.* 27, 2525; 33, 340). — \*II, 117.  
 2) *p*-Tetrabrom-2,4,6,3',5'-Pentamethyldiphenylmethan. Sm. 230 bis 232° (*B.* 33, 342). — \*II, 117.  
 $C_{18}H_{18}S$  1) Di[ $\gamma$ -Phenylallyl]sulfid (Styrylsulfid). Fl. (*J.* 1858, 447). — II, 1070.  
 2) 3-Thiocarbonyl-4-Isopropyl-1-Methylhexahydrobenzol (Thiomenthon). Sd. 217—220° (*C.* 1907 [1] 1746).  
 $C_{18}H_{18}O_4$  1) Harz (aus Tolubalsam) = (C<sub>18</sub>H<sub>18</sub>O<sub>4</sub>)<sub>x</sub>. Sm. 60° (*J.* 1847/48, 736). — III, 564.  
 $C_{18}H_{18}N$  C 86,7 — H 7,6 — N 5,6 — M. G. 249.  
 1)  $\delta$ -[4-Dimethylamidophenyl]- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien. Sm. 171° (*B.* 40, 4369 *C.* 1908 [1] 35).  
 2)  $\gamma$ -[2,4,5-Trimethylphenyl]imido- $\alpha$ -Phenylpropen. Sm. 105—106° (*A.* 239, 384). — III, 61.  
 3) Di[ $\gamma$ -Phenylallyl]amin. Fl. HCl, Pikrat (*B.* 26, 1863). — II, 585; \*II, 328.  
 4) 1,3,3-Trimethyl-2-Benzyliden-2,3-Dihydroindol. Sm. 93°; Sd. 212°<sub>24</sub>. (2HCl, PtCl<sub>4</sub>), HJ (*B.* 38, 1360 *C.* 1905 [1] 1498).  
 5) Nitril d.  $\alpha\beta$ -Diphenylpentan- $\beta$ -Carbonsäure. Sm. 63°; Sd. 330—340° (*B.* 22, 1236). — II, 1472.  
 6) Nitril d.  $\beta\gamma$ -Diphenylpentan- $\beta$ -Carbonsäure. Sm. 99° (*Am.* 35, 397 *C.* 1906 [2] 47).  
 $C_{18}H_{18}N_5$  C 78,0 — H 6,9 — N 15,1 — M. G. 277.  
 1)  $\epsilon$ -Phenylhydrazon- $\alpha$ -Methylphenylamido- $\alpha\gamma$ -Pentadien (*A.* 338, 132 *C.* 1905 [1] 454).

$C_{18}H_{19}N_3$ 

- 2) 5-Methylamido-3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 120,5°; Sd. 236°<sub>17</sub> (A. 339, 158 C. 1905 [1] 1401).
- 3) 5-Äthylphenylamido-3-Methyl-1-Phenylpyrazol. Sd. 235°<sub>20</sub> (B. 40, 4485 C. 1908 [1] 138).
- 4) 5-Methylbenzylamido-3-Methyl-1-Phenylpyrazol. Sd. 242°<sub>20</sub>. (2HCl, PtCl<sub>4</sub>) (A. 339, 169 C. 1905 [1] 1402).
- 5) 2,5-Phenylimido-3-Methyl-2-Äthyl-1-Phenyl-2,2-Dihdropyrazol. Sm. 69,5°; Sd. 230°<sub>22</sub>. (2HCl, PtCl<sub>4</sub>), HJ, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, HJ (B. 40, 4484 C. 1908 [1] 138).
- 6) 2,5-Imido-2,3-Dimethyl-1-Phenyl-4-Benzyl-2,5-Dihdropyrazol. Sm. 96°. HCl, (2HCl, PtCl<sub>4</sub>), HJ, Pikrat, Carbonat, + HgCl<sub>2</sub> (A. 339, 159 C. 1905 [1] 1401).
- 7) 2,5-Benzylimido-2,3-Dimethyl-1-Phenyl-2,5-Dihdropyrazol. Fl. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), + HgCl<sub>2</sub>, Ferrocyanat, Pikrat (A. 339, 171 C. 1905 [1] 1402).
- 8) 2,5-[4-Methylphenyl]imido-2,3-Dimethyl-1-Phenyl-2,5-Dihdropyrazol. Sm. 111° (D.R.P. 113384 C. 1900 [2] 654). — \*IV, 759.
- 9) p-Phenylazo-1,3,4-Trimethyl-1,2-Dihydrochinolin? Pikrat (G. 24 [2] 195). — IV, 1485.
- 10) Nitril d. α-[4-Diäthylamidophenyl]imido-α-Phenyllessigsäure. Sm. 112° (B. 32, 2345; 33, 963). — \*IV, 391.

 $C_{18}H_{19}N_5$ 

- C 70,8 — H 6,2 — N 22,9 — M. G. 305.
- 1) 5-Äthylamido-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 51°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 354, 106 C. 1907 [2] 610).

 $C_{18}H_{19}Cl_3$ 

- 1) βββ-Trichlor-αα-Di[2,4-Dimethylphenyl]äthan. Sm. 106° (J. pr. [2] 39, 300; [2] 47, 47, 77). — II, 242.
- 2) βββ-Trichlor-αα-Di[2,5-Dimethylphenyl]äthan. Sm. 87° (J. pr. [2] 39, 300; [2] 47, 47, 77). — II, 242.

 $C_{18}H_{20}O$ 

- C 85,7 — H 7,9 — O 6,3 — M. G. 252.
- 1) 10-Oxy-10-Isobutyl-9,10-Dihydroanthracen. Sm. 71—72° (B. 14, 802; A. 212, 103). — II, 900.
  - 2) Methyläther d. p-Oxy-4-Isopropyl-s-Diphenyläthen. Sm. 151—152° (G. 15, 513). — II, 900.
  - 3) Äthyläther d. β-Oxy-α-Di[4-Methylphenyl]äthen. Sd. 209°<sub>20</sub> (B. 39, 2295 C. 1906 [2] 523).
  - 4) 3-Methyl-6-Isopropylphenyläther d. α-Oxy-α-Phenyläthen. Sm. 26°; Sd. 177—178°<sub>10</sub> (Soc. 79, 919).
  - 5) Benzyläther d. γ-[2-Oxyphenyl]-β-Penten. Sd. 192—193°<sub>19</sub> (Bl. [3] 29, 354 C. 1903 [1] 1222).
  - 6) β-Keto-γδ-Diphenylhexan. Sm. 56° (Am. 35, 399 C. 1906 [2] 48).
  - 7) isom. β-Keto-γδ-Diphenylhexan. Sm. 116° (Am. 35, 399 C. 1906 [2] 48).
  - 8) ε-Keto-δε-Diphenyl-β-Methylpentan (Isobutyldeoxybenzoin). Sm. 78°; Sd. 329,5—330,5° (B. 21, 1299). — III, 239.
  - 9) γ-Keto-εε-Diphenyl-β-Methylpentan. Sm. 66° (Am. 38, 535 C. 1908 [1] 227).
  - 10) α-Keto-αγ-Diphenyl-γ-Methylpentan. Sd. 202°<sub>18</sub> (Am. 38, 557 C. 1908 [1] 229).
  - 11) 2,4,6,3',5'-Pentamethyldiphenylketon (Mesitoylmesitylen). Sm. 84 bis 85°; Sd. 196—217°<sub>9,5</sub> (B. 32, 1910; 33, 344). — \*III, 176.
  - 12) Verbindung (aus Amylen u. Benzophenon). Sm. 110—111°; Sd. 305 bis 310° u. Zers. (G. 39 [1] 349 C. 1909 [2] 195).
- C 80,6 — H 7,4 — O 11,9 — M. G. 268.
- 1) αβ-Di[4-Oxy-2,5-Dimethylphenyl]äthen. Sm. 320—330° (B. 36, 1892 C. 1903 [2] 291).
  - 2) Dimethyläther d. γδ-Dioxy-αδ-Diphenyl-α-Buten. Sm. 59—61° (B. 42, 2881 C. 1909 [2] 620).
  - 3) Diäthyläther d. αα-Di[4-Oxyphenyl]äthen. Sm. 142° (B. 22, 1132). — II, 998.
  - 4) Diäthyläther d. αβ-Di[4-Oxyphenyl]äthen. Sm. 207° (A. 279, 343). — II, 998.
  - 5) 9,10-Dioxy-9,10-Diäthyl-9,10-Dihydroanthracen. Sm. 175° (B. 41, 936 C. 1908 [1] 1697).

 $C_{18}H_{20}O_2$

$C_{18}H_{20}O_2$ 

- 6) 9,10-Dioxy-9,10-Diäthyl-9,10-Dihydrophenanthren. Sm. 120—122° (A. 362, 252 C. 1908 [2] 952).
- 7) Dimethyläther d. 9,10-Dioxy-9,10-Dimethyl-9,10-Dihydroanthracen. Sm. 197° (Bl. [3] 33, 1145 C. 1908 [1] 47).
- 8) bim. Anhydrid d.  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropan. Sd. 194°<sub>15</sub> (204—206°<sub>11</sub>) (B. 39, 2298 C. 1906 [2] 524; C. 1907 [1] 1034).
- 9)  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Di[3,5-Dimethylphenyl]äthan(s-Tetramethylbenzoin). Sm. 93—94° (B. 33, 341). — \*III, 176.
- 10) Methyläther d.  $\alpha$ -Keto- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpentan. Sm. 58° (Am. 38, 550 C. 1908 [1] 228).
- 11) Methyläther d.  $\alpha$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\gamma$ -Phenylpentan. Sm. 85° (Am. 38, 551 C. 1908 [1] 229).
- 12) Methyläther d. 6-Oxy-3-[tert.]Butyldiphenylketon. Sd. 315° (Am. 17, 116). — III, 238.
- 13)  $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm. 172°. Ag (Soc. 83, 313 C. 1903 [1] 880).
- 14) *p*-Isobutyldiphenylmethan-*p*-Carbonsäure. Sm. 172°. Ca, Ba, Ag (J. 1877, 815). — II, 1472.
- 15) Aldehyd d. 4-Oxy-1-tert. Butylbenzolbenzyläther-3-Carbonsäure. Sm. 70—71° (Am. 16, 641). — III, 91.
- 16) Äthylester d.  $\beta\beta'$ -Diphenylisobuttersäure. Sd. 196—198°<sub>14</sub> (B. 34, 1998; B. 41, 1266 C. 1908 [1] 1876).
- 17) Äthylester d. Di[4-Methylphenyl]essigsäure. Sm. 65° (A. 306, 82). — \*II, 872.
- 18) Propylester d.  $\alpha\beta$ -Diphenylpropionsäure. Sd. 338—339° (B. 21, 1314). — II, 1467.
- 19) Benzylester d.  $\alpha$ -Phenylbutan- $\alpha$ -Carbonsäure. Sd. 330—340° (A. 193, 318). — II, 1392.
- 20) Benzylester d.  $\alpha$ -Phenyl- $\beta$ -Methylpropan- $\beta$ -Carbonsäure. Sd. 280 bis 285° (200—210°<sub>40</sub>) (A. 201, 171). — II, 1394.
- 21) Acetat d.  $\alpha$ -Oxy-2,4,6-Trimethyldiphenylmethan. Sm. 52° (A. ch. [6] 6, 216). — II, 1081.
- 22) Benzoat d. 4-Oxy-1-tert. Amylbenzol. Sm. 60°; Sd. 205°<sub>11</sub> (B. 18, 1717; 28, 408; A. 327, 220 C. 1903 [1] 1408). — II, 1148; \*II, 719.
- 23) Benzoat d.  $\gamma$ -[4-Oxyphenyl]pentan. Sm. 54—55° (J. r. 23, 539). — II, 1148.
- 24) Verbindung (aus *p*-Oxypseudocumylalkohol) (A. 302, 110, 118). — \*II, 686.
- 25) Verbindung (aus Phenylessigsäureäthylester). Sd. 250°<sub>80</sub> (Soc. 37, 481). — II, 1310.

 $C_{18}H_{20}O_3$ 

- C 76,1 — H 7,0 — O 16,9 — M. G. 284.
- 1) Diäthyläther d. 4-Oxyphenyl-4-Oxybenzylketon. Sm. 102° (A. 279, 342). — III, 227.
  - 2) 4-Methyläther d.  $\beta$ [oder  $\alpha$ ]-Oxy- $\alpha$ [oder  $\beta$ ]-Keto- $\beta$ -[4-Oxyphenyl]- $\alpha$ -[4-Isopropylphenyl]äthan. Sm. 81—82° (C. 1908 [2] 1690).
  - 3) Methylenäther d. d-3,4-Dioxybenzylidencampher. Sm. 159° (C. r. 128, 1273; 130, 222). — \*III, 389.
  - 4) Methylenäther d. l-3,4-Dioxybenzylidencampher. Sm. 159,5° (C. 1900 [1] 813). — \*III, 389.
  - 5) Methylenäther d. 3,4-Dioxybenzylidenthujon. Sm. 114° (C. r. 140, 1629 C. 1905 [2] 327).
  - 6) Methylenäther d. 3,4-Dioxybenzylidenisothujon. Sm. 131—132° (C. r. 140, 1631 C. 1905 [2] 327).
  - 7) Ostruthin. Sm. 118—119°. 2HCl, 2HBr (A. 183, 321; C. 1909 [2] 1768). — III, 638.
  - 8)  $\delta$ -Oxy- $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\beta$ -Carbonsäure (Soc. 83, 312 C. 1903 [1] 880).
  - 9)  $\gamma$ -Oxy- $\gamma\gamma$ -Di[4-Methylphenyl]buttersäure. Na, Ba (A. 312, 117). — \*II, 999.
  - 10)  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -[2,3,4,6-Tetramethylphenyl]essigsäure (Phenylisodurylglykolsäure). Ag (Bl. 42, 172). — II, 1702.
  - 11) Aldehyd d. 3,4-Dioxybenzol-3-Isobutyläther-4-Benzyläther-1-Carbonsäure. Sm. 42,5° (D.R.P. 85196). — \*III, 75.



- $C_{18}H_{20}O_3$
- 12) Äthylester d.  $\beta$ -Oxy- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 45,5° (A. 113, 69). — II, 1701.
  - 13) 2-Methylphenylester d.  $\alpha$ -Oxybutter-2-Methylphenyläthersäure. Sd. 189°<sub>12</sub> (B. 39, 3836 C. 1907 [1] 92).
  - 14) 3-Methylphenylester d.  $\alpha$ -Oxybutter-3-Methylphenyläthersäure. Sd. 202°<sub>15</sub> (B. 39, 3837 C. 1907 [1] 93).
  - 15) 4-Methylphenylester d.  $\alpha$ -Oxybutter-4-Methylphenyläthersäure. Sd. 203°<sub>15</sub> (B. 39, 3839 C. 1907 [1] 93).
  - 16) 2-Methylphenylester d.  $\alpha$ -Oxyisobutter-2-Methylphenyläthersäure. Sd. 185°<sub>11</sub> (B. 39, 3836 C. 1907 [1] 92).
  - 17) 3-Methylphenylester d.  $\alpha$ -Oxyisobutter-3-Methylphenyläthersäure. Sd. 201°<sub>15</sub> (B. 39, 3838 C. 1907 [1] 93).
  - 18) 4-Methylphenylester d.  $\alpha$ -Oxyisobutter-4-Methylphenyläthersäure. Sd. 197°<sub>15</sub> (B. 39, 3839 C. 1907 [1] 93).
  - 19) 4-tert. Amylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 76 bis 78° (D.R.P. 68111). — \*II, 888.
  - 20)  $\alpha$ -Benzoat d. Oxymethylcampher. Sm. 119—120°; Sd. 370° (A. 281, 372; C. r. 136, 1223 C. 1903 [2] 116). — III, 115.
  - 21)  $\beta$ -Benzoat d. Oxymethylencampher. Sm. 91—92° (A. 281, 375). — III, 115.
  - 22) Verbindung (aus Sequoia gigantea). Sd. 227—230° (B. 14, 2205). — III, 550.
- $C_{18}H_{20}O_4$
- C 72,0 — H 6,7 — O 21,3 — M. G. 300.
- 1) Bismethylbenzoylcarbinol. Sm. 201° (B. 28, 1161). — III, 132.
  - 2) Tetramethyläther d.  $\alpha\beta$ -Di[2,5-Dioxyphenyl]äthen. Sm. 99° (B. 40, 2358 C. 1907 [2] 310).
  - 3) Tetramethyläther d.  $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthen. Sm. 155—156° (B. 34, 415). — \*II, 632.
  - 4) Diäthyläther d.  $\beta$ -Dioxy- $\beta$ -Dimethylbiphenyldioxyd. Sm. 139° (B. 23, 3247). — II, 955.
  - 5) 5,6-Dimethyläther d. 1,5,6-Trioxy-2-[2-Oxybenzyl]-2,3-Dihydroinden. Sm. 130° (Soc. 91, 1096 C. 1907 [2] 604).
  - 6) Trimethyläther d. 4,3',4'-Trioxy-3-Äthylidiphenylketon. Sm. 103 bis 104° (B. 40, 3665 Anm. C. 1907 [2] 1420).
  - 7) 3,4-Dimethyläther d. 6-[ $\alpha$ ,3,4-Trioxybenzyl]-3,4-Dihydrobenzpyran. Sm. 115—116° (B. 40, 3669 C. 1907 [2] 1420).
  - 8) Resinotannol.  $K + H_2O$  (B. 26 [2] 679; 27 [2] 31). — III, 554.
  - 9) Di[4-Äthoxyphenyl]essigsäure. Sm. 114°.  $Ca + 2H_2O$ ,  $Ba + 2H_2O$  (A. 306, 84). — \*II, 1090.
  - 10)  $\alpha\epsilon$ -Dioxypentandiphenyläther- $\gamma$ -Carbonsäure. Sm. 88°. Ag (Soc. 69, 169, 1502). — \*II, 364.
  - 11) Äthylester d.  $\alpha$ -Oxy- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Phenylpropan- $\beta$ -Carbonsäure. Sm. 136° (B. 41, 342 C. 1908 [1] 836).
  - 12) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenyl- $\beta$ -[2-Methoxyphenyl]propionsäure. Sm. 57,5—58°; Sd. 190—196°<sub>7</sub> (B. 41, 331 C. 1908 [1] 834).
  - 13) Äthylester d. Di[4-Methoxyphenyl]essigsäure. Fl. (A. 306, 83).
  - 14) Benzoat d. 3,4,5-Trioxy-1-Propylbenzol- $\beta$ -Dimethyläther. Sm. 91° (B. 11, 331). — II, 1152.
  - 15) Saures Phtat d. Myrtenol. Sm. 114—115°. Ag (B. 40, 1366 C. 1907 [1] 1410).
  - 16) Verbindung  $+ \frac{1}{2}H_2O$  (aus Laudanosin). Sm. 231° (Soc. 95, 1269 C. 1909 [2] 991).
  - 17) Verbindung (aus 3,5-Dioxy-1-Methylbenzol u. Acetaldehyd) (Am. 5, 349). — II, 962.
- $C_{18}H_{20}O_5$
- C 68,4 — H 6,3 — O 25,3 — M. G. 316.
- 1) Tetramethyläther d.  $\alpha$ -Keto- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 108° (A. 329, 48 C. 1903 [2] 1448).
  - 2) Tetramethyläther d. 2,3',4',5'-Tetraoxy-4-Methyldiphenylketon. Sm. 97° (Soc. 89, 1663 C. 1907 [1] 408).
  - 3) Tetramethyläther d. 3,2',3',4'-Tetraoxy-4-Methyldiphenylketon. Sm. 78° (Soc. 89, 1663 C. 1907 [1] 408).
  - 4) 3,4,5-Trimethyläther d. 4-[ $\alpha$ ,3,4,5-Tetraoxybenzyl]-1,2-Dihydrobenzofuran. Sm. 108—109° (B. 40, 3668 C. 1907 [2] 1420).
  - 5) Trimethyläther d. Phloretin. Sm. 152° (B. 28, 1396). — III, 230.

- $C_{18}H_{20}O_5$  6) *Peruresinotannol*. K (B. 27 [2] 312).  
 7)  $\alpha$ -[2-Oxyphenyl]- $\beta$ -[3,4-Dioxyphenyl]propiontrimethyläthersäure. Sm. 125—126° (B. 42, 834 C. 1909 [1] 1164).  
 8) 2-Methoxyphenylester d.  $\alpha$ -Oxybutter-2-Methoxyphenyläthersäure. Sd. 231°<sub>15</sub> (B. 39, 3853 C. 1907 [1] 94).  
 9) 2-Methoxyphenylester d.  $\alpha$ -Oxyisobutter-2-Methoxyphenyläthersäure. Sd. 221°<sub>15</sub> (B. 39, 3853 C. 1907 [1] 94).  
 10) 6-Benzoeatd. 2,4-Diketo-5,6-Dioxy-1,1,3,3-Tetramethyl-1,2,3,4-Tetrahydrobenzol-5-Methyläther. Sm. 84° (B. 26, 2032). — II, 1152.  
 $C_{18}H_{20}O_6$  11) Harz (aus Tolubalsam). Sm. oberhalb 100° (J. 1847/48, 736). — III, 564. C 65,1 — H 6,0 — O 28,9 — M. G. 332.  
 1) Pentamethyläther d. 2,4,6,3',4'-Pentaoxydiphenylketon. Sm. 157° (B. 25, 1132; B. 39, 4015 C. 1907 [1] 260; B. 39, 4023 C. 1907 [1] 262; C. 1907 [1] 817). — III, 208.  
 2) Pentamethyläther d. 3,4,5,3',4'-Pentaoxydiphenylketon. Sm. 118° (119—120°; 125°) (B. 39, 4026 C. 1907 [1] 263; Soc. 89, 1664 C. 1907 [1] 408; C. 1907 [1] 817).  
 3) Dicumphenylsäure + H<sub>2</sub>O. Sm. 254°. Ag<sub>2</sub> + H<sub>2</sub>O (Soc. 75, 179). — \*II, 1179.  
 4) Säure (aus Sulfocamphersäure) (B. 27 [2] 594).  
 5) Diäthylester d.  $\gamma$ -Benzoyl- $\delta$ -Keto- $\alpha$ -Penten- $\alpha$ - $\beta$ -Dicarbonsäure. Sd. 233—235°<sub>10</sub> (Soc. 73, 730). — \*II, 1178.  
 6) Diäthylester d. 3,5-Diketo-1-Phenylhexahydrobenzol-2,6-Dicarbonsäure. Sm. 156° (B. 27, 2340; 31, 2771). — II, 2020; \*II, 1177.  
 7) Diäthylester d. Aponsäure. Sm. 119—120° (B. 23, 325). — II, 1036.  
 8) Triäthylester d. Säure C<sub>18</sub>H<sub>8</sub>O<sub>6</sub>. Sm. 155° u. Zers. Na, Ag (B. 24, 604). — II, 2020.  
 $C_{18}H_{20}O_7$  C 62,1 — H 5,7 — O 32,2 — M. G. 348.  
 1) 3,4,3',4',5'-Pentamethyläther d. 2,3,4,3',4',5'-Hexaoxydiphenylketon. Sm. 133—134° (Soc. 89, 1665 C. 1907 [1] 408).  
 $C_{18}H_{20}O_8$  2) Acetat d. Cedron. Sm. 260° (M. 20, 786). — \*II, 623. C 59,3 — H 5,5 — O 35,2 — M. G. 364.  
 1) Äthylxanthophansäure (Xanthophansäure). Sm. 143—144°. Na, K (A. 297, 49; B. 39, 2072 C. 1906 [2] 422). — \*I, 317.  
 $C_{18}H_{20}O_9$  C 56,8 — H 5,2 — O 37,9 — M. G. 380.  
 1) Leucodrin (Proteacin). Sm. 212° (A. 290, 314). — III, 636.  
 $C_{18}H_{20}O_{10}$  C 54,5 — H 5,0 — O 40,4 — M. G. 396.  
 1) Apoglucinsäure, siehe C<sub>18</sub>H<sub>22</sub>O<sub>11</sub>.  
 2) Diäthylester d. 2,4,6-Triacetoxylbenzol-1,3-Dicarbonsäure. Sm. 96° (75—76°) (B. 21, 1768; Soc. 85, 167 C. 1904 [1] 163, 722).  
 3) Tetraäthylester d. 1,4-Diketo-1,4-Dihydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 148—149° (A. 237, 28; Am. 11, 8). — II, 2096.  
 4) Pentaacetat d. 2,4,6-Trioxy-3-Dioxyethyl-1-Methylbenzol. Sm. 144—145° (M. 24, 878 C. 1904 [1] 369).  
 5) Verbindung (aus Hämatinsäure). Sm. 146° (H. 54, 537 C. 1908 [1] 1398).  
 $C_{18}H_{20}O_{12}$  C 50,5 — H 4,7 — O 44,8 — M. G. 428.  
 1) Tetramethylester d. 2,5-Diacetoxyl- $\beta$ -Dihydrobenzol-1,3,4,6-Tetracarbonsäure. Sm. 173° (Am. 12, 404). — II, 2094.  
 $C_{18}H_{20}O_{15}$  C 45,4 — H 4,2 — O 50,4 — M. G. 476.  
 1) Dicitromannitan (J. 1858, 436). — I, 840.  
 $C_{18}H_{20}N_2$  C 81,8 — H 7,6 — N 10,6 — M. G. 264.  
 1)  $\alpha\beta$ -Di[ $\alpha$ -Phenyläthylidenamido]äthan. Sm. 103—105° (B. 20, 273). — III, 130.  
 2)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenyl- $\alpha$ -Hexen. Sm. 99—100° (B. 35, 3089 C. 1902 [2] 1110). — \*IV, 504.  
 3)  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenyl- $\beta$ -Äthyl- $\alpha$ -Buten. Sm. 86° (B. 35, 3090 C. 1902 [2] 1111). — \*IV, 504.  
 4) Di[2,4-Dimethylbenzyliden]hydrazin. Sm. 154° (118°). HCl (Bl. [3] 17, 369; J. pr. [2] 62, 112; A. 347, 372 C. 1906 [2] 605). — \*III, 41.  
 5) Di[2,5-Dimethylbenzyliden]hydrazin. Sm. 124° (114—114,5°) (Bl. [3] 17, 941; C. 1901 [2] 772). — \*III, 43.  
 6) Di[3,4-Dimethylbenzyliden]hydrazin. Sm. 132° (A. 347, 369 C. 1906 [2] 605).

- $C_{15}H_{20}N_2$  7) 1-[ $\alpha$ -Phenylimidobenzyl]hexahydropyridin. Fl. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 37, 2684 C. 1904 [2] 521).
- 8) 1-Isoamyl-2-Phenylbenzimidazol. HCl, HJ, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (A. 210, 349). — IV, 1007.
- 9) Verbindung (Base aus Paraldehyd u. salzsaurem Anilin) (B. 16, 2601). — II, 443; \*II, 235.  
C 74,0 — H 6,8 — N 19,2 — M. G. 292.
- $C_{18}H_{20}N_4$  1) 1,4-Di[Phenylhydrazon]hexahydrobenzol. Sm. 150—151°. 2HCl (B. 22, 2173). — IV, 782.
- 2) 3-Methylphenylhydrazon-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazol. Sm. 128°. Salze, siehe (B. 42, 2767 C. 1909 [2] 625).
- 3) 1,1'-Diphenyl-4,5,4',5'-Tetrahydrobipyrazol? Sm. 221°. HCl (J. pr. [2] 50, 552). — IV, 488.
- 4) 5,5'-Diphenyl-4,5,4',5'-Tetrahydrobipyrazol. (2HCl, PtCl<sub>4</sub> + 7H<sub>2</sub>O) (J. pr. [2] 52, 53). — IV, 885.
- 5) Diallyldiphenyltetrazon. Sm. 86° u. Zers. (B. 22, 2238). — IV, 1308.
- 6) 3-[2,4,6-Trimethylphenyl]azo-5,7-Dimethylindazol. Sm. 258° (A. 305, 316). — \*IV, 1082.
- 7) 1,2,3,4-Tetrahydrochinolintetrazon. Sm. 160° (B. 16, 731). — IV, 854.
- 8) Base (aus 3,4-Diamido-1-Methylbenzol u. Formaldehyd). Sm. 222°. 2HCl (B. 25, 2713). — IV, 619.  
C 67,5 — H 6,2 — N 26,2 — M. G. 320.
- $C_{18}H_{20}N_6$  1) 4,6-Diamido-1,3-Di[2-Amidophenylamido]benzol. 4HCl, (4HCl, SnCl<sub>4</sub>) (B. 34, 3729 C. 1902 [1] 54). — \*IV, 911.
- 2) 1,4-Di[2,5-Diamidophenylamido]benzol. Sm. 230° u. Zers. (B. 27, 482). — IV, 1122.
- 3)  $\alpha\beta$ -Di[ $\alpha$ -Amido-4-Methylbenzylidenhydrazon]äthan (Glyoxalen-p-Tolenylhydrazidin). Sm. 252° (B. 27, 3277; A. 298, 4). — IV, 1139.
- $C_{18}H_{20}S_2$  1) Diäthyläther d.  $\alpha\beta$ -Dimerkapto- $\alpha\beta$ -Diphenyläthen (Anhydrobenzoinmerkapto). Sm. 104—105° (B. 33, 2989; B. 35, 510 C. 1902 [1] 660).
- 2) Hexamethyldiphenylendisulfid. Sd. 275°<sub>15</sub> (B. [3] 15, 1039). — \*II, 586.  
C 86,0 — H 8,4 — N 5,6 — M. G. 251.
- $C_{18}H_{21}N$  1)  $\alpha$ -Dimethylamido- $\alpha$ -[2-Äthenylphenyl]- $\beta$ -Phenyläthan. Fl. HCl + H<sub>2</sub>O (B. 42, 1764 C. 1909 [2] 37).
- 2) 2-Phenyl-6-[4-Methylphenyl]hexahydropyridin. Sm. 41,5°; Sd. 237 bis 239°<sub>44</sub>. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr, HJ, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 36, 848 C. 1903 [1] 975). — \*IV, 242.
- 3) isom. 2-Phenyl-6-[4-Methylphenyl]hexahydropyridin. Sd. 218 bis 220°<sub>20</sub>. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr, Pikrat (B. 36, 849 C. 1903 [1] 975). — \*IV, 242.
- 4)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[1,2,3,4-Tetrahydro-2-Chinolyl]äthan. Sd. 249—250°<sub>25</sub>. HCl (B. 35, 1958 C. 1902 [2] 131). — \*IV, 241.
- 5) 2-[ $\beta$ -Phenyläthyl]-6-Methyl-1,2,3,4-Tetrahydrochinolin. Sd. 254°<sub>25</sub> (B. 38, 3701 C. 1906 [1] 50).
- 6) 10-Methyl-5,5-Diäthyl-5,10-Dihydroakridin. Sm. 80—85° (B. 42, 1756 C. 1909 [2] 36).  
C 77,4 — H 7,5 — N 15,0 — M. G. 279.
- $C_{18}H_{21}N_3$  1)  $\alpha$ -Phenylamido- $\epsilon$ -Phenylecyanamidopentan. Sm. 67°. HCl (B. 41, 2167 C. 1908 [2] 706).
- 2) 1-[Äthyl-1,2,3,4-Tetrahydro-2-Naphtyl]amidodiazobenzol. Pikrat (B. 22, 1302). — IV, 1574.
- 3)  $\beta$ -Phenylazo-1,3,4-Trimethyl-1,2,3,4-Tetrahydrochinolin. Fl. Pikrat (G. 21 [2] 324). — IV, 1484.
- 4) 4,5,7-Trimethyl-2-[2,3,5-Trimethylphenyl]-2,1,3-Benztriazol. Sm. 83—85° (B. 21, 547). — IV, 1152.
- 5) Nitril d. Di[4-Dimethylamidophenyl]essigsäure. Sm. 124° (B. 27, 1407; D. R. P. 75334). — II, 1465; \*II, 869.  
C 70,3 — H 6,8 — N 22,9 — M. G. 307.
- $C_{18}H_{21}N_5$  1) 2,4,5,2',4',5'-Hexamethyl-6-Diazoazobenzolimid. Sm. 90—91° u. Zers. (B. 21, 546). — IV, 1534.
- $C_{18}H_{21}Cl$  1)  $\beta$ -Chlor- $\alpha$ -Di[ $\beta$ -Methylphenyl]äthan (B. 7, 1416). — II, 242.
- 2) Chlorid d. Alkohol C<sub>10</sub>H<sub>22</sub>O (aus Campher). Sm. 71—72° (C. 1905 [2] 1021).



- C<sub>18</sub>H<sub>21</sub>Cl** 3) Verbindung (aus Äthylbenzol u. Dichloräthyläther) (*B.* 7, 1414). — II, 242.
- C<sub>18</sub>H<sub>21</sub>J<sub>3</sub>** 1) *p*-Joddi[4-Propylphenyl]jodoniumjodid. Sm. 38° u. Zers. (*A.* 327, 316 *C.* 1903 [2] 354).
- 2) *p*-Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumjodid. Sm. 145° u. Zers. (*J. pr.* [2] 69, 442 *C.* 1904 [2] 589).  
C 85,0 — H 8,6 — O 6,3 — M. G. 254.
- C<sub>18</sub>H<sub>22</sub>O** 1)  $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylhexan. Sm. 46–47° (*C. r.* 135, 534 *C.* 1902 [2] 1209).
- 2)  $\alpha$ -Oxy-2,4,6,3',5'-Pentamethyldiphenylmethan. Sm. 98–99° (*B.* 33, 344). — \*II, 663.
- 3) Alkohol (aus Campher u. Phenylacetylen). Sm. 33–34°; Sd. 205°<sub>14</sub> (*C.* 1905 [2] 1021).
- 4) Äthyläther d.  $\alpha$ -Oxy-2,4,6-Trimethyldiphenylmethan. Sm. 32° (*A. ch.* [6] 6, 214). — II, 1081.
- 5) Isoamyläther d.  $\alpha$ -Oxydiphenylmethan. Sd. 310° u. Zers. (*Bl.* 33, 340). — II, 1078.
- 6) Di[ $\gamma$ -Phenylpropyl]äther. Sd. 220–222°<sub>19</sub> (*C.* 1905 [2] 1017).
- 7) d-3-Methylbenzylidencampher. Sm. 77,5° (*C. r.* 148, 1494 *C.* 1909 [2] 214).
- 8) d-4-Methylbenzylidencampher. Sm. 98° (*C. r.* 148, 1494 *C.* 1909 [2] 213).  
C 80,0 — H 8,1 — O 11,9 — M. G. 270.
- C<sub>18</sub>H<sub>22</sub>O<sub>2</sub>** 1)  $\gamma\delta$ -Dioxy- $\gamma\delta$ -Diphenylhexan. Sm. 132° (*M.* 26, 1560 *C.* 1906 [1] 937).
- 2)  $\beta\gamma$ -Dioxy- $\beta\gamma$ -Di[4-Methylphenyl]butan (Methyl-*p*-Tolylpinakon). Sm. 90° (*J. pr.* [2] 41, 403). — II, 1103.
- 3) 5,5'-Dioxy-1,2,4,1',2',4'-Hexamethyl-*p*-Biphenyl (Dipseudocumenol). Sm. 170° (172,5–173,5°) (*B.* 17, 2982; 18, 2659; 29, 1104; *B.* 36, 2038 *C.* 1903 [2] 360). — II, 996.
- 4) Dimethyläther d.  $\alpha\alpha$ -Di[4-Oxyphenyl]butan. Sd. 228,8–229,3° (*C.* 1908 [2] 589).
- 5) Diäthyläther d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 156° (154°) (*B.* 17, 468; *Am.* 31, 125 *C.* 1904 [1] 809). — II, 993.
- 6) Diphenyläther d.  $\alpha\epsilon$ -Dioxyhexan. Sd. 220–230°<sub>20–25</sub> (*C.* 1899 [1] 25, 248). — \*II, 357.
- 7) Diphenyläther d.  $\alpha\zeta$ -Dioxyhexan. Sm. 83° (*B.* 26, 2987; *C.* 1899 [1] 25, 248, 254; *C. r.* 136, 97 *C.* 1903 [1] 455; *B.* 38, 2345 *C.* 1905 [2] 494; *B.* 39, 4113 *C.* 1907 [1] 277). — II, 655; \*II, 357.
- 8) Diphenyläther d.  $\beta\epsilon$ -Dioxyhexan. Sm. 86–86,5° (*C.* 1899 [1] 248). — \*II, 357.
- 9) Di[2,4-Dimethylphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 110° (*B.* 29, 2403). — \*II, 443.
- 10) Di[2,5-Dimethylphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 82–83° (*A.* 357, 379 *C.* 1908 [1] 358).
- 11) Methyläther d. d-2-Oxybenzylidencampher. Sm. 92–94° (*C.* 1896 [2] 381; 1899 [2] 117; *C. r.* 113, 25; 130, 222; *Bl.* [3] 27, 546). — \*III, 388.
- 12) Methyläther d. l-2-Oxybenzylidencampher. Sm. 92–94° (*C.* 1900 [1] 813). — \*III, 388.
- 13) Methyläther d. 3-Oxybenzylidencampher. Sm. 51–52°; Sd. 208°<sub>10</sub> (*C.* 1899 [2] 114, 117). — \*III, 388.
- 14) Methyläther d. d-4-Oxybenzylidencampher (Anisalcampher). Sm. 125° (*C.* 1896 [2] 381; 1899 [2] 115, 117). — \*III, 388.
- 15) Methyläther d. l-4-Oxybenzylidencampher. Sm. 125° (*C.* 1900 [1] 813). — \*III, 388.
- 16) Methyläther d. i-4-Oxybenzylidencampher. Sm. 99° (85°); Sd. 223 bis 224° (*C. r.* 132, 1574; *C. r.* 140, 1629 *C.* 1905 [2] 326). — \*III, 389.
- 17) Benzyläther d. Oxymethylencampher. Sm. 45–46°; Sd. 222–224°<sub>16</sub> (*A.* 281, 368). — III, 115.
- 18) Benzoat d. Alkohol C<sub>11</sub>H<sub>18</sub>O (aus Pinen). Sd. 210–215°<sub>20</sub> (*B.* 32, 59). — \*III, 393.
- C<sub>18</sub>H<sub>22</sub>O<sub>3</sub>** C 75,5 — H 7,7 — O 16,8 — M. G. 286.
- 1) Diäthyläther d.  $\alpha$ -Oxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 147° (*A.* 279, 343). — II, 1114.

$C_{18}H_{22}O_8$ 

- 2) 3,4-Methylenäther d. 3-Keto-2-[3,4-Dioxybenzyliden]-4-Isopropyl-1-Methylhexahydrobenzol. Sd. oberhalb  $220^{\circ}_{15}$  u. Zers. (C. 1904 [2] 1046).
- 3) Methylenäther d. 3,4-Dioxybenzylidencampher (Piperonylcampher). Sm.  $70^{\circ}$  (C. 1899 [2] 115, 117; 1900 [1] 297). — \*III, 390.
- 4) d-Bornylester d. Benzoylameisensäure. Sm.  $78^{\circ}$  (Ph. Ch. S. Nr. 230). — \*III, 338.
- 5) l-Bornylester d. Benzoylameisensäure. Sm.  $42-43^{\circ}$  (Soc. 89, 374 C. 1906 [1] 1614).
- 6) Benzoat d. 3-Keto-2-Oxymethyl-1-Methyl-4-Isopropylhexahydrobenzol (B. d. Oxymethylenmenthon). Sm.  $75-76^{\circ}$  (A. 281, 395). — III, 512.

 $C_{18}H_{22}O_4$ 

- C 71,5 — H 7,3 — O 21,2 — M. G. 302.
- 1) Tetramethyläther d. p-s-Di[2,5-Dioxy-1-Methyl]biphenyl. Sm.  $129^{\circ}$  (M. 10, 177). — II, 955.
  - 2) 4,3',4'-Trimethyläther d.  $\alpha,4,3',4'$ -Tetraoxy-3-Äthylidiphenylmethan. Sm.  $84-85^{\circ}$  (B. 40, 3665 Anm. C. 1907 [2] 1420).
  - 3) 2,4,6-Trimethyläther- $\alpha$ -Äthyläther d.  $\alpha,2,4,6$ -Tetraoxydiphenylmethan. Sm.  $72-73^{\circ}$  (B. 39, 4021 C. 1907 [1] 262).
  - 4) Diäthyläther d. p-s-Di[2,5-Dioxy-1-Methyl]biphenyl. Sm. 132 bis  $133^{\circ}$  (B. 23, 3248). — II, 956.
  - 5) Di[4-Äthoxyphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm.  $149^{\circ}$  (A. 280, 203). — II, 940.
  - 6) Diäthyläther d. Curcumin (Am. 4, 77; B. 16, 572). — III, 660.
  - 7) Norguajakharzsäure. Sm.  $185^{\circ}$  (M. 18, 720). — \*II, 1086.
  - 8) Methylester d. 2,6-Diketo-1,3-Diäthyl-4-Phenylhexahydrobenzol-5-Carbonsäure. Sm.  $139^{\circ}$  (B. 30, 2265). — \*II, 1086.
  - 9) d-Monoborneolester d. Benzol-1,2-Dicarbonsäure. Sm.  $164,5^{\circ}$ . l-Menthylaminsalz (B. 22 [2] 255; Soc. 91, 1978 C. 1908 [1] 640). — III, 471.
  - 10) l-Monoborneolester d. Benzol-1,2-Dicarbonsäure. Sm.  $164,5^{\circ}$ . l-Menthylaminsalz (B. 22 [2] 255; Soc. 91, 1977 C. 1908 [1] 640). — III, 472.
  - 11) l-Monoisoborneolester d. Benzol-1,2-Dicarbonsäure. Sm.  $167^{\circ}$  (Soc. 91, 1980 C. 1908 [1] 640).
  - 12) i-Monoisoborneolester d. Benzol-1,2-Dicarbonsäure. Sm.  $158^{\circ}$  ( $168^{\circ}$ ). l-Menthylaminsalz (B. 22 [2] 255; Soc. 91, 1978 C. 1908 [1] 640). — III, 473.
  - 13) Monogeraniolester d. Benzol-1,2-Dicarbonsäure. Sm.  $47^{\circ}$ . Ag (J. pr. [2] 56, 15; Bl. [3] 19, 84, 637). — \*III, 345.
  - 14) l-Monofenchylester d. Benzol-1,2-Dicarbonsäure. Sm.  $145-145,5^{\circ}$  (J. pr. [2] 61, 297). — \*III, 343.
  - 15) Monoisofenchylester d. Benzol-1,2-Dicarbonsäure. Sm.  $149-150^{\circ}$  (J. pr. [2] 61, 302). — \*III, 343.
  - 16) l-Monolinaloolester d. Benzol-1,2-Dicarbonsäure. Fl. (B. 31, 839). \*III, 346.
  - 17) Monomyrtenolester d. Benzol-1,2-Dicarbonsäure. Sm.  $116^{\circ}$  (C. 1905 [2] 1253).
  - 18) Phtalestersäure d. Alkohols  $C_{10}H_{16}O$  (aus d. isom. Fenchon  $C_{10}H_{16}O$  aus Isofenchylalkohol). Sm.  $110-111^{\circ}$  (J. pr. [2] 61, 305). — \*III, 343.

 $C_{18}H_{22}O_5$ 

- C 67,9 — H 6,9 — O 25,2 — M. G. 318.
- 1) Pentamethyläther d. 2,4,6,3',4'-Pentaoxydiphenylmethan. Sm. 107 bis  $108^{\circ}$  (B. 40, 722 C. 1907 [1] 967).
  - 2) Resacetsäure.  $NH_4$ , Na, K (A. 234, 168). — II, 1969.
  - 3) Monomethylester d. Benzoylcampfersäure. Sd.  $270-315^{\circ}_{80}$  (B. 25 [2] 666). — II, 1154.
  - 4) Äthylester d. s-Acetyl- $\beta\zeta$ -Diketo- $\delta$ -Phenylheptan- $\gamma$ -Carbonsäure. Sm.  $156^{\circ}$  (A. 281, 86). — II, 1968.
  - 5) Äthylester d. isom. s-Acetyl- $\beta\zeta$ -Diketo- $\delta$ -Phenylheptan- $\gamma$ -Carbonsäure. Sm.  $123^{\circ}$  (B. 36, 2152 C. 1903 [2] 369).
  - 6) Verbindung (aus Muskatnußöl). Sd.  $270-280^{\circ}_{15}$  (Soc. 93, 1655 C. 1908 [2] 1939).

$C_{18}H_{22}O_6$ 

C 64,7 — H 6,6 — O 28,7 — M. G. 334.

- 1) d- $\alpha\beta\gamma\delta\epsilon\zeta$ -Hexaoxy- $\alpha\alpha$ -Diphenylhexan ( $\alpha\alpha$ -Diphenylhexit;  $\alpha\alpha$ -Diphenyl-d-Sorbit). Sm. 157—160° (B. 39, 1363 C. 1906 [1] 1654; B. 39, 2825 C. 1906 [2] 1183).
- 2) isom. d- $\alpha\beta\gamma\delta\epsilon\zeta$ -Hexaoxy- $\alpha\alpha$ -Diphenylhexan ( $\alpha\alpha$ -Diphenyl-d-Galaktohexit). Sm. 157—160° (B. 39, 2830 C. 1906 [2] 1183).
- 3) 2,4,6,3',4'-Pentamethyläther d.  $\alpha,2,4,6,3',4'$ -Hexaoxydiphenylmethan. Sm. 109—110° (B. 39, 4015 C. 1907 [1] 260; B. 40, 4911 C. 1908 [1] 471).
- 4) Hexamethyläther d. 2,3,4,2',3',4'-Hexaoxybiphenyl. Sm. 123° (A. 340, 231 C. 1905 [2] 473).
- 5) Hexamethyläther d. 2,4,5,2',4',5'-Hexaoxybiphenyl. Sm. 177° (Ar. 245, 273 C. 1907 [2] 806).
- 6) Hexamethyläther d. 3,4,5,3',4',5'-Hexaoxybiphenyl. Sm. 126° (B. 11, 1623; A. 340, 230 C. 1905 [2] 473). — II, 1041.
- 7) 3-Methyläther d.  $\beta\zeta$ -Diketo- $\gamma\delta$ -Diacetyl- $\delta$ -[3,4-Dioxyphenyl]heptan (Vanillylidenbisacetylaceton). Sm. 170—171° (B. 37, 4481 C. 1905 [1] 247).
- 8) Diäthylester d. Oxyfumareugenoläthersäure. Sd. 231—232°<sub>14</sub> (Soc. 79, 1186).
- 9) Triäthylester d.  $\beta$ -Phenylpropen- $\alpha\gamma\gamma$ -Tricarbonsäure. Sd. 215 bis 220°<sub>11</sub> (J. pr. [2] 49, 23; Soc. 73, 1015). — II, 2018; \*II, 1174.

 $C_{18}H_{22}O_7$ 

C 61,7 — H 6,3 — O 32,0 — M. G. 350.

- 1) Säure (aus Sulfocamphersäure). Sm. 254° (B. 27 [2] 594).

 $C_{18}H_{22}O_8$ 

C 59,0 — H 6,0 — O 35,0 — M. G. 366.

- 1) Polystichinin. Sm. 110,5°. Anilinsalz (C. 1898 [2] 1103). — \*III, 474.
- 2) Triäthylester d. 6-Acetoxybenzol-1,3-Dicarbonsäure-4-Methylcarbonsäure. Sm. 59° (B. 37, 2120 C. 1904 [2] 438).
- 3) Tetraäthylester d. Benzol-1,2,4,5-Tetracarbonsäure. Sm. 53° (A. Spl. 7, 36). — II, 2073.
- 4) Tetraacetat d. 2,3,5,6-Tetraoxy-1,4-Diäthylbenzol. Sm. 213° (B. 37, 2387 C. 1904 [2] 307).

 $C_{18}H_{22}O_9$ 

C 56,5 — H 5,7 — O 37,7 — M. G. 382.

- 1) Triäthylester d. Benzoyldesoxalsäure. Fl. (J. pr. [2] 20, 155). — II, 1155.
- 2) Verbindung (Anhydrid aus Camphoronsäure). Sm. 175—176° (M. 6, 190). — I, 814.
- 3) Verbindung (aus Acetessigsäureäthylester). Sm. 61—62° (A. 213, 177; 222, 4; B. 19, 2402; A. 345, 69 C. 1906 [1] 1330). — I, 597.

 $C_{18}H_{22}O_{10}$ 

C 54,3 — H 5,5 — O 40,2 — M. G. 398.

- 1) Murrayin. Sm. 170° (Z. 1869, 316). — III, 598.
- 2) Tetraäthylester d. 3,6-Dioxybenzol-1,2,4,5-Tetracarbonsäure.  $\alpha$ -Modif. Sm. 133,2—133,6°;  $\beta$ -Modif. Sm. 123—128,5°. Na<sub>2</sub> (A. 237, 29; Am. 11, 10; Soc. 53, 449; B. 30, 2570). — II, 2095; \*II, 1226.
- 3) Tetraäthylester d. 1,4-Diketo-1,4-Dihydrobenzol-2,2,5,5-Tetracarbonsäure. Sm. 129° (J. r. 25, 130). — II, 2096.
- 4) Verbindung (aus Succinylbernsteinsäureester). Sm. 129° (J. r. 25, 130).

 $C_{18}H_{22}O_{11}$ 

C 52,2 — H 5,3 — O 42,5 — M. G. 414.

- 1) Apoglucinsäure, siehe auch C<sub>6</sub>H<sub>10</sub>O<sub>5</sub> (J. 1870, 845). — I, 871.

 $C_{18}H_{23}N_2$ 

C 81,2 — H 8,3 — N 10,5 — M. G. 266.

- 1) lab.  $\alpha\gamma$ -Di[2-Methylphenylamido]- $\alpha$ -Buten. Sm. 90—92°. 2HNO<sub>3</sub> (B. 33, 3465). — \*II, 259.
- 2) stab.  $\alpha\gamma$ -Di[2-Methylphenylamido]- $\alpha$ -Buten. Sm. 116°. 2HCl, 2HNO<sub>3</sub> (B. 33, 3461). — \*II, 258.
- 3)  $\alpha\gamma$ -Di[4-Methylphenylamido]- $\alpha$ -Buten. Sm. 116° (A. 318, 88).
- 4)  $\alpha\alpha$ -Di[4-Dimethylamidophenyl]äthen. Sm. 115—117° (124°); Sd. 250°<sub>12</sub> (B. 39, 1118 C. 1906 [1] 1349; B. 40, 3902 C. 1907 [2] 1516; C. r. 149, 349 C. 1909 [2] 1450).
- 5)  $\alpha$ -Phenylimido- $\gamma$ -Phenylamido- $\beta$ -Methylpentan. Sm. 103—104°. HCl, 2HCl (B. 25, 2033; A. 318, 88; A. 329, 215 C. 1903 [2] 1427). — II, 442.
- 6)  $\alpha$ -Phenylimido- $\gamma$ -[2,4-Dimethylphenyl]amidobutan. Sm. 94—95° (B. 29, 1472).
- 7) 4-(4-Isopropylbenzyliden)amido-1-Dimethylamidobenzol. Sm. 100,5° (99°) (B. 18, 573; A. 245, 299). — IV, 597.



- $C_{18}H_{22}N_2$
- 8) 1,4-Anhydrid d. 4-Äthylamido-1-Oxymethylbenzol. Sm. 79—80°. 2HCl (*M.* 23, 990 *C.* 1903 [1] 289).
  - 9)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,4-Dimethylphenyl]- $\beta$ -Methylpropan. Sm. 128—129° (*J. pr.* [2] 46, 482).
  - 10) 2,4-Dimethylbenzyliden-2,4-Dimethylbenzylhydrazin. Sm. 77—78°. Pikrat (*J. pr.* [2] 62, 116). — \*IV, 546.
  - 11) 2,5-Dimethylbenzyliden-2,5-Dimethylbenzylhydrazin. Sm. 74—78° (*C.* 1903 [1] 141). — \*IV, 546.
  - 12) 4,4'-Diisopropylazobenzol. Sm. 107,5° (*J. r.* 18, 53). — IV, 1388.
  - 13) 2,4,5,2',4',5'-Hexamethylazobenzol (Azopseudocumol). Sm. 173—174° (171—172°) (*J. r.* 19, 114; *B.* 33, 2555; *A.* 320, 129; *B.* 39, 745 *C.* 1906 [1] 1008). — IV, 1388; \*IV, 1026.
  - 14) 2,4,6,2',4',6'-Hexamethylazobenzol (Azomesitylen). Sm. 75° (*B.* 17, 477; *A.* 320, 129). — IV, 1388; \*IV, 1026.
  - 15) 2-Isopropyl-1,3-Diphenyltetrahydroimidazol (Isobutylidenäthylen-diphenyldiamin). Sm. 95° (*B.* 20, 734). — II, 444.
  - 16) 2-Methyl-1,3-Di[3-Methylphenyl]tetrahydroimidazol. Sm. 83° (*B.* 34, 1510). — \*IV, 297.
  - 17) 1,4-Dibenzylhexahydro-1,4-Diazin (Dibenzylpiperazin). Sm. 92° (*B.* 29, 2384; *C.* 1898 [1] 380; 1898 [2] 743). — \*II, 294.
  - 18) 1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 174° (170—171°) (*M.* 7, 233; *B.* 22, 1781; 23, 1982). — II, 459.
  - 19) isom. 1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 153,5 bis 154,5° (*B.* 23, 2031). — II, 459.
  - 20) 1,4-Di[3-Methylphenyl]hexahydro-1,4-Diazin. Sm. 126° (*Soc.* 71, 427). — \*II, 260.
  - 21) 1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 189—190°; Sd. 360°. (2HCl, PtCl<sub>4</sub>), + CH<sub>3</sub>J (*A. Spl.* 7, 94; *A.* 173, 139; *B.* 22, 1781; 23, 1984). — II, 487.
  - 22) isom. 1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. bei 60°. (2HCl, PtCl<sub>4</sub>) (*A.* 140, 95). — II, 510.
  - 23) 1,4-Dimethyl-2,3-Diphenylhexahydro-1,4-Diazin. Sm. 263—264°. (2HCl, 2PtCl<sub>4</sub> + 8H<sub>2</sub>O) (*Soc.* 55, 104). — IV, 996.
  - 24) isom. 1,4-Dimethyl-2,3-Diphenylhexahydro-1,4-Diazin. Sm. 108 bis 109°. 2HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*Soc.* 55, 105). — IV, 996.
  - 25) N-Methyltetrahydrodesoxyeytisin. HJ (*B.* 39, 821 *C.* 1906 [1] 1172).
  - 26) Verbindung (aus Formaldehyd u. Tetramethyldiamidodiphenylmethan) =  $(C_{18}H_{22}N_2)_x$  (*B.* 27, 3166). — IV, 974.  
C 73,5 — H 7,5 — N 19,0 — M. G. 294.
- $C_{18}H_{22}N_4$
- 1)  $\alpha\beta$ -Di[4-Dimethylamidophenylimido]äthan. Sm. 256—257° (*B.* 31, 294; *Am.* 34, 477 *C.* 1906 [1] 341). — \*IV, 393.
  - 2)  $\alpha\beta$ -Di[ $\beta$ -Äthyliden- $\alpha$ -Phenylhydrazido]äthan. Sm. 83° (*A.* 254, 126). — IV, 746.
  - 3) 4,4'-Di[Isopropylidenhydrazido]biphenyl. Sm. 197—199° u. Zers. (*A.* 239, 211). — IV, 1277.
  - 4) Triäthylidendiphenylhydrazin. Sm. 109—110° (*Bl.* [3] 19, 146). — IV, 746.
  - 5) Di[2-Dimethylamidobenzyliden]hydrazin. Sm. 148—149° (*M.* 25, 373 *C.* 1904 [2] 322).
  - 6) Di[4-Dimethylamidobenzyliden]hydrazin. Sm. 250—253° u. Zers. (*B.* 39, 808 *C.* 1906 [1] 1246).
  - 7)  $\beta\gamma$ -Di[Phenylhydrazon]hexan. Sm. 135—136° (136,5°) (*J. pr.* [2] 55, 196; *B.* 22, 2121; *G.* 28 [2] 272). — IV, 781.
  - 8)  $\beta\epsilon$ -Di[Phenylhydrazon]hexan. Sm. 120° (118—119°) (*B.* 18, 60; *A.* 289, 311; *B.* 35, 2169 *C.* 1902 [2] 261; *B.* 39, 1862 *C.* 1906 [2] 109). — IV, 781; \*IV, 508.
  - 9)  $\gamma\delta$ -Di[Phenylhydrazon]hexan. Sm. 160—161° (*J. pr.* [2] 55, 196; *G.* 28 [2] 272). — IV, 781.
  - 10)  $\gamma\delta$ -Di[Phenylhydrazon]- $\beta$ -Methylpentan. Sm. 117° (*B.* 33, 503). — \*IV, 508.
  - 11)  $\alpha\delta$ -Di[Methylphenylhydrazon]butan. Sm. 86° (96°) (*B.* 38, 1367 *C.* 1905 [1] 1387; *B.* 39, 3672 *C.* 1907 [1] 18).
  - 12)  $\beta\gamma$ -Di[2-Methylphenylhydrazon]butan. Sm. 198° (*A.* 247, 224). — IV, 804.

- $C_{18}H_{22}N_4$  13)  $\beta\gamma$ -Di[4-Methylphenylhydrazon]butan. Sm. 229—230° (A. 247, 224). — IV, 810.  
 14)  $\alpha\beta$ -Di[Äthylphenylhydrazon]äthan. Sm. 149,5° (A. 227, 356). — IV, 756.  
 15) 5,6,8-Trimethyl-2-[2,4,5-Trimethylphenyl]-2,3-Dihydro-1,2,3,4-Benzotetrazin. Sm. 151—153° (B. 21, 547). — IV, 1264.  
 16) Nitril d.  $\alpha$ -Amido- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]essigsäure (Hydrocyanauramin). Sm. 130° u. Zers. (B. 27, 3294; 33, 320). — II, 1465; \*II, 869.
- $C_{18}H_{22}J_2$  1) Di[4-Propylphenyl]jodoniumjodid. Sm. 135—140°. +  $J_2$  (A. 327, 311 C. 1903 [2] 353).  
 2) 4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumjodid (J. pr. [2] 69, 440 C. 1904 [2] 589).  
 3) Di[2,4,6-Trimethylphenyl]jodoniumjodid. Sm. 194° (J. pr. [2] 61, 426). — \*II, 43.
- $C_{18}H_{22}S$  1) Di[2,4,5-Trimethylphenyl]sulfid. Sm. 110—111° (Soc. 75, 892). — \*II, 489.
- $C_{18}H_{22}S_2$  1) Di[2,4,5-Trimethylphenyl]disulfid. Sm. 115° (B. 11, 32). — II, 827.  
 2) Di[2,4,6-Trimethylphenyl]disulfid. Sm. 125° (Z. 1867, 688). — II, 828.
- $C_{18}H_{22}Hg$  1) Quecksilberdi[4-Propylphenyl]. Sm. 109—110° (J. pr. [2] 34, 103). — IV, 1711.  
 2) Quecksilberdi[2,4,5-Trimethylphenyl]. Sm. 189° (B. 28, 591). — IV, 1712.  
 3) Quecksilberdi[2,4,6-Trimethylphenyl]. Sm. 236° (B. 28, 591). — IV, 1712.
- $C_{18}H_{23}N$  C 85,4 — H 9,1 — N 5,5 — M. G. 253.  
 1)  $\epsilon$ -Phenylamido- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sd. 212—215°<sub>20</sub>.  $HNO_3$  (B. 38, 1765 C. 1905 [1] 1599).  
 2) Isobutyldibenzylamin. Sd. 170—173°<sub>10</sub> (Soc. 83, 1413 C. 1904 [1] 438).  
 3) Di[ $\alpha$ -Phenylpropyl]amin. Sd. 293—294°<sub>733</sub>.  $HCl$  (J. pr. [2] 77, 10, 24 C. 1908 [1] 629).  
 4) Di[2,4-Dimethylbenzyl]amin. Erstarrt bei 28,5°; Sd. 217—218°<sub>14</sub>.  $HCl$ , (2HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ),  $HNO_2$ ,  $HNO_3$ , Pikrat (J. pr. [2] 62, 113). — \*II, 317.  
 5) Di[2,5-Dimethylbenzyl]amin.  $HCl$ , (2HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ),  $HNO_3$ , Pikrat (C. 1903 [2] 1441).  
 C 76,9 — H 8,2 — N 14,9 — M. G. 281.
- $C_{18}H_{23}N_3$  1)  $\alpha$ -Methylimidodi[4-Dimethylamidophenyl]methan (Methylauramin). Sm. 133°.  $HCl$ , (2HCl,  $PtCl_4$ ),  $HBr$ ,  $HJ$  ( $HJ$ ,  $J_2$ ), ( $HJ$ ,  $J_2$ ), ( $HJ$ ,  $BrJ_2$ ), Trichromat, Pikrat, Methylsulfat (J. pr. [2] 66, 388 C. 1902 [2] 1508; B. 35, 2619 C. 1902 [2] 593). — \*IV, 830.  
 2) 4-[4-Methyläthylamidobenzyliden]amido-1-Dimethylamidobenzol. Sm. 216° (B. 37, 861 C. 1904 [1] 1206).  
 3) 2,4,5,2',4',5'-Hexamethyldiazoamidobenzol. Sm. 138° (130,5°) u. Zers. (B. 17, 884; 18, 1147; 25, 1353; A. 311, 96). — IV, 1573.  
 4) 6-Amido-2,4,5,2',4',5'-Hexamethylazobenzol? Sm. 138—139° (B. 18, 1147). — IV, 1388.  
 5) Verbindung (aus Silicotetraphenylamid u. Senfölen). (2HCl,  $PtCl_4$ ) (Soc. 83, 258 C. 1903 [1] 572, 875).  
 C 69,9 — H 7,4 — N 22,6 — M. G. 309.
- $C_{18}H_{23}N_5$  1) Di[2,4-Dimethylphenyl]biguanid.  $HCl$ ,  $HNO_3$  (B. 34, 2601).  
 C 84,4 — H 9,4 — O 6,2 — M. G. 256.
- $C_{18}H_{24}O$  1)  $\alpha$ -Phenyl- $\beta$ -[1-Oxy-3-Methyl-6-Isopropylhexahydrophenyl]äthin. Sd. 196—198°<sub>14</sub> (C. 1905 [2] 1021).  
 2)  $\alpha$ -Phenyläthylcampher (Methylphenylcamphomethan). Sm. 70—71° (C. r. 142, 974 C. 1906 [1] 1827).  
 C 79,4 — H 8,8 — O 11,8 — M. G. 272.
- $C_{18}H_{24}O_2$  1) Methyläther d. 1-3-Keto-2-[4-Oxybenzyliden]-4-Isopropyl-1-Methylhexahydrobenzol (1-Anisylidenmenthon). Sm. 115—116° (C. 1904 [2] 1046).  
 2) Methyläther d. 2-Oxybenzylcampher. Sm. 49° (C. 1896 [2] 590). — \*III, 389.

- $C_{18}H_{24}O_2$
- 3) Methyläther d. 3-Oxybenzylcampher. *Sd.* 205—206°<sub>10</sub> (*C.* 1899 [2] 115; 1900 [1] 297). — \*III, 389.
  - 4) Methyläther d. 4-Oxybenzylcampher (Anisylcampher). *Sm.* 71° (*C.* 1896 [2] 590; 1899 [2] 115; 1900 [1] 297). — \*III, 389.
  - 5) Methylester d. d-Benzylidencampholsäure. *Sd.* 205—210°<sub>15</sub> (*C.* 1900 [2] 96). — \*II, 864.
- $C_{18}H_{24}O_3$
- C 75,0 — H 8,3 — O 16,7 — *M. G.* 288.
  - 1) 1,8-Diketo-3,3,6,6,9-Pentamethyloktohydroxanthren. *Sm.* 174° (*A.* 309, 373). — \*III, 583.
  - 2) Methylester d. Benzoylcampholsäure. *Sm.* 71° (*C. r.* 144, 299 *C.* 1907 [1] 1126).
  - 3) Methylester d. Podocarpinsäure. *Sm.* 174° (*A.* 170, 223). — II, 1685.
  - 4) Triäthylester d.  $\alpha$ -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. *Sd.* 219 bis 221°<sub>13</sub> (*B.* 34, 4175 *C.* 1902 [1] 254).
  - 5) l-Bornylester d. d- $\alpha$ -Oxyphenylelessigsäure. *Sm.* 50—51° (*Soc.* 91, 792 *C.* 1907 [2] 238).
  - 6) l-Bornylester d. l- $\alpha$ -Oxyphenylelessigsäure. *Sm.* 78° (*Soc.* 91, 792 *C.* 1907 [2] 239).
  - 7) l-Bornylester d. r- $\alpha$ -Oxyphenylelessigsäure. *Sm.* 45—47°; *Sd.* 204°<sub>14</sub> (*Soc.* 87, 1013 *C.* 1905 [2] 673).
  - 8) l-Menthylester d. Benzolketocarbonsäure. *Sm.* 73—74° (*Soc.* 85, 1254 *C.* 1904 [2] 1304).
- $C_{18}H_{24}O_4$
- 9) Verbindung (aus Cannabinol) (*C.* 1909 [2] 1880).  
C 71,1 — H 7,9 — O 21,0 — *M. G.* 304.
  - 1) 2,4-Diketo-3-Hexahydrobenzoyl-6-Phenyl-3,4-Dihydro-1,2-Pyran? *Sm.* 90—91° (*Bl.* [4] 3, 963 *C.* 1908 [2] 1688).
  - 2) Anabsinthin. *Sm.* 258—259° (*Bl.* [3] 21, 234). — \*III, 452.
  - 3)  $\alpha$ -Dicamphylsäure. *Sm.* 230°.  $Ca + 2H_2O$ ,  $Ag_2$  (*Soc.* 83, 862 *C.* 1903 [2] 573).
  - 4) Allylester d. Santonsäure. *Sm.* 45—55° (*B.* 13, 2209). — II, 1789.
  - 5) Allylester d. Parasantonsäure. *Sm.* 149° (*B.* 13, 2209; *G.* 13, 161). — II, 1790.
  - 6) Monobenzylester d. Hydrocamphocarbonsäure. *Sd.* 250—257°<sub>10</sub>. — II, 1052.
  - 7) Diacetat d. 3,4-Dioxy-1-Methyl-4-Benzylhexahydrobenzol. *Sm.* 69 bis 70° (*Bl.* [3] 27, 303 *C.* 1902 [1] 1221).
  - 8) Saures Phtalat d. isom. 2-Oxy-4-Isopropyl-1-Methylhexahydrobenzol (*Ph. d.*  $\beta$ -Carvakromenthol). *Sm.* 136° (*C. r.* 141, 1247 *C.* 1906 [1] 345).
  - 9) Saures Phtalat d. Citronellol. *Ag* (*J. pr.* [2] 56, 40; *Bl.* [3] 19, 85). — \*III, 332.
  - 10) Saures Phtalat d. isom. Dihydrofencholenalkohol. *Sm.* 86° (*B.* 39, 2580 *C.* 1906 [2] 879).
  - 11) Saures Phtalat d. l-Menthol. *Sm.* 110° (165°). *Mg* (*A. ch.* [6] 7, 487; *C.* 1906 [1] 1552). — III, 467.  
C 67,5 — H 7,5 — O 25,0 — *M. G.* 320.
- $C_{18}H_{24}O_5$
- 1) Diäthylester d. Oxyfumar-2-Methyl-5-Isopropylphenyläthersäure. *Sd.* 206°<sub>14</sub> (*Soc.* 79, 920).
  - 2) Diäthylester d. Oxyfumar-3-Methyl-6-Isopropylphenyläthersäure. *Sd.* 194°<sub>10</sub> (*Soc.* 79, 919).
- $C_{18}H_{24}O_6$
- C 64,3 — H 7,1 — O 28,6 — *M. G.* 336.
  - 1) Dioxy- $\alpha$ -Dicamphylsäure. *Sm.* 255—257° u. Zers. *Ag* (*Soc.* 83, 864 *C.* 1903 [2] 573).
  - 2) Tetrahydrodicampherylsäure. *Sm.* 297—298°.  $Ag_2$  (*Soc.* 75, 184). — \*II, 1173.
  - 3) Hexakrolsäure. *Na*, *Ca*, *Ba* (*A. Spl.* 2, 123; *J.* 1876, 481). — I, 958.
  - 4) Säure (aus Sulfocamphersäure) (*B.* 27 [2] 594).
  - 5) Trimethylester d.  $\beta$ -Phenylpropan- $\alpha\epsilon$ -Dicarbonsäure- $\delta$ -Methylcarbonsäure. *Fl.* (*A.* 360, 338 *C.* 1908 [2] 318).
  - 6) Trimethylester d. Säure  $C_{15}H_{18}O_6$ . *Sm.* 71° (*A.* 259, 163; *A.* 345, 98 *C.* 1906 [1] 1332). — I, 734.
  - 7) Triäthylester d.  $\alpha$ -Phenylpropan- $\beta\beta\gamma$ -Tricarbonsäure. *Sd.* 336,3° (*A.* 256, 92). — II, 2015.



- C<sub>18</sub>H<sub>24</sub>O<sub>6</sub>** 8) Triäthylester d.  $\beta$ -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sd. 305 bis 310° (*Am.* 9, 115; *Soc.* 73, 1015). — II, 2015; \*II, 1171.  
9) Glyoxylsäurederivat d. Dimethyldihydroresorcin. Sm. 210—212° u. Zers. (*B.* 34, 1651).
- C<sub>18</sub>H<sub>24</sub>O<sub>7</sub>** 10) Diacetat d. 3,6-Dioxy-2,5-Dibutyl-1,4-Benzochinon. Sm. 60° (*A.* 361, 380 *C.* 1908 [2] 590).  
11)  $\alpha\gamma$ -Dibutyrat- $\beta$ -Benzoat d.  $\alpha\beta\gamma$ -Trioxypropan. Fl. (*C.* 1903 [1] 134).  
C 61,4 — H 6,8 — O 31,8 — M. G. 352.  
1) Säure (aus Benzoylglykolsäure). Ba (*A.* 145, 350). — II, 2047.  
2) Diäthylester d. 3,5-Diäthoxyphenoxylfumarsäure. Sd. 238—240°<sub>15</sub> (*Soc.* 83, 1134 *C.* 1903 [2] 1060).  
3) Triäthylester d. 3-Oxy-1-Methylbenzoläthyläther-2,4,6-Tricarbonsäure. Sd. 365° u. Zers. (*B.* 32, 2788; *G.* 31 [1] 155). — \*II, 1196.  
C 58,7 — H 6,5 — O 34,8 — M. G. 368.
- C<sub>18</sub>H<sub>24</sub>O<sub>8</sub>** 1) bim.  $\beta$ -Mesityloxydoxalsäuremethylester. Sm. 225° (*A.* 356, 269 *C.* 1907 [2] 2052).  
2) isom. bim.  $\beta$ -Mesityloxydoxalsäuremethylester. Sm. 236—237° (*A.* 356, 272 *C.* 1907 [2] 2052).  
C 56,3 — H 6,2 — O 37,5 — M. G. 384.
- C<sub>18</sub>H<sub>24</sub>O<sub>9</sub>** 1) Tetraäthylester d. 1-Keto-1,2,3,4-Tetrahydrobenzol-2,4,4,5-Tetracarbonsäure. Fl. (*B.* 31, 51). — \*I, 448.  
C 54,0 — H 6,0 — O 40,0 — M. G. 400.
- C<sub>18</sub>H<sub>24</sub>O<sub>10</sub>** 1) Lignin. Lit. bedeutend. — I, 1078; \*I, 586.  
2) Valdivin + 2 $\frac{1}{2}$ H<sub>2</sub>O. Sm. 230° u. Zers. (*Bl.* 35, 104). — III, 615.  
3) Tetraäthylester d. 1,4-Diketo-hexahydrobenzol-2,2,5,5-Tetracarbonsäure. Sm. 127° (*J. r.* 25, 129). — \*I, 451.  
4) Tetraäthylester d. 1,4-Diketo-hexahydrobenzol-2,3,5,6-Tetracarbonsäure + xH<sub>2</sub>O. Sm. 142—144° (wasserfrei). Na<sub>2</sub> (*A.* 237, 35; 258, 276; *B.* 30, 2570 Anm.; *Am.* 11, 14). — II, 2094; \*II, 1226.  
C 50,0 — H 5,6 — O 44,4 — M. G. 432.
- C<sub>18</sub>H<sub>24</sub>O<sub>12</sub>** 1) Hexamethylester d. Isohydromellithsäure. Sm. 125° (124°) (*A. Spl.* 7, 47; *B.* 28, 1273). — II, 2104.  
2) Hexaacetat d. 1,2,3,4,5,6-Hexaoxyhexahydrobenzol (H. d. Seyllit) (*B.* 40, 1825 *C.* 1907 [2] 15).  
3) Hexaacetat d. Cocosit. Sm. bei 300° (*Soc.* 91, 1776 *C.* 1908 [1] 268).  
4) Hexaacetat d. d-Inosit (*A. ch.* [6] 29, 271). — I, 1052.  
5) Hexaacetat d. i-Inosit. Sm. 211—212°; Sd. 234° (i. V.) (*A. ch.* [6] 12, 571; *Soc.* 91, 1781 *C.* 1908 [1] 268). — I, 1052.  
6) Hexaacetat d. Quercin. Sm. 301° (*Bl.* 48, 113). — I, 1056.  
C 80,6 — H 9,0 — N 10,4 — M. G. 268.
- C<sub>18</sub>H<sub>24</sub>N<sub>2</sub>** 1) 4-[4-Isopropylbenzyl]amido-1-Dimethylamidobenzol. Sm. 39°. HCl (*A.* 245, 300). — IV, 587.  
2)  $\alpha\alpha$ -Di[Äthylphenylamido]äthan (Äthylidendiäthyl-diphenyldiamin). Fl. (2HCl, PtCl<sub>4</sub>) (*A.* 140, 95 Anm.). — II, 443.  
3)  $\alpha\beta$ -Di[Äthylphenylamido]äthan. Sm. 75°; Sd. 245°<sub>45</sub>. Pikrat (*B.* 40, 764 *C.* 1907 [1] 1031; *B.* 42, 308 Anm. *C.* 1909 [1] 545).  
4)  $\alpha\alpha$ -Di[4-Dimethylamidophenyl]äthan. Sm. 68—69° (67°). 2HCl, (2HCl, PtCl<sub>4</sub>), 2H<sub>2</sub>SO<sub>4</sub>, 2 Acetat (*Bl.* [3] 23, 18, 22, 24; *B.* 39, 1118 *C.* 1906 [1] 1349; *C. r.* 149, 350 *C.* 1909 [2] 1451). — \*IV, 656.  
5)  $\alpha\beta$ -Di[4-Dimethylamidophenyl]äthan. Sm. 50°; Sd. oberhalb 300° (103°<sub>25</sub>). (2HCl, PtCl<sub>4</sub>), 2HJ, Dioxalat, Pikrat (*B.* 13, 2196; *A.* 345, 330 *C.* 1906 [1] 1696). — IV, 977.  
6)  $\alpha\beta$ -Di[2,4-Dimethylphenylamido]äthan. Sm. 74—75° (71°). (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub>, + HgCl<sub>2</sub> (*Soc.* 79, 254; *B.* 34, 1510).  
7)  $\alpha\beta$ -Di[Methyl-4-Methylphenylamido]äthan. Sm. 79,5—80,5°. (2HCl, HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>) (*A.* 224, 340). — II, 487.  
8) 4-Amido-4'-Diäthylamido-3-Methyldiphenylmethan. Sm. 60° (*C.* 1900 [1] 1112). — \*IV, 651.  
9) 6-Amido-4'-Diäthylamido-3-Methyldiphenylmethan. Fl. (*C.* 1900 [1] 1112).  
10) 4-Äthylamido-4'-Dimethylamido-3-Methyldiphenylmethan. Fl. (*C.* 1900 [1] 1111).  
11) 4-Methylphenyl-4-Diäthylamidobenzylamin. Sm. 58° (59—60°) (*C.* 1900 [1] 1112; *B.* 33, 2591). — \*IV, 410.

- $C_{18}H_{24}N_2$  12) 4,4'-Di[Dimethylamido]-3,3'-Dimethylbiphenyl. Sm. 190° (B. 14, 2170). — IV, 981.  
 13) isom. 4,4'-Di[Dimethylamido]-3,3'-Dimethylbiphenyl. Sm. 80°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2HJ (B. 14, 2172). — IV, 981.  
 14) p-Di[Dimethylamido]-p-Dimethylbiphenyl. Sm. 57°. (2HCl, PtCl<sub>4</sub>) (B. 14, 2167). — IV, 983.  
 15) 4-Phenylhydrazon-6-Isobutenyl-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 80—81° (B. 39, 3446 C. 1906 [2] 1558).  
 16) s-Di[2,4,5-Trimethylphenyl]hydrazin. Sm. 124—125° (J. r. 19, 116). — IV, 1503.  
 17) s-Di[2,4-Dimethylbenzyl]hydrazin. Sm. 58,5°. HCl (J. pr. [2] 62, 118). — \*IV, 546.  
 $C_{18}H_{24}N_4$  C 73,0 — H 8,1 — N 18,9 — M. G. 296.  
 1) 1,4-Di[Phenylhydrazido]hexahydrobenzol. Sm. 147—148° (B. 22, 2175). — IV, 783.  
 2) isom. 1,4-Di[Phenylhydrazido]hexahydrobenzol. Fl. Oxalat + H<sub>2</sub>O (B. 22, 2174). — IV, 783.  
 3) 5'-Dimethylamido-4,2',4'-Trimethyldiazoamidobenzol. Sm. 70—71° (Soc. 91, 370 C. 1907 [1] 1404).  
 4) 3,3'-Di[Dimethylamido]-4,4'-Dimethylazobenzol. Sm. 99° (u. 119°) (C. 1901 [1] 105). — \*IV, 1021.  
 5) 1,4-Di[5-Amido-3-Methylphenyl]hexahydro-1,4-Diazin. Sm. 195 bis 196° (B. 25, 2943). — IV, 625.  
 6) 1,4-Di[3-Amido-4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 193° (B. 25, 2943). — IV, 612.  
 7) 1,4[oder 1,5]-Diäthyl-2,4[oder 2,5]-Diphenylhexahydro-1,2,4,5-Tetrazin. Sm. 123° (B. 42, 3528 C. 1909 [2] 1461).  
 8) Diisopropylidiphenyltetrazon. Sm. 79° (A. 252, 281). — IV, 1308.  
 9) Verbindung (aus Anilin u. Glyoxal). (2HCl, PtCl<sub>4</sub>) (A. 140, 124; B. 11, 831).  
 $C_{18}H_{24}Si$  1) Äthylpropylphenylbenzylsilicium. Sd. 325° (C. 1905 [1] 930; Soc. 91, 221 C. 1907 [1] 1193).  
 $C_{18}H_{25}N$  C 84,7 — H 9,8 — N 5,5 — M. G. 255.  
 1) p-Tripropylchinolin. Sd. 348°. Pikrat (C. 1907 [1] 235).  
 $C_{18}H_{25}N_3$  C 76,3 — H 8,8 — N 14,8 — M. G. 283.  
 1) 4,6-Diamido-4'-Diäthylamido-3-Methyldiphenylmethan (C. 1900 [1] 1112).  
 2) Isobutyldi[2-Amidobenzyl]amin. Sm. 132° (B. 26, 2586). — IV, 628.  
 3) 4,4'-Di[Äthylamido]-3,3'-Dimethyldiphenylamin. 3HJ + 2H<sub>2</sub>O (J. pr. [2] 73, 9 C. 1906 [1] 839).  
 $C_{18}H_{26}O$  C 83,7 — H 10,1 — O 6,2 — M. G. 258.  
 1)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\alpha$ -Dodeken (Benzalmethylnonylketon). Sm. 44—45° (C. 1901 [1] 525; Bl. [3] 33, 162 C. 1905 [1] 601).  
 2)  $\beta$ -Keto- $\alpha$ -Benzylidenundekan<sup>p</sup> (Benzylidenmethylnonylketon). Sm. 41 bis 42° (44—45°); Sd. 245°<sub>85</sub> (C. 1900 [2] 839; 1901 [1] 524; Bl. [3] 25, 269). — \*III, 134.  
 3) Keton (aus Ketoexahydrobenzol). Sd. 214—217°<sub>15</sub> (B. 40, 157 C. 1907 [1] 564).  
 4) Verbindung (aus Ketoexahydrobenzol). Sm. 117—119° (A. 369, 100 C. 1909 [2] 2004).  
 5) Verbindung (aus Methyldiacetyl adipinsäureäthylester). Sd. 230—240°<sub>30</sub> (Soc. 61, 78). — I, 1014.  
 $C_{18}H_{26}O_2$  C 78,8 — H 9,5 — O 11,7 — M. G. 274.  
 1)  $\alpha$ -Larinolsäure. Sm. 80—81° (C. 1900 [2] 861). — \*II, 861.  
 2)  $\beta$ -Larinolsäure. Sm. 85—86° (C. 1900 [2] 861). — \*II, 861.  
 3)  $\alpha$ -Pimarolsäure. Sm. 90—91° (C. 1901 [1] 259). — \*II, 861.  
 4)  $\beta$ -Pimarolsäure. Sm. 89—90° (C. 1901 [1] 259). — \*II, 861.  
 5) l-Menthylester d. Phenylessigsäure. Sd. 180°<sub>15</sub> (B. 31, 1778; C. 1902 [2] 359; A. 369, 330 C. 1909 [2] 2153). — \*III, 335.  
 6) l-Menthylester d. l-Methylbenzol-2-Carbonsäure. Sd. 191°<sub>15</sub> (B. 31, 1778). — \*III, 335.  
 7) l-Menthylester d. l-Methylbenzol-3-Carbonsäure. Sd. 197°<sub>15</sub> (B. 31, 1778). — \*III, 335.

- $C_{18}H_{26}O_2$  8) l-Menthylester d. l-Methylbenzol-4-Carbonsäure. Sd.  $200^{\circ}_{15}$  (B. 31, 1778). — \*III, 335.  
9) Acetat d. 5-Oxy-l-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol. Sd.  $206^{\circ}_{14}$  (A. 303, 269).
- $C_{18}H_{26}O_3$  10) Benzoat d.  $\beta$ -Oxy- $\alpha$ [oder  $\beta$ ]-Undeken. Sd.  $233-235^{\circ}_{50}$  (Soc. 83, 149 C. 1903 [1] 71, 436).  
C 74,5 — H 8,9 — O 16,6 — M. G. 290.  
1) Anhydrid d. Isolauronsäure. Sd.  $210-215^{\circ}_{13}$  (C. 1897 [1] 763). — \*I, 212.  
2) Methylester d. d-Phenylxyhomocampholsäure. Sm.  $105^{\circ}$  (C. 1900 [2] 96). — \*II, 979.  
3) l-Menthylester d. d- $\alpha$ -Oxyphenylelessigsäure. Sm.  $99-100^{\circ}$  (Soc. 85, 1254 C. 1904 [2] 1304; Soc. 91, 794 C. 1907 [2] 238; Soc. 91, 910 C. 1907 [2] 238).  
4) l-Menthylester d. l- $\alpha$ -Oxyphenylelessigsäure. Sm.  $81-82^{\circ}$  (Soc. 85, 1254 C. 1904 [2] 1304; Soc. 91, 794 C. 1907 [2] 238; Soc. 91, 909 C. 1907 [2] 238).  
5) l-Menthylester d. r- $\alpha$ -Oxyphenylelessigsäure. Sm.  $85-86^{\circ}$ ; Sd.  $225^{\circ}_{30}$  (Soc. 85, 383 C. 1904 [1] 940, 1419; Soc. 91, 909 C. 1907 [2] 238; Soc. 95, 1386 C. 1909 [2] 1055).  
C 70,6 — H 8,5 — O 20,9 — M. G. 306.
- $C_{18}H_{26}O_4$  1) Dibutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm.  $92,5^{\circ}$  (C. 1905 [1] 815).  
2) Diisobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm.  $99^{\circ}$  (C. 1905 [1] 815).  
3) Butylisobutyläther d. 4,6-Dioxy-1,3-Diacetylbenzol. Sm.  $78^{\circ}$  (C. 1905 [1] 815).  
4) Diäthylester d. l-Phenylhexahydrobenzol-2,2-Dicarbonsäure. Fl. (Soc. 57, 315). — II, 1860.  
5) Propylester d. Santonsäure. Sd.  $220^{\circ}$  (i. V.) (B. 13, 2209; G. 13, 165). — II, 1788.  
6) Propylester d. Parasantonsäure. Sm.  $113^{\circ}$  (B. 13, 2209; G. 13, 159). — II, 1790.  
7) Diisoamylester d. Benzol-1,4-Dicarbonsäure (A. 121, 89). — II, 1832.  
8) Diacetat d.  $\alpha\gamma$ -Dioxy- $\alpha$ -[4-Isopropylphenyl]- $\beta$ -Methylpropan. Sd.  $182^{\circ}_{10,5}$  (M. 24, 254 C. 1903 [2] 242).  
9) Diacetat d. 1,3-Dioxy- $\beta$ -tert. Dibutylbenzol. Sm.  $138^{\circ}$  (B. 32, 2425; C. 1902 [2] 1199). — \*II, 587.  
10) Diacetat d. isom. 1,3-Dioxy- $\beta$ -Di[tert. Butyl]benzol. Sm.  $135^{\circ}$  (C. 1902 [2] 1198).
- $C_{18}H_{26}O_5$  C 67,1 — H 8,1 — O 24,8 — M. G. 322.  
1)  $\alpha$ -Heerabomyrrhol. Sm.  $248-250^{\circ}$  (Ar. 245, 448 C. 1907 [2] 1913).  
2) Diäthylester d.  $\zeta$ -Oxyhexanphenyläther- $\gamma\gamma$ -Dicarbonsäure. Sd.  $228^{\circ}_{23}$  (B. 31, 2136). — \*II, 366.  
3) Diäthylester d. Hydroxydibenzoësäure. Sd.  $205-207^{\circ}$  (A. 134, 331). — II, 1959.
- $C_{18}H_{26}O_6$  C 63,9 — H 7,7 — O 28,4 — M. G. 338.  
1) Diäthylester d.  $\alpha$ -Oxybutter-1,2-Phenylenäthersäure. Sd. 290 bis  $330^{\circ}_{744}$  (B. 33, 1674). — \*II, 553.  
2) Diäthylester d.  $\alpha$ -Oxybutter-1,3-Phenylenäthersäure. Sd.  $230-240^{\circ}_{55}$  (B. 33, 1680). — \*II, 566.  
3) Diäthylester d.  $\alpha$ -Oxybutter-1,4-Phenylenäthersäure. Sd.  $210-212^{\circ}_{10}$  (B. 33, 1689). — \*II, 573.  
4) Diäthylester d. isom.  $\alpha$ -Oxybutter-1,4-Phenylenäthersäure. Sd. 212 bis  $217^{\circ}_{10}$  (B. 33, 1689). — \*II, 573.  
5) Diäthylester d.  $\alpha$ -Oxyisobutter-1,2-Phenylenäthersäure. Sd.  $197^{\circ}_{27}$  (B. 33, 1675). — \*II, 553.  
6) Diäthylester d.  $\alpha$ -Oxyisobutter-1,3-Phenylenäthersäure. Sd. 208 bis  $209^{\circ}_4$  (B. 33, 1681). — \*II, 566.  
7) Diäthylester d.  $\alpha$ -Oxyisobutter-1,4-Phenylenäthersäure. Sm.  $81^{\circ}$  (B. 33, 1689). — \*II, 573.
- $C_{18}H_{26}O_7$  C 61,0 — H 7,3 — O 31,6 — M. G. 354.  
1) norm. Oxyhexinsäure. Sm.  $173^{\circ}$  (A. ch. [5] 20, 489).  
2) Isooxyhexinsäure. Sm.  $186-187^{\circ}$  (A. ch. [5] 20, 491).



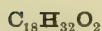
- $C_{18}H_{26}O_{10}$  C 53,7 — H 6,5 — O 39,8 — M. G. 402.
- 1) Tetraäthylester d.  $\alpha\epsilon$ -Diketo- $\gamma$ -Methylpentan- $\alpha\beta\delta\epsilon$ -Tetracarbon-säure +  $H_2O$ . Sm.  $112^\circ$  (Bl. [4] 1, 40 C. 1907 [1] 1053).  
C 51,7 — H 6,2 — O 42,1 — M. G. 418.
- $C_{18}H_{26}O_{11}$  1) Lignose (A. Spl. 5, 225; B. 8, 476). — I, 1080.
- 2)  $\beta$ -Phenolmaltosid. Sm.  $96^\circ$  (B. 35, 3154 C. 1902 [2] 1177).  
C 49,8 — H 6,0 — O 44,2 — M. G. 434.
- $C_{18}H_{26}O_{12}$  1) Hexaacetat d. Dulcit. Sm.  $171^\circ$  (A. ch. [4] 27, 150). — I, 418.
- 2) Hexaacetat d. d-Idit. Sm.  $123^\circ$  ( $121^\circ$ ) (C. 1899 [1] 24; 1904 [2] 1291; C. r. 139, 804 C. 1905 [1] 13; C. r. 139, 984 C. 1905 [1] 218).
- 3) Hexaacetat d. l-Idit. Sm.  $121,5^\circ$  (C. r. 143, 293 C. 1906 [2] 859).
- 4) Hexaacetat d. Mannit. Sm.  $119^\circ$  (A. 160, 94; A. ch. [5] 6, 107; B. 12, 2059). — I, 417.
- 5) Hexaacetat d. Sorbit (B. 23 [2] 24). — I, 418.
- 6) Äthylester d. d-Pentaacetyl-galaktonsäure. Sm.  $101$ – $102^\circ$  (M. 16, 336). — \*I, 425.
- 7) Äthylester d. Pentaacetyl-d-Glykonsäure. Sm.  $103,5^\circ$  (B. 19, 2622). — I, 826.
- 8) Diäthylester d. Tetraacetylzuckersäure. Sm.  $61^\circ$  (A. 149, 242). — I, 853.
- 9) Diäthylester d. Tetraacetylnoriso-zuckersäure. Sm.  $47^\circ$  (B. 19, 1270; 27, 128). — I, 853; \*I, 436.
- 10) Diäthylester d. Tetraacetylschleimsäure. Sm.  $189^\circ$  (A. 129, 195; B. 20, 3367; M. 14, 474; 19, 459). — I, 856; \*I, 438.
- $C_{18}H_{26}O_{13}$  C 48,0 — H 5,8 — O 46,2 — M. G. 450.
- $C_{18}H_{26}O_{16}$  1) Triacetylulin (A. 160, 83). — I, 1096.
- 2) Oxycellulose (Soc. 43, 22; A. 272, 288; siehe auch A. 267, 368). — I, 1077.
- $C_{18}H_{26}N_2$  C 80,0 — H 9,6 — N 10,4 — M. G. 270.
- 1) Verbindung (aus Diäthylketon u. Pyrrol). Sm.  $208$ – $210^\circ$  u. Zers. (wasserfrei).  $2 + AgNO_3$  (B. 20, 2455). — IV, 944.
- $C_{18}H_{26}N_4$  C 72,4 — H 8,7 — N 18,8 — M. G. 298.
- 1) 4'-Diäthylamido-4,6,2'-Triamido-3-Methyldiphenylmethan. Sm.  $122^\circ$  (D. R. P. 133709 C. 1902 [2] 615). — \*IV, 948.
- 2) s-Di[3-Dimethylamido-4-Methylphenyl]hydrazin. Sm.  $127^\circ$  (C. 1901 [1] 105). — \*IV, 1092.
- $C_{18}H_{25}O$  C 83,1 — H 10,8 — O 6,1 — M. G. 260.
- 1) Undekylphenylketon. Sm.  $47^\circ$  ( $45^\circ$ ); Sd.  $132^\circ_{0,1}$  ( $201$ – $202^\circ$ ) (Soc. 67, 508; B. 29, 1318; C. 1904 [1] 1259; C. r. 149, 7 C. 1909 [2] 600).
- 2) Desoxyphoron. Sm.  $108$ – $109^\circ$  (A. 180, 10; 296, 321). — I, 1013; \*I, 529.
- 3)  $\alpha$ -Isoamylenjonon. Sd.  $165$ – $175^\circ_{15}$  (D. R. P. 133758 C. 1902 [2] 614).
- 4)  $\beta$ -Isoamylenjonon. Sd.  $170$ – $180^\circ_{15}$  (D. R. P. 133758 C. 1902 [2] 614).
- 5) Verbindung (aus Morindacitrifolia L.). Sm.  $124,5^\circ$  (Ar. 246, 153 C. 1908 [1] 1844).
- 6) Verbindung (aus Pseudoeuphorbon). Sm.  $100^\circ$  (Ar. 245, 696 C. 1908 [1] 1315).
- 7) Verbindung (aus d. Wurzel von Polygouma cuspidatum) (Soc. 67, 1089).  
C 78,2 — H 10,1 — O 11,6 — M. G. 276.
- $C_{18}H_{28}O_2$  1) bim. 4-Keto-1-Isopropyl-1,2,3,4-Tetrahydrobenzol. Sm.  $156^\circ$  (A. 359, 281 C. 1908 [1] 2155).
- 2) Axinsäure (J. 1860, 324). — II, 1401.
- 3) Clupanodonsäure (C. 1909 [1] 1491).
- 4)  $\alpha$ -Picipimarolsäure. Sm.  $95$ – $96^\circ$  (Ar. 240, 280 C. 1902 [2] 134).
- 5)  $\beta$ -Picipimarolsäure. Sm.  $93$ – $94^\circ$  (Ar. 240, 280 C. 1902 [2] 134).
- 6) Säure (aus Ketohexahydrobenzol). Sd.  $230$ – $240^\circ_{19}$  Ag (A. 369, 101 C. 1909 [2] 2004).
- 7) Phenylester d. Laurinsäure. Sm.  $24,5^\circ$ ; Sd.  $210^\circ_{15}$  (B. 17, 1378). — II, 662.
- 8) Acetat d. Verb.  $C_{18}H_{26}O$  (aus Caryophyllen u. Formaldehyd). Sd.  $185^\circ_{15}$  (C. r. 138, 1228 C. 1904 [2] 106).
- 9) Benzoat d.  $\beta$ -Oxyundekan. Sd.  $197,5$ – $200^\circ_{15}$  (B. 35, 2144 C. 1902 [2] 260).

- $C_{18}H_{28}O_2$  10) Verbindung (aus Caïncin) (Z. 1867, 539). — III, 573.  
 11) Verbindung (aus Diacetylcapronsäureäthylester). Sd. 265—275°<sub>85</sub> (Soc. 57, 26). — I, 694.
- $C_{18}H_{28}O_3$  C 74,0 — H 9,6 — O 16,4 — M. G. 292.  
 1) Homoparacopaivasäure. Sm. 111—112° (C. 1901 [2] 886). — \*III, 420.  
 2) Äthylcarbonat d. Santalol. Sd. 180—185°<sub>25</sub> (D.R.P. 173240 C. 1906 [2] 1093).
- $C_{18}H_{28}O_4$  C 70,1 — H 9,1 — O 20,8 — M. G. 308.  
 1) Embeliasäure. Sm. 142° (C. 1900 [1] 606). — \*II, 1235.  
 2) Säure (aus  $\alpha$ -Camphylsäure). Sd. 270—290°<sub>45</sub> (Soc. 83, 855 C. 1903 [2] 572).  
 3) Äthylester d. Isovalerylcamphocarbonsäure. Sd. 174—176°<sub>13</sub> (B. 35, 4037 C. 1903 [1] 82).  
 4) Isamylester d. Acetylcamphocarbonsäure. Sd. 170—171°<sub>10,5</sub> (B. 35, 4036 C. 1903 [1] 81).
- $C_{18}H_{28}O_6$  C 63,5 — H 8,2 — O 28,2 — M. G. 340.  
 1) Äthylester d. 6-Keto-4-[ $\alpha$ -Acetoxylisopropyl]-1-Methylhexahydrobenzol-2-Acetessigsäure (Acetat d. Oxyterpanonylacetessigsäureäthylester). Sm. 133° (B. 37, 1669 C. 1904 [1] 1606).  
 2) Diäthylester d. cis-2,5-Diketo-1,4-Dipropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Dipropylsuccinylbernsteinsäure). Sd. 217—218°<sub>15</sub> (B. 26, 232). — \*I, 423.  
 3) Diäthylester d. trans-2,5-Diketo-1,4-Dipropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Dipropylsuccinylbernsteinsäure). Sm. 86—87°; Sd. 217—218°<sub>15</sub> (B. 26, 232). — \*I, 423.  
 4) Diäthylester d. cis-2,5-Diketo-1,4-Diisopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diisopropylsuccinylbernsteinsäure). Sd. 215 bis 220°<sub>15</sub> (B. 26, 232). — \*I, 423.  
 5) Diäthylester d. trans-2,5-Diketo-1,4-Diisopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diisopropylsuccinylbernsteinsäure). Sm. 116 bis 117°; Sd. 215—220°<sub>15</sub> (B. 26, 232). — \*I, 423.
- $C_{18}H_{28}O_7$  C 60,7 — H 7,8 — O 31,4 — M. G. 356.  
 1) Pentamethylsalicin. Sm. 62—64° (Soc. 89, 817 C. 1906 [2] 345).  
 2) l-Condurangin. Sm. 134° (G. 22 [1] 239). — III, 577.
- $C_{18}H_{28}O_8$  C 58,0 — H 7,5 — O 35,4 — M. G. 372.  
 1) Säure (aus Digitogensäure) oder  $C_8H_{14}O_4$ . K + 7H<sub>2</sub>O (B. 26 [2] 686; 34, 3576).  
 2) Säure (aus d. Estersäure  $C_{22}H_{36}O_{10}$ ) (H. 61, 237 C. 1909 [2] 1215).  
 3) Tetraäthylester d. Hexahydrobenzol-1,1,3,3-Tetracarbonsäure. Sd. 243—245°<sub>50</sub> (Soc. 59, 803, 994). — I, 866.  
 4) Tetraäthylester d. 1,1-Dimethyl-R-Trimethylen-2,3-Dicarbonsäure-2-Methyldicarbonsäure. Sd. 234°<sub>20</sub> (C. 1900 [2] 319; Soc. 79, 763).
- $C_{18}H_{28}O_9$  C 55,7 — H 7,2 — O 37,1 — M. G. 388.  
 1) Tetraäthylester d.  $\beta$ -Ketohehexan- $\gamma\delta\epsilon\zeta$ -Tetracarbonsäure. Sd. 222 bis 223°<sub>10</sub> (Soc. 73, 729). — \*I, 448.
- $C_{18}H_{28}O_{10}$  C 53,5 — H 6,9 — O 39,6 — M. G. 404.  
 1) Barringtonin. Zers. oberhalb 200° (C. 1903 [2] 841).  
 2) Pentaäthylester d. Propan- $\alpha\alpha\beta\beta\gamma$ -Pentacarbonsäure. Sd. 234°<sub>12</sub> (B. 15, 1108; 21, 2113; 29, 1745; A. 297, 104). — I, 870; \*I, 448.  
 3) Pentaäthylester d. Propan- $\alpha\alpha\beta\beta\gamma\gamma$ -Pentacarbonsäure. Sd. 265°<sub>80</sub> (B. 25 [2] 746; Soc. 73, 1013; B. 40, 4955 C. 1908 [1] 620). — I, 870; \*I, 448.
- $C_{18}H_{28}O_{12}$  C 49,5 — H 6,4 — O 44,0 — M. G. 436.  
 1)  $\beta$ -Pseudoephorbonsäure. Sm. 81° (Ar. 245, 697 C. 1908 [1] 1316).
- $C_{18}H_{28}O_{14}$  C 46,1 — H 6,0 — O 47,9 — M. G. 468.  
 1) Quittenschleim (A. 175, 208; 249, 247; 271, 60; H. 14, 158). — I, 1103.  
 2) Verbindung (aus Glykose). + C<sub>2</sub>H<sub>6</sub>O (H. 5, 125).
- $C_{18}H_{28}O_{16}$  C 43,2 — H 5,6 — O 51,2 — M. G. 500.  
 1) Oxycellulose (oder  $C_{18}H_{30}O_{16}$ ) (B. 32, 2591).
- $C_{18}H_{28}N_2$  C 79,4 — H 10,3 — N 10,3 — M. G. 272.  
 1) 1,2-Di[1-Piperidylmethyl]benzol. Sd. 190—195°<sub>20</sub>. (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>), Pikrat (B. 31, 427, 592). — \*IV, 413.

- $C_{18}H_{29}N_2$  2) 1,3-Di[1-Piperidylmethyl]benzol. Fl. 2HCl, (2HCl, PtCl<sub>4</sub>), 2Pikrat (B. 36, 1677 C. 1903 [2] 29). — \*IV, 415.  
3) 1,4-Di[1-Piperidylmethyl]benzol. Sm. 86°. (2HCl, PtCl<sub>4</sub>), (2HCl, 2AuCl<sub>3</sub>), 2Pikrat (B. 34, 2086). — \*IV, 417.
- $C_{18}H_{29}N$  C 83,4 — H 11,2 — N 5,4 — M. G. 259.  
1)  $\beta$ -Benzylidenamidoundekan. Sd. 197–198°<sub>17</sub> (G. 24 [2] 280). — III, 28.
- $C_{18}H_{30}O$  C 82,4 — H 11,4 — O 6,2 — M. G. 262.  
1) norm. Oktyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 319,8° (A. 243, 49). — II, 770.  
2)  $\beta$ -Chicalban. Sm. 158–159° (Ar. 243, 385 C. 1905 [2] 555).  
3) Hydrocarotin? Sm. 137,4° (A. 117, 206; 180, 274, 277; B. 48, 488; M. 7, 598). — III, 626.  
4) Laktucerylalkohol. Sm. 162° (Hesse, N. Handw. d. Ch. 4, 8).  
5) Syccocerylalkohol. Sm. 90° (J. 1861, 640). — II, 1067.  
6) Verbindung (aus Asclepias syriaca L.) (J. pr. [2] 68, 407 C. 1904 [1] 105).  
7) Verbindung (aus Jalapin) (C. 1895 [2] 495).
- $C_{18}H_{30}O_2$  C 77,7 — H 10,8 — O 11,5 — M. G. 278.  
1) 1-tert. Butyläther d. 1,3-Dioxy-2-tert. Dibutylbenzol. Sm. 99° (B. 32, 2424). — \*II, 587.  
2) Äthyläther d. Benzo-resinol. Sm. 157–158° (B. 26 [2] 679). — III, 554.  
3) Pinakon d. Nopinon. Sm. 106–107°; Sd. 195–200°<sub>11</sub> (C. 1907 [2] 983; A. 356, 238 C. 1907 [2] 1792).  
4) Camphenilonpinakon. Sm. 134°; Sd. 200–202°<sub>11</sub> (B. 32, 1503). — \*I, 97.  
5) Pinakon (aus Camphenilon). Sm. 173–173,5° (A. 340, 55 C. 1905 [2] 553).  
6) isom. Pinakon (aus Camphenilon). Sm. 172,5–173° (A. 340, 55 C. 1905 [2] 553).  
7) Pinakon (aus D-d-Fenchocamphoron). Sm. 192–193° (A. 315, 289).  
8)  $\gamma$ -Heptadekatrien- $\rho$ -Carbonsäure ( $\alpha$ -Linolensäure) (B. 42, 1329 C. 1909 [1] 1698; B. 42, 1343 C. 1909 [1] 1699).  
9) isom.  $\gamma$ -Heptadekatrien- $\rho$ -Carbonsäure ( $\beta$ -Linolensäure). Sd. 157 bis 158° (B. 42, 1331 C. 1909 [1] 1698; B. 42, 1345 C. 1909 [1] 1700).  
10)  $\alpha$ -Elaeostearinsäure. Sm. 48° (C. r. 135, 697 C. 1902 [2] 1364).  
11)  $\beta$ -Elaeostearinsäure. Sm. 71° (C. r. 135, 697 C. 1902 [2] 1364).  
12) Linolensäure. Sd. 230–232°<sub>17</sub> (H. 62, 424 C. 1909 [2] 1985).  
13) isom. Linolensäure. Fl. (M. 8, 158, 267; 9, 204). — I, 537.  
14) isom. Linolensäure (C. 1906 [2] 759).  
15) 1-Menthylester d.  $\beta\delta$ -Dimethyl- $\alpha\gamma$ -Pentadien- $\alpha$ -Carbonsäure. Sd. 183 bis 184°<sub>14</sub> (A. 369, 345 C. 1909 [2] 2154).  
16) Verbindung (aus Campherphoron). Sm. 160–162°; Sd. 180–200°<sub>16</sub> (A. 290, 144). — \*I, 97.  
17) Verbindung (Pinakon). Sd. 230–240°<sub>70</sub> (Soc. 61, 81). — I, 272.
- $C_{18}H_{30}O_3$  C 73,5 — H 10,2 — O 16,3 — M. G. 294.  
1) Tetrapropylphloroglucin? Sd. 190–217°<sub>22</sub> (M. 21, 1001).  
2) 2,4,6-Triketo-1,1,3,3,5,5-Hexaäthylhexahydrobenzol. Sm. 65–68°; Sd. 200–205°<sub>27</sub> (M. 9, 896). — II, 1026.  
3) Äthyläther d. 2,4-Diketo-6-Oxy-1,1,3,3,5-Pentaäthyl-1,2,3,4-Tetrahydrobenzol. Fl. (M. 9, 224). — II, 1026.  
4) Ammoresitannol (B. 29 [2] 37). — III, 553.  
5) Säure (aus Lithofellinsäure). Sm. 152° (B. 28, 3046). — \*I, 268.  
6) Methyläthylakrylat d. Glykol C<sub>12</sub>H<sub>22</sub>O<sub>2</sub>. Sd. 198–205°<sub>11</sub> (M. 24, 160 C. 1903 [1] 957).
- $C_{18}H_{30}O_4$  C 69,7 — H 9,7 — O 20,6 — M. G. 310.  
1) Dihydroembeliasäure. Sm. 116–117° (Ar. 238, 22). — \*II, 1235.
- $C_{18}H_{30}O_5$  C 66,3 — H 9,2 — O 24,5 — M. G. 326.  
1)  $\alpha$ -Lichesterinsäure. Sm. 122–123°. NH<sub>4</sub>, K, Ba, Ag (J. pr. [2] 62, 347; J. pr. [2] 68, 33 C. 1903 [2] 512).  
2)  $\gamma$ -Lichesterinsäure. Sm. 121–122°. Ba (J. pr. [2] 62, 356; J. pr. [2] 68, 36 C. 1903 [2] 512).



- $C_{18}H_{30}O_5$  3) Proto- $\alpha$ -Lichesterinsäure. Sm. 106—107°. Ba, Ag (*J. pr.* [2] 68, 29 *C.* 1903 [2] 511; *J. pr.* [2] 70, 456 *C.* 1905 [1] 258; *J. pr.* [2] 73, 142 *C.* 1906 [1] 1103; *J. pr.* [2] 76, 36 *C.* 1907 [2] 1082).
- 4) Säure (aus Isobutyläthylinsäureäthylester). Sm. 175—180°. Ag (*Soc.* 73, 60). — \*I, 388.
- 5) Säure (aus d. Flechte *Cetraria islandica*). Sm. 140° (152°). Ba (*J. pr.* [2] 62, 358).
- $C_{18}H_{30}O_6$  C 63,2 — H 8,8 — O 28,0 — M. G. 342.
- 1) Di[ $\beta\beta$ -Diäthoxyläthyläther] d. 1,2-Dioxybenzol. Sd. 195—197° (*El.* [3] 19, 764). — \*II, 554.
- 2) Smilacin (Pariglin) (*A.* 5, 204; 11, 305; 13, 84; 14, 76; 15, 74; 17, 166). — III, 649.
- 3) Diäthylester d.  $\beta\iota$ -Diketo- $\delta\eta$ -Dimethyldekan- $\gamma\theta$ -Dicarbonsäure. Sd. 120—125°<sub>15</sub> (*C.* 1905 [1] 342).
- $C_{18}H_{30}O_7$  C 60,3 — H 8,4 — O 31,3 — M. G. 358.
- 1) Telaescin (*J.* 1862, 492; 1867, 751). — III, 613.
- $C_{18}H_{30}O_8$  C 57,8 — H 8,0 — O 34,2 — M. G. 374.
- 1) Dimethylester d. d-Dicaproylweinsäure. Fl. (*Bl.* [3] 11, 313). — \*I, 399.
- 2) Diäthylester d. d-Divalerylweinsäure. Sd. 214—215°<sub>11</sub> (*Bl.* [3] 11, 313). — \*I, 398.
- 3) Diäthylester d. d-Diisovalerylweinsäure. Fl. (*Bl.* [3] 11, 369). — \*I, 398.
- 4) Dipropylester d. d-Dibutylrylweinsäure. Sd. 226—227°<sub>40</sub> (*B.* 25 [2] 859; 26 [2] 923; *Bl.* [3] 9, 683; [3] 11, 312). — \*I, 398.
- 5) Dipropylester d. d-Diisobutylrylweinsäure. Fl. (*Bl.* [3] 11, 368). — \*I, 398.
- 6) Dibutylester d. d-Dipropionylweinsäure. Sd. 230—231°<sub>88</sub> (*B.* 25 [2] 859; *Bl.* [3] 11, 311). — \*I, 398.
- 7) Diisobutylester d. d-Dipropionylweinsäure. Sd. 207—208°<sub>15</sub> (*Bl.* [3] 11, 367; *B.* 25 [2] 859). — \*I, 398.
- 8) Äthyl-sec. Oktylester d. d-Diacetylweinsäure. Zers. oberhalb 100° (*Soc.* 79, 1108).
- 9) Tetraäthylester d. Hexan- $\beta\beta\delta\delta$ -Tetracarbonsäure. Sd. 293—295°<sub>78</sub> (*B.* 24, 1055). — I, 861.
- 10) Tetraäthylester d. Hexan- $\beta\beta\epsilon\epsilon$ -Tetracarbonsäure. Sm. 53—53,5° (54°); Sd. 195—200°<sub>8</sub> (*B.* 27, 1579; *Soc.* 65, 1004; *A.* 294, 103). — \*I, 442.
- 11) Tetraäthylester d. Hexan- $\beta\gamma\gamma\delta$ -Tetracarbonsäure. Sd. bei 300° (*B.* 23, 668). — I, 861.
- 12) Tetraäthylester d. Hexan- $\beta\gamma\delta\delta$ -Tetracarbonsäure. Sd. 201—202°<sub>12</sub> (*B.* 33, 3746).
- 13) Tetraäthylester d. Hexan- $\gamma\gamma\delta\delta$ -Tetracarbonsäure. Sd. 198—200°<sub>11,3</sub> (*B.* 21, 2085; *Am.* 16, 581). — I, 861.
- 14) Tetraäthylester d.  $\beta$ -Methylpentan- $\alpha\beta\gamma\gamma$ -Tetracarbonsäure. Sd. 199 bis 200°<sub>10</sub> (*B.* 33, 3760).
- 15) Tetraäthylester d.  $\beta$ -Methylpentan- $\gamma\gamma\delta\delta$ -Tetracarbonsäure. Sd. 204 bis 205°<sub>12</sub> (*Soc.* 73, 1010). — \*I, 442.
- 16) Tetraäthylester d.  $\beta$ -Isopropylpropan- $\alpha\gamma\gamma\gamma$ -Tetracarbonsäure. Sd. 198°<sub>12</sub> (*B.* 31, 2589). — \*I, 442.
- 17) Tributyrat d. Quercit (*A. ch.* [5] 15, 50). — I, 424.
- $C_{18}H_{30}O_9$  C 55,4 — H 7,7 — O 36,9 — M. G. 390.
- 1) Verbindung (aus Oxyazelaensäure) (*B.* 22, 71). — I, 758.
- $C_{18}H_{30}O_{12}$  C 49,3 — H 6,9 — O 43,8 — M. G. 438.
- 1)  $\alpha$ -Linolensäureozonidperoxyd. Fl. (*B.* 42, 1335 *C.* 1909 [1] 1699).
- $C_{18}H_{30}O_{15}$  C 44,4 — H 6,2 — O 49,4 — M. G. 486.
- 1) Dextrin (aus Stärke) (*Bl.* [3] 17, 959; *C.* 1899 [1] 1272).
- 2) Verbindung (aus Glykose) (*H.* 5, 126).
- $C_{18}H_{30}N_4$  C 71,5 — H 10,9 — N 10,2 — M. G. 274.
- 1) Hydrokyanconiin. (2 HCl, ZnCl<sub>2</sub>), + 2 Zn(OH)<sub>2</sub> (*J. pr.* [2] 26, 341). — IV, 830.
- 2) Verbindung (aus Acetylen u. Ammoniak) (*B.* 41, 2687 *C.* 1908 [2] 1256).
- $C_{18}H_{30}N_6$  C 65,5 — H 9,1 — N 25,4 — M. G. 330.
- 1) Tripiperidinmelamin. Sm. 213°. (2 HCl, PtCl<sub>4</sub>) (*B.* 18, 2779). — IV, 14.



C 77,1 — H 11,4 — O 11,4 — M. G. 280.

- 1) Chaulmoograsäure. Sm. 68°; Sd. 247—248°<sub>20</sub>.  $NH_4$ , K, Mg + 2H<sub>2</sub>O, Ca, Sr, Ba, Zn, Pb, Mn, Fe, Cu, Ag (Soc. 85, 846 C. 1904 [2] 348, 603; Soc. 85, 851 C. 1904 [2] 348, 604; Soc. 87, 887 C. 1905 [2] 338; Soc. 91, 564 C. 1907 [2] 71).
- 2) Elaeostearinsäure (Elaeomargarinsäure). Sm. 43—44°; Sd. 235°<sub>12</sub> (Soc. 83, 1042 C. 1903 [2] 657; B. 42, 674 C. 1909 [1] 912).
- 3) Hanfölsäure (Linolsäure). Fl. (M. 7, 217; 8, 149, 263; 9, 946). — I, 535.
- 4) Hirseölsäure (B. 21 [2] 142). — I, 536.
- 5) Leinölsäure (Linolsäure). Fl. Ba, Zn. Lit. bedeutend. — I, 535.
- 6) isom. Linolsäure. Ba, Ag (B. 42, 3345 C. 1909 [2] 1634).
- 7) Stearolsäure (9-Heptadekin- $\alpha$ -Carbonsäure). Sm. 48°. Ca + H<sub>2</sub>O, Ba, Ag (A. 140, 50; 190, 294; B. 2, 359; 27, 172, 3397; 28, 2249, 2250; C. 1896 [1] 1262; M. 9, 953; Ph. Ch. 10, 416; B. 40, 4156 C. 1907 [2] 1905). — I, 535; \*I, 217.
- 8) Stearolsäure (aus Petroselinsäuredibromid). Sm. 54°. Ag (B. 42, 1639 C. 1909 [2] 12).
- 9) Taririnsäure (8-Heptadekin- $\alpha$ -Carbonsäure). Sm. 50,5°. K, Ag (Bl. [3] 7, 233; B. 26 [2] 767; 27 [2] 20; C. 1896 [1] 1262; C. r. 134, 473 C. 1902 [1] 746; C. r. 134, 842 C. 1902 [1] 1155). — I, 536.
- 10) Telfairiasäure. Krystalle. Sd. 220—225°<sub>18</sub> (C. 1900 [1] 588).
- 11) Säure (aus Ricinelaïdinsäure). Sm. 53—54°. Ba (M. 15, 310; B. 27, 3474). — \*I, 217.
- 12) Säure (aus Ricinölsäure). Sm. 44—45°; Sd. 230°<sub>15</sub> (B. 21, 2732; 27, 3473; M. 15, 308). — I, 536.
- 13) Lakton d. Lichesterylsäure. Sm. 41—42° (Ar. 241, 8 C. 1903 [1] 697).
- 14) Äthylester d. Hydnocarpussäure. Sd. 211° (Soc. 87, 890 C. 1905 [2] 338).
- 15) l-Bornylester d. Caprylsäure. Sd. 175°<sub>15</sub> (B. 31, 1775). — \*III, 339.
- 16) l-Menthylester d.  $\beta\delta$ -Dimethyl- $\beta$ -Penten- $\alpha$ -Carbonsäure. Sd. 169 bis 170°<sub>14</sub> (A. 369, 349 C. 1909 [2] 2155).
- 17) Verbindung (aus 6-Acetyl-5-Methyl-1,2,3,4-Tetrahydrobenzol). Sd. 255 bis 265°<sub>50</sub> (Soc. 57, 21). — I, 1014.
- 18) Verbindung (aus Chaulmoograsamen). Sd. 214—215°<sub>18</sub> (Soc. 85, 842 C. 1904 [2] 604).



C 73,0 — H 10,8 — O 16,2 — M. G. 296.

- 1)  $\kappa$ -Keto- $\eta$ -Heptadeken- $\eta$ -Carbonsäure (Ketoölsäure). Sm. 58° (B. 28, 2248). — \*I, 264.
- 2) Ricinstearolsäure. Sm. 51° (53°). Ba, Ag (Z. 1867, 547; M. 15, 314; B. 27, 3123, 3475; 28, 1448 Anm.). — I, 625; \*I, 264.
- 3) Anhydrid d. Hexadekan- $\alpha\beta$ -Dicarbonsäure. Sm. 89°; Sd. 245 bis 248°<sub>15</sub> (B. 23, 2355). — I, 690.
- 4) l-Menthylester d. Diäthylacetessigsäure. Sd. 180—182,5°<sub>18</sub> (Soc. 89, 380 C. 1906 [1] 1614).



C 69,2 — H 10,2 — O 20,5 — M. G. 312.

- 1)  $\epsilon\zeta$ -Diketoheptadekan- $\alpha$ -Carbonsäure. Sm. 98°. Ba, Ag (C. r. 134, 547 C. 1902 [1] 858; Bl. [3] 27, 487 C. 1902 [2] 105).
- 2)  $\theta\lambda$ -Diketoheptadekan- $\alpha$ -Carbonsäure. Sm. 96,5° (D.R.P. 180926 C. 1907 [1] 916).
- 3)  $\theta\iota$ -Diketostearinsäure (Stearoxylsäure). Sm. 86° (83—84°). Ba, Ag (A. 140, 63; 190, 297; M. 9, 953; B. 28, 276; 29, 813; B. 36, 2660 C. 1903 [2] 826). — I, 695; \*I, 320.
- 4) Ricinstearoxylsäure. Sm. 78° (78—80°). Ba, Ag (Z. 1867, 550; M. 15, 315). — I, 695; \*I, 320.
- 5) Laktonsäure (aus Oxyketodihydrochaulmoograsäuremethylester). Sm. 90° (Soc. 91, 567 C. 1907 [2] 72).
- 6) Diamylester d. Homopilopinsäure. Sd. 192°<sub>25</sub> (B. 34, 732; 35, 200). — \*III, 687.



C 65,8 — H 9,7 — O 24,4 — M. G. 328.

- 1)  $\gamma$ -Keto- $\beta$ -Methylpentadekan- $\alpha\alpha$ -Dicarbonsäure. Sm. 126° (Soc. 91, 575 C. 1907 [2] 72).

- $C_{15}H_{32}O_6$  C 62,8 — H 9,3 — O 27,9 — M. G. 344.  
 1) Pentadekan- $\alpha\gamma\omega$ -Tricarbonsäure. Sm. 68° (61–63°) (*Soc.* 91, 570 C. 1907 [2] 72).  
 2) Hexadekan- $\delta\iota$ -Peroxyd- $\alpha\pi$ -Dicarbonsäure. Fl. (B. 39, 2740 C. 1906 [2] 1394; B. 41, 2798 C. 1908 [2] 1246).  
 3) Acetylagaricinsäure. Sm. 81° (C. 1902 [1] 823).  
 4) Diäthylester d. l-Caprinyläpfelsäure. Sd. 226,8°<sub>19</sub> (*Ph. Ch.* 36, 143).  
 5) Triäthylester d.  $\beta$ -Methyloktan- $\varepsilon\delta\zeta$ -Tricarbonsäure. Sd. 300–305° (B. 29, 976). — \*I, 414.  
 6) Triäthylester d.  $\beta\zeta$ -Dimethylheptan- $\beta\gamma\gamma$ -Tricarbonsäure. Sd. 305 bis 310° (B. 29, 977). — \*I, 414.  
 7) Triäthylester d.  $\beta\zeta$ -Dimethylheptan- $\gamma\gamma\delta$ -Tricarbonsäure. Sd. 188 bis 190°<sub>15</sub> (*Am.* 30, 240 C. 1903 [2] 935).  
 8) Triäthylester d.  $\beta\zeta$ -Dimethylheptan- $\gamma\delta\delta$ -Tricarbonsäure. Sd. 285 bis 290° (B. 29, 976). — \*I, 414.  
 9) Triisovalerat d.  $\alpha\beta\gamma$ -Trioxypropan (Glycerintrisivalerin) (*A. ch.* [3] 41, 257). — I, 429.
- $C_{15}H_{32}O_8$  C 57,4 — H 8,5 — O 34,0 — M. G. 376.  
 1) Diozonid d. Elläostearinsäure (B. 42, 676 C. 1909 [1] 913).
- $C_{15}H_{32}O_{10}$  C 52,9 — H 7,8 — O 39,2 — M. G. 408.  
 1) Säure (aus Terpentin) (*J.* 1869, 786). — III, 562.
- $C_{15}H_{32}O_{14}$  C 45,7 — H 6,8 — O 47,4 — M. G. 472.  
 1) Rhamnose. Sm. 135–140° u. Zers. (*Bl.* [3] 21, 1067; [3] 23, 145). — \*I, 583.
- $C_{15}H_{32}O_{15}$  C 44,3 — H 6,5 — O 49,2 — M. G. 488.  
 1) Rhamminotriionsäure. Ca, Ba (*Bl.* [3] 21, 1072; [3] 23, 145). — \*I, 583.
- $C_{15}H_{32}O_{16}$  C 42,8 — H 6,3 — O 50,8 — M. G. 504.  
 1)  $\beta$ -Cellulose (B. 26, 2524). — \*I, 586.  
 2) Gentianose (siehe auch  $C_{36}H_{66}O_{31}$ ) (C. 1901 [1] 823).  
 3) Glykogen? Ba (B. 14, 1215). — I, 1094.  
 4) Manninotriose. Sm. 150°. BaO, Pb<sub>4</sub> (C. r. 134, 1588 C. 1902 [2] 348; *Bl.* [3] 27, 956 C. 1902 [2] 1178).  
 5) Melezitose + 2H<sub>2</sub>O. Sm. 147–148° (wasserfrei) (*A. ch.* [3] 55, 282; *H.* 26, 96; C. 1897 [1] 30; *Bl.* 27, 98; [3] 9, 723; B. 26 [2] 694; *J. pr.* [2] 45, 321; *J. r.* 21, 420; 29, 614; C. r. 142, 1424 C. 1906 [2] 424; *Bl.* [3] 35, 817 C. 1906 [2] 1723). — I, 1071; \*I, 583.  
 6) Raffinose (Gossypose; Melitose; Melitriose). Sm. 118–119° (wasserfrei). Lit. bedeutend. — I, 1071; \*I, 583.  
 7) Secalose (*H.* 20, 537; 27, 284). — \*I, 592.  
 8) Stachyose + 3H<sub>2</sub>O (B. 23, 1692, 1696; 24, 2705; 25 [2] 386; C. 1902 [1] 1399). — I, 1104.  
 9) lösliche Stärke. + BaO (B. 30, 2416; 31, 1791).  
 10) Zucker (aus Stärke) (*Soc.* 67, 708). — \*I, 583.
- $C_{15}H_{32}O_{17}$  C 41,5 — H 6,1 — O 52,3 — M. G. 520.  
 1) Manninotriionsäure (C. r. 134, 1589 C. 1902 [2] 348).
- $C_{18}H_{33}O_3$  1) Säure (aus Dammarharz) = ( $C_{18}H_{33}O_3$ )<sub>x</sub> (B. 22 [2] 345). — III, 555.
- $C_{18}H_{33}N$  C 82,1 — H 12,6 — N 5,3 — M. G. 263.  
 1) Nitril d. Elaidinsäure. Sm. — 1°; Sd. 213–214°<sub>16</sub> (B. 33, 3582).
- $C_{18}H_{33}N_3$  C 74,2 — H 11,3 — N 14,4 — M. G. 291.  
 1) 6-Amido-5-Isobutyl-2,4-Diisoamyl-1,3-Diazin (Kyanamylin). Sm. 53°. HCl, (2HCl, PtCl<sub>4</sub>) (*J. pr.* [2] 37, 409). — IV, 1135.
- $C_{18}H_{33}N_5$  C 67,7 — H 10,3 — N 21,9 — M. G. 319.  
 1) Base (aus Isovaleraldehydammoniak). Sm. 61–62°. HCl (*A.* 130, 220; *J. r.* 13, 507). — I, 952.
- $C_{18}H_{34}O$  C 81,2 — H 12,8 — O 6,0 — M. G. 266.  
 1) Chaulmoogrylalkohol. Sm. 36° (*Soc.* 85, 857 C. 1904 [2] 348, 604).  
 2) Äther d. Nononaphtenalkohol. Sd. 300,5° (*J. r.* 22, 130). — I, 303.  
 3)  $\kappa$ -Keto- $\delta$ -Methyl- $\delta$ -Oktadeken. Sd. 184–187°<sub>14</sub> (C. 1902 [2] 1407; B. 36, 2558 C. 1903 [2] 655).
- $C_{18}H_{34}O_2$  C 76,6 — H 12,1 — O 11,3 — M. G. 282.  
 1) Pinakon (aus Phoron). Sm. 155°; Sd. 200–240°<sub>15</sub> (*A.* 290, 139). — \*I, 97.



- $C_{18}H_{34}O_2$
- 2)  $\alpha$ -Heptadeken- $\alpha$ -Carbonsäure. Sm. 59°. Na, Ca +  $H_2O$ , Ba, Pb, Ag (*G.* 34 [2] 83 *C.* 1904 [2] 694; *G.* 35 [2] 569 *C.* 1906 [1] 819; *Soc.* 85, 1711 *C.* 1905 [1] 434).
  - 3)  $\beta$ -Heptadeken- $\beta$ - $\alpha$ -Carbonsäure (Ölsäure; Elaidinsäure; Oleinsäure). Sm. 14°; Sd. 285,5—286°<sub>100</sub> (153°). Salze, siehe (*A.* 35, 196; 57, 38; 244, 263). Lit. bedeutend. — *I*, 525; \**I*, 206.
  - 4)  $\beta$ -Heptadeken- $\rho$ -Carbonsäure (Isoölsäure). Sm. 44—45°. Na, Ca +  $H_2O$ , Ba, Zn, Ag (*J. pr.* [2] 35, 386; [2] 37, 269; [2] 45, 301; [2] 50, 61, 81; *C.* 1897 [2] 184; 1899 [1] 1069; 1903 [1] 826). — *I*, 527; \**I*, 207.
  - 5) Dihydrochaulmoograsäure. Sm. 71—72°; Sd. 248°<sub>20</sub> (*Soc.* 85, 857 *C.* 1904 [2] 348, 604).
  - 6) Elaidinsäure. Sm. 44—45° (51—52°); Sd. 287—288°<sub>100</sub> (154°). Na, K, Ba, Pb, Ag, Heptylaminsalz (*A.* 4, 11; 28, 253; 35, 174; *B.* 22, 819; 29, 1325; 32, 1509, 1599; *J. r.* 24, 477, 515; *C.* 1899 [1] 545, 1069; *J. pr.* [2] 50, 75, 81; [2] 57, 29; [2] 61, 80; *Soc.* 73, 629; *C.* 1903 [1] 319; *R.* 12, 163; *Ph. Ch.* 10, 416; *H.* 35, 377 *C.* 1902 [2] 633). — *I*, 526; \**I*, 206.
  - 7) Elaidinsäure (aus Petroselinsäure). Sm. 54°. Ba (*B.* 42, 1639 *C.* 1909 [2] 12).
  - 8) Petroselinsäure. Sm. 33—34°. Mg, Ba, Pb, Zn, Ag (*B.* 42, 1638 *C.* 1909 [2] 12).
  - 9) Rapinsäure. Fl. Na, Zn, Ag (*B.* 20, 2387; *M.* 17, 309). — *I*, 614; \**I*, 252.
  - 10) Säure (aus Hefefett). Sd. 210—220°<sub>12</sub> (*H.* 38, 10 *C.* 1903 [1] 1429).
  - 11) Säure (aus Stearinsäure). Sm. 35° (*J.* 1863, 335). — *I*, 527.
  - 12) Lakton d.  $\gamma$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Sm. 47—48° (*J. pr.* [2] 37, 84; *C.* 1897 [1] 742; 1897 [2] 184; 1903 [1] 826). — *I*, 580; \**I*, 234.
  - 13) Lakton d.  $\iota$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Fl. (*J. pr.* [2] 35, 378; *C.* 1903 [1] 825; 1908 [2] 1414). — *I*, 579.
  - 14) Äthylester d. Gaidinsäure (*A.* 99, 310). — *I*, 524.
  - 15) Äthylester d. Hypogäsäure (*A.* 94, 234). — *I*, 524.
  - 16) l-Menthylester d. Caprylsäure. Sd. 175°<sub>15</sub> (*B.* 31, 364). — \**III*, 334.
  - 17) l-Menthylester d.  $\beta\delta$ -Dimethylpentan- $\alpha$ -Carbonsäure. Sd. 168,5 bis 169,5°<sub>14</sub> (*A.* 369, 351 *C.* 1909 [2] 2155).  
C 72,5 — H 11,4 — O 16,1 — M. G. 298.
- $C_{18}H_{34}O_3$
- 1) Lichesterylsäure. Sm. 83,5—84°.  $NH_4$ , Cu, Ag (*C.* 1898 [2] 964; *Ar.* 24, 10 *C.* 1903 [1] 697). — \**I*, 252.
  - 2) Polyricinolsäure (*C.* 1909 [1] 1751).
  - 3) Ricinolsäure. Sm. 16—17°; Sd. 250°<sub>15</sub>. Mg, Ca, Sr, Ba, Zn, Pb, Ag (*A.* 64, 114; *B.* 9, 1916; 21, 2731; 27, 3121, 3471; *J.* 1857, 359; *Bl.* [3] 13, 246; *M.* 9, 476; 15, 307; *C.* 1897 [1] 662; 1900 [2] 37). — *I*, 613; \**I*, 252.
  - 4) Isoricinolsäure. Fl. (*Bl.* [3] 11, 283).
  - 5) Pseudoricinolsäure. Ba (*C.* 1897 [1] 662).
  - 6) Ricinelaidsäure. Sm. 50° (53°). Ca, Ba, Ag (*A.* 60, 332; 119, 174; *Z.* 1867, 548; *A. ch.* [3] 44, 82; *M.* 15, 308; *B.* 27, 3472). — *I*, 613; \**I*, 252.
  - 7) Ricinsäure. Sm. 81°; Sd. 250—252°<sub>15</sub> u. ger. Zers. Ba, Ag (*B.* 21, 2736; 27, 3472). — *I*, 614.
  - 8) Oxyoleinsäure. Sm. 108—114°. Na, Ba, Ag (*B.* 42, 3348 *C.* 1909 [2] 1634).
  - 9) Oxyölsäure. Fl. (*A.* 140, 70). — *I*, 614.
  - 10) Heptadekan- $\beta$ - $\iota$ -Oxyd- $\alpha$ -Carbonsäure. Sm. 57—60° (*C.* 1899 [1] 1069).
  - 11)  $\gamma$ -Ketoheptadekan- $\alpha$ -Carbonsäure. Sm. 97°. Ca (*C.* 1903 [1] 826; *J. pr.* [2] 67, 418 *C.* 1903 [1] 1405).
  - 12)  $\zeta$ -Ketoheptadekan- $\alpha$ -Carbonsäure. Sm. 75°.  $NH_4$ , Ba (*C. r.* 134, 548 *C.* 1902 [1] 858; *Bl.* [3] 27, 489 *C.* 1902 [2] 105).
  - 13)  $\beta$ -Ketoheptadekan- $\alpha$ -Carbonsäure (Ketostearinsäure). Sm. 83° (*B.* 29, 807). — \**I*, 252.
  - 14)  $\iota$ -Ketoheptadekan- $\alpha$ -Carbonsäure (Ketostearinsäure). Sm. 76° (74 bis 76°). Na, Ba, Ag (*B.* 27, 174; 28, 2249; *C.* 1904 [1] 1331; *J. pr.* [2] 71, 423 *C.* 1905 [2] 33). — \**I*, 252.

- C<sub>18</sub>H<sub>34</sub>O<sub>3</sub>** 15) *κ*-Ketoheptadekan- $\alpha$ -Carbonsäure. Sm. 65°. Ca (C. 1903 [1] 825; J. pr. [2] 67, 416 C. 1903 [1] 1404).  
 16) Ketonsäure (aus d. Stearolsäure C<sub>18</sub>H<sub>32</sub>O<sub>2</sub>). Sm. 80° (B. 42, 1639 C. 1909 [2] 12).  
 17) Glycidsäure (aus Chloroxystearinsäure). Sm. 57–60° (J. pr. [2] 61, 89). — \*I, 274.  
 18) Säure (aus Dioxystearinsäure vom Sm. 131°). Sm. 78,5–79°. Na, Ag (C. 1900 [1] 1068; J. pr. [2] 33, 313; Soc. 79, 1323 C. 1902 [1] 180).  
 19) Säure (aus Dioxystearinsäure vom Sm. 136,5°). Fl. (J. pr. [2] 67, 369 C. 1903 [1] 1404).  
 20) Säure (aus Quittensamenöl). Fl. Ba, Ag (C. 1899 [2] 444). — \*I, 253.  
 21) Säure (aus Ricinoleinsäure). Sm. 73–74° (B. 42, 3353 C. 1909 [2] 1635).  
 22) Säure (aus Ricinoleinsäure). Sm. 108–109° (B. 42, 3353 C. 1909 [2] 1635).  
 23) Anhydrid d. Pelargonsäure. Sm. 5° (16°); Sd. 207°<sub>15</sub> (A. 85, 231; B. 33, 3576). — I, 464.  
 24) Äthylester d.  $\alpha$ -Keto- $\eta$ -Methyltetradekan- $\beta$ -Carbonsäure. Sd. 183 bis 184°<sub>11</sub> (Bl. [3] 31, 596 C. 1904 [2] 26).  
 25) Verbindung (aus Diacetylpentan). Sd. 305–310°<sub>220</sub> (Soc. 59, 229). — I, 1020.  
**C<sub>18</sub>H<sub>34</sub>O<sub>4</sub>** C 68,8 — H 10,8 — O 20,4 — M. G. 314.  
 1) Acetyljuniperinsäure. Sm. 63° (C. 1909 [2] 718).  
 2)  $\alpha$ -Dioxydihydrochaulmoograsäure. Sm. 102° (105°) (Soc. 85, 859 C. 1904 [2] 349, 604; Soc. 91, 566 C. 1907 [2] 71).  
 3)  $\beta$ -Dioxydihydrochaulmoograsäure. Sm. 92–93° (Soc. 91, 566 C. 1907 [2] 72).  
 4)  $\beta$ -Keto- $\lambda$ -Oxyheptadekan- $\alpha$ -Carbonsäure (Ketooxystearinsäure). Sm. 84–85°. Ba, Ag (B. 27, 3123; 29, 806). — \*I, 315.  
 5) isom. Ketooxystearinsäure. Sm. 63–64°. Ag (B. 36, 2658 C. 1903 [2] 826).  
 6)  $\alpha$ -Acetoxypentadekan- $\alpha$ -Carbonsäure ( $\alpha$ -Acetoxypalmitinsäure). Sm. 62,5° (B. 24, 941). — I, 579.  
 7) Hexadekan- $\alpha\beta$ -Dicarbonsäure (Tetradekylbernsteinsäure). Sm. 121°. Ag<sub>2</sub> (B. 23, 2355). — I, 690.  
 8) Hexadekan- $\alpha\pi$ -Dicarbonsäure. Sm. 118°. K<sub>2</sub>, Mg, Ba, Cu (A. 261, 125). — I, 690.  
 9) isom. Hexadekandicarbonsäure (B. 26 [2] 95, 96).  
 10) Säure (aus Sulforicinusölsäure). Fl. (C. 1908 [2] 1247).  
 11) Diäthylester d. Dodekan- $\alpha\mu$ -Dicarbonsäure. Sm. 27° (A. 261, 123). — I, 689.  
 12) Dibutylester d. Oktan- $\alpha\beta$ -Dicarbonsäure (D. d. Sebacinsäure). Sd. 344–345° (Soc. 52, 801). — I, 686.  
 13) l-Diamylester d. Hexan- $\alpha\zeta$ -Dicarbonsäure (C. 1899 [1] 327). — \*I, 304.  
 14) l-Diamylester d.  $\beta$ -Methylpentan- $\epsilon\epsilon$ -Dicarbonsäure (C. 1899 [1] 327). — \*I, 304.  
 15) sec. Dibutylcarbinolester d.  $\beta$ -Methylpentan- $\alpha\alpha$ -Dicarbonsäure (C. 1896 [1] 186).  
 16) norm. Diheptylester d. Bernsteinsäure. Sd. 350,1° (A. 253, 302). — I, 656.  
**C<sub>18</sub>H<sub>34</sub>O<sub>5</sub>** C 65,4 — H 10,3 — O 24,2 — M. G. 330.  
 1) Dioxyricinolsäure (Trioxölsäure). Sm. 64° (B. 16, 2455). — I, 761.  
 2) Ozonid d. Ölsäure. Zers. oberhalb 90° (B. 39, 2737 C. 1906 [2] 1392; B. 39, 2845 C. 1906 [2] 1394; B. 42, 447 C. 1909 [1] 835).  
 3) Säure (aus Dioxystearinsäure vom Sm. 131°). Sm. 111–111,5°. Na, Ca + 3H<sub>2</sub>O, Ba, Ag<sub>2</sub> (C. 1900 [1] 1068; Soc. 79, 1318 C. 1902 [1] 179).  
 4) Diiscamylester d. Homopilomalsäure. Sd. 192°<sub>25</sub> (B. 34, 732; 35, 200). — \*III, 687.  
**C<sub>18</sub>H<sub>34</sub>O<sub>6</sub>** C 62,4 — H 9,8 — O 27,8 — M. G. 346.  
 1) Elaidinsäureozonid (A. 343, 357 C. 1906 [1] 545).  
 2) Ölsäureozonidperoxyd (B. 39, 2844 C. 1906 [2] 1394).  
**C<sub>18</sub>H<sub>34</sub>O<sub>14</sub>** C 45,6 — H 7,2 — O 47,2 — M. G. 474.  
 1) Rhamninit. + 2BaO, + 4PbO (Bl. [3] 21, 1070). — \*I, 583.

$C_{18}H_{35}N$ 

C 81,5 — H 13,2 — N 5,3 — M. G. 265.

- 1) Curarin. (2HCl, PtCl<sub>4</sub>), Pikrat (*A.* 191, 254; *Z.* 1865, 382). — III, 877.
- 2) Nitril d. Stearinsäure. Sm. 41°; Sd. 274,5°<sub>100</sub> (128°). 2 + HBr (*B.* 15, 1730; 26, 2847; 29, 1325). — I, 1468; \*I, 808.

 $C_{18}H_{36}O$ 

C 80,6 — H 13,4 — O 6,0 — M. G. 268.

- 1) Alkohol (aus Ölsäure). Sm. 0,5–5°; Sd. 207°<sub>13</sub> (*C. r.* 137, 328 *C.* 1903 [2] 710; D.R.P. 164294 *C.* 1905 [2] 1701; *Bl.* [3] 31, 1210 *C.* 1905 [1] 25; *B.* 41, 1478 *C.* 1908 [1] 2087).
- 2)  $\beta$ -Ketooktadekan (Methylhexadekylketon). Sm. 51–52°; Sd. 251–252°<sub>100</sub> (*B.* 15, 1707). — I, 1005.
- 3)  $\gamma$ -Ketooktadekan. Sm. 53°; Sd. 197,5°<sub>11</sub> (*Bl.* [3] 15, 765; *G.* 29 [1] 471). — \*I, 513.
- 4) Aldehyd d. Stearinsäure. Sm. 63,5°; Sd. 259–261°<sub>100</sub> (*B.* 13, 1417). — I, 957.

 $C_{18}H_{36}O_2$ Verbindung (aus Jalapenharz). Sm. 56–57° (*C.* 1909 [2] 984).

C 76,0 — H 12,7 — O 11,3 — M. G. 284.

- 1) Oxyd (aus  $\alpha\gamma$ -Dioxy- $\beta\beta\epsilon$ -Trimethylhexan). Sd. 140°<sub>14</sub> (244–246° u. Zers.) (*M.* 11, 393; 19, 70; 22, 408; *M.* 24, 531 *C.* 1903 [2] 869). — I, 1003.
  - 2) Heptadekan- $\alpha$ -Carbonsäure (Stearinsäure). Sm. 69,2° (71–71,5°); Sd. 359–383° (154,5–155,5°). Salze meist bekannt, Lit. bedeutend. — I, 444; \*I, 159.
  - 3) Heptadekan- $\iota$ -Carbonsäure (Dioktylessigsäure). Sm. 38,5°; Sd. 270 bis 275°. Ba, Ag (*A.* 204, 11, 165). — I, 447.
  - 4)  $\lambda$ -Isostearinsäure. Sm. 49,5–50,5°. Na, Ba, Ag (*Ar.* 241, 16 *C.* 1903 [1] 698).
  - 5) Neurostearinsäure. Sm. 84°. Ba (*J. pr.* [2] 25, 25; [2] 53, 87). — I, 447; \*I, 160.
  - 6) Cetylessigsäure. Sm. 63,5–64°. Ag (*A.* 206, 355, 360).
  - 7) Methylester d. Daturinsäure. Sm. 30° (*B.* 26 [2] 288). — \*I, 159.
  - 8) Methylester d. Margarinsäure. Sm. 29° (*Soc.* 85, 837 *C.* 1904 [2] 509).
  - 9) Äthylester d. Pentadekan- $\theta$ -Carbonsäure. Sd. 308,5–311° (*A.* 200, 114). — I, 444.
  - 10) Äthylester d. Palmitinsäure. Sm. 24,2°; Sd. 184,5–185,5°<sub>10</sub> (*J.* 1853, 502; *A.* 88, 299; *C.* 1898 [2] 757; *J. pr.* [2] 64, 422 *C.* 1902 [1] 23; *B.* 36, 4340 *C.* 1904 [1] 433). — I, 443; \*I, 159.
  - 11) Cetylester d. Essigsäure. Sm. 22–23° (18,5°); Sd. 199,5–200,5°<sub>16</sub> (*A.* 102, 220; 131, 284; *B.* 16, 1721; *Ph. Ch.* 10, 421). — I, 411; \*I, 145.
- $C_{18}H_{36}O_3$
- 1)  $\alpha$ -Oxyheptadekan- $\alpha$ -Carbonsäure ( $\alpha$ -Oxystearinsäure). Sm. 77–79° (84–85°; 90–91°). Ba, Cd, Pb, Cu, Ag (*J. pr.* [2] 37, 277, 284; *B.* 24, 2392; *C.* 1897 [1] 742; 1897 [2] 184; 1903 [1] 825; *J. pr.* [2] 67, 416 *C.* 1903 [1] 1404; *G.* 34 [2] 81 *C.* 1904 [2] 694; *Soc.* 85, 830 *C.* 1904 [2] 509). — I, 579.
  - 2)  $\beta$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Sm. 89° (*G.* 35 [2] 570 *C.* 1906 [1] 819).
  - 3)  $\gamma$ -Oxyheptadekan- $\alpha$ -Carbonsäure ( $\gamma$ -Oxystearinsäure). Ca, Pb (*J. pr.* [2] 37, 85; *C.* 1897 [1] 742; 1897 [2] 184). — I, 580.
  - 4)  $\iota$ -Oxyheptadekan- $\alpha$ -Carbonsäure ( $\beta$ -Oxystearinsäure). Sm. 81–81,5° (83–85°). Na, Ca + H<sub>2</sub>O, Ba, Zn, Cu, Ag (*J. pr.* [2] 35, 369, 384; [2] 37, 81; [2] 57, 31; [2] 61, 97; *J. r.* 17, 426; 18, 41; *A. ch.* [2] 65, 113; *D.* 251, 499; *C.* 1897 [1] 742; 1897 [2] 184; 1903 [1] 825; *B.* 16, 2458; *J. pr.* [2] 67, 415 *C.* 1903 [1] 1404). — I, 579; \*I, 234.
  - 5)  $\lambda$ -Oxyheptadekan- $\alpha$ -Carbonsäure (aus Ricinoleinsäure). Sm. 81–82° (78°) (*J. pr.* [2] 62, 368; *C.* 1900 [2] 37; 1909 [1] 1751).
  - 6)  $\nu$ -Oxyheptadekan- $\iota$ -Carbonsäure. Sm. 37° (41°); Sd. 225° (i. V.). Ca (*B.* 39, 2740 *C.* 1906 [2] 1394; *B.* 41, 2796 *C.* 1908 [2] 1246).
  - 7) Äthylester d. Jalapinolsäure. Sm. 32,5° (47–48°) (*A.* 116, 314; *J. pr.* [2] 57, 449). — III, 595; \*I, 233.
  - 8) Äthylester d. Tampikolsäure (*Z.* 1870, 668). — III, 613.
- $C_{18}H_{36}O_4$
- 1)  $\alpha\beta$ -Dioxyheptadekan- $\alpha$ -Carbonsäure ( $\alpha\beta$ -Dioxystearinsäure). Sm. 126° (*Soc.* 85, 1713 *C.* 1905 [1] 434; *G.* 35 [2] 571 *C.* 1906 [1] 819).
  - 2)  $\delta$ - $\theta$ -Dioxyheptadekan- $\alpha$ -Carbonsäure. Strychninsalz (*Bl.* [3] 13, 1053). — \*I, 274.



- C<sub>18</sub>H<sub>36</sub>O<sub>4</sub>**
- 3) *l-9-l*-Dioxyheptadekan- $\alpha$ -Carbonsäure. Strychninsalz + 2 $\frac{1}{2}$  H<sub>2</sub>O (*Bl.* [3] 13, 1053). — \*I, 274.
  - 4) *i-9-l*-Dioxyheptadekan- $\alpha$ -Carbonsäure (Dioxystearinsäure aus Ölsäure). Sm. 136,5° (126°). Na, K, Ca + 3 H<sub>2</sub>O, Ba, Zn, Ag. Lit. bedeutend. — I, 635; \*I, 274.
  - 5) isom. *9-l*-Dioxyheptadekan- $\alpha$ -Carbonsäure (Dioxystearinsäure aus Elaidinsäure). Sm. 99—100°. Na, Ag (*J. pr.* [2] 33, 315; [2] 50, 76; [2] 61, 72; *Soc.* 73, 630; *B.* 33, 2910; *C.* 1899 [1] 1068; 1903 [1] 319; *J. pr.* [2] 67, 296 *C.* 1903 [1] 1404; *J. pr.* [2] 67, 362 *C.* 1903 [1] 1404). — I, 636; \*I, 275.
  - 6) *7-l*-Dioxyheptadekan- $\alpha$ -Carbonsäure. Sm. 116—117°. Ba, Ag (*B.* 42, 3350 *C.* 1909 [2] 1635).
  - 7) *d-9-l*-Dioxyheptadekan- $\alpha$ -Carbonsäure. Sm. 90° (*B.* 39, 4406 *C.* 1907 [1] 537).
  - 8) *r-9-l*-Dioxyheptadekan- $\alpha$ -Carbonsäure. Sm. 69,5°. Ba (*B.* 39, 4405 *C.* 1907 [1] 537).
  - 9) Dioxystearinsäure (aus Petroselinsäure). Sm. 122° (*B.* 42, 1639 *C.* 1909 [2] 12).
  - 10) Dioxystearinsäure (aus Ricinolsäure). Sm. 108° (*B.* 39, 4407 *C.* 1907 [1] 538).
  - 11) Dioxystearinsäure (aus Ricinolsäure). Sm. 126° (*B.* 42, 3763 *C.* 1909 [2] 175).
  - 12) isom. Dioxystearinsäure. Sm. 141—143°. Na (*Bl.* [3] 13, 238). — \*I, 275.
  - 13) Paradioxystearinsäure. Sm. 77—78°. Na, Ca, Ag (*J. pr.* [2] 37, 276; [2] 50, 63). — I, 636.
  - 14) Säure (aus Kephalin). Sm. 122° (*C.* 1909 [1] 1166).
  - 15) Säure (aus Ricinoleinsäure). Sm. 115—116°. Ag (*B.* 42, 3354 *C.* 1909 [2] 1635).
- C<sub>18</sub>H<sub>36</sub>O<sub>5</sub>**
- 16) Äthylester d. Turpetholsäure. Sm. 72° (*A.* 139, 59). — III, 614.  
C 65,1 — H 10,8 — O 24,1 — M. G. 332.
  - 1) *xx*-Trioxystearinsäure. Sm. 90,3° (*C.* 1907 [2] 1993; 1909 [1] 1674).
  - 2) Trioxystearinsäure. Sm. 140—142°. Na +  $\frac{1}{2}$  H<sub>2</sub>O, K, Ca, Ba, Ag (*M.* 9, 476; *J. pr.* [2] 39, 341). — I, 738.
  - 3)  $\alpha$ -Isotrioxystearinsäure. Sm. 110—111°. Na, Ba, Ag (*M.* 9, 477; *J. pr.* [2] 39, 345; *B.* 27, 3475). — I, 738; \*I, 353.
  - 4)  $\beta$ -Isotrioxystearinsäure. Sm. 114—115° (*M.* 10, 199). — I, 738.
  - 5) Isobutylester d. Trioxyessigtriisobutyläthersäure. Sd. 146°<sub>10</sub> (*A.* 254, 33). — I, 737.  
C 62,1 — H 10,3 — O 27,6 — M. G. 348.
- C<sub>18</sub>H<sub>36</sub>O<sub>6</sub>**
- 1) Sativinsäure (Tetraoxystearinsäure). Sm. 173° (177°; 169—170°). Na + H<sub>2</sub>O, K +  $\frac{1}{2}$  H<sub>2</sub>O, Ba, Ag (*M.* 7, 224; 8, 159, 261; 9, 187; *J. pr.* [2] 41, 543; *C.* 1895 [1] 22; 1900 [1] 588; 1905 [1] 1263; *Ar.* 240, 54 *C.* 1902 [1] 482; *B.* 36, 1051 *C.* 1903 [1] 1148). — I, 787.
  - 2) Tetraoxystearinsäure. Sm. 160° (*C.* 1909 [2] 922).
  - 3) isom. Tetraoxystearinsäure. Sm. 175° (*C.* 1909 [2] 922).  
C 56,8 — H 9,5 — O 33,7 — M. G. 380.
- C<sub>18</sub>H<sub>36</sub>O<sub>8</sub>**
- 1) Linusinsäure. Sm. 203° (*M.* 8, 159, 267; 9, 181; *B.* 36, 1051 *C.* 1903 [1] 1148). — I, 851.
  - 2) Isolinusinsäure. Sm. 173—175° (*M.* 9, 181). — I, 851.  
C 77,1 — H 12,9 — N 10,0 — M. G. 280.
- C<sub>18</sub>H<sub>36</sub>N<sub>2</sub>**
- 1) Dinonylidenhydrazin (*Bl.* [4] 1, 352 *C.* 1907 [2] 34).  
C 64,3 — H 10,7 — N 25,0 — M. G. 336.
- C<sub>18</sub>H<sub>36</sub>N<sub>8</sub>**
- 1) Isotriisocamylmelamin. (2HCl, PtCl<sub>4</sub>) (*B.* 3, 264). — I, 1445.
- C<sub>18</sub>H<sub>36</sub>Br<sub>2</sub>**
- 1) Dibromoktadekan. Sm. 24° (*B.* 17, 1373). — I, 180.
  - 2)  $\beta\gamma$ -Dibrom- $\beta$ -Methylheptadekan. Fl. (*C.* 1901 [2] 1201).
- C<sub>18</sub>H<sub>36</sub>S**
- 1) Oktadekylthiophan. Sd. 290—295°<sub>760</sub> u. Zers. (*Am.* 35, 413 *C.* 1906 [2] 77).
  - 2) Verbindung (aus Petroleum). Sd. 198—200°<sub>50</sub> (*C.* 1900 [2] 454).  
C 80,9 — H 13,8 — N 5,2 — M. G. 267.
- C<sub>18</sub>H<sub>37</sub>N**
- 1) *l*-3-Dibutylamido-4-Isopropyl-1-Methylhexahydrobenzol (*l*-Dibutylmenthylamin) (*C.* 1902 [2] 1238). — \*IV, 36.
  - 2) Elaidinamin. Sm. 25°; Sd. 338—340°. HCl, (2HCl, PtCl<sub>4</sub>) (*B.* 33, 3583).
- C<sub>18</sub>H<sub>37</sub>Cl**
- 1) Chloroktadekan. Sd. 185—190°<sub>15</sub> (*Am.* 28, 178 *C.* 1902 [2] 1081).

- $C_{18}H_{37}J$  1) Jodoktadekan. Sm. 42—43° (33,5°) (*J.* 1884, 1193; *B.* 19, 2984). — I, 196.
- $C_{18}H_{38}O$  1)  $\alpha$ -Oxyoktadekan (Oktadekylalkohol). Sm. 59°; Sd. 210,5°<sub>15</sub> (*A.* 92, 299; *C.* 1904 [1] 822; *B.* 16, 1722; 17, 1628). — I, 240.  
2)  $\beta$ -Oxy- $\beta$ -Methylheptadekan. Sm. 34,5—35° (*C.* 1901 [2] 1201).  
3) Äthylcetyläther. Sm. 20° (*A.* 102, 220). — I, 300.
- $C_{18}H_{38}N_2$  1) Stearinamidin. Sm. 85°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (PINNER, Imido-äther 130; *B.* 26, 2843). — \*I, 635.
- $C_{18}H_{38}N$  1) C 80,3 — H 14,5 — N 5,2 — M. G. 269.  
2)  $\alpha$ -Äthylamidoheptadekan (Cetyläthylamin). Sm. 27—28°; Sd. 342° u. Zers. HJ (*B.* 22, 814). — I, 1138.  
3)  $\alpha$ -Dihexylamidoheptan (Trihexylamin). Sd. 260°. HCl, (2HCl, PtCl<sub>4</sub>) (*A.* 101, 310; 102, 312; *J.* 1863, 527). — I, 1136.
- $C_{18}H_{40}O_{10}$  1) Triisohexylamin. Sd. 283°<sub>782</sub> (*C. r.* 140, 485 *C.* 1905 [1] 861).  
2) C 51,9 — H 9,6 — O 38,4 — M. G. 416.
- $C_{18}O_4Cl_{34}$  1) Verbindung (aus Camphersäure u. Isobuttersäure) (*R.* 21, 354 *C.* 1903 [1] 151).
- $C_{18}NCl_{15}$  1) Perchlordinorm. Butylester d. Hexadekachloroktan- $\alpha$ - $\beta$ -Dicarbon-säure (P. d. Perchlorsebacinsäure). Sm. 127°; Sd. 200° (*Soc.* 52, 802). — I, 687.
- 1) Perchlortriphenylamin (*B.* 9, 1494). — II, 342.

### $C_{18}$ -Gruppe mit drei Elementen.

- $C_{18}H_2O_6Br_8$  1) Verbindung (aus d. Verb.  $C_{18}H_4O_6Br_8$ ) (*Am.* 34, 438 *C.* 1906 [1] 29).
- $C_{18}H_4O_6Br_8$  1)  $\beta$ -Dibrom- $\beta$ -Di[Tribromdioxyphenyl]-1,2-Benzochinon (*Am.* 26, 42). — \*III, 255.  
2) Oktobromdioxysemibrenzkatechinbrenzkatechinäther. Sm. 274 bis 275° (*Am.* 34, 434 *C.* 1906 [1] 29).
- $C_{18}H_4O_6Br_{14}$  1) Xanthogallol. Sm. 122° (*A.* 177, 193; 245, 335). — II, 1013.
- $C_{18}H_6O_3Cl_4$  1) 1,2,3,4-Tetrachlor-11-Oxy-5,12-Naphtacenchinon (*Soc.* 95, 287 *C.* 1909 [1] 1482).
- $C_{18}H_6O_4Cl_4$  1) 1,2,3,4-Tetrachlor-6,11-Dioxy-5,12-Naphtacenchinon (*Soc.* 95, 287 *C.* 1909 [1] 1482).
- $C_{18}H_8O_9N_4$  1) C 51,2 — H 1,4 — O 34,1 — N 13,3 — M. G. 422.  
2) Tetranitrochrysochinon (*A.* 158, 314). — III, 463.
- $C_{18}H_8O_{12}N_6$  1) C 43,4 — H 1,2 — O 38,6 — N 16,8 — M. G. 498.  
2) Chrysocyaminsäure + 3H<sub>2</sub>O. (NH<sub>4</sub>)<sub>2</sub> + 3H<sub>2</sub>O, K<sub>2</sub> + 3H<sub>2</sub>O, Ca + 3H<sub>2</sub>O, Ba, Ag<sub>2</sub> (*A.* 134, 229). — III, 428.
- $C_{18}H_8O_{15}N_7$  1) Salpetersaures Tetrazoresorcin (*A.* 162, 282; siehe auch *B.* 17, 1865). — II, 933.
- $C_{18}H_6N_2Br_6$  1)  $\beta$ -Hexabrom-2,3'-Bichinoly. Sm. 239° (*J. pr.* [2] 51, 488). — IV, 1067.
- $C_{18}H_7O_2Cl_5$  1) Chlorid d. 3,4,5,6-Tetrachlor-2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 214° (*A.* 340, 262 *C.* 1905 [2] 486).
- $C_{18}H_7O_4Br_7$  1) Heptabromtrioresorcin + 2H<sub>2</sub>O (*A.* 289, 69). — \*II, 565.
- $C_{18}H_7O_9Br_{11}$  1) Xanthogallolsäure. Sm. 130° (u. 72°). Ba (*A.* 177, 195; 245, 345; *B.* 20, 2038). — II, 1015.
- $C_{18}H_7O_{10}Cl_{11}$  1) Mairogallol. Sm. 190° u. Zers. (*A.* 179, 237). — II, 1013.
- $C_{18}H_7O_{11}Br_{11}$  1) Bromdichroinsäure. Zers. bei 100°. Ca<sub>3</sub>, Ba<sub>3</sub>, Ag<sub>3</sub> (*B.* 10, 1142). — II, 726.
- $C_{18}H_7O_{18}N_7$  1) C 37,4 — H 1,2 — O 44,4 — N 17,0 — M. G. 577.  
2) Heptanitrodiphenyläther d. 1,4-Dioxybenzol. Sm. 190° (*B.* 24, 3588). — II, 940.
- $C_{18}H_8O_2N_2$  1) C 76,1 — H 2,8 — O 11,3 — N 9,8 — M. G. 284.  
2)  $\alpha\beta$ -Diketonaphtophenazin (Naphtophenazinchinon). Sm. 265° u. Zers. (*A.* 286, 79).
- $C_{18}H_8O_2Cl_2$  1) Dichlorchrysochinon (*A.* 158, 312). — III, 462.  
2) 6,11-Dichlor-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 252—254° (259—260° corr.) (*B.* 31, 1282). — \*III, 329.
- $C_{18}H_8O_2Br_2$  1) Dibromchrysochinon. Sm. 160—165° (*B.* 12, 1892). — III, 462.

- $C_{13}H_8O_3Cl_2$  1) 1,4-Dichlor-11-Oxy-5,12-Naphtacenchinon (Soc. 95, 283 C. 1909 [1] 1481).
- $C_{13}H_8O_3Cl_4$  1) 3,4,5,6-Tetrachlor-2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 229°. Na + 4H<sub>2</sub>O (A. 340, 260 C. 1905 [2] 486).
- $C_{18}H_8O_3Br_2$  1) Dibromanhydrobisdiketodihydroinden. Sm. 241—242° u. Zers. (251° u. Zers.) (A. 252, 78; B. 34, 3273). — III, 276; \*III, 214.
- $C_{13}H_8O_4Cl_2$  1) 2,2'-Bi-2-Chlor-1,3-Diketo-2,3-Dihydroinden. Sm. 298° (B. 31, 1167). — \*III, 248.
- 2) 1,4-Dichlor-6,11-Dioxy-5,12-Naphtacenchinon (Soc. 95, 283 C. 1909 [1] 1481).
- 3) 1,4-Dichlor-7,11-Dioxy-5,12-Naphtacenchinon (Soc. 95, 284 C. 1909 [1] 1481).
- 4) Naphtacendichinondichlorid. Sm. 175° (B. 38, 4016 C. 1906 [2] 242).
- $C_{18}H_8O_4Cl_4$  1) 3',4',5',6'-Chlor-1-Oxyphenyl-2-Naphtylketon-2'-Carbonsäure. Sm. 212° (Soc. 95, 286 C. 1909 [1] 1482).
- $C_{18}H_8O_4Br_2$  1) 2,2'-Bi-2-Brom-1,3-Diketo-2,3-Dihydroinden. Sm. bei 280° u. Zers. (B. 31, 1169). — \*III, 248.
- 2) Dibromäthindiphtalid. Sm. noch nicht bei 350° (B. 38, 3286 C. 1905 [2] 1591).
- $C_{18}H_8O_5N_4$  C 60,0 — H 2,2 — O 22,2 — N 15,6 — M. G. 360.
- 1) Dinitroptaloperinon. Sm. 247° (A. 365, 119 C. 1909 [1] 1413).
- $C_{18}H_8O_6N_2$  C 62,1 — H 2,3 — O 27,6 — N 8,0 — M. G. 348.
- 1) Dinitrochrysochinon. Sm. 230° (B. 12, 1893). — III, 463.
- $C_{18}H_8O_6N_4$  C 57,4 — H 2,1 — O 25,5 — N 14,9 — M. G. 376.
- 1) Dinitrotriphendioxazin (B. 30, 996). — IV, 1077.
- $C_{18}H_8O_7N_2$  C 59,3 — H 2,2 — O 30,8 — N 7,7 — M. G. 364.
- 1) p-Dinitro-6-Oxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 275° (Soc. 91, 419 C. 1907 [1] 1420).
- 2) 6,p-Dinitro-11-Oxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 260° (B. 36, 2327 C. 1903 [2] 442).
- $C_{18}H_8O_8N_2$  C 56,8 — H 2,1 — O 33,7 — N 7,4 — M. G. 380.
- 1) p-Dinitro-6,11-Dioxy-5,12-Diketo-5,12-Dihydroacenaphten (B. 36, 2329 C. 1903 [2] 442).
- $C_{18}H_8O_8N_4$  C 52,9 — H 2,0 — O 31,4 — N 13,7 — M. G. 408.
- 1) Tetranitrochrysen (A. 158, 307; J. pr. [2] 9, 283). — II, 292.
- $C_{18}H_8O_{12}N_4$  C 45,8 — H 1,7 — O 40,7 — N 11,8 — M. G. 472.
- 1) 4,8-Dinitro-9,10-Anthrachinon-1,5-Dioxaminsäure (D.R.P. 158076 C. 1905 [1] 635).
- $C_{18}H_8O_{12}Cl_{12}$  1) Leukogallol + 2H<sub>2</sub>O. Sm. 104° u. Zers. (B. 20, 2035). — II, 1013.
- $C_{18}H_8O_{14}N_6$  C 40,6 — H 1,5 — O 42,1 — N 15,8 — M. G. 532.
- 1) Hexanitrodiphenyläther d. 1,3-Dioxybenzol. Sm. 220° (B. 24, 3587). — II, 917.
- 2) Hexanitrodiphenyläther d. 1,4-Dioxybenzol. Sm. 190° (B. 24, 3588). II, 940.
- $C_{18}H_8O_{15}N_7$  1) Salpetersaures Dihydrotetrazoresorcin (A. 162, 285). — II, 934.
- $C_{18}H_8N_2Br_6$  1) Hexabromdiphenylazophenylen. Sm. 243° (M. 8, 481). — II, 338.
- $C_{18}H_8O_2Cl$  1) 6-Chlor-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 254° (C. 1905 [1] 257; Soc. 89, 117 C. 1906 [1] 1023).
- $C_{18}H_8O_3N_3$  C 68,6 — H 2,8 — O 15,2 — N 13,3 — M. G. 315.
- 1) 11[oder 14]-Nitroptaloperinon. Sm. 210—215° (A. 365, 126 C. 1909 [1] 1414).
- 2) 12[oder 13]-Nitroptaloperinon. Sm. 278—280° (A. 365, 126 C. 1909 [1] 1414).
- $C_{13}H_9O_3Cl$  1) 11-Chlor-6-Oxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 290—293° (Soc. 91, 418 C. 1907 [1] 1420).
- $C_{13}H_9O_3Br$  1) Bromanhydrobisdiketodihydroinden. Sm. 195—196° u. Zers. (A. 252, 78). — III, 276.
- 2) 11-Brom-6-Oxy-5,12-Diketo-5,12-Dihydroacenaphten. Sm. oberhalb 300° (Soc. 89, 119 C. 1906 [1] 1024).
- $C_{13}H_9O_4N$  C 71,3 — H 3,0 — O 21,1 — N 4,6 — M. G. 303.
- 1) Nitrochrysochinon. Sm. 252° (B. 24, 953). — III, 462.
- 2) p-Nitro-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 315° (B. 31, 1278). — \*III, 329.
- 3) isom. p-Nitro-5,12-Diketo-5,12-Dihydronaphtacen. Sm. bei 240° (B. 31, 1279). — \*III, 329.



- $C_{18}H_9O_4Cl$  1) 2-Chlor-2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm. 242–244° (B. 31, 1170). — \*III, 248.  
C 67,7 — H 2,8 — O 25,1 — N 4,4 — M. G. 319.
- $C_{13}H_9O_5N$  1) 6-Nitro-11-Oxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 274° (B. 36, 2326 C. 1903 [2] 442).  
C 64,5 — H 2,7 — O 28,6 — N 4,2 — M. G. 335.
- $C_{18}H_9O_6N$  1) Nitroäthindiphtalid. Sm. bei 240° (B. 19, 838). — II, 2034.  
C 59,5 — H 2,5 — O 26,4 — N 11,6 — M. G. 363.
- $C_{18}H_9O_6N_3$  1) Trinitrotriphenylen. Zers. bei 335° (B. 40, 162 C. 1907 [1] 565).  
C 44,3 — H 1,8 — O 39,4 — N 14,4 — M. G. 487.
- $C_{18}H_9O_{12}N_5$  1) Pentanitrodiphenyläther d. 1,3-Dioxybenzol. Sm. 68° (B. 24, 3587). — II, 917.
- $C_{18}H_9NBr_6$  1) ?-Tetrabrom-2-[1-Naphtyl]indol-2,3-Dibromid. Sm. oberhalb 300° (A. 272, 208). — IV, 465.
- $C_{13}H_9N_5Cl_2$  1) Azin d. 6,7-Dichlor-4,5-Diketo-1-Phenyl-4,5-Dihydro-1,2,3-Benzotriazol. Sm. oberhalb 250° (A. 313, 276). — \*IV, 989.  
C 80,0 — H 3,7 — O 5,9 — N 10,4 — M. G. 270.
- $C_{18}H_{10}ON_2$  1) 1,2'-Laktim d. 2-Phenyl-peri-Naphtimidazol-2'-Carbonsäure (Phtaloperinon). Sm. 229–230° (227–228°) (D.R.P. 202354 C. 1908 [2] 1397; A. 365, 117 C. 1909 [1] 1413).  
C 72,5 — H 3,3 — O 5,4 — N 18,8 — M. G. 298.
- $C_{18}H_{10}ON_4$  1) 6,6'-Azoxybichinoly. Sm. noch nicht bei 280° (A. 310, 85). — \*IV, 1005.
- $C_{18}H_{10}OS$  1) Verbindung (aus Phenanthrenchinon u. Thiophen) (B. 37, 3352 C. 1904 [2] 1058).  
C 75,5 — H 3,5 — O 11,2 — N 9,8 — M. G. 286.
- $C_{18}H_{10}O_2N_2$  1) Triphendioxazin. Subl. bei 250°. 2HCl (B. 23, 183; 28, 293; 32, 126, 3525; 35, 2816). — IV, 1077; \*IV, 727.  
2) Anhydroindol-2-Carbonsäure. Sm. 312–315° (B. 21, 1932). — IV, 235.  
C 68,8 — H 3,2 — O 10,2 — N 17,8 — M. G. 314.
- $C_{18}H_{10}O_2N_4$  1) 1,4-Benzochinonhomofluorindin (Istarin) (B. 23, 2794; C. 1897 [1] 62). — III, 340.
- $C_{18}H_{10}O_3Cl_2$  1) 3,6-Dichlor-2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 207,5° (A. 340, 264 C. 1905 [2] 486).
- $C_{18}H_{10}O_4N_2$  C 67,9 — H 3,1 — O 20,1 — N 8,8 — M. G. 318.  
1) Dinitrochrysen. Sm. oberhalb 300° (J. pr. [2] 9, 282). — II, 292.  
2) 3-Oxy-4-Keto-1-[ $\alpha$ -Cyan-4-Nitrobenzyliden]-1,4-Dihydronaphtalin. Sm. 220° (B. 38, 3693 C. 1905 [2] 1731).  
3) Nitrochinophtalon. Sm. 140° (A. 315, 342). — \*IV, 197.  
4) Diindoxylsäureanhydrid. Sm. noch nicht bei 290° (B. 35, 524 C. 1902 [1] 659).  
5) Oxyaposafranonchinon. Zers. bei 275° (B. 31, 2438). — \*IV, 671.  
6) Carbindigo. Sm. oberhalb 400° (B. 33, 997; B. 35, 2427 C. 1902 [2] 456; B. 36, 579). — \*IV, 719.  
7) Hippuroflavin. Sm. noch nicht bei 300°. Subl. + Phenol, + Anilin, + o-Toluidin (B. 21, 3321; 26, 2320; A. 287, 68; 312, 81). — II, 1185; \*II, 744.
- $C_{18}H_{10}O_4Cl_2$  1) Diphenyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinon. Sm. 243° (Am. 17, 595). — III, 352.  
2) 3',6'-Dichlor-1-Oxyphenyl-2-Naphtylketon-2'-Carbonsäure. Sm. 187° (Soc. 95, 282 C. 1909 [1] 1480).
- $C_{18}H_{10}O_4Cl_4$  1) Diacetat d.  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthin. Sm. 234° (A. 325, 78 C. 1903 [1] 463).
- $C_{18}H_{10}O_4Cl_6$  1) 1,3-Dichlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Hexachlor- $\alpha$ -Truxillsäure). Sm. 316° (B. 37, 220 C. 1904 [1] 588).  
2) isom. 1,3-Dichlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Hexachlor- $\gamma$ -Truxillsäure). Sm. 285° (B. 37, 224 C. 1904 [1] 588).  
3) Diacetat d.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 180° (182°) (J. pr. [2] 59, 230; A. 325, 81 C. 1903 [1] 464). — \*II, 605.
- $C_{18}H_{10}O_4Cl_8$  1) Diacetat d.  $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 176–177° (J. pr. [2] 59, 232; A. 325, 87 C. 1903 [1] 464). — \*II, 606.

- $C_{18}H_{10}O_4Br_2$  1) Diphenyläther d. 3,6-Dibrom-2,5-Dioxy-1,4-Benzochinon. Sm. 266 bis 267° (*Am.* 17, 652). — III, 352.
- $C_{18}H_{10}O_4Br_4$  1)  $\beta\beta\epsilon\epsilon$ -Tetrabrom- $\alpha\gamma\delta\zeta$ -Tetraketo- $\alpha\zeta$ -Diphenylhexan. Sm. 196—197° (*B.* 42, 2804 *C.* 1909 [2] 827).
- 2) Tetrabromtriresorcin.  $2 + 5HBr$  (*A.* 289, 67). — \*II, 565.
- $C_{18}H_{10}O_4Br_8$  1) Diacetat d.  $\alpha\alpha$ -Di[2,3,5,6-Tetrabrom-4-Oxyphenyl]äthan. Sm. 205 bis 206° (*A.* 363, 260 *C.* 1909 [1] 175).
- $C_{18}H_{10}O_5N_8$  C 51,7 — H 2,4 — O 19,1 — N 26,8 — M. G. 418.
- 1) 2-Nitroso-1-Phenylazo-4-[2,4,6-Dinitrosonitrophenylazo]benzol? Sm. 175—176° u. Zers. (*J. pr.* [2] 44, 461; [2] 55, 397). — IV, 1370; \*IV, 1016.
- $C_{18}H_{10}O_5Br_2$  1) Anhydrid d.  $\rho$ -Dibrom- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 285—287° (*B.* 10, 1561). — II, 2034.
- $C_{18}H_{10}O_5S$  1)  $\alpha\beta$ -Naphtanthrachinonsulfonsäure. K (*B.* 41, 3634 *C.* 1908 [2] 1928).
- $C_{18}H_{10}O_6N_2$  C 61,7 — H 2,9 — O 27,4 — N 8,0 — M. G. 350.
- 1) Bidioxymethylenindigo (*B.* 23, 1566). — II, 1946.
- 2) Dioxycarbindigo. Sm. noch nicht bei 300° (*B.* 37, 1977 *C.* 1904 [2] 236).
- 3) Indigodicarbonsäure. Ba,  $Ag_4$  (*B.* 18, 950). — II, 1624.
- 4) isom. Indigodicarbonsäure (*D.R.P.* 73687). — \*II, 948.
- $C_{18}H_{10}O_6N_6$  C 53,2 — H 2,5 — O 23,6 — N 20,7 — M. G. 406.
- 1) 2,4,6-Trinitroaposafranin.  $HCl$  (*B.* 31, 1188). — IV, 1176.
- $C_{18}H_{10}O_6N_8$  C 49,7 — H 2,3 — O 22,1 — N 25,8 — M. G. 434.
- 1) 2-Nitroso-1-Phenylazo-4-[2,4,6-Nitrosodinitrophenylazo]benzol? Zers. bei 158° (*J. pr.* [2] 44, 461; [2] 55, 397). — IV, 1370; \*IV, 1016.
- $C_{18}H_{10}O_6Cl_2$  1) Diacetat d.  $\rho$ -Dichlor-2,6-Dioxy-9,10-Anthrachinon. Sm. 292° (*D.R.P.* 187685 *C.* 1907 [2] 1465).
- 2) Diacetat d. isom.  $\rho$ -Dichlor-2,6-Dioxy-9,10-Anthrachinon. Sm. 292° (*D.R.P.* 187685 *C.* 1907 [2] 1465).
- $C_{18}H_{10}O_6Cl_4$  1) Diacetat d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 165° (*A.* 325, 89 *C.* 1903 [1] 464).
- $C_{18}H_{10}O_6Br_4$  1) Diacetat d.  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 191° (*A.* 325, 90 *C.* 1903 [1] 465).
- $C_{18}H_{10}O_6S$  1) 6-Oxy-5,12-Diketo-5,12-Dihydronaphtacen-11-Sulfonsäure (*D.R.P.* 134985 *C.* 1902 [2] 1085).
- 2) 11-Oxy-5,12-Naphtacenchinon- $\rho$ -Sulfonsäure (*B.* 36, 720 *C.* 1903 [1] 773).
- $C_{18}H_{10}O_7N_7$  1) Verbindung (aus 4-Amidochinolin). Sm. 285° (*J. pr.* [2] 56, 201). — \*IV, 605.
- $C_{18}H_{10}O_7S$  1) 6,10-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen-9[ $\rho$ ]-Sulfonsäure (*Soc.* 91, 425 *C.* 1907 [1] 1421).
- 2) 6,11-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen- $\rho$ -Sulfonsäure (*D.R.P.* 138325 *C.* 1903 [1] 371; *B.* 36, 724 *C.* 1903 [1] 774).
- $C_{18}H_{10}O_8N_2$  C 56,6 — H 2,6 — O 33,5 — N 7,3 — M. G. 382.
- 1) 9,10-Anthrachinon-1,5-Dioxaminsäure. Zers. bei 300°.  $(NH_4)_2$ ,  $K_2$  (*D.R.P.* 158076 *C.* 1905 [1] 635; *B.* 39, 643 *C.* 1906 [1] 1025).
- 2) 9,10-Anthrachinon-1,8-Dioxaminsäure.  $(NH_4)_2$ ,  $K_2$  (*D.R.P.* 158076 *C.* 1905 [1] 635).
- 3) Dinitrür d. Äthindiphtalid. Zers. bei 160° (*B.* 19, 837). — II, 2034.
- $C_{18}H_{10}O_8S_2$  1) Chrysochinondisulfonsäure. Ba (*B.* 12, 1894). — III, 463.
- $C_{18}H_{10}O_{10}N_4$  C 48,8 — H 2,3 — O 36,2 — N 12,7 — M. G. 442.
- 1) Di[2,4-Dinitrophenyläther] d. 1,3-Dioxybenzol. Sm. 184° (*B.* 24, 3586). — II, 917.
- 2) Di[2,4-Dinitrophenyläther] d. 1,4-Dioxybenzol. Sm. 240° (*B.* 24, 3588). — II, 940.
- $C_{18}H_{10}O_{12}N_8$  C 40,8 — H 1,9 — O 36,2 — N 21,1 — M. G. 530.
- 1) 1,4-Di[2,4,6-Trinitrophenylamido]benzol. Sm. noch nicht bei 260° (*Soc.* 93, 609 *C.* 1908 [1] 1768).
- $C_{18}H_{10}N_2Br_2$  1)  $\rho$ -Dibrom-6,7'-Bichinolyl (*M.* 6, 553). — IV, 1070.
- 2) Dibromdihydro- $\alpha\alpha$ -Naphtochinoxalin (*C.* 1899 [2] 338). — \*IV, 727.
- $C_{18}H_{10}N_2Br_8$  1) Oktobrom- $\rho$ -Tetroliditoyl (*B.* 14, 935). — IV, 1035.
- $C_{18}H_{10}N_2S_2$  1) Nitril d. 3,4-Dithiocarbonyl-1,2-Diphenyl- $R$ -Tetramethylen-1,2-Dicarbonsäure. Sm. 174° (*B.* 34, 1050).
- $C_{18}H_{10}N_4Cl_2$  1) 2,10-Dichlorhomofluorindin (*B.* 36, 4031 *C.* 1904 [1] 294).

- C<sub>18</sub>H<sub>11</sub>ON** C 84,1 — H 4,3 — O 6,2 — N 5,4 — M. G. 257.  
 1)  $\alpha$ -Phenylpyridinphenylenketon. Sm. 68°. 2 + CrO<sub>3</sub> (A. 249, 124). — IV, 459.
- C<sub>18</sub>H<sub>11</sub>ON<sub>8</sub>** C 75,8 — H 3,8 — O 5,6 — N 14,7 — M. G. 285.  
 1) Triphenazinnoxazin (B. 28, 299; B. 35, 2821 C. 1902 [2] 999). — IV, 1212; \*IV, 879.  
 2) Naphtostyryltolazin. Sm. oberhalb 290° (J. pr. [2] 38, 184). — IV, 621.
- C<sub>18</sub>H<sub>11</sub>O<sub>2</sub>N** C 79,1 — H 4,0 — O 11,7 — N 5,1 — M. G. 273.  
 1) Nitrochrysen. Sm. 209° (A. 158, 306; J. pr. [2] 9, 281; B. 23, 792, 2444). — II, 292.  
 2) 3-Oxy-4-Keto-1-[ $\alpha$ -Cyanbenzyliden]-1,4-Dihydronaphtalin. Sm. 201° (B. 38, 3689 C. 1905 [2] 1731).  
 3) 6-Amido-5,12-Naphtacenchinon. Sm. 290—292° (Soc. 91, 415 C. 1907 [1] 1419).  
 4) Amidochrysochinon. (2HCl, PtCl<sub>4</sub>), HJ (B. 24, 954). — III, 463.  
 5) Monooxim d. Chrysochinon. Sm. 160—161° (A. 311, 272). — \*III, 328.  
 6) 1-Naphtalin-2-Indolindigo (M. 29, 381 C. 1908 [2] 516).  
 7) 2-Naphtalin-2-Indolindigo. Sm. 240° (B. 41, 775 C. 1908 [1] 1463; M. 29, 378 C. 1908 [2] 516).  
 8) Chinophtalon (Chinolingelb). Sm. 234—235° (238—240°). Na, K (B. 16, 1083, 2602; 35, 2298; A. 315, 303, 336; B. 37, 3006 C. 1904 [2] 1408; B. 39, 2203 C. 1906 [2] 529). — IV, 308; \*IV, 196.  
 9) Isochinophtalon. Sm. 186° (B. 35, 2297 C. 1902 [2] 374; B. 37, 3009 C. 1904 [2] 1408; B. 37, 3011 C. 1904 [2] 1409). — \*IV, 198.  
 10) 1,8-Anhydrid d. 8-Benzoylamidonaphtalin-1-Carbonsäure. Sm. 170° (J. pr. [2] 38, 168). — II, 1450.  
 11) Oximanhhydrid d.  $\alpha$ -Oximidophenyl- $\alpha$ -[1-Naphtyl]methan-2-Carbonsäure. Sm. 175—176° (B. 29, 827). — \*II, 1019.  
 12) Imid d. 1-Phenylnaphtalin-2,3-Dicarbonsäure. Sm. 246° (B. 35, 1410 C. 1902 [1] 1156).  
 13) Phenylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 202° (G. 25 [1] 250; B. 28, 362). — II, 1880.  
 14) 1-Naphtylimid d. Benzol-1,2-Dicarbonsäure. Sm. 180—181° (G. 15, 346, 480; B. 29, 827, 2804). — II, 1806; \*II, 1054.  
 15) 2-Naphtylimid d. Benzol-1,2-Dicarbonsäure. Sm. 216° (G. 15, 480; Am. 38, 649 C. 1908 [1] 360). — II, 1806.  
 16) Farbstoff (aus  $\alpha$ -Naphtol u. Isatinchlorid) (M. 29, 379 C. 1908 [2] 516).
- C<sub>18</sub>H<sub>11</sub>O<sub>2</sub>N<sub>3</sub>** C 71,7 — H 3,6 — O 10,6 — N 14,0 — M. G. 301.  
 1) 5'-Oxy-6'-Chinolyl-5-Keto-5,6-Dihydro-6-Chinolylidenamin. NH<sub>4</sub> (Thalleiochinolin) (Ar. 244, 616 C. 1907 [1] 674).  
 2) 6-Nitro-2-Phenyl-1,7-Naphtisodiazin. Sm. 218° (B. 33, 2933). — \*IV, 721.  
 3) 6-Nitro-3-Phenyl-4,7-Naphtisodiazin. Sm. 281° (B. 33, 2924). — \*IV, 721.
- C<sub>18</sub>H<sub>11</sub>O<sub>2</sub>Br** 1) 2-Brom-1,1'-Diketo-2,3-Dihydro-2,2'-Biinden. + C<sub>6</sub>H<sub>6</sub>. Sm. 150° u. Zers. (Soc. 71, 245). — \*III, 236.  
 2) Lakton d.  $\alpha$ -Brom- $\alpha$ -Phenyl- $\alpha$ -[2-Oxy-1-Naphtyl]essigsäure. Sm. 121° (B. 31, 2823). — \*II, 1018.
- C<sub>18</sub>H<sub>11</sub>O<sub>3</sub>N** C 74,7 — H 3,8 — O 16,6 — N 4,8 — M. G. 289.  
 1) Oxim d. Anhydrobisdiketodihydroinden. Zers. oberhalb 210° (A. 277, 370). — III, 276.  
 2) 11-Amido-6-Oxy-5,12-Diketo-5,12-Dihydroacenaphten. Sm. oberhalb 300° (B. 36, 2327 C. 1903 [2] 442; Soc. 89, 121 C. 1906 [1] 1024; D.R.P. 183629 C. 1907 [2] 367; Soc. 91, 417 C. 1907 [1] 1419).  
 3) 5-Oxy-2-Naphtalin-2-Indolindigo (M. 30, 275 C. 1909 [1] 1881).  
 4) 2-Indol-3-Oxy-1-Naphtalinindolignon (B. 42, 1060 C. 1909 [1] 1659; M. 30, 274 C. 1909 [1] 1881).  
 5) 3-Furfuryl- $\beta$ -Naphtochinolin-1-Carbonsäure. Sm. 275°. HCl (B. 27, 2028). — IV, 466.  
 6) Lakton d. Diphenylketipinsäuremononitril. Sm. 193—194° (A. 282, 61). — II, 2032.  
 7) Phenylimid d.  $\beta$ -Oxynaphtalin-1,8-Dicarbonsäure. Sm. noch nicht bei 300° (B. 32, 3292). — \*II, 1140.



- $C_{18}H_{11}O_3N_3$  C 68,1 — H 3,5 — O 15,1 — N 13,2 — M. G. 317.  
 1) 5-Phenyl-3-[6-Chinoly]l-1,2,4-Oxdiazol-5<sup>4</sup>-Carbonsäure (Chinolin-6-Methenylaxoimbenzenyl-4-Carbonsäure). Sm. 203° (B. 22, 2766). — IV, 350.
- $C_{18}H_{11}O_3Cl$  1) 1-Chlor-2-Benzoylnaphtalin-2<sup>3</sup>-Carbonsäure (C. 1905 [1] 257).  
 2) Säure (aus Dehydrobenzoylessigsäure). Sm. 150—151° (Soc. 47, 292). — II, 1721.
- $C_{18}H_{11}O_4N$  C 70,8 — H 3,6 — O 21,0 — N 4,6 — M. G. 305.  
 1) 11[oder 6]-Amido-2,6[oder 2,11]-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen (B. 36, 2329 C. 1903 [2] 442; Soc. 91, 423 C. 1907 [1] 1421).
- $C_{18}H_{11}O_4N_3$  C 64,8 — H 3,3 — O 19,2 — N 12,6 — M. G. 333.  
 1) Dinitroamidochrysen. HCl (B. 24, 952). — II, 643.  
 2) 6,6'-Diazoamidocumarin. Sm. 230—234° (Soc. 85, 1234 C. 1904 [2] 1124).  
 3) 5-Oximido-2,4,6-Triketo-1,3-Diäthylhexahydro-1,3-Diazin + H<sub>2</sub>O (Diäthylviursäure). Sm. bei 90° (107° wasserfrei). NH<sub>4</sub>, NH<sub>4</sub>H + 2H<sub>2</sub>O, NaH + 3H<sub>2</sub>O, KH + 2H<sub>2</sub>O (B. 30, 1816).  
 4) 2-[4-Nitrophenyl]peri-Naphtimidazol-2<sup>3</sup>-Carbonsäure (A. 365, 127 C. 1909 [1] 1414).
- $C_{18}H_{11}O_4Cl$  1) Diphenyläther d. 6-Chlor-2,5-Dioxy-1,4-Benzochinon. Sm. 169 bis 170° (Am. 17, 655). — III, 349.
- $C_{18}H_{11}O_4Cl_5$  1) 1-Chlor-1,3-Di[2,4-Dichlorphenyl]-R-Tetramethylen-2,4-Dicarbon-säure (Pentachlor- $\alpha$ -Truxillsäure). Sm. 274°. Ag<sub>2</sub> (B. 37, 222 C. 1904 [1] 588).  
 2) Diacetat d.  $\alpha$ -Chlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 162° (A. 338, 255 C. 1905 [1] 1151).
- $C_{18}H_{11}O_4Br$  1) Bromhydrocumarin (Soc. 51, 67). — II, 2026.  
 2) 4-Brom-1-Oxy-2-Benzoylnaphtalin-2<sup>3</sup>-Carbonsäure. Sm. 236° (Soc. 89, 118 C. 1906 [1] 1024).
- $C_{18}H_{11}O_5N$  C 67,3 — H 3,4 — O 24,9 — N 4,4 — M. G. 321.  
 1) Äthenylacetylamidolizarin (Acetat d. Oxy-1-Methylantrachinonoxazol). Sm. 248—240° (B. 18, 1666). — III, 424.  
 2) p-Nitro-2,5-Dibenzoylfuran. Sm. 130—131° (Am. 25, 459). — \*III, 523.
- $C_{18}H_{11}O_5N_3$  C 61,9 — H 3,1 — O 22,9 — N 12,0 — M. G. 349.  
 1) 10-Nitro-6-Acetylamidophenonaphtoxazon (B. 33, 3069). — \*IV, 714.
- $C_{18}H_{11}O_5Br$  1) Trioxynaphtacenchinonbromid. Sm. 198° (B. 38, 4019 C. 1906 [1] 242).  
 2) 6-Brom-1-Oxy-2-[4(oder 5)-Oxybenzoyl]naphtalin-2<sup>3</sup>-Carbonsäure. Sm. 270° u. Zers. (Soc. 91, 424 C. 1907 [1] 1421).  
 3) Brompulvinsäure. Sm. 208—209° u. Zers. Ba + 2H<sub>2</sub>O (A. 282, 19). — II, 2032.
- $C_{18}H_{11}O_6N$  C 64,1 — H 3,3 — O 28,5 — N 4,1 — M. G. 337.  
 1) 4-Nitro-1-Oxy-2-Benzoylnaphtalin-2<sup>3</sup>-Carbonsäure. Sm. 220° (Soc. 89, 121 C. 1906 [1] 1024).  
 2) 1-Oxy-2-[3(oder 6)-Nitrobenzoyl]naphtalin-2<sup>3</sup>-Carbonsäure. Sm. 200° u. Zers. (Soc. 91, 1590 C. 1907 [2] 1628).  
 3) 1-Oxy-2-[4(oder 5)-Nitrobenzoyl]naphtalin-2<sup>3</sup>-Carbonsäure. Sm. 130—140° (Soc. 91, 1591 C. 1907 [2] 1628).
- $C_{18}H_{11}O_6N_3$  C 59,2 — H 3,0 — O 26,3 — N 11,5 — M. G. 365.  
 1) Trinitro-1,3-Diphenylbenzol. Sm. 200° (A. 203, 130). — II, 286.  
 2) Trinitro-1,4-Diphenylbenzol. Sm. 195° (A. 203, 207; J. 1881, 400). — II, 286.  
 3) Dinitrodihydrochinophtalon. Sm. 133° (A. 315, 342). — \*IV, 197.
- $C_{18}H_{11}O_6Br$  1) Methylester d. 7-[4-Brombenzoyl]-1,2-Benzpyron-4-Carbonsäure. Sm. 98° (B. 34, 384). — \*II, 1170.  
 2) Diacetat d. p-Brom-1,2-Dioxy-9,10-Anthrachinon (J. 1874, 486). — III, 422.
- $C_{18}H_{11}O_7N$  C 61,2 — H 3,1 — O 31,7 — N 4,0 — M. G. 353.  
 1) Phlorein (A. 178, 93). — II, 1022.
- $C_{18}H_{11}O_7N_5$  C 52,8 — H 2,7 — O 27,4 — N 17,1 — M. G. 409.  
 1) 3-Nitroso-2,5-Di[p-Nitrophenylamido]-1,4-Benzochinon (B. 16, 1557). — III, 340.

- $C_{18}H_{11}O_8N$  C 58,5 — H 3,0 — O 34,7 — N 3,8 — M. G. 369.  
 1) Diacetat d. 3-Nitro-1,2-Dioxy-9,10-Anthrachinon. Sm. 218° (B. 12, 587). — III, 423.  
 2) Diacetat d. 4-Nitro-1,2-Dioxy-9,10-Anthrachinon. Sm. 194—195,5° (B. 24, 1611). — III, 423.
- $C_{18}H_{11}O_8N_7$  C 47,7 — H 2,4 — O 28,2 — N 21,6 — M. G. 453.  
 1) 1,3-Dinitro-10-[2,4-Dinitrophenyl]amido-5,10-Dihydro-5,10-Naphtdiazin (B. 41, 1307 C. 1908 [1] 2096).
- $C_{18}H_{11}O_9N_5$  C 49,0 — H 2,5 — O 32,6 — N 15,9 — M. G. 441.  
 1) 2,4-Dinitrophenyläther d. 2',4'-Dinitro-4-Oxydiphenylamin. Sm. 225° (233°) (C. 1900 [2] 610; B. 37, 1518 C. 1904 [1] 1597; B. 37, 1732 C. 1904 [1] 1521). — \*II, 399.
- $C_{18}H_{11}O_{14}N_9$  C 37,4 — H 1,9 — O 38,8 — N 21,8 — M. G. 577.  
 1) Di[2,4,6-Trinitrophenyl]histidin (H. 59, 292 C. 1909 [1] 1583).
- $C_{18}H_{11}N_2Cl_3$  1) 10-Chlorphenylat d. 2,8-Dichlor-5,10-Naphtdiazin (Dichlorphenylphenazoniumchlorid) +  $AuCl_3$  (B. 31, 301). — IV, 1001.
- $C_{18}H_{11}N_2Br$  1) 2-Brom-6,6'-Bichinoly. Sm. 150—155° (B. 17, 2449). — IV, 1069.
- $C_{18}H_{11}N_4Cl$  1) 2-Chlorhomofluorindin. HCl (B. 36, 4030 C. 1904 [1] 294).  
 2) Chlornaphtofluoflavin. Sm. oberhalb 300° (A. 319, 273 C. 1902 [1] 359). — \*IV, 972.
- $C_{18}H_{12}ON_2$  C 79,4 — H 4,4 — O 5,9 — N 10,3 — M. G. 272.  
 1) 7-Phenylhydrazon-8-Ketoacenaphten. Sm. 179° (A. 276, 10). — III, 404.  
 2) 5-Phenyl-3-[2-Naphtyl]-1,2,4-Oxdiazol. Sm. 116° (B. 22, 2452). — II, 1455.  
 3) 1-Nitroso-2-[1-Naphtyl]indol. Sm. 248° u. Zers. (A. 272, 205). — IV, 465.  
 4) 6-Chinolyläther d. 2-Oxychinolin. Sm. 120°. (2HCl,  $PtCl_4$ ) (M. 17, 670). — IV, 271.  
 5) 8-Chinolyläther d. 2-Oxychinolin. Sm. 175°. HCl, (2HCl,  $PtCl_4$ ), (2HCl,  $PdCl_2$  +  $H_2O$ ) (M. 17, 668). — IV, 274.  
 6) 2-Oxy-2,3'-Bichinoly. Sm. 208°. K +  $H_2O$ , Pb (M. 7, 314). — IV, 1067.  
 7) 2-Oxy-2,5'-Bichinoly. Sm. 186—187° (M. 8, 144). — IV, 1068.  
 8)  $\alpha$ -Chinophtalin. Sm. 278° (305°). (2HCl,  $PtCl_4$ ) (A. 315, 349). — \*IV, 197.  
 9)  $\beta$ -Chinophtalin. Sm. 213°.  $H_2SO_4$ , Ag (A. 315, 351; B. 37, 3021 C. 1904 [2] 1410). — \*IV, 198.  
 10) 1-Keto-4-[2-Naphtyl]-1,2-Dihydro-2,3-Benzdiazin. Sm. oberhalb 250° (J. pr. [2] 51, 155). — IV, 1071.  
 11) 1-Keto-2-Phenylimido-1,2-Dihydro- $\beta$ -Naphtindol ( $\beta$ -Naphtisatin- $\alpha$ -Anilid) (D. R. P. 153418 C. 1904 [2] 679).  
 12) 1-Benzoyl- $\alpha$ -Naphtimidazol. Sm. 120° (126°) (B. 34, 934; B. 37, 3116 C. 1904 [2] 1316). — \*IV, 663.  
 13) Aposafuranon (Safranon; Benzolindon). Sm. 248—249° (242°) (B. 28, 275, 1716; 29, 1819; 30, 2623; 33, 1487; J. pr. [2] 46, 572; A. 266, 252; 287, 193). — IV, 1002.  
 14) 6-Oxy-3-Phenyl-4,7-Naphtisodiazin. Sm. 168° (B. 33, 2925). — \*IV, 721.  
 15) Anhydrid d. 3-Phenylamidophenoxazoniumhydroxyd. Sm. 196 bis 198° (A. 322, 13 C. 1902 [2] 221). — \*IV, 672.  
 16) Verbindung (aus d. Nitril d.  $\beta$ -Imido- $\beta$ -Phenylpropionsäure). Sm. 144° (J. pr. [2] 52, 107). — \*II, 763.
- $C_{18}H_{12}ON_4$  C 72,0 — H 4,0 — O 5,3 — N 18,7 — M. G. 300.  
 1) 4-Benzoylamido-1-Diazonaphtalincyamid. Zers. bei 210° (Soc. 91, 1320 C. 1907 [2] 1076).
- $C_{18}H_{12}O_2N_2$  2) Diamidophtaloperinon. Sm. 255—260° (A. 365, 119 C. 1909 [1] 1413).  
 C 75,0 — H 4,2 — O 11,1 — N 9,7 — M. G. 288.  
 1) 2,7-Phtalyldiamidonaphtalin. Sm. 215° (B. 40, 3264 C. 1907 [2] 1073).  
 2) 3-[4-Oxyphenyl]azodiphenylenoxyd. Sm. 199° (B. 41, 1942 C. 1908 [2] 173).  
 3) 2-Keto-5-Phenyl-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 136° (B. 24, 4185). — IV, 927.  
 4)  $\alpha$ -Dioxy-2,3'-Bichinoly. Sm. 239°. HCl, 2HCl, (2HCl,  $PtCl_4$ ) (M. 7, 319). — IV, 1068.

- $C_{15}H_{12}O_2N_2$  5)  $\beta$ -Dioxy-2,3'-Bichinoly. Sm. oberhalb  $305^\circ$  (M. 7, 324). — IV, 1068.  
 6) 4,5-Diketo-2-Methyl-1-Phenyl-4,5-Dihydro- $\alpha$ -Naphthimidazol. Sm.  $305-306^\circ$  (B. 31, 2410). — \*IV, 665.  
 7) Safranin (Oxybenzolinon). Sm. oberhalb  $330^\circ$ . Na, HCl (B. 21, 1593; 28, 273; 29, 369; 30, 401; A. 286, 199, 210; Soc. 95, 580 C. 1909 [1] 1997). — IV, 1003; \*IV, 671.  
 8) Oxyaposafranin (Oxyphenylphenazon). Sm.  $280^\circ$  u. Zers. (A. 262, 252; 290, 301; B. 26, 383; 28, 1712, 2287; 29, 1605). — IV, 1003.  
 9) Oxybenzolinon (A. 286, 200). — IV, 1002.  
 10) 5,7-Anhydrid d. 5-Acetylamido-7,12-Naphtophenoxazin. Sm. 193 bis  $194^\circ$ .  $HNO_3$  (B. 40, 2082 C. 1907 [2] 151).  
 11) Base (aus Triphenyldioxazin) (B. 23, 186). — IV, 1078.  
 12) 2-Phenyl- $\alpha$ [oder  $\beta$ ]-Naphthimidazol-2'-Carbonsäure. Zers. bei  $280^\circ$  (B. 23, 1044). — IV, 1065.  
 13) 2-Phenyl-peri-Naphtimidazol-2'-Carbonsäure (A. 365, 124 C. 1909 [1] 1414).  
 14)  $\alpha,\alpha$ -Pyrryl-naphtocinchoninsäure. Sm.  $300^\circ$  u. Zers. (C. 1907 [2] 1238).  
 15) Nitril d. s-Diphenylketipinsäure. Sm.  $270^\circ$  u. Zers.  $K_2 + 2C_2H_6O$  (A. 282, 9, 45). — II, 2031.  
 16) Nitril d.  $\beta$ -Acetoxyl- $\beta$ -Phenyl- $\alpha$ -[2-Cyanphenyl]äthen- $\alpha$ -Carbon-säure. Sm.  $211-213^\circ$  (B. 27, 833). — II, 1977.  
 17) Acetat d. 5-Oxy- $\alpha\beta$ -Naphtophenazin. Sm.  $217^\circ$  (B. 26, 622). — IV, 1057.  
 18) Acetat d. 6-Oxy- $\alpha\beta$ -Naphtophenazin. Sm.  $188-189^\circ$  (B. 26, 619). — IV, 1054.  
 19) Phenylamidoimid d. Naphtalin-1,8-Dicarbonsäure. Sm.  $218,5^\circ$  (B. 28, 363). — IV, 712.  
 20) Verbindung (aus 1,8-Diamidonaphtalin u. Phtalsäureanhydrid) (D.R.P. 202354 C. 1908 [2] 1397).  
 $C_{18}H_{12}O_2N_4$  C 68,4 — H 3,8 — O 10,1 — N 17,7 — M. G. 316.  
 1) 5,5'-Diketo-3,3'-Diphenyl-4,5,4',5'-Tetrahydro-4,4'-Bipyrazol (Phenylpyrazolonblau) (J. pr. [2] 52, 37). — IV, 906.  
 2) 5,5'-Diketo-2,2'-Diphenyl-4,5,4',5'-Tetrahydro-4,4'-Biimidazol (Glyoxalinrot) (Soc. 77, 809). — \*IV, 567.  
 $C_{18}H_{12}O_2Cl_4$  1) Tetrachlorstyracin (A. 70, 6). — II, 1407.  
 $C_{18}H_{12}O_2S_2$  1) Diphenyläther d. 2,5-Dimerkapto-1,4-Benzochinon. Sm.  $257^\circ$  (A. 336, 126 C. 1904 [2] 1298).  
 2) Diphenyläther d. 2,6-Dimerkapto-1,4-Benzochinon. Sm.  $203-204^\circ$  (A. 336, 130 C. 1904 [2] 1298).  
 3) 4,4'-Dimethylthioindigo. Sm. oberhalb  $300^\circ$  (B. 42, 541 C. 1909 [1] 758).  
 4) Dimethylthioindigo (D.R.P. 204763 C. 1909 [1] 233).  
 $C_{18}H_{12}O_3N_2$  C 71,1 — H 3,9 — O 15,8 — N 9,2 — M. G. 304.  
 1) Dioxyaposafranin. Sm. oberhalb  $280^\circ$  (B. 29, 369). — IV, 1004.  
 2) 6-Acetylamidophenonaphtoxazon. Zers. bei  $310^\circ$  (B. 33, 3068). — \*IV, 714.  
 3) 5,7-Anhydrid d. 9-Acetylamido-5-Oxy-7,12-Naphtophenoxazin (B. 40, 2078 C. 1907 [2] 150).  
 4) Benzoyl-1,4-Diketotetrahydronaphtopyrazol. Sm.  $185^\circ$  (B. 32, 2297). — \*IV, 664.  
 5) Phenylhydrazon d. ?-Oxynaphtalin-1,8-Dicarbonsäureanhydrid. Sm.  $265^\circ$  (B. 32, 3294). — \*IV, 468.  
 6) Verbindung (aus Carbindigo). Sm.  $390-395^\circ$  (B. 35, 2428 C. 1902 [2] 457). — \*IV, 720.  
 $C_{18}H_{12}O_3N_4$  C 65,1 — H 3,6 — O 14,5 — N 16,8 — M. G. 332.  
 1) 9-Nitro-5-Acetylamido- $\alpha\beta$ -Naphtophenazin. Zers. bei  $295-300^\circ$  (B. 31, 3092). — \*IV, 858.  
 2) 10-Nitro-5-Acetylamido- $\alpha\beta$ -Naphtophenazin (B. 31, 3094). — \*IV, 857.  
 $C_{18}H_{12}O_3Br_2$  1) Anhydrid d. Allo- $\alpha$ -Brom- $\beta$ -Phenylakrylsäure. Sm.  $72-74^\circ$  (Am. 20, 91).  
 $C_{18}H_{12}O_3J_6$  1) Pseudojodosojodbenzol. Sm.  $144-145^\circ$  (C. 1907 [1] 1194).  
 $C_{18}H_{12}O_4N_2$  C 67,5 — H 3,7 — O 20,0 — N 8,7 — M. G. 320.  
 1) ?-Dinitro-1,4-Diphenylbenzol. Sm.  $277^\circ$  (A. 203, 125; J. 1881, 400). — II, 286.



- $C_{18}H_{11}O_4N_2$  2) *p*-Diamido-6,11-Dioxy-5,12-Diketo-5,12-Dihydroacenaphten (B. 36, 2330 C. 1903 [2] 442).
- 3)  $\alpha\beta$ -Di[1,2-Phtalylamido]äthan (Äthylendiphtalimid). Sm. 232° (243 bis 244°) (B. 20, 2225; 27 [2] 404; G. 24 [1] 405). — II, 1807; \*II, 1054.
- 4) Indoxin. Sm. 223° (B. 29, 660). — IV, 238.
- 5) 3-Phtalylamido-1-Phenyl-2,5-Diketotetrahydropyrrol (Phtalylasparaginphenylimid). Sm. 263–264° (G. 16, 7). — II, 1811.
- 6) Trioxyphenylposafanon (B. 31, 2437). — \*IV, 671.
- 7) Leukocarbindigo (B. 33, 998; B. 35, 2426 C. 1902 [2] 456). — \*IV, 700.
- 8) Methyläther d. 5-Keto-3-[3-Oxyphenyl]-4,5-Dihydroisoxazol-2-Indolindigo (C. r. 148, 353 C. 1909 [1] 1098).
- 9) 3,6-Diphenyl-1,2-Diazin-4,5-Dicarbonsäure. Sm. 202° u. Zers.  $K_2$ ,  $Ag_2$  (B. 33, 3788). — \*IV, 702.
- 10) 2,5-Diphenyl-1,4-Diazin-3,6-Dicarbonsäure. Sm. 190°.  $Ag_2$  (A. 291, 278). — IV, 1050.
- 11) Dilakton d. Di[ $\beta$ -Oxy- $\beta$ -Phenyläthyliden]hydrazin-2,2'-Dicarbonsäure. Sm. noch nicht bei 280° (B. 40, 78 C. 1907 [1] 555).
- 12) Verbindung (aus Äthylendibenzoyldicarbonsäure). Sm. 270° u. Zers. (B. 20, 1492). — II, 2034.
- 13) Verbindung (aus Chinolylacetophenon-2-Carbonsäure). Sm. 205° u. Zers. (B. 37, 3013 C. 1904 [2] 1409).
- $C_{18}H_{12}O_4N_4$  C 62,1 — H 3,4 — O 18,4 — N 16,1 — M. G. 348.
- 1) 1,3-Dinitro-5-Phenyl-5,10-Dihydrophenazin. Sm. 246° u. Zers. (B. 26, 2375; 33, 3075). — \*IV, 666.
- 2) Phenylpyrazolonphenylpyridazoncarbonsäure. Sm. 245° u. Zers. (B. 27, 3454). — IV, 1265.
- $C_{18}H_{12}O_4N_6$  C 57,4 — H 3,2 — O 17,0 — N 22,3 — M. G. 376.
- 1) Dinitrophenosafranin. HCl (B. 28, 513). — IV, 1278.
- 2) 4,4'-Biphenylendi[Hydrazoncyanessigsäure].  $Na_4$ ,  $Ag_2$  (J. pr. [2] 63, 16). — \*IV, 944.
- $C_{18}H_{12}O_4Cl_2$  1) 1,4-Diphenyläther d. 3,6-Dichlor-1,2,4,5-Tetraoxybenzol. Sm. 197 bis 198° (Am. 17, 596). — \*II, 629.
- $C_{18}H_{12}O_4Cl_4$  1) Diacetat d.  $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 246° (A. 325, 50 C. 1903 [1] 462).
- $C_{18}H_{12}O_4Cl_6$  1) Diacetat d.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 206°? (A. 325, 65 C. 1903 [1] 463).
- $C_{18}H_{12}O_4Br_2$  1)  $\beta\epsilon$ -Dibrom- $\alpha\gamma\delta\zeta$ -Tetraketo- $\alpha\zeta$ -Diphenylhexan. Sm. 124–125° (B. 42, 2805 C. 1909 [2] 828).
- $C_{18}H_{12}O_4Br_4$  1) Diacetat d.  $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthen. Sm. 241° (A. 325, 31 C. 1903 [1] 460).
- $C_{18}H_{12}O_4Br_6$  1) Diacetat d.  $\alpha\alpha$ -Di[2,3,5-Tribrom-4-Oxyphenyl]äthan. Sm. 182–183° (A. 363, 258 C. 1909 [1] 175).
- 2) Diacetat d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 216° u. Zers. (A. 325, 43 C. 1903 [1] 461).
- $C_{18}H_{12}O_5N_2$  C 64,3 — H 3,6 — O 23,8 — N 8,3 — M. G. 336.
- 1) 3,5-Dinitro-2-Oxy-1,4-Diphenylbenzol. Sm. 193–194°. K (B. 36, 1410 C. 1903 [1] 1358).
- 2) Di[Phtalylamidomethyl]äther. Sm. 207° (B. 31, 1232). — \*II, 1052.
- 3) 1-Nitroso-2,5-Diphenylpyrrol-2',5'-Dicarbonsäure. Sm. 210° (B. 19, 842). — IV, 452.
- $C_{18}H_{12}O_5N_4$  C 59,3 — H 3,3 — O 22,0 — N 15,4 — M. G. 364.
- 1) 4,7-Dinitro-6-Oxy-2-Methyl-1-[1-Naphtyl]benzimidazol. Sm. 241° u. Zers. (Soc. 89, 1942 C. 1907 [1] 715).
- 2) 4,7-Dinitro-6-Oxy-2-Methyl-1-[2-Naphtyl]benzimidazol. Sm. 242° (Soc. 89, 1942 C. 1907 [1] 715).
- $C_{18}H_{12}O_5N_6$  C 55,1 — H 3,1 — O 20,4 — N 21,4 — M. G. 392.
- 1) 4-Oxy-1,3-Di[2-Nitrophenylazo]benzol. Sm. 203° (A. 357, 176 C. 1908 [1] 248).
- 2) 4-Oxy-1,3-Di[4-Nitrophenylazo]benzol. Sm. 278° (B. 40, 3453 C. 1907 [2] 1505; J. pr. [2] 78, 393 C. 1909 [1] 362).
- $C_{18}H_{12}O_5Cl_4$  1) Diacetat d.  $\alpha$ -Keto- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 158 bis 159° (A. 338, 245 C. 1905 [1] 1150).

- $C_{18}H_{12}O_5Br_6$  1) 4,4'-Diacetat d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan- $\alpha$ -Methyläther. Sm. 197° (A. 330, 78 C. 1904 [1] 1148).
- $C_{18}H_{12}O_6N_2$  C 61,4 — H 3,4 — O 27,3 — N 7,9 — M. G. 352.
- 1) Diphenyläther d. 4,6-Dinitro-1,3-Dioxybenzol. Sm. 129° (Am. 26, 7).
- 2) Diisnitrosoderivat d.  $\alpha\gamma\delta\zeta$ -Tetraketo- $\alpha\zeta$ -Diphenylhexan. Sm. 130° u. Zers. (B. 42, 2799 C. 1909 [2] 826).
- 3) Methyläther d. 3-Oxy-4-Keto-1-[2,4-Dinitrobenzyliden]-1,4-Dihydronaphthalin. Sm. 216° (C. 1907 [1] 1131).
- 4) 5-Nitro-4-Diacetylamido-9,10-Phenanthrenchinon. Sm. 280° (B. 38, 3735 C. 1906 [1] 40).
- $C_{18}H_{12}O_6N_4$  C 56,8 — H 3,2 — O 25,3 — N 14,7 — M. G. 380.
- 1) ?-Trinitrotriphenylamin. Sm. 280° (B. 18, 2157; 23, 2539). — II, 342.
- 2) 2,5-Di[2-Nitrophenylamido]-1,4-Benzochinon. Sm. 305° u. Zers. (B. 23, 2794; C. 1897 [1] 62). — III, 340.
- $C_{18}H_{12}O_6N_6$  C 52,9 — H 2,9 — O 23,5 — N 20,6 — M. G. 408.
- 1) 5,6-Dinitro-2,3-Dinitroso-1,4-Di[Phenylamido]benzol. Sm. 168° (A. 307, 67). — II, 54.
- 2) 4-[2,4,6-Trinitrophenylamido]azobenzol. Sm. 176–177° (J. pr. [2] 69, 43 C. 1904 [1] 508).
- 3) 5,5'-Dinitro-4,4'-Diketo-2,2'-Dimethyl-3,4,3',4'-Tetrahydro-3,3'-Bis[1,3-Benzdiazin]. Sm. 306° (C. 1906 [2] 688).
- 4) 6,6'-Dinitro-4,4'-Diketo-2,2'-Dimethyl-3,4,3',4'-Tetrahydro-3,3'-Bis[1,3-Benzdiazin]. Sm. 281–286° (C. 1906 [2] 1767).
- 5) 7,7'-Dinitro-4,4'-Diketo-2,2'-Dimethyl-3,4,3',4'-Tetrahydro-3,3'-Bis[1,3-Benzdiazin]. Sm. 337,5° (C. 1908 [2] 181).
- 6) 4-Nitro- $\alpha$ -Imidobenzylamid d. 6-Oxy-2-[4-Nitrophenyl]-1,3-Diazin-4-Carbonsäure (B. 34, 1987).
- $C_{18}H_{12}O_6Br_2$  1)  $\alpha\delta$ -Diketo- $\alpha\delta$ -Di[ $\beta$ -Bromphenyl]butan-2,2'-Dicarbonsäure. Sm. oberhalb 350° (B. 38, 3286 C. 1905 [2] 1591).
- 2) ?-Dibrom- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure? Sm. 270 bis 272° u. Zers. (B. 10, 2209). — II, 2034.
- 3) Monacetat d. Dibrombrasilein +  $\frac{3}{4}H_2O$  (B. 23, 1428). — III, 655.
- $C_{18}H_{12}O_6P_2$  1) 1,2-Dioxybenzolphosphin. Sd. 202–203°<sub>1</sub> (B. 27, 2569, 2752). — II, 910; \*II, 548.
- $C_{18}H_{12}O_7N_2$  C 58,7 — H 3,3 — O 30,4 — N 7,6 — M. G. 368.
- 1) Oxyresazoin (M. 8, 426). — II, 932.
- 2) Anhydrid d.  $\beta$ -[4-Nitrophenyl]akrylsäure (A. 86, 260). — II, 1415.
- $C_{18}H_{12}O_7N_4$  C 54,5 — H 3,0 — O 28,3 — H 14,1 — M. G. 396.
- 1) Monoacetat d. 2-Oxy-1-[3,5-Dinitro-4-Oxyphenyl]azonaphthalin. Sm. 269–270° (Soc. 87, 1205 C. 1905 [2] 1247).
- $C_{18}H_{12}O_7N_8$  C 47,8 — H 2,6 — O 24,8 — N 24,8 — M. G. 452.
- 1) 4-Phenylhydrazido-2,2',4',6'-Nitrosotrinitroazobenzol? Sm. 115 bis 116° (J. pr. [2] 43, 492; [2] 55, 396). — IV, 1359; \*IV, 1013.
- 2) 3'-Phenylhydrazido-2,4,6,5'-Nitrosotrinitroazobenzol? Zers. bei 130° (J. pr. [2] 44, 460; [2] 55, 396). — IV, 1499; \*IV, 1091.
- $C_{18}H_{12}O_8N_2$  C 56,2 — H 3,1 — O 33,3 — N 7,3 — M. G. 384.
- 1) Dinitropolyporsäure. Sm. 230° (A. 195, 369). — II, 1907.
- 2) Diacetat d. 2,7-Dinitro-9,10-Dioxyphenanthren. Sm. 285° u. Zers. (B. 35, 3127 C. 1902 [2] 1213).
- 3) Diacetat d. 4,5-Dinitro-9,10-Dioxyphenanthren. Sm. 258° (B. 35, 3128 C. 1902 [2] 1213).
- $C_{18}H_{12}O_8N_4$  C 52,4 — H 2,9 — O 31,0 — N 13,6 — M. G. 412.
- 1) 4,8-Dinitro-1,5-Di[Acetylamido]-9,10-Anthrachinon (D.R.P. 127780 C. 1902 [1] 337).
- 2) 4,5-Dinitro-1,8-Di[Acetylamido]-9,10-Anthrachinon (D.R.P. 127780 C. 1902 [1] 338).
- 3) 4,8-Diamido-9,10-Anthrachinon-1,5-Dioxaminsäure (D.R.P. 158076 C. 1905 [1] 635).
- 4) Phenylamid d. Oxyessig-1,?,?-Trinitro-2-Naphtyläthersäure. Sm. 232–233° u. Zers. (B. 34, 3199). — II, 524.
- $C_{18}H_{12}O_8N_6$  C 49,1 — H 2,7 — O 29,1 — N 19,1 — M. G. 440.
- 1) 1,4-Di[2,4-Dinitrophenylamido]benzol (C. 1900 [2] 848).

- $C_{18}H_{12}O_8N_8$  C 46,2 — H 2,6 — O 27,3 — N 23,9 — M. G. 468.  
 1) 3'-Phenylhydrazido-2,4,6,5'-Tetranitroazobenzol. Zers. bei 193° (*J. pr.* [2] 44, 462). — IV, 1499.
- $C_{18}H_{12}O_8Cl_4$  1) Tetracetat d. 3,4,6,7-Tetrachlor-1,2,5,8-Tetraoxynaphtalin. Sm. noch nicht bei 250° (*A.* 286, 49). — \*II, 631.
- $C_{18}H_{12}O_8P_2$  1) 1,2-Dioxybenzolphosphinoxid. Sd. oberhalb 360° (i. V.) (*B.* 27, 2571). — II, 910.
- $C_{18}H_{12}O_{12}N_4$  C 45,4 — H 2,5 — O 40,3 — N 11,8 — M. G. 476.  
 1) Diäthyläther d. 1,8-Dioxy-9,10-Anthrachinon (*A.* 143, 367). — III, 428.  
 2) Tetranitro- $\alpha$ -Truxillsäure. Sm. 262° (*B.* 39, 4088 *C.* 1907 [1] 248).  
 $C_{18}H_{12}O_{16}N_6$  C 39,1 — H 2,2 — O 43,5 — N 15,2 — M. G. 552.  
 1) Phloroglucintrialloxan +  $H_2O$ . Zers. oberhalb 200° (*C.* 1900 [2] 1092). — \*II, 615.  
 2) Äthylester d.  $\alpha$ -Acetyl- $\alpha$ -Di[2,4,6-Trinitrophenyl]essigsäure. Sm. 205° u. Zers. (*B.* 23, 2720). — II, 1715.
- $C_{18}H_{12}NBr_3$  1) Tri[4-Bromphenyl]amin. Sm. 143—144° (*B.* 40, 4278 *C.* 1907 [2] 1908).
- $C_{18}H_{12}N_2Cl_2$  1) 2,3[oder 2,6]-Dichlor-1,4-Di[Phenylimido]-1,4-Dihydrobenzol. Sm. bei 220° (*C.* 1902 [1] 527). — \*III, 258.  
 2) 2,5-Dichlor-1,4-Di[Phenylimido]-1,4-Dihydrobenzol. Sm. bei 220° (*C.* 1902 [1] 527). — \*III, 258.  
 3) 10-Chlorphenylat d. 2-Chlor-5,10-Naphtdiazin (Chlorphenylphenazoniumchlorid). 2 +  $PtCl_4$ , +  $AuCl_3$  +  $H_2O$  (*B.* 30, 1830; 33, 1488). — IV, 1001; \*IV, 670.
- $C_{18}H_{12}N_2Cl_4$  1) 2,3,5,6-Tetrachlor-1,4-Di[Phenylamido]benzol (*C.* 1902 [1] 527). — \*IV, 382.
- $C_{18}H_{12}N_2Br_2$  1) 6,6'-Bichinolyldibromid (*B.* 17, 2448). — IV, 1069.
- $C_{18}H_{12}N_2Br_4$  1) 2,7'-Bichinolyltetrabromid (*B.* 19, 2473). — IV, 1069.  
 2) 6,6'-Bichinolyltetrabromid (*B.* 17, 1818, 2448). — IV, 1070.  
 3) 6,7'-Bichinolyltetrabromid (*M.* 6, 553). — IV, 1070
- $C_{18}H_{12}N_2S$  1) Anhydrid d. 3-Phenylamidophenazthioniumhydroxyd. Sm. 150° (*A.* 322, 41 *C.* 1902 [2] 223).
- $C_{18}H_{12}N_2S_2$  1) 2-Thiocarbonyl-5-Phenyl-4-[1-Naphtyl]-2,4-Dihydro-1,3,4-Thio-diazol. +  $CHCl_3$  (Sm. 207°) (*J. pr.* [2] 60, 228). — \*IV, 613.  
 2) 2-Thiocarbonyl-5-Phenyl-4-[2-Naphtyl]-2,4-Dihydro-1,3,4-Thio-diazol. Sm. 212—213° (*J. pr.* [2] 60, 231). — \*IV, 615.  
 3) 2,2'-Dichinolyldisulfid. Sm. 137° (*B.* 21, 622). — IV, 291.  
 4) 8,8'-Dichinolyldisulfid. Sm. 206° (*B.* 41, 939 *C.* 1908 [1] 1704).  
 5) Thiochinanthren. Sm. 306°; subl. bei 170°<sub>23</sub>. 2HCl, 2HBr, 4HNO<sub>3</sub> + 2H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, 2H<sub>2</sub>SO<sub>4</sub>, Pikrat (*J. pr.* [2] 54, 342, 353; [2] 56, 273; *B.* 29, 2456; 30, 2418; 33, 3769; *B.* 35, 97 *C.* 1902 [1] 417; *J. pr.* [2] 66, 220 *C.* 1902 [2] 1131). — IV, 291; \*IV, 190.  
 6) isom. Thiochinanthren. Sm. oberhalb 360°. 2HCl, 2HBr, 4HNO<sub>3</sub> + 2H<sub>2</sub>O, 2H<sub>2</sub>SO<sub>4</sub> (*J. pr.* [2] 56, 277; *B.* 30, 2420; 35, 97; *J. pr.* [2] 66, 222 *C.* 1902 [2] 1131). — \*IV, 722.
- $C_{18}H_{12}N_8Cl_3$  1) 2,4,6-Trichlor-1-Diphenylamidoazobenzol. Sm. 38—39° (*C. r.* 139, 570 *C.* 1904 [2] 1497).
- $C_{18}H_{12}N_8Br_3$  1) 2,4,6-Tribrom-1-Diphenylamidodiazobenzol. Sm. 48° (*C. r.* 139, 570 *C.* 1904 [2] 1497).
- $C_{18}H_{12}N_5Br_3$  1) 4-Brom-1-Di[4-Bromphenylazo]amidobenzol (Bis-p-Bromdiazobenzol-p-Bromanilid) (*B.* 28, 831). — IV, 1521.
- $C_{18}H_{12}N_6S_2$  1) Disulfid d. 3-Merkapto-5-Phenyl-1,2,4-Triazin. Sm. 183° (*B.* 36, 4129 *C.* 1904 [1] 295).
- $C_{18}H_{12}Cl_2J_4$  1) Di[3-Jodphenyl]-1,3-Phenylendijodoniumchlorid. 2 +  $PtCl_4$  (*B.* 37, 1310 *C.* 1904 [1] 1340).
- $C_{18}H_{12}Br_2J_4$  1) Di[3-Jodphenyl]-1,3-Phenylendijodoniumbromid. Sm. 146° (*B.* 37, 1310 *C.* 1904 [1] 1340).
- $C_{18}H_{13}ON$  C 83,4 — H 5,0 — O 6,2 — N 5,4 — M. G. 259.  
 1) Acetylphenyl- $\beta$ -Naphtylcarbazol. Sm. 121° (*A.* 202, 7). — IV, 453.  
 2) isom. Acetylphenyl- $\beta$ -Naphtylcarbazol. Sm. 142° (149°) (*B.* 29, 270; *C.* 1901 [2] 428). — IV, 453; \*IV, 271.  
 3) Anhydrid d. 7-Oxy-1,2-Naphtakridinmethylhydroxyd. Sm. 227° (*B.* 39, 2625 *C.* 1906 [2] 1204).



- C<sub>18</sub>H<sub>13</sub>ON<sub>3</sub>** C 75,2 — H 4,5 — O 5,6 — N 14,6 — M. G. 287.
- 1) 3-Oxy-5-Phenyl-1-[2-Naphtyl]-1,2,4-Triazol. Sm. 274–275°. Ag (*Soc.* 73, 371). — **IV**, 1158.
  - 2) 3-[2-Naphtyl]hydrazon-2-Oxypseudoindol ( $\beta$ -N. d. Isatin). Sm. 234° (*B.* 28, 2527). — **IV**, 930.
  - 3) Phenylhydrazon d. 2-Naphtisatin. Sm. 220° (*B.* 36, 1737 *C.* 1903 [2] 119). — **\*IV**, 456.
  - 4) Safraninon (s-Amidobenzolindon). HCl (*B.* 28, 275; 30, 399; D. R. P. 126175; *A.* 286, 211; D. R. P. 168516 *C.* 1906 [1] 1811). — **IV**, 1178; **\*IV**, 835.
  - 5) Isosafraninon. Sm. 300–315° (*B.* 33, 3076). — **\*IV**, 835.
  - 6) Amidoaposafranon (Aposafraonoxim). (2 + HCl, AuCl<sub>3</sub>) (*B.* 33, 1489; *A.* 322, 73; *C.* 1902 [2] 902; *B.* 38, 3436 *C.* 1905 [2] 1501). — **\*IV**, 670.
  - 7) 3-Phenylhydrazo- $\alpha$ -Naphtoxindol. Sm. 268–270° (*B.* 21, 118). — **II**, 623.
  - 8) Anhydrid d. 2-Hydroxylamido-5,10-Phenazin-10-Phenylhydroxyd (*A.* 322, 72 *C.* 1902 [2] 225). — **\*IV**, 834.
  - 9) 2,5[oder 3,5]-Anhydrid d. 3-Amido-2-Oxy-5,10-Naphtdiazin-5-Phenylhydroxyd. Zers. oberhalb 300° (*B.* 41, 475 *C.* 1908 [1] 1070).
  - 10) 2-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 288° (*B.* 33, 1541). — **\*IV**, 871.
  - 11) 3-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 274° (*B.* 31, 2415). — **\*IV**, 870.
  - 12) 5-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. oberhalb 370° (*B.* 23, 846; 27, 3342; 29, 2951). — **IV**, 1204; **\*IV**, 857.
  - 13) 6-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 240° (*B.* 31, 2411). — **\*IV**, 864.
  - 14) 9-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 298° (*B.* 38, 1814 *C.* 1905 [1] 1655).
  - 15) Nitril d. 2-Oxy-1-[3-Methylphenyl]azonaphtalin-1<sup>8</sup>-Carbonsäure. Sm. 227° (*B.* 26, 52). — **IV**, 1466.
  - 16) Verbindung (aus 1,8-Diamidonaphtalin u. Isatin). Sm. 181° (*A.* 365, 154 *C.* 1909 [1] 1822).
- C<sub>18</sub>H<sub>13</sub>ON<sub>5</sub>** C 68,6 — H 4,1 — O 5,1 — N 22,2 — M. G. 315.
- 1) 5-[2-Oxy-1-Naphtyl]azo-1-Phenyl-1,2,3-Triazol. Sm. 215° u. Zers. (*A.* 364, 214 *C.* 1909 [1] 1007).
- C<sub>18</sub>H<sub>18</sub>OBr** 1) 5-Brom-2-Oxy-1,4-Diphenylbenzol. Sm. 86° (*B.* 36, 1409 *C.* 1903 [1] 1358).
- 2) Bromanhydrobishydrindon. Zers. bei 180° (*Soc.* 65, 497). — **III**, 257.
- C<sub>18</sub>H<sub>13</sub>O<sub>2</sub>N** C 78,5 — H 4,7 — O 11,6 — N 5,1 — M. G. 275.
- 1) 5-Nitroso-2-Oxy-1,3-Diphenylbenzol. Sm. 242–244° (*B.* 32, 2937; *A.* 312, 227). — **\*II**, 543.
  - 2) p-Amido-p-Dioxychrysen. HJ (*B.* 24, 953). — **II**, 1004.
  - 3) Methylenäther d. 2-[3,4-Dioxybenzyliden]amidonaphtalin. Sm. 115°. + C<sub>6</sub>H<sub>6</sub>O (*B.* 37, 1703 *C.* 1904 [1] 1497).
  - 4) 5-Keto-4-Cinnamyliden-2-Phenyl-4,5-Dihydrooxazol. Sm. 152° (*A.* 337, 273 *C.* 1905 [1] 377).
  - 5) 5-Keto-4-Cinnamyliden-3-Phenyl-4,5-Dihydroisoxazol. Sm. 160° u. Zers. (*C. r.* 146, 638 *C.* 1908 [1] 1702).
  - 6) 1-Naphtyläther d. 1-Oxymethylbenzoxazol. Sm. 220° (*J. pr.* [2] 64, 296).
  - 7) 2-Naphtyläther d. 1-Oxymethylbenzoxazol. Sm. 204° (*J. pr.* [2] 64, 296).
  - 8) 3,4-Methylenäther d.  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[2-Chinolyl]äthen (Piperonäthylenchinolin). Sm. 155° (*B.* 27, 1977). — **IV**, 455.
  - 9)  $\alpha$ -[1-Naphtyl]imidophenylelessigsäure. Sm. 145° u. Zers. (*A. ch.* [7] 9, 526). — **\*II**, 942.
  - 10) 1-[1-Naphtyl]imidomethylbenzol-2-Carbonsäure (*B.* 29, 2038). — **\*II**, 949.
  - 11) 1-[2-Naphtyl]imidomethylbenzol-2-Carbonsäure (*B.* 29, 2038).
  - 12) 2,6-Diphenylpyridin-4-Carbonsäure. Sm. 275° (278–279°). Ag (*B.* 20, 2761; 29, 798; *Bl.* [3] 29, 407; *Bl.* [3] 29, 407 *C.* 1903 [1] 1362). — **IV**, 458; **\*IV**, 276.

- C<sub>18</sub>H<sub>13</sub>O<sub>2</sub>N** 13) 2-[ $\beta$ -Phenyläthenyl]chinolin-4-Carbonsäure. Sm. 295° u. Zers. Mg, Ag (B. 22, 3007). — IV, 458.  
 14) 2-[ $\beta$ -Phenyläthenyl]chinolin-6-Carbonsäure. Sm. 264° (B. 23, 2260). — IV, 459.  
 15) Lakton d. 1-[1-Naphtyl]amidooxymethylbenzol-2-Carbonsäure. Sm. 155—159° (B. 29, 2038). — II, 949.  
 16) Lakton d. 1-[2-Naphtyl]amidooxymethylbenzol-2-Carbonsäure (B. 29, 2038). — II, 949.  
 17) Lakton d. 1-[ $\alpha$ -Oxy- $\beta$ -2-Chinolyäthyl]benzol-2-Carbonsäure (Monophthalidylchinaldin). Sm. 104°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 29, 188; A. 315, 345). — IV, 309, 450; \*IV, 269.  
 18) Nitril d.  $\alpha$ -Phenyl- $\alpha$ -[3,4-Dioxy-1-Naphtyl]essigsäure. Sm. 235° (B. 38, 3692 C. 1905 [2] 1730).  
 19) Amid d. 2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 215° (A. 340, 254 C. 1905 [2] 485).  
 20) Verbindung (aus 1-p-Methylphenylacetyl-amido-9,10-Anthrachinon)(D.R.P. 192201 C. 1908 [1] 571).
- C<sub>18</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>** C 71,3 — H 4,3 — O 10,6 — N 13,8 — M. G. 303.  
 1) Acetat d. 4-Oxyphenylazimido- $\beta$ -Naphtalin. Sm. 164—165° (B. 18, 3138). — IV, 1576.  
 2) p-Nitro-2-Methyl-1-[2-Naphtyl]benzimidazol. Sm. 162° (B. 21, 592). — IV, 877.  
 3) 6-Acetyl-amido-5-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 257—258° (B. 33, 3071). — \*IV, 865.  
 4) Amidooxyaposafranon. Sm. 270—280° u. Zers. (A. 266, 256). — IV, 1179.
- C<sub>18</sub>H<sub>13</sub>O<sub>2</sub>N<sub>5</sub>** C 65,2 — H 3,9 — O 9,7 — N 21,1 — M. G. 331.  
 1) 4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amido-3-Methyl-5-Phenylpyrazol. + C<sub>2</sub>H<sub>5</sub>O<sub>2</sub> (Sm. 136°) (B. 40, 673 C. 1907 [1] 969).  
 2) p-[3-Nitrophenyl]azo-2-Methyl-peri-Naphtimidazol (A. 365, 91 C. 1909 [1] 1410).  
 3) p-[4-Nitrophenyl]azo-2-Methyl-peri-Naphtimidazol. Zers. bei 165 bis 190° (A. 365, 91 C. 1909 [1] 1410).  
 4) Phenylpyrazolonrubazonsäure. Sm. 124° (127°) u. Zers. (B. 27, 784; J. pr. [2] 51, 62; [2] 52, 30). — IV, 1162, 1490.
- C<sub>18</sub>H<sub>13</sub>O<sub>2</sub>Br** 1) 2-Brom-1,1'-Diketo-2,3,2',3'-Tetrahydro-2,2'-Biinden. Sm. 170 bis 178° u. Zers. (Soc. 71, 243; B. 29 [2] 870). — \*III, 236.
- C<sub>18</sub>H<sub>13</sub>O<sub>2</sub>Br<sub>3</sub>** 1) Dimethyläther d. p-Brom-5,6-Dioxy-1-Äthenylphenanthren. Sm. 158—159° (B. 35, 4392 C. 1903 [1] 339).
- C<sub>18</sub>H<sub>13</sub>O<sub>2</sub>Br<sub>5</sub>** 1) Dimethyläther d. p-Pentabrom-3,4-Dioxy-p-Äthylphenanthren. Sm. 153—154° (B. 39, 3127 C. 1906 [2] 1333).
- C<sub>18</sub>H<sub>13</sub>O<sub>3</sub>N** C 74,2 — H 4,5 — O 16,5 — N 4,8 — M. G. 291.  
 1) 5-Nitro-2-Oxy-1,3-Diphenylbenzol. Sm. 135—136°. K + H<sub>2</sub>O (B. 33, 1241; Am. 24, 5). — \*II, 543.  
 2) 4-[4-Acetylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 235—240° (C. 1907 [1] 1129).  
 3) 6-Acetyl-2-Phenylchinolin-4-Carbonsäure +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 200° (B. 41, 3892 C. 1909 [1] 299).  
 4) Chinolyacetophenon-2-Carbonsäure. Sm. 155° u. Zers. (B. 37, 3012 C. 1904 [2] 1409; B. 37, 3022 C. 1904 [2] 1410).  
 5) Lakton d. Apocinchonoxysäure. Sm. bei 274° (J. pr. [2] 61, 28). — \*III, 634.  
 6) Monamid d. 1-Phenylnaphtalin-2,3-Dicarbonsäure. NH<sub>4</sub>, Ag (B. 35, 1410 C. 1902 [1] 1156).  
 7) 1-Amid d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 260° (275°) (A. 311, 274; A. 335, 122 C. 1904 [2] 1133). — \*II, 1106.  
 8) 2<sup>2</sup>-Amid d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 220° (A. 311, 274; A. 335, 122 C. 1904 [2] 1133). — \*II, 1106.  
 9) 1-Naphtylmonamid d. Benzol-1,2-Dicarbonsäure (1-Naphtylphtal-amidsäure). Sm. 183—185° (189°) (G. 15, 480; C. 1909 [1] 654). — II, 1797.  
 10) 2-Naphtylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 200° (G. 15, 480; Am. 38, 648 C. 1908 [1] 360). — II, 1797.

- C<sub>18</sub>H<sub>18</sub>O<sub>3</sub>N** 11) Verbindung (aus Phtalylehlorid u. Chinaldin). Sm. 124° (A. 315, 343). — \*IV, 198.
- 12) Verbindung (aus d. Anhydro-1-[β-Oxyäthenyl]benzol-2-Carbonsäure). Sm. 285°. Ag (B. 27, 210). — II, 1641.
- C<sub>18</sub>H<sub>18</sub>O<sub>8</sub>N<sub>5</sub>** C 62,2 — H 3,7 — O 13,8 — N 20,2 — M. G. 347.
- 1) 2-[4-Nitrophenyl]azo-4-Phenylazo-1-Oxybenzol. Sm. 196° (J. pr. [2] 78, 393 C. 1909 [1] 362).
  - 2) 4-[4-Nitrophenyl]azo-2-Phenylazo-1-Oxybenzol. Sm. 189° (J. pr. [2] 78, 394 C. 1909 [1] 362).
  - 3) Phenylpyrazolondiketohydroxypyridinphenylhydrazon. Zers. bei 245°. Phenylhydrazinsalz (B. 27, 3453). — IV, 727.
- C<sub>18</sub>H<sub>18</sub>O<sub>3</sub>Br** 1) Acetat d. 6-Brom-1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Sm. 142° (B. 31, 722; Bl. [3] 27, 77 C. 1902 [1] 590). — \*III, 188.
- 2) Acetat d. 6-Brom-1-Keto-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 173—174° (B. 31, 722; Bl. [3] 27, 78 C. 1902 [1] 590). — \*III, 188.
- 3) Acetat d. 6-Brom-1-Keto-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 226—227° (B. 31, 723; Bl. [3] 27, 78 C. 1902 [1] 590). — \*III, 188.
- C<sub>18</sub>H<sub>18</sub>O<sub>4</sub>N** C 70,4 — H 4,2 — O 20,8 — N 4,6 — M. G. 307.
- 1) Phenyläther-4-Nitrophenyläther d. 1,4-Dioxybenzol. Sm. 91—92,5° (B. 34, 1070).
  - 2) 2-Diacetylamido-9,10-Anthrachinon. Sm. 258° (B. 40, 1701 C. 1907 [1] 1799).
  - 3) Berberolin. H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (Soc. 55, 87). — III, 803.
  - 4) 4-Amido-1-Oxy-2-Benzoylnaphtalin-2'-Carbonsäure. HCl (Soc. 91, 416 C. 1907 [1] 1419; D.R.P. 183629 C. 1907 [2] 367).
  - 5) 1-Oxy-2-[3 oder 6-Amidobenzoyl]naphtalin-2'-Carbonsäure. Sm. 167—170° (Soc. 91, 1590 C. 1907 [2] 1628).
  - 6) 1-Oxy-2-[4 oder 5-Amidobenzoyl]naphtalin-2'-Carbonsäure. Sm. 160—163° (Soc. 91, 1591 C. 1907 [2] 1628).
  - 7) 2,5-Diphenylpyrrol-2',5'-Dicarbonsäure. Sm. 230—232° (195° u. Zers.) (B. 19, 840; B. 38, 3292 C. 1905 [2] 1592). — IV, 451.
  - 8) Pulvinaminsäure (Monamid d. Pulvinsäure). Sm. 226° (220°). NH<sub>4</sub>, K + 5H<sub>2</sub>O, Zn, Ag + H<sub>2</sub>O (B. 13, 1633; A. 219, 14; 282, 23, 49). — II, 2031.
  - 9) Laktam d. α-Benzoylamido-β-[2-Acetoxyphenyl]akrylsäure (C. 1908 [2] 1947).
  - 10) Laktam d. α-Benzoylamido-β-[3-Acetoxyphenyl]akrylsäure. Sm. 149° (C. 1908 [2] 1946).
  - 11) Laktam d. α-Benzoylamido-β-[4-Acetoxyphenyl]akrylsäure. Sm. 172 bis 173° (A. 307, 139). — \*II, 953.
  - 12) Methylester d. α-Cyan-β-Benzoxyl-β-Phenylakrylsäure. Sm. 83° (C. r. 136, 691 C. 1903 [1] 920; Bl. [3] 31, 335 C. 1904 [1] 1135).
  - 13) Methylester d. 4-Phenylamido-1,2-Naphtochinon-4'-Carbonsäure. Sm. 188° (B. 27, 3073). — III, 395.
  - 14) Acetat d. 5-Keto-4-[2-Oxybenzyliden]-2-Phenyl-4,5-Dihydrooxazol. Sm. 137—138° (154—155°) (G. 19, 45; A. 337, 290 C. 1905 [1] 378). — II, 1633.
  - 15) Acetat d. 5-Keto-4-[3-Oxybenzyliden]-2-Phenyl-4,5-Dihydrooxazol. Sm. 145° (A. 337, 294 C. 1905 [1] 379).
  - 16) Verbindung (aus Isomethylenphtalid). Sm. 179—180° (B. 17, 2666). — II, 1647.
  - 17) Verbindung (aus d. Chinon C<sub>18</sub>H<sub>10</sub>O<sub>4</sub>). Sm. 202—203° u. Zers. (A. 293, 112). — \*II, 1187.
- C<sub>18</sub>H<sub>18</sub>O<sub>4</sub>N<sub>3</sub>** C 64,5 — H 3,9 — O 19,1 — N 12,5 — M. G. 335.
- 1) p-Dinitrotriphenylamin. Sm. 206—207° (B. 23, 2538). — II, 342.
  - 2) p-Nitro-3-Oxy-6-Phenylamido-4-Phenylimido-1-Keto-1,4-Dihydrobenzol (Nitroanilidooxychinonanilid) (B. 32, 1071). — \*III, 262.
  - 3) 3-Nitro-2,5-Di[Phenylamido]-1,4-Benzochinon. Sm. 260° u. Zers. (B. 28, 1387; 32, 1069). — III, 343; \*III, 261.
  - 4) 3'-Nitro-4'-Oxy-4-[4-Oxyphenyl]azobenzol. Sm. 200° (D.R.P. 61571). — \*IV, 1048.
  - 5) Acetat d. 2-Nitro-4-Phenylazo-1-Oxynaphtalin. Sm. 173° (Soc. 95, 1433 C. 1909 [2] 1248).



- $C_{18}H_{13}O_4N_3$  6) Acetat d. 4-Nitro-2-Phenylazo-1-Oxynaphtalin. Sm. 208° (Soc. 95, 1435 C. 1909 [2] 1248).  
 7) Acetat d. 2-[4-Nitrophenyl]azo-1-Oxynaphtalin. Sm. 179,5° (B. 28, 851, 1125). — IV, 1430.  
 8) Acetat d. 4-[4-Nitrophenyl]azo-1-Oxynaphtalin. Sm. 165–166° (B. 28, 851, 1125). — IV, 1430.  
 9) Acetat d. 1-[3-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 161–162° (Soc. 53, 465). — IV, 1430.  
 10) Acetat d. 1-[4-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 192–193° (Soc. 53, 466). — IV, 1431.
- $C_{18}H_{13}O_4N_5$  C 59,5 — H 3,6 — O 17,5 — N 19,3 — M. G. 363.  
 1) 4-[2,4-Dinitrophenylamido]azobenzol. Sm. 175,5–176° (J. pr. [2] 69, 43 C. 1904 [1] 508).  
 2) Disazoverbindung (aus 2-Nitro-1,3-Dioxybenzol u. Diazobenzolchlorid). Zers. bei 260° (B. 39, 327 C. 1906 [1] 835).
- $C_{18}H_{13}O_4Cl$  1) Benzoat d. 3-Chlor-5[oder 7]-Oxy-4,7[oder 4,5]-Dimethyl-1,2-Benzopyron. Sm. 196° (B. 34, 359). — \*II, 1042.
- $C_{18}H_{13}O_4Br$  1) Bromtiresorcin.  $HBr + H_2O$  (A. 289, 67). — \*II, 565.  
 2) Diacetat d. 2-Brom-9,10-Dioxyphenanthren. Sm. 178–179° (B. 37, 3561 C. 1904 [2] 1401).
- $C_{18}H_{13}O_5N$  C 66,9 — H 4,0 — O 24,8 — N 4,3 — M. G. 323.  
 1) 4-Amido-1-Oxy-2-[4 oder 5-Oxybenzoyl]naphtalin-2<sup>2</sup>-Carbonsäure (Soc. 91, 423 C. 1907 [1] 1421).  
 2) Pulvinhydroxamsäure. Sm. 194° u. Zers. Anilinsalz (A. 282, 34). — II, 2031.  
 3)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Benzoylamido- $\beta$ -Benzoxyl- $\gamma$ -Oxypropen- $\alpha$ -Carbonsäure (Dibenzoylamidotetronsäure). Sm. 164° (A. 312, 142). — \*II, 749.  
 4) Verbindung (aus Diphtalysäure). Sm. 150–152° (A. 242, 231). — II, 2029.
- $C_{18}H_{13}O_5N_3$  C 61,6 — H 3,7 — O 22,8 — N 11,9 — M. G. 351.  
 1) Methyläther d. 7-[2,4-Dinitrobenzyliden]amido-2-Oxynaphtalin. Sm. 206–207° (B. 40, 3233 C. 1907 [2] 814).  
 2) Acetat d. 5-Oximido-2,4,6-Triketo-1,3-Diphenylhexahydro-1,3-Diazin. Sm. 245° u. Zers. (C. 1906 [2] 1404; Soc. 91, 1340 C. 1907 [2] 1065).  
 3) Tartrandibenzamimid (A. 232, 165). — II, 1267.
- $C_{18}H_{13}O_6N$  C 63,7 — H 3,8 — O 28,3 — N 4,1 — M. G. 339.  
 1) Säure (aus Corydinsäure) +  $2H_2O$ . Pb (C. 1897 [2] 133).  
 2) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\alpha$ -Phenyl- $\beta$ -[2-Nitrophenyl]butan- $\beta$ -Keto-carbonsäure. Sm. 118° (A. 333, 237 C. 1904 [2] 1390).  
 3) Dimethylester d. 4-Phtalylamidobenzol-1,2-Dicarbonsäure. Sm. 174° (C. 1908 [2] 1027).  
 4) 1-Acetat d. 3-Acetylamido-1,2-Dioxy-9,10-Anthrachinon. Sm. 268 bis 271° u. Zers. (B. 18, 1668). — III, 424.  
 5) Diacetylderivat d. 4-Amido-1,2-Dioxy-9,10-Anthrachinon. Sm. 245° (B. 35, 906 C. 1902 [1] 815; J. pr. [2] 74, 277 C. 1907 [1] 110). — \*III, 303.  
 6) isom. Diacetylderivat d. 4-Amido-1,2-Dioxy-9,10-Anthrachinon. Sm. 205° (B. 35, 907 C. 1902 [1] 815; J. pr. [2] 74, 278 C. 1907 [1] 110). — \*III, 303.  
 7) Diacetat d. 2-Nitro-9,10-Dioxyphenanthren. Sm. 258° (B. 36, 3732 C. 1904 [1] 35).  
 8) Diacetat d. 4-Nitro-9,10-Dioxyphenanthren. Sm. 222–223° u. Zers. (B. 38, 3736 C. 1904 [1] 36).
- $C_{18}H_{13}O_6N_3$  C 56,9 — H 3,5 — O 26,2 — N 11,4 — M. G. 367.  
 1) Diacetat d. 3-Nitro-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 183° u. Zers. (B. 41, 3688 C. 1908 [2] 1869).
- $C_{18}H_{13}O_6N_5$  C 54,7 — H 3,3 — O 24,3 — N 17,7 — M. G. 395.  
 1) 2',4',6'-Trinitro-2-Phenylamidodiphenylamin (B. 33, 3074). — \*IV, 364.  
 2) Dibarbituryl-1-Naphtylamin. Zers. bei 260°.  $Na_2$  (J. pr. [2] 73, 476 C. 1906 [2] 504).  
 3) Dibarbituryl-2-Naphtylamin. Zers. bei 260°.  $Na_2$  (J. pr. [2] 73, 477 C. 1906 [2] 504).
- $C_{18}H_{13}O_6Cl$  1) Triphloroglucinechlorid +  $2\frac{1}{2}H_2O$  (A. 276, 333). — II, 1020.

- C<sub>18</sub>H<sub>13</sub>O<sub>6</sub>Br** 1) 1<sup>34</sup>-Methylenäther-3,5-Dimethyläther d. *p*-Brom-3,5-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 274° (B. 32, 2268). — \*III, 533.
- 2) 1<sup>2</sup>,2-Lakton d. *p*-Brom-2,5-Dioxy-1-[4,5-Dioxyphenyl]benzofuran-1<sup>4</sup>,1<sup>5</sup>,5-Trimethyläther-1<sup>2</sup>-Carbonsäure (Bromtrimethoxyeumaronisocumarin). Sm. 206° (Soc. 95, 403 C. 1909 [1] 1572).
- C<sub>18</sub>H<sub>13</sub>O<sub>7</sub>N** 3) 4-Acetat d. *p*-Brom-3,4,6-Trioxy-9,10-Phenanthrenchinon-3,6-Dimethyläther. Sm. 233° (B. 28, 943; 30, 1391). — \*III, 319.
- C 60,8 — H 3,7 — O 31,6 — N 3,9 — M. G. 355.
- 1) Aristinsäure. Sm. 275°. K + 2H<sub>2</sub>O, Ca + 4H<sub>2</sub>O, Ba + 2H<sub>2</sub>O, Pb + 2H<sub>2</sub>O, Cu + 3H<sub>2</sub>O, Ag (B. 29 [2] 38). — III, 780.
- 2) Aristidinsäure. Zers. bei 260° (B. 29 [2] 38). — III, 780.
- 3) Anhydrid d.  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3,4-Dioxyphenyl]äthen-3,4-Dimethyläther- $\alpha^2$ -Dicarbonsäure. Sm. 217° (B. 39, 3116 C. 1906 [2] 1329).
- C 56,4 — H 3,4 — O 29,2 — N 11,0 — M. G. 383.
- C<sub>18</sub>H<sub>13</sub>O<sub>7</sub>N<sub>3</sub>** 1) 2,4,6-Trinitrophenyläther d. 2-Oxy-1,4-Dimethylnaphtalin. Sm. 189—190° (B. 31, 1679). — \*II, 536.
- 2) Dehydroäscorkein (B. 34, 2616). — \*III, 430.
- C<sub>18</sub>H<sub>13</sub>O<sub>7</sub>N<sub>5</sub>** C 52,6 — H 3,2 — O 27,2 — N 17,0 — M. G. 411.
- 1) 2,4,6-Trinitro-3,5-Di[Phenylamido]-1-Oxybenzol. Sm. 200° u. Zers. (R. 21, 264 C. 1902 [2] 519).
- C<sub>18</sub>H<sub>13</sub>O<sub>8</sub>N<sub>5</sub>** C 50,6 — H 3,0 — O 30,0 — N 16,4 — M. G. 427.
- 1) 2,4,6-Trinitro-1,3-Di[4-Oxyphenylamido]benzol. Sm. 224—226° u. Zers. (D.R.P. 137108 C. 1902 [2] 1486). — \*IV, 372.
- C<sub>18</sub>H<sub>13</sub>NS** 1) 1-[ $\alpha$ -Rhodanbenzyl]naphtalin. Sm. 76—77° (C. 1902 [2] 789).
- C<sub>18</sub>H<sub>13</sub>N<sub>2</sub>Cl** 1) 1-Chlor-2-[ $\alpha$ -Cyanbenzyl]amidonaphtalin. Sm. 76—77° (Soc. 77, 1217). — \*II, 821.
- 2) Chlorphenylat d. 5,10-Naphtdiazin (Phenylphenazoniumchlorid). + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (B. 29, 2316, 2968; 30, 2622; A. 322, 69). — IV, 1001; \*IV, 670.
- C<sub>18</sub>H<sub>13</sub>N<sub>2</sub>Br** 1) 1-Brom-2-[ $\alpha$ -Cyanbenzyl]amidonaphtalin. Sm. 92° (Soc. 77, 1216). — \*II, 821.
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>Cl<sub>2</sub>** 2,4-Dichlor-1-Diphenylamidodiazobenzol. Sm. 35—40° (C. r. 139, 570 C. 1904 [2] 1497).
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>Br<sub>2</sub>** 1) 2,4-Dibrom-1-Diphenylamidodiazobenzol. Sm. 80° (C. r. 139, 570 C. 1904 [2] 1497).
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>J<sub>2</sub>** 1) 2,4-Dijod-1-Diphenylamidodiazobenzol. Sm. 70° (C. r. 139, 571 C. 1904 [2] 1497).
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>S** 1) Phenylthionin. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HBr + H<sub>2</sub>O, HNO<sub>3</sub> + H<sub>2</sub>O, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> + H<sub>2</sub>O (C. 1900 [2] 342; B. 33, 3293). — \*II, 478.
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>S<sub>2</sub>** 1) 5-Phenylamido-2-Thiocarbonyl-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 255° u. Zers. (B. 24, 4192). — IV, 927.
- 2) 3-Merkapto-5-Thiocarbonyl-4-Phenyl-1-[1-Naphtyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 120° (B. 34, 319). — \*IV, 751.
- C<sub>18</sub>H<sub>13</sub>N<sub>3</sub>S<sub>3</sub>** 1) 2-Amido-1-Naphtyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 152° (J. pr. [2] 60, 196). — \*IV, 445.
- 2) 4-Amido-1-Naphtyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 132—133°. HCl (J. pr. [2] 60, 195). — \*IV, 445.
- C<sub>18</sub>H<sub>13</sub>N<sub>5</sub>Cl<sub>2</sub>** 1) Diazophenosafuranchlorid. + 2AuCl<sub>3</sub> (B. 16, 469). — IV, 1284.
- C<sub>18</sub>H<sub>14</sub>ON<sub>2</sub>** C 78,8 — H 5,1 — O 5,8 — N 10,2 — M. G. 274.
- 1)  $\alpha\beta$ -Methylen- $\alpha$ -Phenyl- $\beta$ -[1-Naphtyl]harnstoff. Sm. 170—190° (Soc. 95, 504 C. 1909 [1] 1892).
- 2) Phenylamido-4-Phenylimido-1-Keto-1,4-Dihydrobenzol (Anilido-chinonphenylimid). Sm. 125° (B. 26, 385). — IV, 838.
- 3)  $\alpha$ -Benzyliden- $\beta$ -[1-Naphtoyl]hydrazin. Sm. 224° (J. pr. [2] 74, 19 Anm. C. 1906 [2] 792).
- 4) 2-Furalhydrazidfluoren. Sm. 190—191° (B. 34, 1763). — \*IV, 667.
- 5) 6-Oxy-3-Phenylazobenzol (D.R.P. 58295). — \*IV, 1048.
- 6) 4'-Oxy-4-Phenylazobenzol. Sm. 240° (B. 31, 482; A. 300, 254). — IV, 1415.
- 7) Phenyläther d. 4-Oxyazobenzol. Sm. 116° (B. 41, 1157 C. 1908 [1] 1880).

- C<sub>18</sub>H<sub>14</sub>ON<sub>2</sub>**
- 8) 5-Keto-4-Benzyliden-2-[ $\beta$ -Phenyläthenyl]-4,5-Dihydroimidazol. Sm. 218° (*J. pr.* [2] 76, 96 *C.* 1907 [2] 1088).
  - 9) 2-Methyl-3-Benzylidenacetyl-1,4-Benzdiazin. Sm. 147° (*B.* 35, 3312 *C.* 1902 [2] 1109). — \*IV, 630.
  - 10) 3-[2-Naphtyl]amido-1,4-Benzoxazin. Sm. 154—155° (*Am.* 20, 567). — \*II, 392.
  - 11) Methyläther d. 2-[4-Oxyphenyl]-peri-Naphtimidazol. Sm. 205° (*B.* 42, 3678 *C.* 1909 [2] 1664).
  - 12) Phenylhydroxyd d. 5,10-Naphtdiazin (Phenylphenazoniumhydrat). Salze, siehe diese. Chlorid, Nitrat, Bichromat (*B.* 29, 2316, 2968; 30, 2622). — IV, 1001.
  - 13) 7-Äthylrosindon[5] (Äthylphenonaphtazon). Sm. 192—193° (180°) (*A.* 290, 300; *C.* 1898 [2] 920). — IV, 1055; \*IV, 708.
  - 14) 7-Äthylrosindon[9] (ms-Äthylisorosindon). Sm. 178° (*B.* 29, 2759; 31, 2478). — IV, 1055; \*IV, 708.
  - 15) Äthyläther d. 9[oder 10]-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 186—187° (*B.* 25, 496). — IV, 1055.
  - 16) N-Acetyldihydro- $\alpha$ -Naphtinolin. Sm. 174° (*B.* 27, 2258). — IV, 1039.
  - 17) Nitril d.  $\beta$ -Äthoxy- $\beta$ -Phenyl- $\alpha$ -[2-Cyanphenyl]äthen- $\alpha$ -Carbonsäure. Sm. 115—116° (*B.* 27, 834). — II, 1977.
  - 18) Phenylamid d. peri-Naphtimidazol-2-Carbonsäure. Sm. 278° (*A.* 365, 104 *C.* 1909 [1] 1412).
- C<sub>18</sub>H<sub>14</sub>ON<sub>4</sub>**
- C 71,5 — H 4,6 — O 5,3 — N 18,6 — M. G. 302.
- 1) 4-Phenylnitrosamidoazobenzol. Sm. 119,5 (*B.* 12, 261). — IV, 1356.
  - 2) 4-Oxy-1,3-Di[Phenylazo]benzol. Sm. 131° (123°) (*A.* 137, 87; 263, 237; 288, 242; *B.* 9, 628; *Soc.* 37, 572; *B.* 35, 1611 *C.* 1902 [1] 1325; *C. r.* 138, 1278 *C.* 1904 [2] 97). — IV, 1415; \*IV, 1039.
  - 3) 5-Oxy-1,3-Di[Phenylazo]benzol. Sm. 176—177° (*B.* 22, 2193). — IV, 1416.
  - 4) 1-Phenylazo-4-[4-Oxyphenylazo]benzol. 2HCl (*Soc.* 95, 1396 *C.* 1909 [2] 1222).
  - 5) Acetylderivat d. Verb. C<sub>18</sub>H<sub>12</sub>N<sub>4</sub>. Sm. 137—139° (*B.* 20, 2900). — IV, 1542.
  - 6) Monoacetylderivat d. Base C<sub>16</sub>H<sub>12</sub>N<sub>4</sub> (aus d. Verb. C<sub>18</sub>H<sub>8</sub>O<sub>2</sub>N<sub>4</sub>). Sm. 260—261° (*A.* 255, 353). — IV, 1171.
- C<sub>18</sub>H<sub>14</sub>ON<sub>6</sub>**
- C 65,5 — H 4,2 — O 4,8 — N 25,4 — M. G. 330.
- 1) 4-[2-Amido-1-Naphtyl]azo-3-Oxy-1-Phenyl-1,2,5-Triazol (*A.* 295, 160). — IV, 1235.
- C<sub>18</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>**
- C 74,5 — H 4,8 — O 11,0 — N 9,7 — M. G. 290.
- 1) 4-Nitrophenylamin. Sm. 139—140° (144°) (*B.* 23, 2537; 31, 2988). — II, 342; \*II, 158.
  - 2) 4-Nitroso-1-Phenylacetylaminonaphtalin. Sm. 81° (*A.* 286, 182). — \*II, 334.
  - 3) s-Benzoyl-1-Naphtylharnstoff. Sm. 243—243,5° (165—166°) (*Soc.* 71, 1202; *Am.* 24, 211). — \*II, 736.
  - 4) s-Benzoyl-2-Naphtylharnstoff. Sm. 219—220° (*Soc.* 71, 1202). — \*II, 737.
  - 5) Benzoyl-2-Naphtenylamidoxim. Sm. 179° (*B.* 22, 2451). — II, 1455.
  - 6) 2,5-Di[Phenylamido]-1,4-Benzochinon (*J.* 1863, 415; *B.* 5, 851; 16, 1556; 21, 2618; 22, 1655; *A.* 210, 178; 228, 331). — III, 340.
  - 7) 5-Phenylamido-2-Oxy-1,4-Benzochinonphenylimid (*B.* 18, 788). — III, 347.
  - 8)  $\alpha$ -[2-Oxybenzyliden]- $\beta$ -[1-Naphtoyl]hydrazin. Sm. 235° (*J. pr.* [2] 74, 19 *Anm.* *C.* 1906 [2] 792).
  - 9) Methylenäther d.  $\alpha$ -[3,4-Dioxybenzyliden]- $\beta$ -[2-Naphtyl]hydrazin. Sm. 186° (*Ar.* 245, 374 *C.* 1907 [2] 1513).
  - 10) 2-Oxy-1-[2-Acetylphenyl]azonaphtalin. Sm. 198,5—199° (*B.* 36, 1621 *C.* 1903 [2] 36). — \*IV, 1072.
  - 11) 2-Oxy-1-[4-Acetylphenyl]azonaphtalin. Sm. 181—183° (*B.* 18, 2695; *C.* 1909 [2] 525). — IV, 1478.
  - 12) 3,5-Diketo-4-[ $\gamma$ -Phenylallyliden]-1-Phenyltetrahydropyrazol. Sm. 252° (*B.* 30, 1018). — IV, 992.
  - 13) p-Methylamidoanthrapyridon (D.R.P. 201904 *C.* 1908 [2] 1308).



- $C_{18}H_{14}O_2N_2$  14)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Nitro-2-Chinolyl]äthen. Sm. 135°. HCl, (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), Pikrat (B. 38, 3720 C. 1906 [1] 54).
- 15)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[8-Nitro-2-Chinolyl]äthen. Sm. 145°. HCl +  $H_2O$ , (2HCl,  $PtCl_4$ ), (HCl,  $HgCl_2$ ) (B. 38, 3717 C. 1906 [1] 54).
- 16)  $\alpha$ -[3-Nitrophenyl]- $\beta$ -[6-Methyl-2-Chinolyl]äthen. Sm. 201° (B. 38, 3701 C. 1906 [1] 51).
- 17)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[6-Methyl-2-Chinolyl]äthen. Sm. 177° (C. 1907 [2] 1528).
- 18)  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[8-Methyl-2-Chinolyl]äthen. Sm. 96°. (2HCl + 3 $HgCl_2$ ), (2HCl,  $PtCl_4$ ), (2HCl,  $AuCl_3$ ) (B. 38, 3710 C. 1906 [1] 52).
- 19)  $\alpha$ -[3-Nitrophenyl]- $\beta$ -[8-Methyl-2-Chinolyl]äthen. Sm. 109°. HCl, (2HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ) (B. 38, 3711 C. 1906 [1] 53).
- 20)  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[8-Methyl-2-Chinolyl]äthen. Sm. 112°. HCl, (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ) (B. 38, 3712 C. 1906 [1] 53).
- 21) 3-Dimethylamidophenonaphtoxazon. Sm. 244°. HCl (Soc. 91, 333 C. 1907 [1] 1337).
- 22) Äthylpseudoisatin- $\beta$ -Indogenid. Sm. 197—198° (B. 16, 2200). — II, 1615.
- 23) 1,1'-Dimethylindigo (H. 53, 187 C. 1907 [2] 1857).
- 24) 2,2'-Dimethylindigo (D.R.P. 58276, 63310; Am. 27, 8 C. 1907 [1] 476). — \*II, 960.
- 25) 3,3'-Dimethylindigo (Am. 27, 11 C. 1902 [1] 477).
- 26) 4,4'-Dimethylindigo (B. 24, 693; 31, 1817; 33, 2648; Am. 27, 12 C. 1902 [1] 477; B. 42, 3641 Anm. C. 1909 [2] 1877; B. 42, 4218 C. 1909 [2] 2172). — \*II, 961.
- 27) isom. Dimethylindigo (D.R.P. 128955 C. 1902 [1] 691).
- 28) Dimethylindirubin (B. 28, 2526). — \*II, 961.
- 29) Acetylindileucin. Sm. 204° (B. 28, 2525). — \*II, 947.
- 30) Oxyaposafranon. Sm. 280° u. Zers. (A. 266, 252; B. 28, 2287).
- 31) Dimethylamidophenonaphtoxazon. Sm. 244°. HCl (A. 289, 123). — IV, 1061.
- 32) Muscarin (B. 25, 3003). — IV, 1060.
- 33) Methylester d. 2,3-Diphenyl-1,4-Diazin-5-Carbonsäure. Sm. 115 bis 116° (Soc. 63, 1306). — IV, 1049.
- 34) Acetat d. 2-[4-Oxyphenylazo]naphtalin. Sm. 180° (J. pr. [2] 78, 396 C. 1909 [1] 362).
- 35) Acetat d. 2-Oxy-1-Phenylazonaphtalin. Sm. 117° (G. 15, 407; Soc. 53, 466; 55, 117; 63, 930; B. 24, 2306). — IV, 1428.
- 36) Acetat d. 4-Oxy-1-Phenylazonaphtalin. Sm. 128° (B. 17, 3030; Soc. 81, 172). — IV, 1427; \*IV, 1042.
- 37) Acetat d. 1-Oxy-2-Phenylazonaphtalin. Sm. 120—121° (Soc. 65, 840; B. 40, 2157 C. 1907 [2] 145; A. 359, 380 C. 1908 [1] 1774; B. 42, 1379 C. 1909 [1] 1709). — IV, 1429.
- 38) N-Acetylderivat d. Verb.  $C_{18}H_{13}ON_2$ . Sm. 210° u. Zers. (B. 40, 2077 C. 1907 [2] 150).
- 39) Benzoat d. 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin. Sm. 150° (PINNER, Imidoäther 243). — IV, 957.
- 40) Nitril d.  $\beta$ -Benzoylimido- $\alpha$ -Benzoylbuttersäure. Sm. 158° (J. pr. [2] 47, 112). — II, 1195.
- 41) Benzylidenhydrazid d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 224,5° (J. pr. [2] 78, 164 C. 1908 [2] 951).
- 42) Verbindung (aus Indol u. Glyoxylsäure) (C. 1908 [1] 748).
- 43) Verbindung (aus Diacetonitril u. Salicylaldehyd). Sm. 179—180° (J. pr. [2] 56, 139). — \*III, 54.
- $C_{18}H_{14}O_2N_4$  C 67,9 — H 4,4 — O 10,1 — N 17,6 — M. G. 318.
- 1) 1,3-Di[Phenylnitrosamido]benzol. Sm. 102° (B. 16, 2798). — IV, 572.
- 2) 1,4-Di[Phenylnitrosamido]benzol. Sm. 120° u. Zers. (M. 8, 479). — IV, 585.
- 3) 2-Nitro-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 569 C. 1904 [2] 1497).
- 4) 3-Nitro-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 569 C. 1904 [2] 1497).
- 5) 4-Nitro-1-Diphenylamidodiazobenzol. Sm. 63° (C. r. 139, 569 C. 1904 [2] 1497).

- $C_{18}H_{14}O_2N_4$  6) 3-Nitro-4'-Phenylamidoazobenzol. Sm. 136—137° (Soc. 45, 118). — IV, 1359.
- 7) 4-Nitro-4'-Phenylamidoazobenzol. Sm. 151° (Soc. 43, 440; 45, 119). — IV, 1359.
- 8) 4-Phenylazo-2-Oxyazoxybenzol? Sm. 124—124,5° (B. 35, 1621 C. 1902 [1] 1326). — \*IV, 1040.
- 9) 5-Phenylazo-2-Oxyazoxybenzol. Sm. 145—145,5° (B. 35, 1619 C. 1902 [1] 1326). — \*IV, 1039.
- 10) 1,4-Di[3-Oxyphenylazo]benzol? (B. 15, 3021). — IV, 1416.
- 11) 1,4-Di[4-Oxyphenylazo]benzol. Sm. 205—207° (Soc. 47, 659). — IV, 1416.
- 12) 1-Phenylazo-4-[m-Dioxyphenylazo]benzol. Sm. 183—184° (B. 15, 2818). — IV, 1444.
- 13) isom. 1-Phenylazo-4-[m-Dioxyphenylazo]benzol. Sm. 215° (B. 15, 2818). — IV, 1444.
- 14) 2,4-Di[Phenylazo]-1,3-Dioxybenzol. Sm. 220—222° (B. 17, 880; 21, 3118). — IV, 1443.
- 15) 4,6-Di[Phenylazo]-1,3-Dioxybenzol. Sm. 213—215° (217°) (B. 15, 24, 2816; 21, 3117). — IV, 1443.
- 16) p-Di[Phenylazo]-1,3-Dioxybenzol. Sm. 220° (B. 15, 24, 2817; 21, 3117). — IV, 1443.
- 17) 3,3'-Bi-5-Keto-1-Phenyl-4,5-Dihydropyrazol. Sm. 275° u. Zers. (B. 28, 68). — IV, 722.
- 18) 3,5'-Diphenyl-5,3'-Äthylenbi[1,2,4-Oxdiazol]. Sm. 158—159° (B. 22, 2960). — II, 1210.
- 19)  $\alpha\beta$ -Di[4-Keto-3,4-Dihydro-1,3-Benzdiazin-2-läthan +  $H_2O$ ]. Sm. oberhalb 310° (wasserfrei). (2HCl,  $PtCl_4$ ) (J. pr. [2] 69, 23 C. 1904 [1] 640).
- 20) 3-Methyl-2-[4-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 107°. +  $C_2H_6O$  (Soc. 59, 697). — IV, 1396.
- 21)  $\alpha$ -Imidobenzylamid d. 6-Oxy-2-Phenyl-1,3-Diazin-4-Carbonsäure. Sm. 263° u. Zers. (B. 22, 2615). — IV, 988.
- 22) Benzylidenhydrazid d. 5-Keto-4-Benzyliden-4,5-Dihydropyrazol-3-Carbonsäure. Sm. noch nicht bei 250° (J. pr. [2] 51, 57). — IV, 987.
- $C_{18}H_{14}O_2N_6$  1) 2,2'-Diacetyl-3,3'-Azoindazol. Zers. bei 210° (B. 39, 4281 C. 1907 [1] 479).
- 2) Benzylidenhydrazid d. 4-Benzylidenhydrazon-5-Keto-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 217,5° (J. pr. [2] 51, 58). — IV, 535.
- $C_{18}H_{14}O_2Cl_2$  1) Chlorid d.  $\alpha$ -Truxillsäure. Sm. 125° (B. 22, 681). — II, 1901.
- 2) Chlorid d.  $\beta$ -Truxillsäure. Sm. 96° (B. 22, 2260). — II, 1902.
- 3) Chlorid d.  $\gamma$ -Truxillsäure. Sm. 140° (B. 22, 682). — II, 1893.
- $C_{18}H_{14}O_2Br_2$  1) Dibromretenchinon. Sm. 250—252° (A. 229, 120). — III, 458.
- $C_{18}H_{14}O_2Br_4$  1) Bromderivat d. 5,6-Dioxy-1-Äthenylphenanthrendimethyläther. Sm. 145—147° u. Zers. (B. 35, 4391 C. 1903 [1] 339).
- $C_{18}H_{14}O_2J_4$  1) Di[3-Jodphenyl]-1,3-Phenylendijodoniumhydroxyd. Salze, siehe (B. 37, 1310 C. 1904 [1] 1340).
- $C_{18}H_{14}C_2S_2$  1) 2,5-Diphenyläther d. 2,5-Dimerkapto-1,4-Dioxybenzol. Sm. 103° (A. 336, 134 C. 1904 [2] 1298).
- 2) 2,6-Diphenyläther d. 2,6-Dimerkapto-1,4-Dioxybenzol (A. 336, 136 C. 1904 [2] 1299).
- 3) Disulfid d.  $\beta$ -Phenylakrylthiolsäure (Zimtsäuredisulfid). Sm. 139° (B. 36, 2272 C. 1903 [2] 563).
- $C_{18}H_{14}O_3N_2$  1) C 70,6 — H 4,6 — O 15,7 — N 9,1 — M. G. 306.
- 2) 2-Naphtylamidomethyl-3-Nitrophenylketon. Sm. 179° (B. 30, 575). — \*III, 98.
- 3) 3-Acetylamido-4-Phenylamido-1,2-Naphtochinon. Sm. 308° (B. 31, 2410). — \*III, 283.
- 3) 6-Acetylamido-4-Phenylamido-1,2-Naphtochinon. Sm. 282° u. Zers. (B. 31, 2416). — \*III, 283.
- 4) 7-Acetylamido-4-Phenylamido-1,2-Naphtochinon. Sm. 280° u. Zers. (B. 33, 1541). — \*III, 283.
- 5) p-Acetylamido-4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 215° (B. 15, 286). — III, 393.

- C<sub>18</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>** 6) 2,5-Di[ $\alpha$ -Oximidobenzyl]furan. Sm. 213—214° (*Am.* 25, 462). — \*III, 523.
- 7) isom. 2,5-Di[ $\alpha$ -Oximidobenzyl]furan. Sm. 243—245° u. Zers. (*Am.* 25, 463). — \*III, 523.
- 8) 4<sup>3,4</sup>-Methylenäther d. 5-Keto-4-[3,4-Dioxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 166—167° (*B.* 33, 869). — \*IV, 637.
- 9) 2-Oxy-1-[4-Oxy-3-Methylphenyl]azonaphtalin-1<sup>5</sup>-Carbonsäure. Sm. 229° (*G.* 37 [1] 78 *C.* 1907 [2] 404).
- 10) 2-Oxy-1-[5-Oxy-3-Methylphenyl]azonaphtalin-1<sup>6</sup>-Carbonsäure. Sm. 237° (*G.* 37 [1] 81 *C.* 1907 [2] 404).
- 11)  $\alpha$ -Benzoylamido- $\beta$ -[3-Indolyl]akrylsäure. Sm. 232—234° (*B.* 40, 3031 *C.* 1907 [2] 703).
- 12) Oxim d. Chinolylacetophenon-2-Carbonsäure. Sm. 145° u. Zers. (*B.* 37, 3012 *C.* 1904 [2] 1409).
- 13) Aldehyd d. 2-Oxy-1-[2-Methoxyphenyl]azonaphtalin-1<sup>4</sup>-Carbonsäure. Sm. 212° (*B.* 42, 3101 *C.* 1909 [2] 1229).
- 14) Äthylester d. 1,2-Naphto- $\beta$ -Ketopentamethylenazinmethylsäure. Zers. bei 250° (*Bl.* [3] 23, 445). — \*IV, 696.
- 15) Äthylester d. 2,3-Naphto- $\beta$ -Ketopentamethylenazinmethylsäure. H<sub>2</sub>SO<sub>4</sub> (*Bl.* [3] 23, 455). — \*IV, 696.
- 16) Monoacetat d. 1-Phenylazo-2,4-Dioxynaphtalin. Sm. 173° (*A.* 286, 87; *B.* 17, 1812). — IV, 1449.
- 17) Monoacetat d. 1-Phenylazo-2,7-Dioxynaphtalin. Sm. 181° (*B.* 23, 524). — IV, 1450.
- 18) Monoacetat d. 1-Phenylazo-3,4-Dioxynaphtalin. Sm. 133° (*A.* 286, 83). — IV, 1449.
- 19) Acetat d. Dioxychindolinmethyläther. Sm. 148° (*B.* 39, 3938 *C.* 1907 [1] 119).
- 20) 2-Benzoat d. 1,2-Dioximido-1,2-Dihydronaphtalin-1-Methyläther. Sm. 119° (*B.* 39, 4171 *C.* 1907 [1] 228; *B.* 40, 4348 *C.* 1908 [1] 30).
- 21) Benzoat d. 5-Oxy-1-Benzoyl-2-Methylimidazol. Sm. 128° (*J. pr.* [2] 76, 96 *C.* 1907 [2] 1088).
- 22) Benzoat d. Verb. C<sub>11</sub>H<sub>10</sub>O<sub>2</sub>N<sub>2</sub>. Sm. 158—159° (*C.* 1905 [2] 627).
- 23) Monamid d. s-Diphenylketipinsäuremononitril. Sm. 199—200° u. Zers. (*A.* 282, 45). — II, 2032.
- 24) Di[Phenylamid] d. Furan-2,5-Dicarbonsäure. Sm. 227—228° (*Am.* 25, 453). — \*III, 513.
- 25)  $\alpha\beta$ -Phenylimid- $\gamma$ -Phenylamid d. Propen- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 250—252° (225°) (*A.* 98, 80; *Soc.* 55, 238; *Am.* 9, 192; *B.* 38, 1619 *C.* 1905 [1] 1532). — II, 423.
- 26) Base (aus 4-Acetylamido-1,2-Naphtochinon). Zers. bei 160—170° (*B.* 40, 2084 *C.* 1907 [2] 152).
- C<sub>18</sub>H<sub>14</sub>O<sub>3</sub>N<sub>4</sub>** C 64,7 — H 4,2 — O 14,4 — N 16,7 — M. G. 334.
- 1) 3,5-Di[Phenylnitrosamido]-1-Oxybenzol (*G.* 20, 343). — II, 724.
- 2) 2,4-Di[Phenylazo]-1,3,5-Trioxybenzol. Sm. 228—230° (*B.* 12, 226; *Soc.* 71, 190). — IV, 1450.
- 3) 2-Acetylamido-1-[2-Nitrophenyl]azonaphtalin. Sm. 154° (*Soc.* 59, 373). — IV, 1394.
- 4) 2-Acetylamido-1-[3-Nitrophenyl]azonaphtalin. Sm. 192° (*Soc.* 59, 377). — IV, 1395.
- 5) 2-Acetylamido-1-[4-Nitrophenyl]azonaphtalin. Sm. 227—228° (*Soc.* 59, 376). — IV, 1395.
- 6) 2-Oxy-1-[3-Methylphenyl]azonaphtalin-1<sup>6</sup>-Carbonsäure. Sm. 283° u. Zers. (*B.* 26, 52). — IV, 1466.
- 7) 4-Oxy-1-[3-Methylphenyl]azonaphtalin-1<sup>6</sup>-Carbonsäure. Sm. 270° u. Zers. (*B.* 26, 54). — IV, 1466.
- 8) Verbindung (aus Anilin u. Trichloreitrazinamid) (*B.* 21, 1248; 27, 579). — II, 423.
- 9) Verbindung (aus Glyoxalinrot). Zers. bei 262° (*Soc.* 77, 810). — \*IV, 567.
- C<sub>18</sub>H<sub>14</sub>O<sub>3</sub>Br** 1) Acetat d. 2-Brom-1-Keto-2-[ $\alpha$ -Brom-2-Oxybenzyl]-2,3-Dihydroindien. Sm. 159° (*Soc.* 91, 1088 *C.* 1907 [2] 602).



- $C_{18}H_{14}O_4N_2$  C 67,1 — H 4,3 — O 19,9 — N 8,7 — M. G. 322.
- 1) 2,4-Di[Benzoylamido]-1,3-Dioxy-R-Buten +  $\frac{1}{2}H_2O$  (Dibenzamidodi-oxytetrol). Sm. 137—138° (wasserfrei). Ca, Pb (B. 21, 3325; 22, 115; J. pr. [2] 70, 239 C. 1904 [2] 1462). — II, 1185.
  - 2) 1,3-Diketo-2-[3-Nitro-4-Dimethylamidobenzyliden]-2,3-Dihydroinden. Sm. 221° (B. 34, 2468). — \*III, 234.
  - 3) 1,4-Di[Acetylamido]-9,10-Anthrachinon. Sm. 271° (B. 39, 643 C. 1906 [1] 1025).
  - 4) 1,5-Di[Acetylamido]-9,10-Anthrachinon. Sm. 317° (B. 16, 368; D. R. P. 127780 C. 1902 [1] 337; B. 39, 638 C. 1906 [1] 1024). — III, 414.
  - 5) 1,8-Di[Acetylamido]-9,10-Anthrachinon. Sm. 284° (B. 39, 639 C. 1906 [1] 1025).
  - 6) 2,3-Di[Acetylamido]-9,10-Anthrachinon (B. 37, 4532 C. 1905 [1] 368).
  - 7) 2,7-Di[Acetylamido]-9,10-Anthrachinon. Sm. oberhalb 350° (B. 39, 641 C. 1906 [1] 1025).
  - 8)  $\alpha\gamma$ -Dioximido- $\beta$ -Pthaly- $\alpha$ -Phenylbutan. Sm. 63° (B. 37, 582 C. 1904 [1] 940).
  - 9) 2,3,5,6-Tetraketo-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 274°. + 2Aceton (J. pr. [2] 47, 188). — II, 467.
  - 10) 4,5-Di[4-Methylbenzoyl]-1,2,3,6-Dioxdiazin. Sm. 125° (A. 172, 314; B. 6, 937; 20, 3361; R. 6, 63). — III, 300.
  - 11) Dimethyläther d. 4,4'-Dioxyindigo (A. 367, 78 C. 1909 [2] 628).
  - 12) Dimethyläther d. Dioxyindigo. Subl. (B. 22, 2351). — II, 1621.
  - 13) Dianhydrodiacetylthranilsäure. Sm. 249—250°. Cu, Ag<sub>2</sub> (B. 35, 3465 C. 1902 [2] 1315).
  - 14)  $\beta$ -Naphtholazoanissäure +  $1\frac{1}{2}H_2O$ . Ba +  $4\frac{1}{2}H_2O$  (B. 14, 2039). — IV, 1471.
  - 15)  $\alpha\beta$ -Di[2-Methylenamidophenyl]äthen- $\alpha\beta$ -Dicarbonsäure (A. 332, 276 C. 1904 [2] 701).
  - 16) 1-Phenylazo-3,4-Dioxynaphtalin-2-Methylcarbonsäure. Sm. 212° u. Zers. (E. Hoyer, Dissert. Berlin 1901).
  - 17)  $\alpha$ ,2-Lakton d.  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ ,2-Dicarbonsäure. Sm. 233—234° u. Zers. K (B. 38, 1911 C. 1905 [2] 43).
  - 18) Diacetat d. 9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 184° (B. 22, 1993). — III, 446.
  - 19) Dibenzoat d.  $\alpha\delta$ -Dioximido- $\beta$ -Buten. Sm. 165° u. Zers. (C. r. 134, 907 C. 1902 [1] 1272; C. 1905 [1] 680).
  - 20) Phenylamid d. Oxyessig-1-Nitro-2-Naphtyläthersäure. Sm. 139° (B. 34, 3196). — \*II, 524.
  - 21)  $\alpha$ , $\alpha$ -Phenylimid d.  $\beta$ -Phenylamidoäthen- $\alpha\alpha\beta$ -Tricarbonsäure- $\beta$ -Methylester. Sm. 194° (Soc. 91, 1365 C. 1907 [2] 1236).
  - 22) Verbindung (aus Maleindioxim-dibenzoat). Sm. 246—247° u. Zers. (C. 1905 [1] 680).
  - 23) Verbindung (aus 1,4-Benzochinon u. 4-Amido-1-Oxybenzol). Sm. noch nicht bei 290° (A. 226, 70). — III, 346.
  - 24) Verbindung (aus 5-Keto-1-Äthyl-2-Benzyliden-3,4-Diphenyl-2,5-Dihydropyrrol). Sm. 151° (B. 24, 3874). — II, 1728.
- $C_{18}H_{14}O_4N_4$  C 61,7 — H 4,0 — O 18,3 — N 16,0 — M. G. 350.
- 1) 1-Phenylamido-2-[p-Dinitrophenyl]amidobenzol. Sm. 170—171° (J. pr. [2] 46, 572). — IV, 556.
  - 2) 4,6-Dinitro-1,3-Di[Phenylamido]benzol. Sm. 186° (B. 30, 1668; Am. 26, 4). — IV, 572; \*IV, 371.
  - 3) 4-Amido-4'-[2,4-Dinitrophenyl]amidobiphenyl. Sm. 245° (B. 9, 981; J. pr. [2] 68, 262 C. 1903 [2] 1064). — IV, 963.
  - 4) 3,4'-Bi[2,5-Diketo-4-Phenyltetrahydroimidazol] (Diphenylhydantil). Sm. 336—338° (B. 21, 2324; A. 350, 125, 133 C. 1907 [1] 157; A. 350, 135 C. 1907 [1] 158). — II, 1325.
  - 5) 1,4-Dibenzoyl-3,6-Diamido-2,5-Diketo-1,2,4,5-Tetrahydro-1,4-Diazin (Hippuroflavindiamid). Sm. 237—238° (A. 287, 94). — \*II, 745.
  - 6) 4-[2-Nitrophenyl]azo-1-Naphtylamidoessigsäure. Sm. 94—96° u. Zers. K, HCl (B. 25, 1607). — IV, 1398.
  - 7) 4-[3-Nitrophenyl]azo-1-Naphtylamidoessigsäure. Sm. 139° u. Zers. K, HCl (B. 25, 1609). — IV, 1398.
  - 8) 4-[4-Nitrophenyl]azo-1-Naphtylamidoessigsäure. Sm. 125° u. Zers. K, HCl (B. 25, 1606). — IV, 1398.

- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>N<sub>6</sub>** C 57,1 — H 3,7 — O 16,9 — N 22,2 — M. G. 378.  
 1) 3-Amido-3'-[2,4-Dinitrophenyl]amidoazobenzol. Sm. 187—188° (B. 40, 3337 C. 1907 [2] 801).  
 2) Dinitrophenylphenylenblau (B. 28, 512). — IV, 1278.  
 3) Verbindung (aus Anilin u. d. 2,3-5,6-Bianhydrid d. 3,6-Bisdiazo-2,5-Dioxy-1,4-Benzochinon) (A. 350, 356 C. 1907 [1] 719).
- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) pp-Dichlor-α-Truxillsäure. Sm. 278—280° (B. 39, 4087 C. 1907 [1] 247).  
 2) Verbindung (aus 1,4-Benzochinon u. 4-Chlor-1-Oxybenzol). Sm. 72° (B. 42, 1151 C. 1909 [1] 1557).
- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>Cl<sub>4</sub>** 1) Tetrachlorhydropolyporsäure. Sm. 108° (A. 195, 372). — II, 1907.  
 2) Diacetat d. αβ-Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 159° (A. 325, 50 C. 1903 [1] 462).
- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>2</sub>** 1) 1,3-Di[4-Bromphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Dibrom-α-Truxillsäure). Sm. 296°. Ag<sub>2</sub> (B. 35, 2932 C. 1902 [2] 1046; B. 37, 219, 224 Anm. C. 1904 [1] 588).  
 2) isom. 1,3-Di[4-Bromphenyl]-R-Tetramethylen-2,4-Dicarbonsäure (Dibrom-γ-Truxillsäure). Sm. 280° (B. 37, 223 C. 1904 [1] 588).  
 3) Acetat d. p-Dibrom-3,4,2-Trioxyphenanthrendimethyläther (A. d. Dibromthebaol). Sm. 179° (B. 30, 1389). — \*II, 627.  
 4) Verbindung (aus 1,4-Benzochinon u. 4-Brom-1-Oxybenzol). Sm. 62° (B. 42, 1152 C. 1909 [1] 1557).
- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>Br<sub>4</sub>** 1) Diacetat d. αα-Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 130—131° (A. 363, 256 C. 1909 [1] 174).
- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>S** 1) Säure (aus Thiodiglykolsäure u. Benzaldehyd). Na<sub>2</sub> + 2½ H<sub>2</sub>O (B. 18, 3242). — II, 1638.
- C<sub>13</sub>H<sub>14</sub>O<sub>4</sub>S<sub>2</sub>** 1) 1,3-Di[Phenylsulfon]benzol. Sm. 190—191° (B. 19, 2421). — II, 814.  
 2) Disulfid d. α-Merkapto-β-Phenylakrylsäure (Disulfidzimtsäure). Sm. 179°. Na<sub>2</sub> (M. 8, 351). — II, 1638.
- C<sub>13</sub>H<sub>14</sub>O<sub>5</sub>N<sub>2</sub>** C 63,9 — H 4,1 — O 23,7 — N 8,3 — M. G. 338.  
 1) Rhodizoanilid (B. 21, 1855). — III, 355.  
 2) Azoxybenzol-3,3'-Diakrylsäure (m-Azoxyzimtsäure). Sm. 335—337° (C. r. 140, 1248 C. 1905 [2] 45).  
 3) Azoxybenzol-4,4'-Diakrylsäure (p-Azoxyzimtsäure). Zers. oberhalb 360° (C. r. 140, 1248 C. 1905 [2] 45; B. 39, 809 C. 1906 [1] 1246).  
 4) Laktone d. γ-Phenylimido-α-Oxy-β-Acetyl-α-[3-Nitrophenyl]propan-γ-Carbonsäure. Sm. 237° u. Zers. (Soc. 89, 1242 C. 1906 [2] 1118).
- C<sub>13</sub>H<sub>14</sub>O<sub>5</sub>N<sub>4</sub>** C 59,0 — H 3,8 — O 21,9 — N 15,3 — M. G. 366.  
 1) Äthylester d. α-[N-Benzoyl-3-Nitrophenylhydrazon]cyanessigsäure. Sm. 174—175° (J. pr. [2] 51, 223). — IV, 1456.  
 2) Verbindung (aus Äpfelsäurebisphenylhydrazid). Sm. 199° (B. 24, 4193). — IV, 712.
- C<sub>13</sub>H<sub>14</sub>O<sub>5</sub>Cl<sub>4</sub>** 1) 4,4'-Diacetat d. α-Oxydi[3,5-Dichlor-4-Oxyphenyl]methan-α-Methyläther. Sm. 155° (A. 362, 236 C. 1908 [2] 944).
- C<sub>13</sub>H<sub>14</sub>O<sub>5</sub>Br<sub>2</sub>** 1) Trimethyläther d. 6,8-Dibrom-5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 245° (B. 38, 932 C. 1905 [1] 1026).  
 2) 2-Acetat-3,4-Methylenäther d. αβ-Dibrom-γ-Keto-γ-[2-Oxyphenyl]-α-[3,4-Dioxyphenyl]propan. Sm. 113—114° (B. 32, 316). — \*III, 168.
- C<sub>13</sub>H<sub>14</sub>O<sub>5</sub>S<sub>2</sub>** 1) Phenylester d. Diphenylsulfon-3-Sulfonsäure. Sm. 106° (B. 19, 2421). — II, 814.  
 2) Verbindung (aus Benzolsulfonsäurechlorid u. Oxybenzol). Sm. 123° (G. II, 66). — II, 668.
- C<sub>13</sub>H<sub>14</sub>O<sub>6</sub>N<sub>2</sub>** C 61,0 — H 3,9 — O 27,1 — N 7,9 — M. G. 354.  
 1) Dimethyläther d. 4,5-Di[4-Oxybenzoyl]-1,2,3,6-Dioxdiazol (Dianisyl-dinitrosacyl). Sm. 139° (B. 23, 1202; R. 10, 215). — III, 134; \*III, 105.  
 2) 7-Acetat d. 7,8-Dioxy-2-Keto-3-[2-Nitrophenyl]-1,2-Dihydrochinolin-8-Methyläther. Sm. 261° (B. 39, 3122 C. 1906 [2] 1331).
- C<sub>13</sub>H<sub>14</sub>O<sub>6</sub>N<sub>4</sub>** C 56,6 — H 3,7 — O 25,1 — N 14,6 — M. G. 382.  
 1) 4,6-Dinitro-1,3-Di[4-Oxyphenylamido]benzol. Sm. 284—286° (C. 1900 [2] 699; 1901 [1] 1395). — \*IV, 372.  
 2) 4,6-Dinitro-1-[2-Oxyphenyl]amido-3-[4-Oxyphenyl]amidobenzol. Sm. 242° (D.R.P. 114270 C. 1900 [2] 999). — \*IV, 372.  
 3) Verbindung (aus Weinsäurediphenylhydrazid). Sm. 182° (B. 24, 4193). — IV, 721.

- $C_{18}H_{14}O_6Cl_4$  1)  $\alpha\beta$ -Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 220° (A. 325, 60 C. 1903 [1] 462).  
 2)  $\alpha\beta$ -Diacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 202° (A. 325, 62 C. 1903 [1] 462).
- $C_{18}H_{14}O_6Br_2$  1) Monacetat d. Dibrombrasilin. Sm. 170° (B. 27, 528). — III, 653.
- $C_{18}H_{14}O_6Br_4$  1)  $\alpha\beta$ -Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 218° (A. 325, 38 C. 1903 [1] 461).  
 2)  $\alpha\beta$ -Diacetat d. isom.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]-äthan? Sm. 217° (A. 325, 40 C. 1903 [1] 461).
- $C_{18}H_{14}O_6S_2$  1) 1,3-Phenyleneester d. Benzolsulfonsäure. Sm. 69–70° (B. 24, 417). — II, 918.  
 2) 1,4-Phenyleneester d. Benzolsulfonsäure. Sm. 120–121° (B. 24, 418). — II, 941.
- $C_{18}H_{14}O_7N_2$  C 58,4 — H 3,8 — O 30,3 — N 7,5 — M. G. 370.  
 1) Tartrandibenzamsäure.  $Cu_3$  (A. 232, 160). — II, 1267.  
 2) Dimethylester d. Azoxybenzol-4,4'-Dibetocarbonsäure. Sm. 173 bis 175° (B. 22, 206). — IV, 1345.
- $C_{18}H_{14}O_7N_4$  C 54,3 — H 3,5 — O 28,1 — N 14,1 — M. G. 398.  
 1) Acetylderivat d. Verb.  $C_{16}H_{12}O_6N_4$  (aus 1-Amidonaphtalin u. 1,3,5-Trinitrobenzol). Sm. 140,5° (Soc. 79, 527).  
 2) Acetylderivat d. Verb.  $C_{16}H_{12}O_6N_4$  (aus 2-Amidonaphtalin u. 1,3,5-Trinitrobenzol). Sm. 142° (Soc. 79, 527).
- $C_{18}H_{14}O_8N_2$  C 56,0 — H 3,6 — O 33,2 — N 7,2 — M. G. 386.  
 1) Dinitro- $\beta$ -Cocensäure. Sm. 252° (A. 271, 205). — II, 1404.  
 2) pp-Dinitro- $\alpha$ -Truxillsäure (4,4'-Dinitro- $\alpha$ -Truxillsäure). Sm. 228–229° (B. 24, 2589; B. 39, 4087 C. 1907 [1] 247). — II, 1901.  
 3)  $\beta$ -Dinitro- $\alpha$ -Truxillsäure. Sm. 290° u. Zers.  $Ba + H_2O$ ,  $Ag_2$  (B. 24, 2590). — II, 1902.  
 4) Dinitro- $\beta$ -Truxillsäure. Sm. 216° (B. 24, 2590). — II, 1902.  
 5) Dinitro- $\gamma$ -Truxillsäure. Sm. 293° (B. 24, 2590). — II, 1903.  
 6) Dinitro- $\delta$ -Truxillsäure. Sm. 226° (A. 271, 207). — II, 1904.
- $C_{18}H_{14}O_8N_4$  C 52,2 — H 3,4 — O 30,9 — N 13,5 — M. G. 414.  
 1) Biphenylen-4,4'-Di[Hydrazonmalonsäure].  $Na_2$  (Bl. [3] 27, 317 C. 1902 [1] 1205). — \*IV, 944.  
 2) Diacetat d. 4,7-Dinitro-6-Oxy-1-[2-Oxyphenyl]-2-Methylbenzimidazol. Sm. 165° (Soc. 95, 1044 C. 1909 [2] 519).  
 3) Diacetat d. 4,7-Dinitro-6-Oxy-1-[3-Oxyphenyl]-2-Methylbenzimidazol. Sm. 209° (Soc. 95, 1046 C. 1909 [2] 519).  
 4) Diacetat d. 4,7-Dinitro-6-Oxy-1-[4-Oxyphenyl]-2-Methylbenzimidazol. Sm. 169,5° (Soc. 95, 1046 C. 1909 [2] 519).
- $C_{18}H_{14}O_9N_4$  C 50,2 — H 3,2 — O 33,5 — N 13,0 — M. G. 430.  
 1) Verbindung (aus 2,3,5-Trinitro-4-Acetylamido-1-Oxybenzol u. 2-Oxy-naphtalin). Sm. 184–185° (C. 1909 [1] 1875).
- $C_{18}H_{14}O_{10}N_2$  C 51,7 — H 3,3 — O 38,3 — N 6,7 — M. G. 418.  
 1) p-Dinitro-pp-Dioxy- $\alpha$ -Truxillsäure (B. 39, 4087 C. 1907 [1] 247).
- $C_{18}H_{14}O_{14}N_4$  C 42,4 — H 2,7 — O 43,9 — N 11,0 — M. G. 510.  
 1) Di[p-Dinitro-2-Methoxyphenylester] d. Bernsteinsäure (B. 35, 4083 C. 1903 [1] 74).
- $C_{18}H_{14}O_{14}Br_{12}$  1) Verbindung (aus 4,5,6-Tribrom-1,2,3-Trioxylbenzol). Sm. 79–80° (A. 245, 329). — II, 1013.
- $C_{18}H_{14}NCl$  1) Chlormethylat d.  $\alpha$ -Chrysidin.  $2 + PtCl_4$  (A. 266, 165). — IV, 463.  
 2) Chlormethylat d.  $\beta$ -Chrysidin.  $2 + PtCl_4$  (A. 266, 168). — IV, 464.
- $C_{18}H_{14}NJ$  1) Jodmethylat d.  $\alpha$ -Chrysidin. Sm. 108° (262–263°) (A. 266, 165; B. 37, 2925 C. 1904 [2] 1412). — IV, 463.  
 2) Jodmethylat d.  $\beta$ -Chrysidin. Sm. 237° (264°) (A. 266, 168; B. 37, 2927 C. 1904 [2] 1412). — IV, 464.
- $C_{18}H_{14}N_2Cl_2$  1) 2,3[oder 2,6]-Dichlor-1,4-Di[Phenylamido]benzol. Sm. 106° (C. 1902 [1] 527). — \*IV, 382.  
 2) 2,5-Dichlor-1,4-Di[Phenylamido]benzol. Sm. 157° (C. 1902 [1] 527). — \*IV, 382.  
 3) 7-Chlorphenylat d. 9-Chlor- $\alpha\beta$ -Naphtophenazin.  $2 + PtCl_4$ ,  $+ AuCl_3$  (B. 31, 2478). — \*IV, 704.
- $C_{18}H_{14}N_2J_2$  1) 4-Phenylazodiphenyljodoniumjodid. Sm. 135° (B. 37, 1314 C. 1904 [1] 1341).



- C<sub>18</sub>H<sub>14</sub>N<sub>2</sub>S** 1) **2-Merkapto-3-[4-Methylphenyl]- $\alpha$ -Naphtimidazol.** Sm. 307° (*B.* 25, 2832). — IV, 919.  
 2) **2-Thiocarbonyl-3-[1-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.** Sm. 255° (*J. pr.* [2] 52, 409). — IV, 635.  
 3) **2-Thiocarbonyl-3-[2-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.** Sm. 280° (*J. pr.* [2] 52, 413). — IV, 635.
- C<sub>18</sub>H<sub>14</sub>N<sub>3</sub>Cl** 1) **2-Chlor-1-Diphenylamidodiazobenzol.** Fl. (*C. r.* 139, 569 *C.* 1904 [2] 1497).  
 2) **3-Chlor-1-Diphenylamidodiazobenzol.** Fl. (*C. r.* 139, 569 *C.* 1904 [2] 1497).  
 3) **4-Chlor-1-Diphenylamidodiazobenzol.** Sm. 20° (*C. r.* 139, 569 *C.* 1904 [2] 1497).  
 4) **3-Chlor-4,6-Dimethyl-2-[2-Naphtyl]-2,1,5-Benztriazol.** Sm. 190° (*A.* 366, 406 *C.* 1909 [2] 290).  
 5) **5-Chlorphenylat d. 3-Amido-5,10-Naphtdiazin (Aposafuraninchlorid)** (*B.* 30, 2624; 33, 3079).
- C<sub>18</sub>H<sub>14</sub>N<sub>3</sub>Br** 1) **2-Brom-1-Diphenylamidodiazobenzol.** Fl. (*C. r.* 139, 570 *C.* 1904 [2] 1497).  
 2) **3-Brom-1-Diphenylamidodiazobenzol.** Fl. (*C. r.* 139, 570 *C.* 1904 [2] 1497).  
 3) **4-Brom-1-Diphenylamidodiazobenzol.** Fl. (*C. r.* 139, 570 *C.* 1904 [2] 1497).  
 4) **3-Brom-4,6-Dimethyl-2-[2-Naphtyl]-2,1,5-Benztriazol.** Sm. 180° (*A.* 366, 407 *C.* 1909 [2] 290).  
 5) **Aposafuraninbromid** (*B.* 33, 1488). — \*IV, 834.
- C<sub>18</sub>H<sub>14</sub>N<sub>3</sub>J** 1) **4-Jod-1-Diphenylamidodiazobenzol.** Fl. (*C. r.* 139, 571 *C.* 1904 [2] 1497).
- C<sub>18</sub>H<sub>14</sub>N<sub>4</sub>S<sub>4</sub>** 1) **Disulfid d. 5-Merkapto-3-[4-Methylphenyl]-1,2,4-Thiodiazol.** Sm. 169° (*B.* 24, 392). — IV, 851.
- C<sub>18</sub>H<sub>14</sub>N<sub>4</sub>S<sub>6</sub>** 1) **Äthylenäther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol.** Sm. 145° (*J. pr.* [2] 60, 188). — \*IV, 445.  
 2) **Dibenzyläther d. 2,5-Dimerkapto-1,3,4-Thiodiazol-2,2'-Disulfid.** Sm. 109° (*J. pr.* [2] 60, 45). — \*IV, 312.  
 3) **Di[2-Thiocarbonyl-3-(4-Methylphenyl)-2,3-Dihydro-1,3,4-Thiodiazolyl-5]-disulfid.** Sm. 139—140° (*J. pr.* [2] 60, 207). — \*IV, 535.  
*C* 82,8 — *H* 5,7 — *O* 6,1 — *N* 5,4 — *M. G.* 261.
- C<sub>18</sub>H<sub>15</sub>ON** 1) **5-Amido-2-Oxy-1,3-Diphenylbenzol.** Sm. 146—147° (149—150°). *HCl* (*B.* 32, 2938; 33, 1241; *A.* 312, 229; *Am.* 24, 7). — \*II, 543.  
 2) **2-Oxy-1-[2-Methylphenylimido]methylnaphtalin.** Sm. 124° (*Bl.* [3] 25, 375). — \*III, 70.  
 3) **2-Oxy-1-[4-Methylphenylimido]methylnaphtalin.** Sm. 132° (*Bl.* [3] 25, 375). — \*III, 70.  
 4) **Methyläther d. 4-Oxy-1-[1-Naphtylimido]methylbenzol.** Sm. 100 bis 101°. *HCl* (*Soc.* 93, 1916 *C.* 1909 [1] 279).  
 5) **Methyläther d. 4-Oxy-1-[2-Naphtylimido]methylbenzol.** Sm. 98° (*A.* 241, 341). — III, 85.  
 6) **Methyläther d. 2-Oxy-1-Phenylimidomethylnaphtalin.** *Sd.* 262 bis 265°<sub>10</sub> (*Bl.* [3] 17, 310). — \*III, 70.  
 7) **Methyläther d. 4-Oxy-1-Phenylimidomethylnaphtalin.** *Sd.* 269°<sub>10</sub> (*Bl.* [3] 17, 307). — \*III, 70.  
 8) **1-Naphtylamidomethylphenylketon.** Sm. 125° (*B.* 30, 575). — \*III, 97.  
 9) **2-Naphtylamidomethylphenylketon.** Sm. 150° (*B.* 30, 575). — \*III, 97.  
 10) **Phenylamidomethyl-1-Naphtylketon.** Sm. 130° (*B.* 19, 2899). — III, 174.  
 11) **3-Benzoyl-2-Methyl-4-Phenylpyrazol.** Sm. 231° (*B.* 35, 3005 *C.* 1902 [2] 1121). — \*IV, 224.  
 12)  **$\alpha$ -Oxydiphenyl-4-Pyridylmethan.** Sm. 203°. (2*HCl*, *PtCl*<sub>4</sub>), *Pikrat* (*C.* 1907 [1] 816; *J. pr.* [2] 75, 526 *C.* 1907 [2] 541).  
 13) **4-Keto-1-Methyl-2,6-Diphenyl-1,4-Dihydropyridin.** Sm. 176°. *HCl*, (2*HCl*, *PtCl*<sub>4</sub>) (*B.* 42, 3687 *C.* 1909 [2] 1658).  
 14)  **$\alpha$ -[4-Oxyphenyl]- $\beta$ -[6-Methyl-2-Chinoly]äthen.** Sm. 249° (*B.* 38, 3702 *C.* 1906 [1] 51).

- C<sub>18</sub>H<sub>15</sub>ON** 15) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[2-Chinoly]-äthen. Sm. 126°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 35, 2786 C. 1902 [2] 994). — \*IV, 273.
- 16) 1-Phenyl-1,3-Dihydro-4,2- $\beta$ -Naptisoxazin. Sm. 214° (G. 33 [1] 29 C. 1903 [1] 926). — \*IV, 274.
- 17) 10-Methyl-1,2-Naphtakridol. Sm. 206—207° (B. 37, 2928 C. 1904 [2] 1412).
- 18) Methyläther d. 10-Oxy-7,12-Dihydro- $\alpha$ -Phenakridin. Sm. 260° (B. 40, 862 C. 1907 [1] 1054).
- 19) Methylhydroxyd d.  $\alpha$ -Chrysidin. Sm. 110°. Chlorid, Jodid (A. 266, 165). — IV, 463.
- 20) Methylhydroxyd d.  $\beta$ -Chrysidin. Sm. 133°. Chlorid, Jodid (A. 266, 168). — IV, 464.
- 21) 4-Methylphenylamid d. Naphtalin-2-Carbonsäure. Sm. 191° (A. 180, 324). — II, 1454.
- 22) Phenyl-1-Naphtylamid d. Essigsäure. Sm. 115° (A. 209, 154). — II, 607.
- 23) Phenyl-2-Naphtylamid d. Essigsäure. Sm. 93° (A. 209, 157). — II, 616.
- 24) Methyl-1-Naphtylamid d. Benzolcarbonsäure. Sm. 121° (B. 18, 687). — II, 1168.
- 25) Methyl-2-Naphtylamid d. Benzolcarbonsäure. Sm. 169° (B. 18, 680). — II, 1168.
- C<sub>18</sub>H<sub>15</sub>ON<sub>3</sub>** C 74,7 — H 5,2 — O 5,5 — N 14,5 — M. G. 289.
- 1) 4-Nitroso-1,3-Di[Phenylamido]benzol. Sm. 153° (A. 255, 144; 286, 176). — IV, 572.
- 2) 2-[ $\alpha$ -Semicarbazonbenzyl]naphtalin. Sm. 175° (Bl. [4] 3, 739 C. 1908 [2] 600).
- 3)  $\beta$ -Nitroso- $\alpha\alpha\beta$ -Triphenylhydrazin. Sm. 115° (B. 40, 2101 C. 1907 [2] 32).
- 4) Phenylazodiphenylamidoxyd. Sm. 128,5—129° (B. 32, 3559). — \*IV, 1142.
- 5) 2-Acetylamido-1-Phenylazonaphtalin. Sm. 152—153° (B. 18, 799). — IV, 1393.
- 6) 4-Acetylamido-1-Phenylazonaphtalin. Sm. 233° (B. 28, 2197; 34, 885). — IV, 1392.
- 7) 3-[ $\beta$ -Benzoylamido-4-Methylphenyl]-1,2-Diazin. Sm. 178—179° (B. 34, 3836 C. 1902 [1] 52). — \*IV, 820.
- 8) Äthyläther d. 5-Oxy-3-Phenyl- $\beta$ -Naptisotriazol. Sm. 160° (B. 25, 1017). — IV, 1576.
- 9) Dimethylamidophenonaphtoxazin + H<sub>2</sub>O (Methylnilblau). HCl (A. 289, 111). — IV, 1208; \*IV, 873.
- 10) Oxim d. 7-Äthylrosindon[9] (ms-Äthylisorosindonoxim). HCl (B. 33, 1490). — \*IV, 708.
- C<sub>18</sub>H<sub>15</sub>ON<sub>5</sub>** C 68,2 — H 4,7 — O 5,0 — N 22,1 — M. G. 317.
- 1) 2-Amido-6-Keto-8-Phenyl-7-Benzylpurin (B. 39, 235 C. 1906 [1] 688).
- C<sub>18</sub>H<sub>15</sub>OCl** 1) 1-Keto-2-[ $\alpha$ -Chlor- $\gamma$ -Phenylpropenyl]-2,3-Dihydroinden. Sm. 81 bis 82° (Soc. 65, 486). — III, 253.
- C<sub>18</sub>H<sub>15</sub>OCl<sub>3</sub>** 1) Methyläther d.  $\gamma$ -Chlor- $\gamma$ -Oxy- $\alpha\delta$ -Di[4-Chlorphenyl]- $\alpha\delta$ -Pentadien. Sm. 95—96,5° (B. 39, 3000 C. 1906 [2] 1429).
- C<sub>18</sub>H<sub>15</sub>OP** 1) Phenyläther d. Diphenyloxyphosphin. Sd. 265—270°<sub>82</sub> (B. 18, 2109). — IV, 1657.
- 2) Oxyd (aus Triphenyloxyphosphoniumhydrat). Sm. 153,5° (156°); Sd. oberhalb 360° (B. 15, 803; 18, 2120; A. 229, 305; C. r. 139, 675 C. 1904 [2] 1638; Soc. 89, 265 C. 1906 [1] 1484). — IV, 1659.
- C<sub>18</sub>H<sub>16</sub>OAs** 1) Phenyläther d. Diphenyloxyarsin. Sd. 230—231°<sub>15</sub> (A. 321, 143 C. 1902 [2] 42). — \*IV, 1189.
- C<sub>18</sub>H<sub>15</sub>O<sub>3</sub>N** C 78,0 — H 5,4 — O 11,5 — N 5,1 — M. G. 277.
- 1) Phenyläther-4-Amidophenyläther d. 1,4-Dioxybenzol. Sm. 84 bis 84,5°. HCl (B. 34, 1070).
- 2) Methyläther d. 2-Amido-4-Oxy-1-Naphtylketon. Sm. 147° (B. 39 4338 C. 1907 [1] 347).

- $C_{18}H_{15}O_2N$  3) Methyläther d. 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydro-naphtalin. Sm. 150° (B. 15, 1970). — III, 394.
- 4) Äthyläther d. 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 104° (B. 14, 1496; 15, 282). — III, 393.
- 5) 1,3-Diketo-2-[4-Dimethylamidobenzyliden]-2,3-Dihydroinden. Sm. 99° (B. 34, 2467). — \*III, 234.
- 6) Methyläther d. N-1-Naphtyl-4-Oxybenzaldoxim. Sm. 159° (J. pr. [2] 78, 77 C. 1908 [2] 712).
- 7)  $\beta$ -[2-Naphtyl]äther d.  $\alpha$ -Oximido- $\beta$ -Oxy- $\alpha$ -Phenyläthan. Sm. 144 bis 145° (B. 28, 3032). — III, 133.
- 8) 9-Diacetylamidoanthracen. Sm. 159° (B. 23, 2525). — II, 640.
- 9) 3-Acetylamido-1-Oxy-2-Phenylnaphtalin. Sm. 203° (Soc. 91, 1303 C. 1907 [2] 992).
- 10) 2-Oxy-1-Benzoylamidomethylnaphtalin. Sm. 185—186° (D. R. P. 156398 C. 1905 [1] 55; A. 343, 250 C. 1906 [1] 925).
- 11)  $\beta$ -Äthylphenylamido-1,2-Naphtochinon? Sm. 165° (B. 15, 691). — III, 393.
- 12) 2-Äthylphenylamido-1,4-Naphtochinon. Sm. 155°. HCl (B. 15, 1810). — III, 376.
- 13)  $\beta$ -Oxy- $\beta$ -Phenyl-1,4-Naphtochinonäthylimid. Sm. 129—130° (A. 226, 40). — III, 460.
- 14) Methyläther d. 2-[ $\beta$ -Phenyläthenyl]-5-[4-Oxyphenyl]oxazol. Sm. 99—100°. HCl (B. 29, 2102). — IV, 456.
- 15) 2,6-Dioxy-4-Phenyl-3-Benzylpyridin. Sm. 175° (Soc. 75, 251). — \*IV, 274.
- 16)  $\alpha$ -[3-Methoxyl-4-Oxyphenyl]- $\beta$ -[2-Chinolyl]äthen (Vanilloäthylen-chinolin). Sm. 182°. HCl + 2 $\frac{1}{2}$ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 27, 1975). — IV, 454.
- 17)  $\alpha$ -[1-Naphtyl]amido- $\alpha$ -Phenylelessigsäure. Sm. 175—176° (B. 39, 1010 C. 1906 [1] 1343).
- 18) 2-Methyl-1,5-Diphenylpyrrol-3-Carbonsäure. Sm. 226° (B. 18, 2595). — IV, 357.
- 19) 2-Methyl-1,5-Diphenylpyrrol-4-Carbonsäure. Sm. 267° u. Zers. (B. 39, 1928 C. 1906 [2] 119).
- 20) 2,6-Diphenyl-1,4-Dihdropyridin-4-Carbonsäure. NH<sub>4</sub> (B. 20, 2760). — II, 1901.
- 21) 3-Crotonyl- $\beta$ -Naphtochinolin-1-Carbonsäure + H<sub>2</sub>O. Sm. 226° (wasserfrei). Ag (B. 27, 2024). — IV, 450.
- 22) Äthylester d.  $\alpha$ -Cyan- $\alpha\beta$ -Diphenyläthen- $\alpha^2$ -Carbonsäure. Sm. 62,5° (B. 40, 1203 C. 1907 [1] 1257).
- 23) Äthylester d. 2-Phenylchinolin-4-Carbonsäure. Sm. 50—51°. (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 56, 297). — \*IV, 267.
- 24) Phenylester d. Diphenylamidoameisensäure. Sm. 103—104° (B. 20, 2122). — II, 663.
- 25) Benzylester d. 2-Methylchinolin-3-Carbonsäure. Sm. 82° (A. 282, 124). — IV, 353.
- 26) 2-Naphtylester d. 2-Methylphenylamidoameisensäure. Sm. 149° (B. 25, 1087). — II, 878.
- 27) Acetat d. 7-Phenylamido-2-Oxynaphtalin. Sm. 162° (B. 26, 3088). — II, 886.
- 28) Acetat d. 4-Methyl-2-[4-Oxyphenyl]chinolin (A. d. Flavenol). Sm. 128° (B. 16, 69). — IV, 436.
- 29) Acetat d. 2-[4-Oxy-3-Methylphenyl]chinolin. Sm. 106° (M. 9, 106). — IV, 434.
- 30) Phenylamid d. 2-Oxynaphtalinmethyläther-1-Carbonsäure. Sm. 169° (J. pr. [3] 41, 317). — II, 1690.
- 31) Phenylamid d. 4-Oxynaphtalinmethyläther-1-Carbonsäure. Sm. 218° (J. pr. [2] 41, 316). — II, 1689.
- 32) Methylphenylamid d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 150° (B. 25, 3635). — II, 1691.
- 33) 1-Naphtylamid d.  $\alpha$ -Oxyphenylelessigsäure. Sm. 140° (A. 279, 129). — II, 1552.
- 34) 2-Naphtylamid d.  $\alpha$ -Oxyphenylelessigsäure. Sm. 189° (A. 279, 129). — II, 1552.



- $C_{18}H_{15}O_2N$  35) Imid d. Buttersäure. Sm. 107° (*C. r.* 137, 128 *C.* 1903 [2] 552).  
 36) Äthylimid d.  $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (Ä. d. Diphenylmaleinsäure). Sm. 108° (*B.* 26, 2478). — II, 1897.  
 37) Äthylimid d.  $\alpha\beta$ -Diphenyläthen- $\alpha,\alpha$ 2-Dicarbonsäure (Benzalhomophthaläthylimid). Sm. 97° (*B.* 20, 2498). — III, 36.  
 38) Phenylimid d.  $\beta$ -Benzylidenpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 90° (*B.* 39, 3591 *C.* 1907 [1] 41).  
 39) Oxim d. Verb.  $C_{18}H_{14}O_2$ . Sm. 192° u. Zers. (*B.* 28, 1210). — III, 325.  
 40) Verbindung (aus Benzoylessigsäurealdehyd). Sm. 219–220° (*B.* 21, 1138). — III, 95.
- $C_{18}H_{15}O_2N_3$  C 70,8 — H 4,9 — O 10,5 — N 13,8 — M. G. 305.  
 1) 2-Oxyphenylacetylhydrazimido- $\beta$ -Naphtalin. Sm. 198° (*B.* 18, 3127). — IV, 1576.  
 2) 4-Oxyphenylacetylhydrazimido- $\beta$ -Naphtalin. Sm. 218° (*B.* 18, 3129). — IV, 1576.  
 3) 1-[4-Acetylamidophenyl]azo-2-Oxynaphtalin. Sm. 259–260° (*Soc.* 87, 4 *C.* 1905 [1] 441, 733).  
 4) 4-Acetylamido-1-[3-Oxyphenyl]azonaphtalin. Sm. 232–235° (*B.* 27 [2] 596). — IV, 1415.  
 5) 2-Phenylazo-4-Acetylamido-1-Oxynaphtalin. Sm. 267–268° (*B.* 29, 2949). — IV, 1431.  
 6) 4-Phenylazo-8-Acetylamido-1-Oxynaphtalin. Sm. 215–216° (*B.* 39, 3332 *C.* 1906 [2] 1615).  
 7) 5-Phenylhydroxyd d. 1[oder 3]-Amido-3[oder 1]-Oxy-5,10-Naphtdiazin. Chlorid, Nitrat, Bichromat (*B.* 33, 3076). — \*IV, 836.  
 8) Äthyläther d. N-Acetyl- $\alpha$ -D-Oxyindophenazin. Sm. 208° (*B.* 34, 4013). — \*IV, 849.  
 9) Äthyläther d. N-Acetyl- $\beta$ -D-Oxyindophenazin. Sm. 171° (*B.* 34, 4013). — \*IV, 849.  
 10)  $\alpha$ -[2-Naphtyl]- $\beta$ -Phenylguanidin-3-Carbonsäure. HCl (*B.* 16, 338). — II, 1269.  
 11) 4-Phenylazo-1-Naphtylamidoessigsäure. Sm. 133° u. Zers. HCl, K (*B.* 24, 2902). — IV, 1398.  
 12) 2,6-Di[Phenylamido]pyridin-4-Carbonsäure. Sm. noch nicht bei 300° (*B.* 35, 2934 *C.* 1902 [2] 1055). — \*IV, 783.  
 13) Methylester d. 5-[ $\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 149°. — IV, 1170.  
 14) Acetat d. 6-Oxy-5-Methyl-2-Phenyl-4-[2-Pyridyl]-1,3-Diazin. Sm. 104° (*B.* 34, 4247 *C.* 1902 [1] 209). — \*IV, 852.  
 15) 2-Oxybenzylidenhydrazid d. 2-Naphtylamidoameisensäure. Sm. 251 bis 252° (*B.* 38, 837 *C.* 1905 [1] 868).
- $C_{18}H_{15}O_2N_5$  C 64,9 — H 4,5 — O 9,6 — N 21,0 — M. G. 333.  
 1) 1-[Methyl- $\alpha$ -Cyanäthylamido]-1-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amido-benzol. Sm. 142° (*B.* 36, 759 *C.* 1903 [1] 962). — \*IV, 392.  
 2) 4,6-Di[Benzoylamido]-2-Methyl-1,3,5-Triazin. Sm. 153–154° (*C.* 1907 [2] 706).  
 3) Diamid d. 2-Methyl-4,6-Diphenyl-1,3,5-Triazin-4<sup>8</sup>,6<sup>3</sup>-Dicarbonsäure? (*B.* 17, 1434; PINNER, Imidoäther 195). — IV, 1262.
- $C_{18}H_{15}O_2Cl$  1) Oxoniumchlorid d. 4',5'-Dioxy-2,3-Indenobenzpyran-4',5'-Dimethyläther + 3H<sub>2</sub>O. Zers. bei 165°. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (*Soc.* 93, 1103 *C.* 1908 [2] 608).
- $C_{18}H_{15}O_2Br$  1) Bromretenchinon. Sm. 210–212° (*Z.* 1869, 73). — III, 458.  
 2) Methylester d.  $\delta$ -Brom- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 127–128° (*A.* 306, 217). — \*II, 877.  
 3) Methylester d.  $\rho$ -Brom- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure. Sm. 81–82° (*J. pr.* [2] 68, 533 *C.* 1904 [1] 452).
- $C_{18}H_{15}O_2P$  1) Phenylester d. Diphenylphosphinsäure. Sm. 135–136°; Sd. oberhalb 360° u. Zers. (*B.* 18, 2113). — IV, 1657.
- $C_{18}H_{15}O_2As$  1) Diphenylester d. Phenylarsinogensäure. Sd. 245°<sub>16</sub> (*A.* 320, 287 *C.* 1902 [1] 919). — \*IV, 1187.
- $C_{18}H_{15}O_3N$  C 73,7 — H 5,1 — O 16,4 — N 4,8 — M. G. 293.  
 1) 1-[4-Methoxybenzoyl]amido-2-Oxynaphtalin. Sm. 241–243° (*J. pr.* [2] 78, 94 *C.* 1908 [2] 713).  
 2) 1-Naphtylamidomethyl-3,4-Dioxyphenylketon (*C.* 1905 [2] 1459).

- C<sub>18</sub>H<sub>15</sub>O<sub>3</sub>N** 3) Methylenäther d. Methyl-4-[3,4-Dioxy-cinnamyliden]amidophenylketon. Sm. 158° (B. 37, 1701 C. 1904 [1] 1497).
- 4) Dizimthydroxamsäure. Sm. 152°. Na, K, Pb, Ag (A. 178, 219). — II, 1408.
- 5) δ-Phthalylamido-α-Keto-α-Phenylbutan. Sm. 132—133° (B. 41, 517 C. 1908 [1] 1164).
- 6) 1-[4-Methylphenylacetyl-amido]-9,10-Anthrachinon (D. R. P. 192201 C. 1908 [1] 571).
- 7) 4-Acetyl-amido-1-Benzoyl-2-Methylbenzofuran. Sm. 178—179° (B. 36, 1260 C. 1903 [1] 1183).
- 8) 4-Oxy-5-Keto-3-Acetyl-1,2-Diphenyl-2,5-Dihydropyrrol. Zers. bei 239—240° (B. 31, 1307). — \*IV, 222.
- 9) α-Phenoldichroin (B. 7, 247, 966, 1099; 17, 1877). — III, 678.
- 10) Pyrocusparin. Sm. 250° (Ar. 243, 484 C. 1905 [2] 1799).
- 11) γ-Cyan-α-Keto-α-δ-Diphenylbutan-γ-Carbonsäure. Sm. 178°. Ba + H<sub>2</sub>O (Bl. [3] 15, 777). — \*II, 1151.
- 12) δ-Benzoylamido-α-Phenyl-α-γ-Butadien-δ-Carbonsäure (Cinnamylidenhippursäure). Sm. 238° u. Zers. (A. 337, 274 C. 1905 [1] 377).
- 13) 2-[4-Methoxyphenyl]amidonaphtalin-2'-Carbonsäure. Sm. 171° (B. 38, 2126 C. 1905 [2] 248).
- 14) 3-Methyl-5-Phenyl-4-Benzylisoxazol-4'-Carbonsäure. Sm. 189 bis 190° (B. 37, 588 C. 1904 [1] 940).
- 15) 3-[γ-Ketobutyl]-β-Naphtochinolin-1-Carbonsäure. Sm. 290—291° (B. 42, 443 C. 1909 [1] 834).
- 16) Äthylätherhomoapocinchensäure. Sm. 253—254°. + AgNO<sub>3</sub> (J. pr. [2] 61, 36). — \*IV, 268.
- 17) Laktone d. γ-Phenylimido-α-Oxy-β-Acetyl-α-Phenylpropan-γ-Carbonsäure. Sm. 230° u. Zers. (Soc. 89, 1241 C. 1906 [2] 1118).
- 18) Benzylbetain d. Chininsäure. Sm. 159° (A. 276, 279). — IV, 362.
- 19) 1,4-Anhydrid d. 6-Methoxy-1-Methyl-2-Phenylchinolinammonium-4-Carbonsäure + H<sub>2</sub>O. Sm. 218° u. Zers. (A. 282, 87). — IV, 447.
- 20) Methylester d. 6-Methoxy-2-Phenylchinolin-4-Carbonsäure. Sm. 111° (A. 282, 106). — IV, 447.
- 21) Äthylester d. Xanthen-9-Cyanessigsäure. Sm. 124—126° (125—127°) (C. r. 143, 242 C. 1906 [2] 886; Bl. [3] 35, 1012 C. 1907 [1] 116).
- 22) Äthylester d. 4-Oxy-2-Phenylchinolin-3-Carbonsäure. Sm. 262° (B. 18, 2633; 19, 1462; B. 38, 2045 C. 1905 [2] 261). — IV, 446.
- 23) Äthylester d. 1-Keto-2-Phenyl-1,2-Dihydroisochinolin-4-Carbonsäure. Sm. 118° (B. 41, 3268 C. 1908 [2] 1434).
- 24) Acetat d. 9-Acetyl-amido-10-Oxyphenanthren. Sm. 242° (B. 35, 2737 C. 1902 [2] 645).
- 25) Benzoat d. α-Oxy-α-[2-Furanyl]-β-[2-Pyridyl]äthan (Benzoylpikolylfurylalkäin). Sm. 47—49°. (HCl, HgCl<sub>2</sub>, (2HCl, PtCl<sub>4</sub>) (B. 23, 2695). — IV, 333.
- 26) Diphenylamidoformiat d. 2-Oxymethylfuran. Sm. 97,5° (B. 35, 1851 C. 1902 [2] 64; B. 35, 1859 C. 1902 [2] 66). — \*III, 502.
- 27) Nitril d. α-Cinnamoyloxy-4-Methoxyphenylessigsäure. Sm. 86—87° (Soc. 95, 1408 C. 1909 [2] 1228).
- 28) 3-Oxy-1,2,3,4-Tetrahydro-2-Naphtylimid d. Benzol-1,2-Dicarbonsäure. Sm. 217—218,5° (A. 288, 132). — \*II, 1056.
- 29) Oxim d. Verb. C<sub>18</sub>H<sub>14</sub>O<sub>3</sub> (aus d. Verb. C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>). α-Modif. Sm. 185° u. Zers.; β-Modif. Sm. 179—180° u. Zers. (B. 28, 1209, 1210). — III, 325.
- 30) Verbindung (aus Diphenacylcyanessigsäure) = (C<sub>18</sub>H<sub>15</sub>O<sub>3</sub>N)<sub>x</sub>. Sm. 170° u. Zers. (Bl. [3] 15, 1013). — \*II, 1188.
- 31) Verbindung + 1/2 H<sub>2</sub>O (aus Thallin u. Phtalsäureanhydrid). Sm. 239° (B. 37, 1963 C. 1904 [2] 44).
- C<sub>13</sub>H<sub>15</sub>O<sub>3</sub>N<sub>3</sub>** C 67,3 — H 4,7 — O 14,9 — N 13,1 — M. G. 321.
- 1) 4-Nitro-2-Acetyl-amido-1-[2-Naphtyl]amidobenzol. Sm. 200° u. Zers. (B. 21, 591). — IV, 558.
- 2) 1'-Methyläther d. 2-Oxy-1-[2-Oxy-4-Oximidomethylphenyl]azonaphtalin. Na (B. 42, 3101 C. 1909 [2] 1229).
- 3) Äthyläther d. p-Nitro-1-Oxy-2-Phenylazonaphtalin. Sm. 151—152° (Soc. 65, 841). — IV, 1429.

- $C_{18}H_{15}O_3N_3$  4) 6-Oxy-4-Methyl-5-Benzyl-2-[4-Nitrophenyl]-1,3-Diazin. Sm. 264° (B. 34, 1986). — \*IV, 699.
- 5) 4-[3-Nitro-4-Acetylamidobenzyl]isochinolin + 3H<sub>2</sub>O. Sm. 144–145° (wasserfrei) (A. 326, 281 C. 1903 [1] 928). — \*IV, 692.
- 6) 1-Semicarbazon-3-Phenylinden-2-Methylcarbonsäure. Sm. 218 bis 220° u. Zers. (B. 35, 1730 C. 1902 [2] 54).
- 7) Laktone d. 3-Semicarbazon-1-Oxy-1-Phenyl-2,3-Dihydroinden-2-Methylcarbonsäure. Zers. bei 256–261° (B. 35, 1736 C. 1902 [2] 55).
- 8) Äthylester d. Phenylbenzoylhydrazoncyanessigsäure. Sm. 158° (J. pr. [2] 49, 331). — IV, 1455.
- 9) Äthylester d. 4-Phenylazo-5-Phenylisoxazol-3-Carbonsäure. Sm. 99–100° (B. 37, 2205 C. 1904 [2] 323).
- 10) 3-Nitrobenzylidenhydrazid d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure. Sm. 204° (A. 367, 27 C. 1909 [2] 526).
- 11) Verbindung (aus Dibenzoylnitrobenzimidazoperidin). Sm. 178° (B. 41, 685 C. 1908 [1] 1400).
- $C_{18}H_{15}O_3N_5$  C 61,9 — H 4,3 — O 13,8 — N 20,0 — M. G. 349.
- 1) 1-Phenylamidoformyl-4-Phenylureido-2-Keto-1,2-Dihydro-1,3-Diazin. Sm. 260° (Am. 29, 501 C. 1903 [1] 1311). — \*IV, 1163.
- $C_{18}H_{15}O_3Br$  1) Methyläther d. Bromthebenol. Sm. 148–149° (B. 37, 2791 C. 1904 [2] 716).
- 2) Acetat d.  $\gamma$ -Keto- $\gamma$ -[4-Methylphenyl]- $\alpha$ -[5-Brom-2-Oxyphenyl]propen. Sm. 153° (B. 31, 714 Anm.). — \*III, 184.
- $C_{18}H_{15}O_3Br_3$  1) Tribrompyrogallacin. Sm. 172° (M. 1, 601). — III, 645.
- $C_{18}H_{15}O_3P$  1) Diphenylester d. Phenylphosphinsäure. Sm. 63,5° (A. 181, 338). — IV, 1651.
- 2) Triphenylester d. Phosphorigensäure (Triphenylphosphit). Sd. 220°<sub>11</sub>. + CuCl, 2 + CuCl, + CuBr, 2 + CuBr, 2 + CuJ (A. 218, 96; 239, 311; B. 27, 493; 31, 1049; B. 38, 1173 C. 1905 [1] 1217; C. 1906 [2] 750). — II, 659; \*II, 357.
- $C_{18}H_{15}O_3As$  1) Triphenylester d. Arsenigensäure. Sd. 275°<sub>57</sub> (279°<sub>95</sub>) (B. 28, 621; Bl. [3] 33, 1143 C. 1906 [1] 21; Soc. 93, 1372 C. 1908 [2] 849). — \*II, 360.
- $C_{18}H_{15}O_3B$  1) Triphenylester d. Borsäure. Sm. 124° (50°); Sd. 370° (L. W. ANDREWS, Privatmitteilung; A. 315, 41; B. 36, 2222 C. 1903 [2] 420).
- $C_{18}H_{15}O_3Sb$  1) Triphenylester d. Antimonigensäure. Sm. 13°; Sd. 250°<sub>30</sub> (Soc. 95, 610 C. 1909 [1] 1976).
- $C_{18}H_{15}O_4N$  C 69,9 — H 4,8 — O 20,7 — N 4,5 — M. G. 309.
- 1) Methyläther d.  $\beta$ -Acetylamido-2-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 204° (Soc. 91, 1632 C. 1907 [2] 2058).
- 2) Dimethyläther d. 5-Keto-4-[3,4-Dioxybenzyliden]-2-Phenyl-4,5-Dihydrooxazol (Inn. Anhydrid d. Veratralhippursäure). Sm. 152° (B. 42, 1184 C. 1909 [1] 1712).
- 3) Phenoloxychroin + H<sub>2</sub>O (B. 17, 1878). — III, 679.
- 4) 2,5-Dimethyl-1-[1-Naphtyl]pyrrol-3,4-Dicarbonsäure. Zers. bei 244°. K<sub>2</sub>, Ba, Ag (A. 236, 307). — IV, 92.
- 5) 2,5-Dimethyl-1-[2-Naphtyl]pyrrol-3,4-Dicarbonsäure. Zers. oberhalb 260°. Ba (B. 18, 304; A. 236, 306). — IV, 92.
- 6) Methyl ester d.  $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbon-säure. Sm. 130–131° (A. 336, 216 C. 1904 [2] 1732).
- 7) Äthylester d. 4-Phenylamido-1,2-Benzpyron-3-Carbonsäure. Sm. 128° (A. 367, 188 C. 1909 [2] 703).
- 8) Äthylester d. 3-Oxy-1-Benzoylindol-2-Carbonsäure. Sm. 87–88° (84–86°). Na (D. R. P. 126962 C. 1902 [1] 82; B. 35, 1692 C. 1902 [1] 1363).
- 9) Äthylester d. 3-Benzoxylindol-2-Carbonsäure. Sm. 163° (B. 34, 1854; D. R. P. 131400 C. 1902 [1] 1343).
- 10)  $\beta$ ,2'-Imid d.  $\alpha\beta$ -Diphenylpropan- $\beta$ ,2,2'-Tricarbonsäure. Sm. 233 bis 236° (B. 27, 2499). — II, 2027.
- 11) Benzylimid d. d-Benzoyläpfelsäure. Sm. 122° (126–127°) (G. 23 [1] 175; J. pr. [2] 70, 11 C. 1904 [2] 774). — II, 530.
- 12) Benzylimid d. l-Benzoyläpfelsäure. Sm. 126–127° (J. pr. [2] 70, 12 C. 1904 [2] 774).



- C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>N** 13) Benzylimid d. i-Benzoyläpfelsäure. Sm. 100—101° (*G.* 23 [1] 174; *J. pr.* [2] 70, 9 *C.* 1904 [2] 774). — II, 530.
- 14) 4-Butyroxylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 156° (*C.* 1897 [1] 49). — \*II, 1056.
- C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>N<sub>3</sub>** C 64,1 — H 4,4 — O 19,0 — N 12,5 — M. G. 337.
- 1) Acetat d. 6-Acetylamido-2-Keto-3-Oxy-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. noch nicht bei 300° (*B.* 38, 99 *C.* 1905 [1] 540).
- 2) Dibenzoat d. 2,5-Di[Oximido]tetrahydropyrrol. Sm. 187—189° (*B.* 22, 2965). — II, 1210.
- C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>Cl** 1) Oxoniumchlorid d. 7,4',5'-Trioxy-2,3-Indenobenzpyran-4',5'-Dimethyläther + H<sub>2</sub>O. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> + 2H<sub>2</sub>O (*Soc.* 93, 1105 *C.* 1908 [2] 608).
- 2) Oxoniumchlorid d. 7,4',5'-Trioxy-4,3-Indenobenzpyran-4',5'-Dimethyläther + 2H<sub>2</sub>O. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> + 2H<sub>2</sub>O (*Soc.* 93, 1148 *C.* 1908 [2] 612).
- 3) Diacetat d. α-Chlor-αβ-Di[4-Oxyphenyl]äthen. Sm. 125—126° (*A.* 335, 183 *C.* 1904 [2] 1130).
- C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>Cl<sub>3</sub>** 1) Diacetat d. βββ-Trichlor-αα-Di[4-Oxyphenyl]äthan. Sm. 138° (*B.* 7, 1202). — II, 995.
- C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>Br** 1) Äthyläther d. α-Brom-α-Oxy-βγδ-Triketo-αδ-Diphenylbutan. Sm. 101—102° (*B.* 27, 718). — III, 318.
- 2) Oxoniumbromid d. 7,4',5'-Trioxy-4,3-Indenobenzpyran-4',5'-Dimethyläther + H<sub>2</sub>O. + CdBr<sub>2</sub> (*Soc.* 93, 1148 *C.* 1908 [2] 612).
- 3) αγ-Lakton d. β-Brom-α-Oxy-α-Diphenylbutan-βγ-Dicarbonsäure. Sm. 174,5° u. Zers. (*B.* 39, 1072 *C.* 1906 [1] 1433).
- 4) αγ-Lakton d. β-Brom-α-Oxy-αβ-Diphenylbutan-γδ-Dicarbonsäure. Sm. 141—145° u. Zers. (*A.* 308, 163). — \*II, 1146.
- 5) Äthylester d. β-Brom-αγ-Diketo-αγ-Diphenylpropan-β-Carbonsäure (Ä. d. Dibenzylbromessigsäure). Sm. 109—110° (*A.* 282, 160). — II, 1896.
- 6) Diacetat d. α-Brom-αβ-Di[4-Oxyphenyl]äthen. Sm. 126—127° (*A.* 335, 182 *C.* 1904 [2] 1130).
- C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>Br<sub>3</sub>** 1) Diacetat d. β-Brom-α-Oxy-α-[3,5-Dibrom-4-Oxyphenyl]-β-Phenyläthan. Sm. 142—143° (*A.* 349, 117 *C.* 1906 [2] 1257).
- C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>P** 1) Triphenylester d. Phosphorsäure. Sm. 48—50° (45°); Sd. 245°<sub>11</sub> (*A.* 92, 317; 224, 159; *B.* 8, 1523; 15, 640; 16, 1765; 18, 1718; 30, 2372; *G.* 11, 69; 29 [2] 343; *H.* 25, 442). — II, 660; \*II, 359.
- C<sub>18</sub>H<sub>15</sub>O<sub>5</sub>N** C 66,5 — H 4,6 — O 24,6 — N 4,3 — M. G. 325.
- 1) Dimethyläther d. Phtalylamidomethyl-3,4-Dioxyphenylketon? Sm. 202° (D.R.P. 209962 *C.* 1909 [1] 1951).
- 2) 5-Keto-1,3-Diphenyltetrahydropyrrol-2,2-Dicarbonsäure. Sm. 178° (*B.* 35, 520 *C.* 1902 [1] 658). — \*IV, 175.
- 3) Methylester d. α-Benzoylamido-β-[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 151° (*B.* 42, 1189 *C.* 1909 [1] 1713).
- 4) Äthylester d. 3-Nitrobenzylidenbenzoylessigsäure. Sm. 107—108° (*Soc.* 83, 722 *C.* 1903 [2] 54).
- 5) Äthylester d. 3-Acetoxy-2-Naphtoylcyanessigsäure. Sm. 103° (*A.* 367, 258 *C.* 1909 [2] 1239).
- C<sub>18</sub>H<sub>15</sub>O<sub>5</sub>N<sub>3</sub>** C 61,2 — H 4,2 — O 22,7 — N 11,9 — M. G. 353.
- 1) 1<sup>2</sup>,1<sup>6</sup>-Dimethyläther d. 2-Oxy-1-[3-Nitro-2,6-Dioxyphenyl]azonaphtalin. Sm. 162—163° (*B.* 40, 4013 *C.* 1907 [2] 1840).
- C<sub>18</sub>H<sub>15</sub>O<sub>5</sub>Br** 1) 5-Brom-3,4,8-Trioxypheanthrentrimethyläther-9-Carbonsäure. Zers. bei 230° (*B.* 42, 3502 *C.* 1909 [2] 1459).
- 2) 3,6-Diacetat d. 5-Brom-1,3,6-Trioxypentanthren-1-Methyläther. Sm. 189—191° (*B.* 34, 1545).
- C<sub>18</sub>H<sub>15</sub>O<sub>5</sub>Br<sub>3</sub>** 1) Trimethyläther d. 3,6,8-Tribrom-5,7-Dioxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 145° u. Zers. (*B.* 38, 932 *C.* 1905 [1] 1026).
- C<sub>18</sub>H<sub>15</sub>O<sub>6</sub>N** C 63,3 — H 4,4 — O 28,2 — N 4,1 — M. G. 341.
- 1) 1,4-Benzochinonamid? (*Berx. J.* 26, 801; *A.* 210, 178). — III, 330.
- 2) d-Usninsäureoximanhydrid. Sm. 230° u. Zers. (*A.* 310, 252, 290). — \*II, 1204.
- 3) d-iso-Usninsäureoximanhydrid. Sm. 255° u. Zers. (*A.* 324, 164 *C.* 1902 [2] 1511).

- $C_{18}H_{15}O_6N$  4) i-Usninsäureoximanhydrid. Sm. 235° u. Zers. (A. 324, 162 C. 1902 [2] 1511).  
 5) isom. Usninsäureoximanhydrid. Sm. 215—220° (G. 30 [2] 106). — \*II, 1204.  
 6) Äthylester d. 4-Nitrodibenzoylessigsäure. Sm. 86—87° (B. 35, 937 C. 1902 [1] 808).  
 7)  $\alpha$ -Äthylester d.  $\beta$ -[3-Nitrobenzoxyl]- $\alpha$ -Phenylakrylsäure. Sm. 101 bis 102°; Sd. 287—288°<sub>28</sub> (A. 312, 48; Ph. Ch. 34, 54). — \*II, 956.  
 8)  $\beta$ -Äthylester d.  $\beta$ -[3-Nitrobenzoxyl]- $\alpha$ -Phenylakrylsäure. Sm. 117 bis 118° (A. 312, 49; Ph. Ch. 34, 54). — \*II, 956.  
 9) Triacetat d. Hydroresorufin. Sm. 216° (B. 22, 3031). — II, 933.  
 10) Verbindung (aus 1,3-Dioxybenzol) (B. 18, 374). — II, 923.
- $C_{18}H_{15}O_6N_5$  C 54,4 — H 3,8 — O 24,2 — N 17,6 — M. G. 397.  
 1) 4,6-Dinitro-5-Methylnitramido-2-Methylphenyl-2-Naphtylamin. Sm. 131° (J. pr. [2] 67, 526 C. 1903 [2] 239). — \*IV, 1115.
- $C_{18}H_{15}O_6Br$  1) 1<sup>2</sup>,2-Lakton d. 2-Brom-2,5-Dioxy-1-[4,5-Dioxyphenyl]-1,2-Dihydrobenzofuran-1<sup>4</sup>,1<sup>5</sup>,5-Trimethyläther-1<sup>2</sup>-Carbonsäure. Sm. 121° (Soc. 95, 400 C. 1909 [1] 1572).  
 C 60,5 — H 4,2 — O 31,4 — N 3,9 — M. G. 357.
- $C_{18}H_{15}O_7N$  1)  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3-Methoxyl-4-Acetoxyphenyl]akrylsäure. Sm. 178° (B. 33, 1822). — \*II, 1095.  
 2)  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3-Acetoxy-4-Methoxyphenyl]akrylsäure. Sm. 201° (B. 35, 4412 C. 1903 [1] 343).  
 3)  $\beta$ -2-Carboxybenzoylamido- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 160—165° u. Zers. (C. 1903 [2] 33).  
 4) 1,2-Dimethylester d. Benzol-1,2-Dicarbonsäure-4-Phtalaminsäure. Sm. 166—167°. Ag (C. 1906 [2] 117).  
 5) Verbindung (aus Chloroxylonin). Sm. 285° u. Zers. (Soc. 95, 967 C. 1909 [2] 373).
- $C_{18}H_{15}O_7Cl$  1) Diäthylester d. 3-Chlor-1,2-Naphtochinon-4-Oxalessigsäure. Sm. 127,5° (B. 33, 2417). — \*II, 1202.  
 2) Diäthylester d. 3-Chlor-1,4-Naphtochinon-2-Oxalessigsäure. Sm. 117—118° (B. 33, 2407). — \*II, 1202.
- $C_{18}H_{15}O_7Br$  1) Monacetat d. p-Brom-3,4,2',4',6'-Pentaoxydiphenylketon-3,4-Methylenäther-p-Dimethyläther (Acetyl bromprotocetin). Sm. 175° (B. 24, 2986). — III, 209.
- $C_{18}H_{15}O_7P$  1) Tri[3-Oxyphenylester] d. Phosphorsäure + H<sub>2</sub>O. Sm. 75° (Bl. [3] 15, 363). — \*II, 566.  
 2) Tri[4-Oxyphenylester] d. Phosphorsäure. Sm. 149° (Bl. [3] 15, 361). — \*II, 572.
- $C_{18}H_{15}O_8N$  C 57,9 — H 4,0 — O 34,3 — N 3,8 — M. G. 373.  
 1)  $\alpha$ -Phenyl- $\beta$ -[2-Nitro-3,4-Dioxyphenyl]äthen-3,4-Dimethyläther- $\alpha\alpha^2$ -Dicarbonsäure. Zers. bei 259—260° (B. 39, 3116 C. 1906 [2] 1329).
- $C_{18}H_{15}O_8N_3$  C 53,9 — H 3,7 — O 31,9 — N 10,5 — M. G. 401.  
 1) Diphenyläther d. Nitrodioxydichinolinitrosäure. Na<sub>2</sub> (Am. 29, 118 C. 1903 [1] 709).
- $C_{18}H_{15}O_{10}N$  C 53,3 — H 3,7 — O 39,5 — N 3,5 — M. G. 405.  
 1) Diphenylamin-4,4'-Ditartronsäure (C. 1900 [2] 791).
- $C_{18}H_{15}NBr_2$  1) 2-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]-6-Methylechinolin. Sm. 169° (B. 38, 3700 C. 1906 [1] 50).
- $C_{18}H_{15}N_2Cl$  1) 7-Chloräthylat d.  $\alpha\beta$ -Naphtophenazin. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (C. 1898 [2] 920). — \*IV, 704.
- $C_{18}H_{15}N_2J$  1) Jodäthylat d.  $\alpha\beta$ -Naphtophenazin. Sm. bei 150° u. Zers. (B. 26, 180). — IV, 1051.
- $C_{18}H_{15}N_3Si_2$  1) Verbindung (aus Silikodiphenyldiimid) (Soc. 77, 839).
- $C_{18}H_{15}N_4Cl$  1) 5-Chlorphenylat d. 1,3-Diamido-5,10-Naphtdiazin. 2 + PtCl<sub>4</sub> (B. 32, 2609). — \*IV, 953.  
 2) 10-Chlorphenylat d. 2,8-Diamido-5,10-Naphtdiazin. 2 + PtCl<sub>4</sub> (Bl. 48, 772; [3] 23, 179; B. 19, 3123; 28, 1581, 1697; 33, 315; Soc. 95, 583 C. 1909 [1] 1998). — IV, 1282; \*IV, 953.
- $C_{18}H_{15}ClSi$  1) Siliciumtriphenylchlorid. Sm. 88—89° (110—111°) (B. 19, 1018; Soc. 79, 454; Soc. 93, 208 C. 1908 [1] 1266; Soc. 95, 308 C. 1909 [1] 1555). — IV, 1701; \*IV, 1207.
- $C_{18}H_{15}ClSn$  1) Zinntriphenylchlorid. Sm. 106° (A. 194, 172; B. 12, 509). — IV, 1714.

- $C_{18}H_{15}Cl_2As$  1) Triphenylarsendichlorid. Sm.  $171^\circ$  ( $204-205^\circ$ ). +  $HgCl_2$  (A. 201, 242; A. 321, 162 C. 1902 [2] 44). — IV, 1689; \*IV, 1190.
- $C_{18}H_{15}Cl_2Bi$  1) Wismuthtriphenyldichlorid. Sm.  $141,5^\circ$  ( $140^\circ$ ) (B. 20, 56; A. 251, 329). — IV, 1698.
- $C_{18}H_{15}Cl_2Sb$  1) Antimontriphenyldichlorid. Sm.  $143^\circ$  ( $141,5^\circ$ ) (A. 233, 50; B. 31, 2911; G. 24 [1] 318; B. 37, 4622 C. 1905 [1] 147). — IV, 1695.
- $C_{18}H_{15}BrSi$  1) Siliciumtriphenylbromid. Sm.  $118-120^\circ$  (B. 40, 2275 C. 1907 [2] 322).
- $C_{18}H_{15}Br_2As$  1) Triphenylarsendibromid. Sm.  $215^\circ$  (A. 321, 163 C. 1902 [2] 44). — \*IV, 1190.
- $C_{18}H_{15}Br_2Bi$  1) Wismuthtriphenyldibromid. Sm.  $122^\circ$  ( $119^\circ$ ) (B. 20, 56; A. 251, 329). — IV, 1698.
- $C_{18}H_{15}Br_2Sb$  1) Antimontriphenyldibromid. Sm.  $216^\circ$  (A. 233, 50). — IV, 1695.
- $C_{18}H_{15}J_2Sb$  1) Antimontriphenyldijodid. Sm.  $153^\circ$  (A. 233, 51). — IV, 1695.
- $C_{18}H_{15}J_4As$  1) Triphenylarsentetrajodid. Sm.  $142-144^\circ$  (A. 321, 164 C. 1902 [2] 44). — \*IV, 1190.
- $C_{18}H_{15}SP$  1) Triphenylphosphinsulfid. Sm.  $157,5^\circ$ ; Sd. oberhalb  $360^\circ$  u. ger. Zers. (A. 229, 307). — IV, 1660.
- $C_{18}H_{15}SP_3$  1) Sulfid (aus Phenylphosphin). Sm.  $138^\circ$  (B. 10, 811). — IV, 1648.
- $C_{18}H_{15}SAs$  1) Triphenylarsinsulfid. Sm.  $162^\circ$  (A. 201, 244; B. 19, 1032). — IV, 1689.
- $C_{18}H_{15}SSb$  1) Antimontriphenylsulfid. Sm.  $119-120^\circ$  (B. 41, 2764 C. 1908 [2] 1260).
- $C_{18}H_{15}S_3P$  1) Triphenyläther d. Trimerkaptophosphin. Sm.  $76-77^\circ$  (B. 40, 3422 C. 1907 [2] 1405).
- $C_{18}H_{15}S_4P$  1) Triphenyläther d. Trimerkaptophosphinsulfid (Triphenylperthiophosphorsäure). Sm.  $86^\circ$  (J. pr. [2] 10, 234; B. 40, 3424 C. 1907 [2] 1405). — II, 661.
- $C_{18}H_{15}PSe$  1) Triphenylphosphinselenid. Sm.  $184-186^\circ$  (A. 229, 308). — IV, 1660.
- $C_{18}H_{15}ON_2$
- 1) C 78,3 — H 5,8 — O 5,8 — N 10,1 — M. G. 276.
  - 1) 3,5-Di[Phenylamido]-1-Oxybenzol. Sm.  $94-95^\circ$ . 2HCl, (2HCl,  $PtCl_4$ ) (A. 256, 260; G. 20, 343). — II, 724.
  - 2) 4-Phenylamido-4'-Oxydiphenylamin (D. R. P. 150553 C. 1904 [1] 1467).
  - 3) 3-Acetylamido-1-[2-Naphtyl]amidobenzol. Sm.  $135^\circ$  (B. 26, 979). — IV, 573.
  - 4) 4-Acetylamido-1-[1-Naphtylamido]benzol. Sm.  $162,5^\circ$  (J. pr. [2] 60, 557 Anm.). — \*IV, 386.
  - 5) 1-Acetylamido-2-Phenylamidonaphtalin. Sm.  $200^\circ$  (B. 42, 1381 C. 1909 [1] 1709).
  - 6) 4-Acetylamido-1-Phenylamidonaphtalin? Sm.  $192^\circ$  (A. 286, 184). — IV, 922.
  - 7) 1-Amido-3-Acetylamido-2-Phenylnaphtalin. Sm.  $220^\circ$ . HCl, Acetat (Soc. 89, 1935 C. 1907 [1] 729; Soc. 91, 1292 C. 1907 [2] 991).
  - 8) 2-[4-Acetylamidophenyl]amidonaphtalin. Sm.  $160^\circ$  (J. pr. [2] 75, 278 C. 1907 [2] 409).
  - 9) s-Benzyl-1-Naphtylharnstoff. Sm.  $203^\circ$  (B. 24, 3818). — II, 608.
  - 10) s-4-Methylphenyl-1-Naphtylharnstoff. Sm.  $234^\circ$  (Soc. 95, 502 C. 1909 [1] 1891).
  - 11)  $\alpha$ -Methyl- $\beta$ -Phenyl- $\beta$ -[2-Naphtyl]harnstoff. Sm.  $133-134^\circ$  (B. 39, 3142 C. 1906 [2] 1268).
  - 12) 1,4-Naphtochinondimethylamidophenylimid ( $\alpha$ -Naphtolblau) (B. 16, 2851; 18, 2917; D. R. P. 15915, 20850; A. 289, 129). — III, 371; \*III, 274.
  - 13) Methyläther d. 2-Oxy-1-Phenylhydrazonmethylnaphtalin. Sm.  $265^\circ$  (Bl. [3] 17, 310). — \*IV, 495.
  - 14) Methyläther d. 4-Oxy-1-Phenylhydrazonmethylnaphtalin. Sm.  $185^\circ$  (Bl. [3] 17, 307). — \*IV, 496.
  - 15) 1-Naphtyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxyäthan (B. 30, 1703).
  - 16) 2-Naphtyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxyäthan. Sm.  $145^\circ$  (B. 30, 1702). — IV, 755.
  - 17) Methyläther d.  $\alpha$ -[4-Oxybenzyliden]- $\beta$ -[2-Naphtyl]hydrazin. Sm.  $187^\circ$  (Ar. 245, 373 C. 1907 [2] 1513).
  - 18)  $\alpha$ -Phenyl- $\alpha$ -Benzyl- $\beta$ -[2-Fural]hydrazin. Sm.  $138^\circ$  (G. 27 [2] 239). — IV, 812.
  - 19) 2-Oxy-1-[2,4-Dimethylphenylazo]naphtalin. Sm.  $166^\circ$  (C. 1902 [2] 938). — \*IV, 1045.
  - 20) 2-Oxy-1-[2,5-Dimethylphenylazo]naphtalin. Sm.  $150-151^\circ$  (B. 35, 1880). — \*IV, 1045.



- C<sub>18</sub>H<sub>16</sub>ON<sub>2</sub>** 21) Methyläther d. 4-Oxy-1-[2-Methylphenylazo]naphtalin. Sm. 93° (B. 19, 2489). — IV, 1435.  
 22) Methyläther d. 4-Oxy-1-[4-Methylphenylazo]naphtalin. Sm. 103 bis 104° (B. 19, 2488). — IV, 1435.  
 23) Äthyläther d. 2-Oxy-1-Phenylazonaphtalin (B. 20, 3177; Soc. 55, 608). — IV, 1428.  
 24) Äthyläther d. 4-Oxy-1-Phenylazonaphtalin. Sm. 98—100° (B. 17, 3028; 25, 1013; 27, 2351; 31, 893, 895; Soc. 55, 609). — IV, 1427; \*IV, 1042.  
 25) Äthyläther d. 1-Oxy-2-Phenylazonaphtalin. Sm. 44° (B. 42, 1384 C. 1909 [1] 1709).  
 26) 5-Phenylhydrazonmethyl-2-Benzylfuran. Sm. 199—204° (Soc. 95, 1335 C. 1909 [2] 1057).  
 27) 6-Oxy-4-Methyl-2-Phenyl-5-Benzyl-1,3-Diazin. Sm. 243° (B. 22, 1626). — IV, 1041.  
 28) Methyläther d. 6-Oxy-5-Methyl-2,4-Diphenyl-1,3-Diazin. Sm. 121° (J. pr. [2] 39, 197). — IV, 1192.  
 29) 2-[3-Acetylamido-4-Methylphenyl]chinolin. Sm. 176—177° (M. 9, 104). — IV, 1030.  
 30) 4-Methyl-2-[2-Acetylamidophenyl]chinolin. Sm. 138° (B. 32, 3231). — \*IV, 691.  
 31) 4-Methyl-2-[4-Acetylamidophenyl]chinolin. Sm. 162—163°. — IV, 1030.  
 32) 4-[4-Acetylamidobenzyl]isochinolin. Sm. 181—182° (A. 326, 279 C. 1903 [1] 928). — \*IV, 692.  
 33) Äthylhydroxyd d. αβ-Naphtophenazin. Sm. bei 185°. Jodid (B. 26, 181). — IV, 1051.  
 34) N-Acetyltetrahydro-α-Naphtinolin. Sm. 240° (B. 27, 2255). — IV, 1032.  
 35) β-Naphtolviolett. Chlorid, 2 Chlorid + PtCl<sub>4</sub> (B. 12, 2066; 21, 1745; 23, 2274; Soc. 39, 39). — II, 886; \*II, 527.  
 36) Amid d. α-[1-Naphtyl]amido-α-Phenylelessigsäure. Sm. 158—159° (B. 39, 1010 C. 1906 [1] 1343).  
 37) Benzylidenhydrazid d. α-Phenyl-αγ-Butadien-δ-Carbonsäure. Sm. 207° (A. 367, 26 C. 1909 [2] 526).  
**C<sub>18</sub>H<sub>16</sub>ON<sub>4</sub>** C 71,0 — H 5,3 — O 5,3 — N 18,4 — M. G. 304.  
 1) Diazobenzolnitrosodiphenylamin. Sm. 112° u. Zers. (B. 21, 2614). — IV, 797.  
 2) 4-Oxy-1,2-Di[Phenylhydrazon]-1,2-Dihydrobenzol. Sm. 160° (Am. 26, 163). — \*IV, 524.  
 3) 5-Phenylhydroxyd d. 1,3-Diamido-5,10-Naphtdiazin. Chlorid, Nitrat, Bichromat (B. 32, 2609; 33, 3075). — \*IV, 953.  
 4) 10-Phenylhydroxyd d. 2,8-Diamido-5,10-Naphtdiazin (Phenosafuranin). 2 Chlorid + PtCl<sub>4</sub>, Nitrat (B. 16, 466, 871; 19, 3123; 21, 1593; 28, 1581, 1697; 30, 1565; 33, 315; Bl. 48, 339, 772). — IV, 1282; \*IV, 953.  
**C<sub>18</sub>H<sub>16</sub>ON<sub>6</sub>** C 65,1 — H 4,8 — O 4,8 — N 25,3 — M. G. 332.  
 1) Verbindung (aus 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol). Sm. 140—141°. — IV, 1105.  
**C<sub>18</sub>H<sub>16</sub>OCl<sub>2</sub>** 1) Dihydrochlorid d. 1-Keto-2-Benzyliden-4-Phenyl-2,3-Dihydro-R-Penten. Sm. 178° (B. 41, 201 C. 1908 [1] 944).  
**C<sub>18</sub>H<sub>16</sub>OSi** 1) Siliciumtriphenylhydroxyd (Triphenylsilicol). Sm. 148° (139—141°; 155°) (C. 1899 [2] 257; B. 19, 1019; Soc. 79, 452; B. 37, 1140 C. 1904 [1] 1257; B. 40, 2275 C. 1907 [2] 322; Soc. 93, 209 C. 1908 [1] 1267). — IV, 1702; \*IV, 1207.  
**C<sub>18</sub>H<sub>16</sub>OSn** 1) Zinntriphenylhydroxyd + 1½ H<sub>2</sub>O. Sm. 117—118° (A. 194, 174). — IV, 1715.  
**C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>N** 1) Aporhein. HCl, (2HCl, PtCl<sub>4</sub>) (G. 37 [1] 631 C. 1907 [2] 820).  
**C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** C 74,0 — H 5,5 — O 10,9 — N 9,6 — M. G. 292.  
 1) Methyläther d. 4-Oxy-1-[2-Naphtyl]nitrosamidomethylbenzol. Sm. 133° (A. 241, 342). — II, 754.  
 2) Di[4-Amidophenyläther] d. 1,4-Dioxybenzol. Sm. 170° (D.R.P. 178803 C. 1907 [1] 596).  
 3) α-Oxy-β-[4-Methylphenyl]-α-[1-Naphtyl]harnstoff. Sm. 147° (J. pr. [2] 78, 80 C. 1908 [2] 712).

- $C_{18}H_{16}O_2N_2$  4)  $\alpha$ -[ $\beta$ -Phenyläthenyl]- $\beta$ -[ $\beta$ -Phenylakroyl]harnstoff (Cinnamoylstyryl-harnstoff). Sm. 225—226° (*R.* 26, 204 *C.* 1907 [2] 1167).
- 5)  $\alpha\beta$ -Di[4-Acetylamidophenyl]äthin. Sm. 270° (*A.* 325, 73 *C.* 1903 [1] 463). — \*IV, 677.
- 6) 1,4-Di[Acetylamido]anthracen. Sm. 322° (*B.* 41, 1435 *C.* 1908 [1] 1978).
- 7) 9,10-Di[Acetylamido]phenanthren. Sm. 330° u. Zers. (*B.* 35, 2739 *C.* 1902 [2] 645). — \*IV, 677.
- 8) Methylenäther d.  $\delta$ -Phenylhydrazon- $\alpha$ [3,4-Dioxyphenyl]- $\alpha\gamma$ -Butadien. Sm. 190—192° (*B.* 28, 1369). — IV, 764.
- 9) 4-Phenylhydrazon-3,5-Diketo-1-Phenylhexahydrobenzol. Sm. 172° (*A.* 294, 308). — IV, 1480.
- 10) 3-Methyläther d. 3,4-Dioxy-1-[1-Naphtyl]hydrazonmethylbenzol (Vanillin- $\alpha$ -Naphtylhydrazon). Sm. 140° (*C.* 1900 [2] 693). — \*IV, 614.
- 11) 3-Methyläther d. 3,4-Dioxy-1-[2-Naphtyl]hydrazonmethylbenzol (Vanillin- $\beta$ -Naphtylhydrazon). Sm. 179° (182°; 187°) (*C.* 1900 [2] 693; *Ar.* 245, 374 *C.* 1907 [2] 1513).
- 12) 1<sup>2</sup>-Methyläther d. 2-Oxy-1-[2-Oxy-4-Methylphenyl]azonaphtalin. Sm. 173° (*B.* 42, 3103 *C.* 1909 [2] 1230).
- 13) Dimethyläther d. 2-[3,4-Dioxyphenyl]azonaphtalin. Sm. 103—105° (*C.* 1908 [1] 24, 128).
- 14) 4-Äthyläther d. 4-Oxy-1-[4-Oxyphenyl]azonaphtalin. Sm. 171° (*B.* 27, 2359). — IV, 1440.
- 15) 1<sup>4</sup>-Äthyläther d. 4-Oxy-1-[4-Oxyphenyl]azonaphtalin. Sm. 168° (*B.* 27, 2360). — IV, 1440.
- 16) Monoäthyläther d. 1-Phenylazo-2,4-Dioxynaphtalin. Sm. 172—173° (*B.* 17, 1812). — IV, 1449.
- 17) Monoäthyläther d. 1-Phenylazo-2,7-Dioxynaphtalin. Sm. 137° (*B.* 23, 524). — IV, 1450.
- 18) 3-[ $\alpha$ -Phenylhydrazonäthyl]-6-Methyl-1,2-Benzpyron. Sm. 193—194° (*Bl.* [3] 35, 90 *C.* 1906 [1] 934).
- 19) 4-[ $\alpha$ -Phenylhydrazonäthyl]-8-Methyl-1,2-Benzpyron. Sm. 168—169° (*Bl.* [3] 35, 80 *C.* 1906 [1] 933).
- 20) 3-Keto-4-Benzoyl-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 148°. HCl (*B.* 41, 2669 *C.* 1908 [2] 1363).
- 21) Methyläther d. 5-Keto-4-[4-Oxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 128,5° (*B.* 33, 866). — \*IV, 637.
- 22) 2-Keto-3-Acetyl-1-Methyl-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. 134° (*B.* 40, 4803 *C.* 1908 [1] 373).
- 23) 3,4-Diketo-2-Isopropyliden-1,3-Diphenyltetrahydroimidazol. Sm. 196—198° (*B.* 33, 620). — \*II, 209.
- 24) 4,5-Diketo-2-Methylen-1,3-Di[4-Methylphenyl]tetrahydroimidazol. Sm. 178° (*B.* 33, 618). — \*II, 276.
- 25) 5-Keto-4-[4-Dimethylamidobenzyliden]-3-Phenyl-4,5-Dihydroisoxazol. Sm. 184° (*C. r.* 146, 639 *C.* 1908 [1] 1703).
- 26) 3-[ $\beta$ -Phenyläthenyl]-4-[ $\alpha$ -Oxy- $\alpha$ -Phenyläthyl]-1,2,5-Oxdiazol. Sm. 132° (*B.* 28, 1211). — III, 325.
- 27) 2,5-Diketo-1,4-Di[2-Methylphenyl]-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 231—232° (*J. pr.* [2] 47, 185). — II, 471.
- 28) 2<sup>4</sup>-Äthyläther d. 6-Oxy-2-[4-Oxyphenyl]-4-Phenyl-1,3-Diazin. Sm. 274° (*B.* 23, 2955). — IV, 1040.
- 29) Dimethyläther d. 2,3-Di[4-Oxyphenyl]-1,4-Diazin. Sm. 134° (*Soc.* 63, 1303). — IV, 1038.
- 30) 1-Acetyl-3-[4-Methylphenyl]imido-2-Keto-5-Methyl-2,3-Dihydroindol. Sm. 121—122° (*B.* 18, 196). — II, 1652.
- 31) 3-Benzoylamidoacetylamido-2-Methylindol. Sm. 269° u. Zers. (*B.* 39, 1277 *C.* 1906 [1] 1749).
- 32) Äthyläther d. 5-Benzoylamido-6-Oxychinolin. Sm. 144° (*J. pr.* [2] 48, 30). — IV, 911.
- 33) Äthyläther d. 5-Benzoylamido-8-Oxychinolin (Analgen). Sm. 206° (*J. pr.* [2] 48, 25; D.R.P. 65111). — IV, 913; \*IV, 605.
- 34) 6-Methyl-1,3-Diphenyl-1,4-Dihydro-1,2-Diazin-5-Carbonsäure. Sm. 185—186° (*A.* 331, 310 *C.* 1904 [2] 45).

- C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>N<sub>2</sub>** 35) 7-Dimethylamido-2-Phenylchinolin-4-Carbonsäure. Sm. 275° u. Zers. Zn + 2½ H<sub>2</sub>O, Pb + H<sub>2</sub>O, Cu + H<sub>2</sub>O, Ag (A. 281, 20). — IV, 1036.
- 36) Laktone d. δ-Phenylhydrazon-α-Oxy-α-Phenyl-α-Penten-γ-Carbonsäure. Sm. 168° (B. 39, 1817 C. 1906 [2] 40).
- 37) Äthylester d. 1,5-Diphenylpyrazol-3-Carbonsäure. Sm. 90°; Sd. 400° (B. 20, 2185; 25, 3144). — IV, 946.
- 38) Äthylester d. 6-Methyl-2-Phenyl-1,3-Benzdiazin-4-Carbonsäure. Sm. 121° (B. 28, 737). — IV, 1036.
- 39) Acetat d. α-Phenyl-β-[4-Oxy-1-Naphtyl]hydrazin. Sm. 157° (160 bis 165°) (B. 24, 2313; Soc. 81, 173 C. 1902 [1] 354). — IV, 1506; \*IV, 1094.
- 40) Acetat d. 5-Methyl-3-Phenyl-1-[4-Oxyphenyl]pyrazol. Sm. 133° (A. 278, 301). — IV, 937.
- 41) Benzoat d. 5-Oxy-3,4-Dimethyl-1-Phenylpyrazol. Sm. 99° (A. 266, 129; J. pr. [2] 55, 149). — IV, 522.
- 42) Benzoat d. 3-Oxy-5-Methyl-1-[2-Methylphenyl]pyrazol. Sm. 72° (A. 338, 313 C. 1905 [1] 1162).
- 43) Benzoat d. 3-Oxy-5-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 47° (A. 338, 313 C. 1905 [1] 1162).
- 44) Phenylimid d. α-Phenylamido-α-Buten-αβ-Dicarbonsäure. Sm. 113 bis 114° (B. 37, 2383 C. 1904 [2] 306).
- 45) 4-Methylphenylimid d. 4-Methylphenylimidobornsteinsäure. Sm. 228° (B. 26, 1766). — II, 509.
- 46) 2-Oxybenzylidenhydrazid d. α-Phenyl-αγ-Butadien-δ-Carbonsäure. Sm. 232° (A. 367, 27 C. 1909 [2] 526).
- 47) Benzoylhydrazid d. α-Phenyl-αγ-Butadien-δ-Carbonsäure. Sm. 212° (A. 367, 29 C. 1909 [2] 527).
- 48) Verbindung (aus Benzochinon u. Benzidin). Sm. 118° (B. 41, 2986 C. 1908 [2] 1648).
- 49) Verbindung (aus Indigo). Sm. 245° u. Zers. (B. 42, 1569 C. 1909 [1] 1934).
- C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>N<sub>4</sub>** C 67,5 — H 5,0 — O 10,0 — N 17,5 — M. G. 320.
- 1) 1,3-Di[Methylnitrosamido]-2-Phenylnaphtalin. Sm. 174—175° (Soc. 91, 1297 C. 1907 [2] 991).
- 2) isom. 1,3-Di[Methylnitrosamido]-2-Phenylnaphtalin. Sm. 179° (Soc. 91, 1299 C. 1907 [2] 991).
- 3) 1-[4-Nitrophenylazo]-2-Äthylamidonaphtalin. Sm. 162—163° (Soc. 77, 1214). — \*IV, 1028.
- 4) Azoverbindung (aus 4-Nitrodiazobenzol u. 5-Dimethylamido-1,2,3,4-Tetrahydronaphtalin) (C. 1905 [2] 331).
- 5) 4-[4-Acetylamidophenyl]azo-3-Methyl-5-Phenylisoxazol. Sm. 228° u. Zers. (B. 39, 2463 C. 1906 [2] 676).
- 6) 2-Acetyl-3-Acetyl-1,5-Dibenzoyl-2,3-Dihydropyrazol. Sm. 119° (G. 29 [1] 100). — \*IV, 941.
- 7) 5-Keto-1-Benzoyl-4-[2-Methylphenyl]azo-3-Methyl-4,5-Dihydropyrazol. Sm. 209° (B. 41, 2360 C. 1908 [2] 518).
- 8) 1-Dibenzoylamido-3,4-Dimethyl-1,2,5-Triazol. Sm. 114° (96°; 110 bis 115°) (J. pr. [2] 78, 546 C. 1909 [1] 446; B. 42, 667 C. 1909 [1] 1017).
- 9) 2,3-Dibenzoyl-5,6-Dimethyl-2,3-Dihydro-1,2,3,4-Tetrazin. Sm. 140° (B. 33, 645; B. 42, 664 C. 1909 [1] 1016). — \*IV, 903.
- 10) 1,2-Diacetyl-3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 228 bis 229° (B. 26, 2133; 27, 1005; A. 297, 259). — II, 1214; \*II, 762.
- 11) 1,4-Diacetyl-3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 215° (B. 27, 1005; A. 297, 262). — II, 1215.
- 12) 5-Methyl-1-Phenylpyrazol-4-Phenylhydrazonmethylcarbonsäure. Sm. 207—208° (A. 295, 322). — IV, 547.
- 13) Äthylester d. 4-Phenylazo-5-Phenylpyrazol-3-Carbonsäure. Sm. 153° (B. 37, 2208 C. 1904 [2] 323).
- C<sub>18</sub>H<sub>16</sub>O<sub>2</sub>N<sub>6</sub>** C 62,1 — H 4,6 — O 9,2 — N 24,1 — M. G. 348.
- 1) 3-Amido-3'-[4-Nitro-2-Amidophenyl]amidazobenzol. Sm. 176 bis 177° (B. 40, 3339 C. 1907 [2] 801).
- 2) 1,3-Dioxy-P-Di[4-Amidophenylazo]benzol (D. R. P. 98438). — \*IV, 1049.



- $C_{18}H_{16}O_2N_6$  3) **3,6-Di[3-Acetylamidophenyl]-1,2,4,5-Tetrazin.** Sm. 295° (B. 35, 3937 C. 1903 [1] 38). — \*IV, 993.
- $C_{18}H_{16}O_2N_8$  C 57,4 — H 4,3 — O 8,5 — N 29,8 — M. G. 376.
- 1) **Di[Benzylidenhydrazid] d. 1,2-Dihydro-1,2,4,5-Tetrazin-3,6-Dicarbonsäure.** Sm. oberhalb 290° (B. 41, 3114 C. 1908 [2] 1574).
- $C_{18}H_{16}O_2Br_2$  1) **Diäthyläther d. 2-Dibrom-1,5-Dicxyanthracen.** Sm. 250° (B. 42, 1416 C. 1909 [1] 1711).
- 2) **Methylester d.  $\gamma\delta$ -Dibrom- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure.** Sm. 117—118° (A. 306, 210; J. pr. [2] 68, 527 C. 1904 [1] 452). — \*II, 875.
- 3) **Methylester d. isom. 2-Dibrom- $\alpha\delta$ -Diphenyl- $\alpha$ -[oder  $\beta$ ]-Buten- $\alpha$ -Carbonsäure.** Sm. 133—134° (J. pr. [2] 68, 526 C. 1904 [1] 451).
- 4)  **$\beta\gamma$ -Dibrom- $\gamma$ -Phenylpropylester d.  $\beta$ -Phenylakrylsäure.** Sm. 151° (A. 189, 344). — II, 1407.
- $C_{18}H_{16}O_2Br_4$  1)  **$\alpha\beta$ -Di[3,6-Dibrom-4-Oxy-2,5-Dimethylphenyl]äthen.** Sm. 217—220° (A. 301, 273).
- 2)  **$\beta\gamma$ -Dibrom- $\gamma$ -Phenylpropylester d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure?** (A. 189, 348). — II, 1407.
- 3) **Verbindung (aus 1,3,6-Tribrom-4-Keto-1,2,5-Trimethyl-1,4-Dihydrobenzol).** Sm. bei 230° (B. 28, 2914; 29, 1115, 1116). — \*II, 451.
- 4) **Verbindung (aus d. Acetat d. 4,6-Dibrom-2-Oxy-5-Brommethyl-1,3-Dimethylbenzol).** Sm. 254° (A. 302, 93).
- $C_{18}H_{16}O_2S$  1)  **$\delta$ -Merkapto- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure.** Sm. 164° (M. 23, 970 C. 1903 [1] 284).
- $C_{18}H_{16}O_2S_2$  1) **Diphenyläther d. 2,5-Dimerkapto-1,4-Diketo-hexahydrobenzol (Thiophenochinon)** (J. pr. [2] 53, 482; A. 336, 117 C. 1904 [2] 1298; J. pr. [2] 80, 271 C. 1909 [2] 1740). — III, 344.
- $C_{18}H_{16}O_3N_2$  C 70,1 — H 5,2 — O 15,6 — N 9,1 — M. G. 308.
- 1)  **$\gamma$ -Benzoylphenylhydrazon- $\beta\delta$ -Diketopentan.** Sm. 160—161° (B. 25, 3194). — IV, 787.
- 2) **1<sup>2</sup>,1<sup>6</sup>-Dimethyläther d. 2-Oxy-1-[2,6-Dioxyphenyl]azonaphtalin.** Sm. 120—121° (B. 40, 4012 C. 1907 [2] 1840).
- 3) **2-Alloxanylamidodi[4-Methylphenyl]amin.**  $\alpha$ -Modif. Sm. 252° u. Zers.;  $\beta$ -Modif. Sm. 242—247° u. Zers. (B. 26, 542). — IV, 616.
- 4) **4-Acetylamido-1-[ $\alpha$ -Oximidobenzyl]-2-Methylbenzfuran.** Sm. 192° (B. 36, 1261 C. 1903 [1] 1183).
- 5) **Monooxim d. 4-Oxy-5-Keto-3-Acetyl-1,2-Diphenyl-2,5-Dihydropyrrrol.** Sm. 213—215° (B. 31, 1307). — \*IV, 222.
- 6) **4<sup>3</sup>-Methyläther d. 5-Keto-4-[3,4-Dioxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol.** Sm. 169° (B. 33, 867). — \*IV, 637.
- 7) **Methyläther d. 5-Oxy-2-Keto-1-Acetyl-4,5-Diphenyl-2,5-Dihydroimidazol.** Sm. 180° (A. 368, 200 C. 1909 [2] 1465).
- 8) **3-Acetyl-2,5-Diketo-1-Methyl-4,4-Diphenyltetrahydroimidazol.** Sm. 172° (B. 41, 170 C. 1908 [1] 847; B. 41, 1386 C. 1908 [1] 2103).
- 9) **Dimethyläther d. 2-Keto-3,6-Di[4-Oxyphenyl]-1,2-Dihydro-1,4-Diazin.** Sm. 217°. HCl, Pikrat (Soc. 95, 588 C. 1909 [1] 1991).
- 10) **2,4,6-Triketo-5,5-Dibenzylhexahydro-1,3-Diazin.** Sm. 222° (D.R.P. 146496 C. 1903 [2] 1484; A. 335, 347 C. 1904 [2] 1381; D.R.P. 156385 C. 1905 [1] 59; A. 340, 322 C. 1905 [2] 890).
- 11) **2,4,6-Triketo-5,5-Dimethyl-1,3-Diphenylhexahydro-1,3-Diazin.** Sm. 230° (C. 1906 [2] 1404).
- 12) **9-Acetyl-3-Diacetylamidocarbazol.** Sm. 174,5° (B. 34, 1684). — \*IV, 665.
- 13) **Dimethyläther d. 3-Acetyl-2-[2,4-Dioxyphenyl]-1,4-Benzdiazin.** Sm. 116° (B. 40, 2727 C. 1907 [2] 326).
- 14) **Anhydro- $\alpha$ -[3-Methylphenyl]amido- $\alpha$ -[3-Methylphenyl]imidoäthan-6<sup>1</sup>,6<sup>2</sup>-Dicarbonsäure.** Sm. 293° (B. 30, 1189). — \*II, 829.
- 15) **Lakton d.  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -Phenylbutan- $\beta$ -Ketocarbon-säure.** Sm. 165—166° u. Zers. (Soc. 89, 1242 C. 1906 [2] 1118).
- 16) **Äthylester d. 6-Oxy-2-[2-Naphtyl]-1,3-Diazin-4-Methylcarbonsäure.** Sm. 193° (B. 28, 481). — IV, 1036.
- 17) **Benzoat d. 4-Oxy-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol.** Sm. 139° (A. 293, 53). — IV, 513.
- 18) **Benzoat d. 3-Oxy-5-Keto-4,4-Dimethyl-1-Phenyl-4,5-Dihydropyrazol.** Sm. 80° (B. 41, 3865 C. 1909 [1] 296).

- $C_{18}H_{16}O_3N_2$  19) Imid d.  $\beta$ -Phenylbenzoylamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 190° (B. 18, 1042). — II, 440.
- 20)  $\alpha$ -Phenylamid- $\beta\gamma$ -Phenylimid d. Propan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 168° (B. 38, 1622 C. 1905 [1] 1533).
- 21) Dioxim (aus d. Verb.  $C_{18}H_{16}O_4$ ). Sm. 157—158° (B. 28, 1208). — III, 324.
- 22) Verbindung (aus Diacetylweinsäureanhydrid u. p-Toluidin) (Soc. 71, 1062).
- 23) Verbindung (aus d.  $\gamma$ -Phenylhydrazon- $\alpha$ -Phenylbutan- $\alpha^2\beta$ -Dicarbonsäure- $\beta$ -Äthylester). Sm. 228—229° (A. 236, 194). — IV, 719.
- $C_{18}H_{16}O_3N_4$  C 64,3 — H 4,7 — O 14,3 — N 16,7 — M. G. 336.
- 1) 4-[3-Nitrobenzyliden]amido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 213° (A. 293, 62). — IV, 1109.
- 2) 4-[4-Nitrobenzyliden]amido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 155° (A. 352, 205 C. 1907 [1] 1051).
- 3) 2,4,6-Triketo-1-(6-(4-Methylphenyl)amido-3-Methylphenyl)imido-hexahydro-1,3,5-Triazin. Sm. 244° (B. 39, 1320 C. 1906 [1] 1738).
- 4) Äthylester d. 4-Phenylhydrazon-5-Keto-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 152—154° (B. 24, 4212; 25, 1979; Soc. 87, 810 C. 1905 [2] 456). — IV, 729.
- 5) Acetat d. 3-Oxy-5-[3-Acetylamidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 117° (Soc. 71, 212). — IV, 1271.
- 6) Acetat d. 3-Oxy-5-[4-Acetylamidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 215° (Soc. 71, 208). — IV, 1271.
- 7) Oxim d. Verb.  $C_{18}H_{15}O_3N_8$ . Sm. 226° (B. 41, 685 C. 1908 [1] 1400).
- $C_{18}H_{16}O_8N_6$  C 59,3 — H 4,4 — O 13,2 — N 23,1 — M. G. 364.
- 1) 8-[1-Oxy-2-Naphtyl]azo-2,6-Diketo-1-3,7-Trimethylpurin (Kaffein-azo- $\beta$ -Naphtol) (Am. 23, 63). — \*IV, 1087.
- $C_{18}H_{16}O_3Cl_2$  1)  $\delta$ -Acetat d.  $\gamma\gamma$ -Dichlor- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 106° (B. 36, 2396 C. 1903 [2] 498).
- $C_{18}H_{16}O_3Br_2$  1)  $\alpha\beta$ -Dibrom- $\zeta$ -Oxy- $\gamma\delta$ -Diketo- $\alpha\zeta$ -Diphenylhexan. Sm. 127° u. Zers. (B. 28, 1211). — III, 325.
- 2) Äthylester d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\alpha\gamma$ -Diphenylpropan- $\beta$ -Carbonsäure. Sm. 110° (G. 33 [2] 147 C. 1903 [2] 1270).
- 3)  $\delta$ -Acetat d.  $\gamma\gamma$ -Dibrom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 124° (B. 36, 2398 C. 1903 [2] 498).
- 4)  $\delta$ -Acetat d. isom.  $\gamma\gamma$ -Dibrom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 103° (B. 36, 2399 C. 1903 [2] 498).
- 5) Acetat d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\alpha$ -[4-Methylphenyl]- $\gamma$ -[2-Oxyphenyl]-propan. Sm. 136—137° (B. 29, 239). — III, 234.
- $C_{18}H_{16}O_4N_2$  C 66,7 — H 4,9 — O 19,7 — N 8,6 — M. G. 324.
- 1)  $\alpha\delta$ -Dioximido- $\beta\gamma$ -Diketo- $\alpha\delta$ -Di[4-Methylphenyl]butan. Sm. 181° u. Zers. +  $C_2H_6O$  (B. 25, 3474). — III, 324.
- 2) 8-Nitro-1-Diäthylamido-9,10-Anthrachinon (D.R.P. 136777 C. 1902 [2] 1373).
- 3) 3,4-3',4'-Diäthylenäther d. Di[3,4-Dioxybenzyliden]hydrazin. Sm. 190—191° (A. 357, 374 C. 1908 [1] 358).
- 4) Dimethyläther d. 6,6'-Dioxyindigoweiss. Zers. bei 200° (B. 42, 3652 C. 1909 [2] 1654).
- 5) Di[4-Methylbenzyliden]hydrazin- $\alpha\alpha'$ -Dicarbonsäure. Sm. 280° (C. 1896 [2] 380; Bl. [3] 17, 368).
- 6)  $\alpha$ ,2-Lakton d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -Phenyläthan- $\beta$ ,2-Dicarbonsäure- $\beta$ -Äthylester. Sm. 157—159° (A. 246, 344). — IV, 724.
- 7) Äthylester d. Phenylazobenzoylbrenztraubensäure. Sm. 116—117° (B. 21, 1705; B. 37, 2204 C. 1904 [2] 323). — IV, 1475.
- 8) Äthylester d. 4-Phenylhydrazido-1,2-Benzopyron-3-Carbonsäure. Sm. 220° u. Zers. (A. 367, 191 C. 1909 [2] 704).
- 9) Äthylester d. 3-Phenylamidoformoxylindol-2-Carbonsäure. Sm. 187—189° (B. 34, 1855).
- 10) Diacetat d.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d.  $\alpha$ -Benzildioxim). Sm. 147—148° (B. 21, 798). — III, 294.
- 11) Diacetat d. isom.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d.  $\beta$ -Benzildioxim). Sm. 124—125° (A. 252, 46; B. 21, 799). — III, 294.
- 12) Diacetat d. isom.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d.  $\gamma$ -Benzildioxim). Sm. 114—115° (B. 22, 714). — III, 294.

- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>** 13) Diacetat d. Di[2-Oxybenzyliden]hydrazin. Sm. 190—191° (*B.* 37, 3185 *C.* 1904 [2] 991; *B.* 39, 807 *C.* 1906 [1] 1246).
- 14) Diacetat d. Di[4-Oxybenzyliden]hydrazin. Sm. 185° (192°) (*B.* 39, 807 *C.* 1906 [1] 1246).
- 15) Dibenzoat d.  $\alpha\delta$ -Dioximidobutan. Sm. 152° (*B.* 34, 1493).
- 16) Dibenzoat d.  $\beta\gamma$ -Dioximidobutan. Sm. 223° (*B.* 40, 1632 *C.* 1907 [1] 1733).
- 17) Phenylmonamid d. Citronensäurephenylimid (Citrodianil) (*A.* 82, 87; 98, 88). — II, 423.
- 18) Di[Phenylamid] d. Propen- $\alpha\beta\gamma$ -Tricarbonsäure (Diphenyldiamid d. Akonitsäure). Sm. 188—189° (*Am.* 9, 193). — II, 423.
- 19) isom. Di[Phenylamid] d. Propen- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 199 bis 220° (*Soc.* 89, 1850 *C.* 1907 [1] 741).
- 20) s-Di[Benzoylamid] d. Bernsteinsäure. Sm. 211° (*Soc.* 85, 1690 *C.* 1905 [1] 512).
- 21)  $\alpha$ -Phenylamid- $\beta\gamma$ -Phenylimid d.  $\beta$ -Oxypropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 182° (*B.* 38, 1624 *C.* 1905 [1] 1533).
- 22) p-Nitro-2-Isopropyl-4-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 167° (*A.* 221, 169). — II, 1806.
- 23) 1,2-Phenylendiimid d.  $\beta$ -Buten- $\alpha\gamma$ -Dicarbonsäure. Sm. 139—140° (*G.* 34 [2] 449 *C.* 1905 [1] 618).
- 24) 1,3-Phenylendiimid d.  $\beta$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sm. 175° (*G.* 34 [2] 449 *C.* 1905 [1] 618).
- 25) 1,4-Phenylendiimid d.  $\beta$ -Buten- $\beta\gamma$ -Dicarbonsäure. Sm. 285° (*G.* 34 [2] 450 *C.* 1905 [1] 618).
- 26) sec. Hydrazid d. 1,2-Dihydrobenzofuran-1-Carbonsäure. Sm. 229 bis 230° (*B.* 39, 493 *C.* 1906 [1] 931).
- 27) Methylphenylhydrazid d. 4-Keto-7-Methyl-3,4-Dihydro-1,2-Benzopyron-3-Carbonsäure. Sm. 207° (*A.* 367, 231 *C.* 1909 [2] 1237).
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>N<sub>4</sub>** C 61,3 — H 4,5 — O 18,2 — N 15,9 — M. G. 352.
- 1) 1,4-Dibenzoyl-3,6-Diamido-2,5-Dioxy-1,4-Dihydro-1,4-Diazin (Dihydrohippuroflavindiamid). Sm. 240° u. Zers. (*A.* 287, 90). — \*II, 745.
- 2) Diazotruixillsäure (*B.* 24, 2591). — IV, 1557.
- 3) Acetat d. 4-Acetylphenylamido-3-Oxy-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 153° (*B.* 21, 2330; 34, 2311). — IV, 676.
- 4) Benzoat d.  $\alpha$ -[ $\alpha$ -Nitrosoäthyliden]- $\beta$ -[ $\alpha$ -Oximido- $\alpha$ -Benzoyläthyl]-hydrazin (Dibenzoylazaurolsäure). Sm. 210° u. Zers. (*A.* 353, 85 *C.* 1907 [1] 1667).
- 5) Di[Benzylamid] d. Bisanhydronitroessigsäure. Sm. 174—175° (*B.* 34, 879).
- 6) 3-Phenylhydrazid d. 5-Keto-1-Phenyl-4,5-Dihydropyrazol-3,4-Dicarbonsäure-4-Methylester. Zers. bei 250°. Phenylhydrazinsalz (*Soc.* 91, 1364 *C.* 1907 [2] 1236).
- 7) Verbindung (aus 1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin). Sm. 282° (*B.* 23, 1982). — II, 459.
- 8) Verbindung (aus 1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin). Sm. 166 bis 167° (*B.* 23, 1984). — II, 487.
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>N<sub>6</sub>** C 56,8 — H 4,2 — O 16,8 — N 22,1 — M. G. 380.
- 1) 4,6-Dinitro-1,3-Di[2-Amidophenylamido]benzol. Sm. 253° (*B.* 34, 3729 *C.* 1902 [1] 54). — \*IV, 372.
- 2) Dinitrodiäthyltetraamidodimethylbiphenyl. Sm. 242°. 2 HCl, 2 HNO<sub>3</sub> (*B.* 21, 2407). — IV, 1295.
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>Cl<sub>2</sub>** 1) Di[4-Chloracetylphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 160—165° (*B.* 31, 171). — \*III, 106.
- 2) Diacetat d.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 220° u. Zers. (*A.* 335, 179 *C.* 1904 [2] 1130).
- 3) Diacetat d. isom.  $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 132° (*A.* 335, 181 *C.* 1904 [2] 1130).
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Diäthylester d. p-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 105 bis 106° (*B.* 19, 3154). — II, 1885.
- 2) Dibenzylester d.  $\alpha\beta$ -Dibrombernsteinsäure. Sm. 92—93° (*B.* 41, 2467 *C.* 1908 [2] 767).
- 3) 2-Acetat d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropan-4-Methyläther. Sm. 130,5—131,5° (*B.* 32, 312). — \*III, 168.



- $C_{18}H_{16}O_4Br_2$  4) 2-Acetat d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[4-Oxyphenyl]-propan-4-Methyläther. Sm. 104–105° (B. 32, 319). — \*III, 168.
- 5)  $\gamma^2$ -Acetat d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[4-Oxyphenyl]-propan- $\alpha^4$ -Methyläther. Sm. 123° (B. 41, 1338 C. 1908 [1] 1981).
- 6) Diacetat d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 215° u. Zers. (A. 335, 176, 178 C. 1904 [2] 1129).
- 7) Diacetat d. isom.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 169 bis 170° (A. 335, 176, 179 C. 1904 [2] 1130).
- $C_{18}H_{16}O_5N_2$  C 63,5 — H 4,7 — O 23,5 — N 8,2 — M. G. 340.
- 1) 1-Benzoyl-4-Benzoylamido-3,5,5-Trioxy-4,5-Dihydropyrrol. Sm. 153,5–158,5°. Ba, Pb, Cu (B. 21, 3325; 22, 1957). — II, 1186.
- 2)  $\alpha$ -Äthylester d.  $\alpha$ -Phenylazobenzoylessigsäure-2-Carbonsäure +  $H_2O$ . Sm. 145–147° (B. 35, 927, 936 C. 1902 [1] 807). — \*IV, 1059.
- 3) Äthylester d. Furfurincarbonsäure. Sm. 124° (J. pr. [2] 27, 319). — III, 722.
- 4) Diacetat d. Anhydro-o-Phenylendiimidoglykopyrogallol. Sm. 143° (B. 27, 1985). — IV, 565.
- 5) 4,4'-Biphenylendiamid d. Citronensäure (Citrobenzidylsäure). Zers. oberhalb 300°. Ag (B. 21, 663). — IV, 966.
- 6) Verbindung (aus 4-Amidobenzol-1-Carbonsäure, Acetessigsäureäthylester u. Pyridin) (J. pr. [2] 60, 511). — \*II, 790.
- $C_{18}H_{16}O_5N_4$  C 58,7 — H 4,3 — O 21,7 — N 15,2 — M. G. 368.
- 1) Laktond.  $\alpha\delta$ -Di[Phenylhydrazon]- $\beta\gamma$ -Dioxybutan- $\alpha\delta$ -Dicarbonsäure. Sm. 256° u. Zers. (Soc. 95, 1248 C. 1909 [2] 972).
- 2) Dibenzoat d.  $\alpha$ -Oxy- $\alpha$ -[ $\alpha$ -Oximidoäthyl]- $\beta$ -[ $\alpha$ -Nitrosoäthyliden]hydrazin. Sm. 157° u. Zers. (A. 353, 103 C. 1907 [1] 1668).
- $C_{18}H_{16}O_5N_6$  C 54,5 — H 4,0 — O 20,2 — N 21,2 — M. G. 396.
- 1) Phenylnitrosohydrazid-Phenylnitrosamidoimid d. Propan- $\alpha\beta\gamma$ -Tricarbonsäure (G. 29 [2] 154). — \*IV, 470.
- $C_{18}H_{16}O_5Br_2$  1) Trimethyläther d.  $\beta$ -Dibrom-2,4,6-Trioxydibenzoylmethan. Sm. 132° (B. 32, 2449 Anm.; 33, 1990 Anm.). — \*III, 227.
- $C_{18}H_{16}O_6N_2$  C 60,7 — H 4,5 — O 26,9 — N 7,9 — M. G. 356.
- 1) Bis-2-Aldehydophenoxyessigsäurehydrazon. Sm. 222° u. Zers. (B. 31, 2810). — \*III, 55.
- 2)  $\alpha\beta$ -Äthylendi[Amidophenyl-4-Ketocarbonsäure]. Sm. 205–208° u. Zers. (C. 1901 [1] 238). — \*II, 948.
- 3) meso- $\alpha\beta$ -Di[Benzoylamido]bernsteinsäure. Sm. 213° u. Zers. (B. 26, 1986). — II, 1192.
- 4) isom.  $\alpha\beta$ -Di[Benzoylamido]bernsteinsäure +  $H_2O$ . Sm. 182° u. Zers. (B. 26, 1998). — II, 1192.
- 5) 4,4'-Di[Acetylamido]biphenyl-3,3'-Dicarbonsäure. Sm. bei 300° (B. 31, 2582). — \*II, 1093.
- 6) 2,2'-Di[Acetylamido]biphenyl-4,4'-Dicarbonsäure. Sm. 250° (B. 42, 651 C. 1909 [1] 1012).
- 7) Dinitrodiäthylcarbобензonsäure. Sm. 155–156° (A. 184, 170). — II, 1476.
- 8)  $\alpha\beta$ -Di[Benzoylamido]äthan-2,2'-Dicarbonsäure (Äthylendiphtalamid-säure) (B. 21, 2670). — II, 1798.
- 9) Bernsteinsäurediphenylamid-3,3'-Dicarbonsäure (Succindi-3-Amidobenzol-1-Carbonsäure). Sm. bei 300° u. Zers. Ca + 7  $H_2O$ , Ba + 5  $H_2O$  (J. r. 4, 295, 300; G. 15, 547). — II, 1266.
- 10) Dimethylester d. s-Diphenyloxamid-3,3'-Dicarbonsäure. Sm. 236° (B. 33, 617). — \*II, 789.
- 11) Dimethylester d. Säure  $C_{18}H_{12}O_6N_2$  (aus d. Bromimid d. Benzol-1,2-Dicarbonsäure). Sm. 142–143° (B. 33, 26). — \*II, 1050.
- 12) Diäthylester d. 1,2-Phtalyldi[cyanessigsäure]. Sm. 158–160° (A. ch. [7] 1, 499). — II, 2018.
- 13) Diäthylester d. 1,3-Phtalyldi[cyanessigsäure]. Sm. 191–192° (NH<sub>4</sub>, Fe<sub>2</sub>, Cu + 2  $H_2O$ , Ag<sub>2</sub> (Bl. [3] 11, 1097). — II, 2019.
- 14) Diäthylester d. 1,4-Phtalyldi[cyanessigsäure]. Sm. 179° (Bl. [3] 11, 927). — II, 2019.
- 15) Diamid d. Dibenzoylweinsäure. Sm. 240° (A. 361, 144 C. 1908 [2] 398).

- $C_{18}H_{16}O_6N_2$  16) Di[2-Acetoxyphenylamid] d. Oxalsäure. Sm. 201° (B. 29, 2644). — \*II, 393.
- 17) Di[4-Acetoxyphenylamid] d. Oxalsäure. Subl. bei 260° (G. 25 [2] 533). — \*II, 409.
- 18) Phenylhydrazonderivat (aus d.  $\alpha, \alpha^3$ -Lakton d.  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trioxyphenyl]äthen- $\alpha^3\beta$ -Dicarbonsäure- $\beta$ -Äthylester). Sm. 243° (Soc. 71, 1112). — \*II, 1216.
- $C_{18}H_{16}O_6N_4$  C 56,3 — H 4,1 — O 25,0 — N 14,6 — M. G. 384.
- 1) 1-Äthylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 153,5—154° (Soc. 83, 1337 C. 1904 [1] 99).
- 2) 2-Äthylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 106° (Soc. 83, 1339 C. 1904 [1] 99).
- 3) 1-Dimethylamidonaphtalin + 1,3,5-Trinitrobenzol. Sm. 105—106° (Soc. 83, 1338 C. 1904 [1] 99).
- 4) 4,8-Dinitro-1,5-Di[Dimethylamido]-9,10-Anthrachinon (D. R. P. 136777 C. 1902 [2] 1374).
- 5) 2,5-Diketo-1,4-Di[ $\beta$ -Nitro-2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 253—254° (B. 23, 1992). — II, 471.
- $C_{18}H_{16}O_6N_6$  C 52,4 — H 3,9 — O 23,3 — N 20,4 — M. G. 412.
- 1) 1,2-Dioximido-3,5-Dinitro-4 [oder 6]-Phenylamidobenzol + Anilin (A. 307, 60).
- 2) Dimethylenäther d.  $\alpha\beta$ -Disemicarbazon- $\alpha\beta$ -Di[3,4-Dioxyphenyl]-äthan. Sm. 250° u. Zers. (A. 339, 273 C. 1905 [2] 47).
- $C_{18}H_{16}O_6Cl_2$  1) Diäthylester d. 3,6-Dichlor-1,4-Dimethyl-p- $\beta$ -Benzdifuran-2,5-Dicarbonsäure. Sm. 175° (J. pr. [2] 45, 72). — III, 735.
- $C_{18}H_{16}O_6Br_2$  1) Di[ $\beta$ -Brom-4-Acetoxyphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm. 156° (A. 280, 203). — II, 941.
- $C_{18}H_{16}O_6Br_4$  1) 9-Methyläther d. Tetrabrom-1,3,6,8-Tetraketo-9-Oxy-2,4,5,7-Tetramethyloktahydroxanthren. Sm. 155—160° u. Zers. (M. 25, 680 C. 1904 [2] 1145).
- $C_{18}H_{16}O_7N_2$  C 58,1 — H 4,3 — O 30,1 — N 7,5 — M. G. 372.
- 1) Triacetat d. Tetraoxyazobenzol. Sm. 240—242° (C. 1897 [2] 588). — IV, 1363.
- 2) Oxybernsteinsäurediphenylamid-3,3'-Dicarbonsäure. Cu (A. 232, 166). — II, 1266.
- 3) Verbindung (aus Oxyresazoin) (M. 8, 428). — II, 932.
- $C_{18}H_{16}O_7N_4$  C 54,0 — H 4,0 — O 28,0 — N 14,0 — M. G. 400.
- 1) 1-Amidonaphtalin + 2,4,6-Trinitro-1-Oxybenzoläthyläther. Sm. 79,5° (Soc. 79, 532).
- $C_{18}H_{16}O_7Si_4$  1) Trisilicobenzoylkieselsäure (B. 19, 1016; B. 41, 2949 C. 1908 [2] 1347). — IV, 1702.
- $C_{18}H_{16}O_8N_2$  C 55,7 — H 4,1 — O 33,0 — N 7,2 — M. G. 388.
- 1)  $\beta$ -Dinitro- $\beta\gamma$ -Diphenylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 218° (B. 39, 4091 C. 1907 [1] 248).
- 2) isom.  $\beta$ -Dinitro- $\beta\gamma$ -Diphenylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 318° (B. 39, 4091 C. 1907 [1] 248).
- 3) Biphenyl-3,3'-Dicarbonsäure-4,4'-Di[Amidoessigsäure]. Sm. oberhalb 300° (C. 1903 [1] 34).
- 4)  $\alpha\beta$ -Dioxybernsteinsäurediphenylamid-3,3'-Dicarbonsäure. (CuOH)<sub>2</sub> (A. 232, 159). — II, 1267.
- 5) Diäthylester d.  $\alpha\beta$ -Di[ $\beta$ -Nitrophenyl]äthan-2,2'-Dicarbonsäure. Sm. 60° (A. 239, 70). — II, 1889.
- 6) Di[2-Nitrobenzylester] d. Bernsteinsäure. Sm. 104—105° (B. 41, 2463 C. 1908 [2] 767).
- 7) Di[4-Nitrobenzylester] d. Bernsteinsäure. Sm. 90° (B. 41, 2462 C. 1908 [2] 767).
- 8) Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Nitrophenyl]äthan. Sm. bei 340° (J. pr. [2] 34, 345). — II, 1101.
- 9) Schwarzer Farbstoff (aus Haaren) (J. 1876, 936; J. Th. 1886, 333). — III, 669.
- $C_{18}H_{16}O_8N_4$  C 51,9 — H 3,8 — O 30,8 — N 13,5 — M. G. 416.
- 1) Diäthylester d.  $\beta$ -Dinitroazobenzol-3,3'-Dicarbonsäure. Sm. 104° (J. r. 6, 197). — IV, 1459.

- $C_{18}H_{16}O_9N_2$  C 53,5 — H 4,0 — O 35,6 — N 6,9 — M. G. 404.  
1) Diacetat d. Di[ $\alpha$ -Oxy-2-Nitrobenzyl]äther. Sm. 171° (B. 42, 2584 C. 1909 [2] 520).
- $C_{18}H_{16}O_{10}N_6$  C 45,4 — H 3,4 — O 33,6 — N 17,6 — M. G. 476.  
1) Di[ $\beta$ -Dinitro-4-Methylphenylamid] d. Bernsteinsäure (A. 209, 380). — II, 502.
- $C_{18}H_{16}O_{10}S_2$  1)  $\alpha$ -Truxillsäure- $\alpha$ -Disulfonsäure ( $\gamma$ -Isatropasulfonsäure). Ba<sub>2</sub> + 4H<sub>2</sub>O (B. 22, 128). — II, 1902.  
2)  $\alpha$ -Truxillsäure- $\beta$ -Disulfonsäure. Ba + 4H<sub>2</sub>O (B. 22, 128). — II, 1902.  
3)  $\beta$ -Truxillsäure- $\beta$ -Disulfonsäure. Ba<sub>2</sub> + 4H<sub>2</sub>O (B. 22, 129). — II, 1903.
- $C_{18}H_{16}O_{14}N_{10}$  C 36,2 — H 2,7 — O 37,6 — N 23,5 — M. G. 596.  
1) Di[2,4,6-Trinitrophenyl]arginin (H. 59, 292 C. 1909 [1] 1583).
- $C_{18}H_{16}NCl_{12}$  1) Chlordiphenylmethylat d. Pyridin. 2 + PtCl<sub>4</sub> (C. 1902 [1] 1301). — \*IV, 90.  
2)  $\gamma$ -Phenylallylchinoliniumchlorid. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (Ar. 247, 350 C. 1909 [2] 1439; Ar. 247, 372 C. 1909 [2] 1441).  
3) Nitril d.  $\alpha$ -[4-Chlorphenyl]- $\beta$ -[4-Isopropylphenyl]akrylsäure. Sm. 126° (J. pr. [2] 61, 192). — \*II, 876.
- $C_{18}H_{16}NBr$  1) 2-Brommethyl-1-[1-Naphtylamido]methylbenzol. Sm. 240—242° (B. 31, 423). — \*II, 332.  
2) Bromdiphenylmethylat d. Pyridin + H<sub>2</sub>O. Sm. 129—130° (C. 1902 [1] 1301). — \*IV, 90.
- $C_{18}H_{16}NJ$  1) Jodmethylat d. 2,6-Diphenylpyridin. Sm. 203° (B. 20, 2765; 28, 1732). — IV, 455.
- $C_{18}H_{16}NP$  1) Verbindung (aus Anilin u. Phosphorpentachlorid). Sm. 208—210° (Am. 27, 446 C. 1902 [2] 355).
- $C_{18}H_{16}N_2Cl_2$  1)  $\beta$ -Chlor- $\alpha$ -Methylphenylamido- $\epsilon$ -[4-Chlorphenyl]imido- $\alpha\gamma$ -Pentadien. HCl (A. 339, 199 C. 1905 [1] 1407).  
2) 2,4-Dichlor-1,3-Di[4-Methylphenylimido]-R-Tetramethylen. Sm. 133° (A. 279, 64). — \*II, 275.
- $C_{18}H_{16}N_2S$  1)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[1-Naphtyl]thioharnstoff. Sm. 135,5—136° (B. 37, 4326 C. 1905 [1] 165).  
2)  $\alpha$ -Methyl- $\alpha$ -Phenyl- $\beta$ -[2-Naphtyl]thioharnstoff. Sm. 127° (124,5 bis 125°) (B. 17, 2091; B. 37, 4326 C. 1905 [1] 165). — II, 619.  
3) s-[2-Methylphenyl]-1-Naphtylthioharnstoff. Sm. 165—168° (B. 15, 1416). — II, 609.  
4) s-[4-Methylphenyl]-1-Naphtylthioharnstoff. Sm. 168° (B. 15, 1416). — II, 610.  
5) s-[2-Methylphenyl]-2-Naphtylthioharnstoff. Sm. 193—194° (B. 15, 1418). — II, 619.  
6) s-[4-Methylphenyl]-2-Naphtylthioharnstoff. Sm. 163—164° (B. 15, 1419). — II, 619.  
7) s-Benzyl-1-Naphtylthioharnstoff. Sm. 172—173° (Soc. 59, 558). — II, 610.  
8) s-Benzyl-2-Naphtylthioharnstoff. Sm. 165—166° (Soc. 59, 559). — II, 619.  
9) s-Phenyl-1-Naphtylmethylthioharnstoff. Sm. 197—198° (C. 1902 [2] 789).  
10) 5-Thiocarbonyl-3-Methyl-4-Benzyliden-1-[4-Methylphenyl]-4,5-Dihydropyrazol. Sm. 212° (A. 361, 299 C. 1908 [2] 522).  
11) 5-Thiocarbonyl-3-Methyl-4-[ $\alpha$ -Phenyläthyliden]-1-Phenyl-4,5-Dihydropyrazol. Sm. 135—136° (A. 361, 280 C. 1908 [2] 521).  
12) 2-Merkapto-1-Allyl-4,5-Diphenylimidazol. Sm. noch nicht bei 240°. K (A. 284, 28). — III, 224.  
13) Methyläther d.  $\alpha$ -Phenylamido-[1-Naphtyl]imidomerkaptomethan. Sm. 96° (B. 21, 1870). — II, 609.
- $C_{18}H_{16}N_2S_2$  1) 4-Amido-4'-Phenylamidodiphenyldisulfid. Sm. bei 120°. 2HCl (B. 27, 3322). — \*II, 480.  
2) Benzylester d.  $\beta$ -[1-Naphtyl]hydrazidodithioameisensäure. Sm. 127° (J. pr. [2] 60, 227). — \*IV, 612.  
3) Benzylester d.  $\beta$ -[2-Naphtyl]hydrazidodithioameisensäure. Sm. 171° (J. pr. [2] 60, 231). — \*IV, 614.



- C<sub>18</sub>H<sub>16</sub>N<sub>3</sub>Cl** 1) 7-Chloräthylat d. 5-Amido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl<sub>4</sub> (*J. r.* 30, 549). — IV, 1204.  
 2) 7-Chloräthylat d. 9-Amido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl<sub>4</sub> (*C.* 1898 [2] 919; *B.* 29, 2759). — IV, 1201.  
 3) 3-Chloräthylat d. 3-Phenyl- $\beta$ -Naphtisotriazol. Sm. 212° u. Zers. 2 + PtCl<sub>4</sub> (*A.* 255, 347). — IV, 1171.
- C<sub>18</sub>H<sub>16</sub>N<sub>3</sub>J** 1) 3-Jodäthylat d. 3-Phenyl- $\beta$ -Naphtisotriazol. Sm. 192° u. Zers. (*A.* 255, 346). — IV, 1171.
- C<sub>18</sub>H<sub>16</sub>N<sub>6</sub>S** 1) Sulfid d. 3-Merkapto-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 188° (*G.* 28 [2] 561). — \*IV, 745.  
 2) Verbindung (aus 3,5-Diimido-2,4-Di[2-Methylphenyl]tetrahydro-1,2,4-Thiodiazol). Sm. 89° (*B.* 23, 368). — IV, 1236.  
 3) Verbindung (aus 3,5-Diimido-2,4-Di[4-Methylphenyl]tetrahydro-1,2,4-Thiodiazol). Sm. 190° (*B.* 23, 365). — IV, 1236.
- C<sub>18</sub>H<sub>16</sub>ClJ** 1) 4-Äthylphenyl-1-Naphtyljodoniumchlorid. Sm. 168°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*A.* 327, 299 *C.* 1903 [2] 352).
- C<sub>18</sub>H<sub>16</sub>BrJ** 1) 4-Äthylphenyl-1-Naphtyljodoniumbromid. Sm. 156° (*A.* 327, 299 *C.* 1903 [2] 352).
- C<sub>18</sub>H<sub>17</sub>ON** C 82,1 — H 6,5 — O 6,1 — N 5,3 — M. G. 263.  
 1) 4-Methylamido-2-Oxy-1-Naphtyl]methan. Sm. 142°. HCl (*M.* 23, 998 *C.* 1903 [1] 290).  
 2) 4-Methylamidophenyl-[4-Oxy-1-Naphtyl]methan. Sm. 141—142°. HCl, H<sub>2</sub>SO<sub>4</sub> (*M.* 23, 996 *C.* 1903 [1] 290).  
 3) Methyläther d. 2-Oxy-1-[2-Naphtylamido]methylbenzol. Sm. 92°; Sd. 220—225° u. Zers. (*A.* 241, 352). — II, 742.  
 4) Methyläther d. 4-Oxy-1-[2-Naphtylamido]methylbenzol (*A.* 241, 341). — II, 754.  
 5) Äthyläther d. 1-[4-Oxyphenyl]amidonaphtalin. Sm. 89° (*D.R.P.* 80669). — \*II, 400.  
 6) Äthyläther d. 2-[4-Oxyphenyl]amidonaphtalin. Sm. 95° (*J. pr.* [2] 75, 274 *C.* 1907 [2] 408).  
 7)  $\beta$ -Phenylamidoäthyläther d. 2-Oxynaphtalin. Sm. 75° (*B.* 13, 1955 bis 1956). — II, 877.  
 8) 6-Phenylamido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 240° (*A.* 294, 280, 305). — \*III, 217.  
 9) 10-Acetylamido-9-Äthylanthracen. Sm. 259—260° (*A.* 330, 174 *C.* 1904 [1] 891).  
 10) 2[oder 3]-Benzoylphenylamido-2,3-Dihydro-R-Penten. Sm. 76—77° (*B.* 33, 3350). — \*II, 730.  
 11) 1-Keto-2-[4-Dimethylamidobenzyliden]-2,3-Dihydroinden. Sm. 165 bis 166° (*B.* 34, 415). — \*III, 188.  
 12) 6-Benzoylamido-2,3-Dimethylinden. Sm. 198° u. Zers. (*B.* 23, 1885). — II, 1167.  
 13) Retenchinonimid. Sm. 109—111° (*A.* 229, 121). — III, 458.  
 14)  $\epsilon$ -Oximido- $\beta$ -Methyl- $\alpha\epsilon$ -Diphenyl- $\alpha\gamma$ -Pentadien. Sm. 165° (*B.* 32, 1938). — \*III, 193.  
 15)  $\epsilon$ -Oximido- $\alpha$ -Phenyl- $\epsilon$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 170° (*B.* 36, 847 *C.* 1903 [1] 975).  
 16)  $\epsilon$ -Oximido- $\epsilon$ -Phenyl- $\alpha$ -[4-Methylphenyl]- $\alpha\gamma$ -Pentadien. Sm. 128—129° (*B.* 36, 851 *C.* 1903 [1] 975).  
 17) Diphenylmethylhydroxyd d. Pyridin. (2 Chlorid + PtCl<sub>4</sub>), Bromid, Pikrat (*C.* 1902 [1] 1301). — \*IV, 90.  
 18) 5-Phenyl-2-[4-Isopropylphenyl]oxazol. Sm. 50°; Sd. oberhalb 360°. HCl (*B.* 29, 2101). — IV, 445.  
 19)  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[2-Chinolyl]propan. Sm. 113—114° (*B.* 32, 3606). — \*IV, 266.  
 20)  $\gamma$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[4-Chinolyl]propan. Sm. 150°. (2HCl, PtCl<sub>4</sub>) (*B.* 32, 3605). — \*IV, 266.  
 21) 7-Oxy-2-Propyl-4-Phenylchinolin. Sm. 221° (*B.* 36, 4019 *C.* 1904 [1] 293).  
 22) Äthyläther d. 4-Oxy-6-Methyl-3-Phenylchinolin. Fl. (*M.* 27, 994 *C.* 1907 [1] 350).  
 23) Äthyläther d. 7-Oxy-2-Methyl-4-Phenylchinolin. Sm. 91° (*B.* 36, 2455 *C.* 1903 [2] 670).

- $C_{18}H_{17}ON$  24) Phenyläther d. 1-Oxy-3-Propylisochinolin. Fl. Pikrat (B. 29, 2397). — IV, 338.
- 25) Phenyläther d. 1-Oxy-3-Isopropylisochinolin. Fl. (B. 30, 894). — IV, 339.
- 26) Nitril d.  $\gamma$ -Cyan- $\varepsilon$ -Oxy- $\beta\varepsilon$ -Diphenyl- $\beta$ -Penten- $\gamma$ -Carbonsäure. Sd. 225°<sub>18</sub> (Soc. 95, 488 C. 1909 [1] 1757).
- 27) 4-Methylphenylamid d. d-1,2[oder 1,4]-Dihydronaphtalin-1-Carbonsäure. Sm. 204° (Soc. 87, 1767 C. 1906 [1] 467).
- $C_{18}H_{17}ON_3$  C 74,2 — H 5,8 — O 5,5 — N 14,4 — M. G. 291.
- 1)  $\beta$ -Nitroso-1-Äthylamido-2-Phenylamidonaphtalin. Sm. 145—146° (B. 26, 190). — IV, 918.
- 2) 4-[4-Amidophenyl]amido-1-[4-Oxyphenyl]amidobenzol. Sm. 185° (D.R.P. 153994 C. 1904 [2] 966).
- 3)  $\beta$ -[2-Naphtyl]amido- $\alpha$ -[2-Methylphenyl]harnstoff. Sm. 215°. — IV, 928.
- 4)  $\beta$ -[2-Naphtyl]amido- $\alpha$ -[4-Methylphenyl]harnstoff. Sm. 187° — IV, 928.
- 5)  $\varepsilon$ -Semicarbazon- $\alpha\varepsilon$ -Diphenyl- $\alpha\gamma$ -Pentadien (B. 35, 1065 C. 1902 [1] 929). — \*III, 189.
- 6) 4-[4-Dimethylamidophenyl]azo-1-Oxynaphtalin. Zers. bei 159°. HCl, 2HCl, (2HCl, PtCl<sub>4</sub>) (Soc. 93, 341 C. 1908 [1] 1686).
- 7) 7-[4-Dimethylamidophenyl]azo-2-Oxynaphtalin (B. 40, 3267 C. 1907 [2] 1073).
- 8) 1-[4-Dimethylamido-2-Oxyphenyl]azonaphtalin. Sm. 176° (B. 31, 2777). — IV, 1414.
- 9) 2-[4-Dimethylamido-2-Oxyphenyl]azonaphtalin. Sm. 196° (B. 31, 2778). — IV, 1414.
- 10) Äthyläther d. 1-Amido-2-Phenylazo-4-Oxynaphtalin. Sm. 142° (C. 1905 [1] 1104).
- 11) 4-Benzylidenamido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 151° (A. 352, 204 C. 1907 [1] 1051).
- 12) 4-Benzylidenamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 173° (A. 293, 61). — IV, 1109.
- 13) 4-Benzylidenamido-3-Keto-5-Methyl-1-[4-Methylphenyl]-2,3-Dihydropyrazol. Sm. 233° (A. 350, 315 C. 1907 [1] 736).
- 14) 3-Benzoylimido-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol (Benzoyliminopyrin). Sm. 176° (B. 36, 3285 C. 1903 [2] 1190).
- 15) 1-Acetyl-2,5-Di[4-Methylphenyl]-1,3,4-Triazol. Sm. 129—130° (B. 27, 3285; A. 298, 13). — IV, 1188.
- 16) Äthyläther d. 3-Oxy-1-Phenyl-5-[ $\beta$ -Phenyläthenyl]-1,2,4-Triazol. Sm. 89—90° (Soc. 71, 216). — IV, 1167.
- 17) Monoacetylderivat d. 2-[ $\beta$ -3-Amidophenyläthenyl]-5[oder 6]-Methylbenzimidazol (C. 1904 [1] 103).
- 18) Dimethyldiamidonaphtophenoxazin (A. 289, 115).
- 19) Verbindung (aus 5-Nitrofur-2-Carbonsäure). Sm. 250° (Am. 27, 204 C. 1902 [1] 909). — \*III, 505.
- 20) Verbindung (aus Benzaldehyd u.  $\alpha$ -Cyanpropionsäureäthylester). Sm. 198° u. Zers. (C. 1903 [2] 713).
- 21) isom. Verbindung (aus Benzaldehyd u.  $\alpha$ -Cyanpropionsäureäthylester). Sm. 210° u. Zers. (C. 1903 [2] 713).
- $C_{18}H_{17}ON_5$  C 67,7 — H 5,3 — O 5,0 — N 21,9 — M. G. 319.
- 1) 2-[2-Amido-1-Naphtyl]azo-4-Methylnitrosamido-1-Methylbenzol. Sm. 179° (B. 31, 2929). — IV, 1400.
- 2) Acetyldiphenylacetoguanamin. Sm. 217° (B. 34, 2599). — \*IV, 981.
- $C_{18}H_{17}OCl$  1) Methyläther d.  $\gamma$ -Chlor- $\gamma$ -Oxy- $\alpha\varepsilon$ -Diphenyl- $\alpha\delta$ -Pentadien. Sm. 54 bis 55° (B. 40, 2703 C. 1907 [2] 331).
- 2) Isobutyloxanthranolchlorid. Sm. 78° (A. 212, 87; B. 14, 463). — III, 244.
- $C_{18}H_{17}OJ$  1) 4-Äthylphenyl-1-Naphtyljodoniumhydroxyd. Salze, siehe (A. 327, 299 C. 1903 [2] 352).
- $C_{18}H_{17}O_2N$  C 77,4 — H 6,1 — O 11,5 — N 5,0 — M. G. 279.
- 1) 4-Methylamidophenyl-[2,3-Dioxy-1-Naphtyl]methan. Sm. 185 bis 186°. H<sub>2</sub>SO<sub>4</sub> (M. 23, 1001 C. 1903 [1] 290).

- C<sub>18</sub>H<sub>17</sub>O<sub>2</sub>N** 2) 4-Methylamidophenyl-[2,7-Dioxy-1-Naphtyl]methan. Sm. 179—180° (M. 23, 1000 C. 1903 [1] 290).
- 3) β-Phenylamido-δ-Keto-γ-Benzoyl-β-Penten. Sm. 87—89° (A. 291, 98). — III, 316.
- 4) 2-Diäthylamido-9,10-Anthrachinon. Sm. 162° (156°) (Bl. [3] 19, 831; [3] 25, 208; C. 1900 [1] 1214; 1900 [2] 655). — \*III, 297.
- 5) 4-Methyläther d. ε-Oximido-ε-[4-Oxyphenyl]-α-Phenyl-αγ-Pentadiën. Sm. 131,5° (B. 39, 1920 C. 1906 [2] 125).
- 6) Retenchinonoxim. Sm. 128,5° (A. 229, 122). — III, 458.
- 7) Dimethyläther d. 2,5-Di[4-Oxyphenyl]pyrrol. Sm. 223° (R. 10, 217). — IV, 438.
- 8) 3-Isobutyl-β-Naphtochinolin-1-Carbonsäure. Sm. 251° (B. 27, 2022). — IV, 423.
- 9) Methylester d. α-Cyan-ββ'-Diphenylisobuttersäure. Sd. 235—240°<sub>15</sub> (Soc. 95, 164 C. 1909 [2] 1312).
- 10) Äthylester d. α-Cyan-αβ-Diphenylpropionsäure. Sd. 231—233°<sub>32</sub> (Am. 32, 130 C. 1904 [2] 954).
- 11) Äthylester d. α-Cyan-ββ-Diphenylpropionsäure. Sm. 78° (Am. 33, 339 C. 1905 [1] 1390).
- 12) Äthylester d. 3-Benzylindol-2-Carbonsäure. Sm. 144—146° (B. 31, 555). — \*IV, 256.
- 13) Äthylester d. Akridin-5-Äthyl-β-Carbonsäure. Sm. 83°. Pikrat (B. 39, 2426 C. 1906 [2] 802).
- 14) Acetat d. γ-Oximido-αβ-Diphenyl-α-Buten. Sm. 92° (M. 19, 410; 20, 739; 22, 667). — \*III, 185.
- 15) Acetat d. syn-α-Oximido-αγ-Diphenyl-β-Buten. Sm. 74° (M. 25, 436 C. 1904 [2] 336).
- 16) Nitril d. α-Benzoxyl-4-Isopropylphenylelessigsäure. Sm. 68—69° (Soc. 95, 1406 C. 1909 [2] 1228).
- 17) Nitril d. 1-Oxymethylbenzoleugenoläther-4-Carbonsäure. Sm. 63 bis 64° (D.R.P. 82924). — \*II, 927.
- 18) Nitril d. 1-Oxymethylbenzolisoeugenoläther-4-Carbonsäure. Sm. 97—98° (D.R.P. 82924). — \*II, 927.
- 19) Mononitril d. 3-Methyl-6-Isopropylbiphenyl-2,2'-Dicarbonsäure. Sm. 195° (B. 37, 4315 C. 1905 [1] 178).
- 20) Phenylimid d. β-[4-Methylphenyl]propan-αγ-Dicarbonsäure. Sm. 174,5° (Am. 28, 51 C. 1902 [2] 702).
- 21) 2-Isopropyl-4-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 145° (A. 221, 169). — II, 1806.

**C<sub>18</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>** C 70,4 — H 5,5 — O 10,4 — N 13,7 — M. G. 307.

- 1) ε-Phenylhydrazon-α-[4-Nitrophenyl]-αγ-Hexadiën. Sm. 209—210° (A. 253, 355). — IV, 775.
- 2) 4-[2-Oxybenzyliden]amido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 194° (A. 293, 62). — IV, 1109.
- 3) 4-[2-Oxybenzyliden]amido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 173° (A. 352, 204 C. 1907 [1] 1051).
- 4) 4-Benzoylamido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 234° (A. 352, 206 C. 1907 [1] 1051).
- 5) Methyläther d. 4-[4-Oxybenzyliden]amido-3-Keto-5-Methyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 245° (A. 350, 298 C. 1907 [1] 735).
- 6) 4<sup>t</sup>-Methyläther d. 4-[4-Oxybenzyliden]amido-5-Keto-1-Methyl-3-Phenyl-4,5-Dihydropyrazol. Sm. 220° u. Zers. (A. 352, 200 C. 1907 [1] 1050).
- 7) 3-Keto-4-[α-Oximidobenzyl]-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 197° (B. 41, 2671 C. 1908 [2] 1364).
- 8) 3-Benzylidenamido-2,5-Diketo-4,4-Dimethyl-1-Phenyltetrahydroimidazol. Sm. 154° (C. 1908 [2] 1609).
- 9) 1,4-Diacetyl-3,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 93° (95°) (B. 30, 1877; A. 297, 268). — II, 1215; IV, 1184; \*II, 763.
- 10) 6-Imido-2,4-Diketo-5,5-Dibenzylhexahydro-1,3-Diazin. Sm. 295° u. Zers. (D.R.P. 156384 C. 1905 [1] 58; A. 340, 322 C. 1905 [2] 890).
- 11) 5-[4-Methylbenzoyl]-2-[2,4-Dimethylphenyl]-1,2,3,6-Oxtriazin (R. 16, 325). — \*IV, 771.



- $C_{18}H_{17}O_2N_3$  12) 7-Acetylamido-4-Keto-2,6-Dimethyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 271° (C. 1909 [2] 2012).
- 13) Phenylhydrazon d. 1-Keto-4-Oxy-3-Propionyl-1,2-Dihydroisochinolin. Sm. 212—213° (B. 37, 2486 C. 1904 [2] 420).
- 14) 4-[2-Naphtylhydrazon]-2,6-Dimethyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 288°. HCl (A. 366, 377 C. 1909 [2] 288).
- 15) Äthylester d.  $\alpha$ -Phenylhydrazon- $\beta$ -Cyan- $\beta$ -Phenylpropionsäure. Sm. 107—108° (B. 33, 2593). — \*IV, 468.
- 16) Äthylester d. isom.  $\alpha$ -Phenylhydrazon- $\beta$ -Cyan- $\beta$ -Phenylpropionsäure? Sm. 112—113° (B. 33, 2594). — \*IV, 467.
- 17) Acetat d. 5-Oxy-1-Phenyl-3-[ $\beta$ -Phenyläthyl]-1,2,4-Triazol. Sm. 109° (B. 36, 1102 C. 1903 [1] 1140). — \*IV, 815.
- 18) Nitril d. Imidodi[2-Methoxyphenylelessigsäure] (o-Methoxyphenylimidoacetonitril). Sm. 123° (B. 15, 2025). — II, 1750.
- 19) 6<sup>2</sup>-Amid d. Anhydro- $\alpha$ -[3-Methylphenyl]amido- $\alpha$ -[3-Methylphenyl]-imidoäthan-6<sup>1</sup>,6<sup>2</sup>-Dicarbonsäure. Sm. 278° (B. 30, 1190). — \*II, 829.
- 20) Ureid d. Dibenzylcyanessigsäure (Dibenzylcyanacetylarnstoff). Sm. 187° (A. 340, 343 C. 1905 [2] 892).
- 21)  $\gamma$ -Phenylallylidenhydrazid d. Benzoylamidoessigsäure (Hippurylcinnamylhydrazin). Sm. 201,5° (J. pr. [2] 52, 247). — III, 62.
- 22) Verbindung (aus Benzylidenbenzoylacetone u. Semicarbazid). Zers. bei 230° (Soc. 85, 467 C. 1904 [1] 1080, 1438).
- 23) Verbindung (aus 2-Acetylbenzol-1-Carbonsäure). Sm. 204—210° (B. 18, 1258 Ann.). — II, 1646.
- $C_{18}H_{17}O_2N_5$  C 64,5 — H 5,1 — O 9,5 — N 20,9 — M. G. 335.
- 1) 5-Keto-4-[4-Acetylamidophenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 222—223° (B. 33, 194). — \*IV, 1079.
- 2) Methyläther d. 2-[ $\alpha$ -Semicarbazonäthyl]-3-[2-Oxyphenyl]-1,4-Benzdiazin. Sm. 247—248° u. Zers. (B. 40, 2722 C. 1907 [2] 326).
- $C_{18}H_{17}O_2P$  1) Triphenyloxyphosphoniumhydroxyd. Sm. 153,5°. Nitrat (B. 15, 803; 18, 2120; 27, 274; A. 229, 306). — IV, 1659.
- $C_{18}H_{17}O_2As$  1) Triphenyloxyarsoniumhydroxyd. Sm. 108° (115—116°). Nitrat, Dintrat, Chromat (B. 19, 1032; A. 201, 243; A. 321, 164 C. 1902 [2] 44). — IV, 1689; \*IV, 1190.
- $C_{18}H_{17}O_2Bi$  1) Wismuthtriphenyldihydroxyd. Chlorid, Bromid, Nitrat (B. 20, 56; A. 251, 329). — IV, 1698.
- $C_{18}H_{17}O_2Sb$  1) Antimontriphenyldihydroxyd. Sm. 212°. Chlorid, Bromid, Jodid, Nitrat (A. 233, 51; B. 31, 2911; G. 24 [1] 318; B. 41, 2763 C. 1908 [2] 1261). — IV, 1695.
- $C_{18}H_{17}O_3N$  C 73,2 — H 5,8 — O 16,3 — N 4,7 — M. G. 295.
- 1) 2-Methoxyl-4-Allylphenyläther d. 1-Oxymethylbenzoxazol. Sm. 111—113° (J. pr. [2] 64, 296).
- 2) Dimethyläther d. 6,7-Dioxy-1-Keto-2-Benzyl-1,2-Dihydroisochinolin. Sm. 167°. Pikrat (B. 37, 530 C. 1904 [1] 818; B. 37, 3814 C. 1904 [2] 1575; B. 38, 1740 C. 1905 [1] 1652).
- 3) Difuraltropinon. Sm. 138°. HCl (B. 30, 2715). — \*III, 613.
- 4)  $\gamma$ -Benzoylamido- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Dicarbonsäure. Sm. 205° (B. 42, 2790 C. 1909 [2] 705).
- 5)  $\alpha$ -Cinnamoylamido- $\beta$ -Phenylpropionsäure. Sm. 198—199° (B. 37, 3069 C. 1904 [2] 1208).
- 6) Äthylester d.  $\alpha$ -Cyan- $\beta$ -[2-Äthoxyl-1-Naphtyl]akrylsäure. Sm. 71° (Bl. [3] 29, 880 C. 1903 [2] 885).
- 7) Äthylester d.  $\alpha$ -Benzoylamido- $\beta$ -Phenylakrylsäure. Sm. 149° (A. 275, 11). — II, 1420.
- 8) Nitril d.  $\alpha$ -Phenyl- $\beta$ -[2,4,5-Trimethoxyphenyl]akrylsäure. Sm. 147—148° (B. 39, 1217 C. 1906 [1] 1659).
- 9) Phenylmonamid d.  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Dicarbonsäure. Sm. 184° (B. 38, 3504 C. 1905 [2] 1630).
- 10)  $\alpha$ -[4-Methylphenyl]amid d. Mesakonsäure- $\beta$ -Phenylester. Sm. 122° (A. 359, 193 C. 1908 [1] 1532).
- 11)  $\beta$ -[4-Methylphenyl]amid d. Mesakonsäure- $\alpha$ -Phenylester. Sm. 129 bis 130° (A. 359, 192 C. 1908 [1] 1532).
- 12)  $\delta$ -Phenoxybutylimid d. Benzol-1,2-Dicarbonsäure. Sm. 101°; Sd. 400° u. Zers. (B. 32, 1268). — \*II, 1053.

- C<sub>15</sub>H<sub>17</sub>O<sub>3</sub>N** 13)  $\beta$ -[2,4-Dimethylphenoxy]äthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 113—114° (B. 29, 2400). — \*II, 1052.
- C<sub>18</sub>H<sub>17</sub>O<sub>8</sub>N<sub>8</sub>** C 66,9 — H 5,3 — O 14,8 — N 13,0 — M. G. 323.
- 1) 3-Methyläther d. 3,4-Dioxy-1-[ $\alpha$ -Semicarbazonäthyl]phenanthren. Sm. 220° u. Zers. (B. 42, 3520 C. 1909 [2] 1474).
  - 2)  $\alpha$ -[4-Acetylamidophenyl]azo- $\beta$ -Keto- $\alpha$ -Benzoylpropan. Sm. 171° (B. 39, 2461 C. 1906 [2] 676).
  - 3) 3-Phenyl-5-[ $\alpha\gamma$ -Dioximido- $\gamma$ -Phenylpropyl]-4,5-Dihydroisoxazol. Sm. 197—198° (B. 24, 137; 30, 1292). — III, 95; \*III, 69.
  - 4) 4-Acetyl-6-Acetylamido-2-Keto-1-Phenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 128—131° (B. 38, 97 C. 1905 [1] 540).
  - 5) d- $\alpha$ -Phenylureido- $\beta$ -[3-Indolyl]propionsäure. Sm. 166° (H. 52, 216 C. 1907 [2] 457).
- C<sub>15</sub>H<sub>17</sub>O<sub>8</sub>N<sub>5</sub>** C 61,6 — H 4,8 — O 13,7 — N 19,9 — M. G. 351.
- 1) P-Tri[Acetylamido]-5,10-Naphtdiazin (B. 22, 858). — IV, 1326.
  - 2) Amid d. 1-[Methyl- $\alpha$ -Carboxyäthylamido]-4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amidobenzol. Sm. 205—210° (B. 36, 762 C. 1903 [1] 963). — \*IV, 392.
  - 3) Azid d.  $\alpha$ -Benzoylamidoacetylamido- $\beta$ -Phenylpropionsäure. Zers. bei 70° (J. pr. [2] 70, 229 C. 1904 [2] 1462).
- C<sub>18</sub>H<sub>17</sub>O<sub>8</sub>Cl** 1) Äthylester d.  $\beta$ -Keto- $\gamma$ -[4-Chlorphenyl]- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure. Sm. 166—168° (J. pr. [2] 67, 392 C. 1903 [1] 1357).
- C<sub>18</sub>H<sub>17</sub>O<sub>3</sub>Br** 1) Bromderivat d. Verb. C<sub>18</sub>H<sub>18</sub>O<sub>3</sub>. Sm. 86—88° (C. 1901 [1] 23).
- C<sub>18</sub>H<sub>17</sub>O<sub>4</sub>N** C 69,4 — H 5,5 — O 20,6 — N 4,5 — M. G. 311.
- 1) 2-Diäthylamido-1,4-Dioxy-9,10-Anthrachinon + H<sub>2</sub>O? (Bl. [3] 25, 211). — \*III, 305.
  - 2) Trimethyläther d. 7,8-Dioxy-2-Keto-3-[4-Oxyphenyl]-1,2-Dihydrochinolin. Sm. 282° (B. 35, 4405 C. 1903 [1] 342). — \*IV, 258.
  - 3) Dimethyläther d. Papaverolin. (2HCl, PtCl<sub>4</sub>), Pikrat (C. 1903 [1] 844). — \*IV, 264.
  - 4) Benzoylhydrastinin. Sm. 98—99° (A. 271, 387). — III, 106.
  - 5)  $\alpha$ -Benzylidenamido- $\beta$ -Acetoxyl- $\beta$ -Phenylpropionsäure. Sm. 160—170° u. Zers. Na (A. 284, 43). — II, 1576.
  - 6) 1,2-Lakton d. 3,4-Dioxy-1-[1,2,3,4-Tetrahydro-1-Chinolyl]oxymethylbenzol-3[oder 4]-Methyläther-2-Carbonsäure (Methylnoropiansäuretetrahydrochinolid). Sm. 231°. Na (B. 29, 2035; 30, 693). — IV, 195.
  - 7) Methyl ester d.  $\alpha$ -Benzoylamido- $\beta$ -[4-Methoxyphenyl]akrylsäure. Sm. 153° (A. 337, 297 C. 1905 [1] 379).
  - 8) Äthylester d.  $\beta$ -Phenylamidoformoxyl- $\alpha$ -Phenylakrylsäure. Sm. 116° (A. 291, 200). — \*II, 956.
  - 9) Äthylester d.  $\alpha$ -Benzoylamido- $\beta$ -[3-Oxyphenyl]akrylsäure. Sm. 118° (A. 337, 295 C. 1905 [1] 379).
  - 10) Acetat d. 3-Acetylbenzoylamido-4-Oxy-1-Methylbenzol. Sm. 101 bis 102° (A. 369, 228 C. 1909 [2] 1995).
  - 11) 10-Acetat d. 10-Oximido-9,9-Dioxy-9,10-Dihydroanthracen-9,9-Dimethyläther. Sm. 114° u. Zers. (A. 323, 228 C. 1902 [2] 802).
  - 12) Benzoat d. Oxymethyl-3-Acetylamido-4-Methylphenylketon? Sm. 130° (B. 33, 2650). — \*III, 118.
  - 13) Phenylmonamid d.  $\alpha$ -Oxy- $\alpha$ -Phenyläthen- $\beta\beta$ -Dicarbonsäuremonoäthylester. Sm. 142—143° (B. 37, 4633 C. 1905 [1] 238).
  - 14) Phenylmonamid d.  $\alpha$ -Keto- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäuremonoäthylester (Ph. d. Benzoylmalonsäuremonoäthylester). Sm. 145—146° (B. 38, 33 C. 1905 [1] 602).
  - 15) Dibenzylmonamid d. Oxymaleinsäure. Sm. 147° u. Zers. (B. 40, 2299 C. 1907 [2] 297).
  - 16) Phenylphenacylmonamid d. Oxalsäuremonoäthylester. Sm. 90° (G. 35 [2] 92 C. 1905 [2] 895).
- C<sub>18</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>** C 63,7 — H 5,0 — O 18,9 — N 12,4 — M. G. 339.
- 1) 4-Methylbenzylamidophenylalloxan. Sm. 217—218° u. Zers. (C. 1900 [2] 789). — \*II, 1123.
  - 2) 2-Keto-1-[4-Nitro-2-Benzoylamidophenyl]hexahydropyridin. Sm. 196° (B. 41, 684 C. 1908 [1] 1400).

- $C_{18}H_{17}O_4Br$  1) 2<sup>4</sup>-Methyläther-6-Äthyläther d. 2[oder 3]-Brom-6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 140—141° (B. 32, 1927). — \*III, 560.
- 2) Diäthylester d. ?-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 65° (B. 19, 3151). — II, 1885.
- $C_{18}H_{17}O_5N$  C 66,0 — H 5,2 — O 24,5 — N 4,3 — M. G. 327.
- 1) Indiretin (J. 1858, 469). — III, 596.
- 2) Mekoninmethylphenylketonoxim.  $\alpha$ -Derivat Sm. 146°;  $\beta$ -Derivat Sm. 198° (M. 13, 670, 672). — II, 2022.
- 3) Benzoyloxyhydrastininhydrat. Sm. 169—170° (A. 271, 387). — III, 106.
- 4)  $\alpha$ -Benzoylamido- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure (Veratralhippursäure). Sm. 213° u. Zers. (B. 42, 1185 C. 1909 [1] 1712).
- 5)  $\alpha$ -Benzoylamido- $\gamma$ -Benzoxylbuttersäure. Sm. 210—211° (H. 56, 278, 296 C. 1908 [2] 683).
- 6) Dimethylester d. Benzoylphenylamidoessigsäure-2-Carbonsäure. Fl. (D. R. P. 127648 C. 1902 [1] 337).
- 7) 2-Äthylester d. Benzoyl-2-Carboxyphenylamidoessigsäure. Sm. 141 bis 143° (D. R. P. 138207 C. 1903 [1] 305).
- 8) Diacetat d. Acetyldi[4-Oxyphenyl]amin. Sm. 128,5° (B. 32, 690). — \*II, 402.
- 9) Diacetat d. 3,4-Dioxy-6-Äthylphenoxazin. Sm. 110° (B. 31, 497). — \*IV, 234.
- 10)  $\gamma$ -Phenylmonamid d.  $\beta$ -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sm. 153° u. Zers. (A. 320, 97).
- 11)  $\beta$ -Benzylamid d. d- $\alpha$ -Benzoyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 125° (B. 37, 2125 C. 1904 [2] 439).
- 12)  $\beta$ -Benzylamid d. l- $\alpha$ -Benzoxyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 117° (G. 22 [1] 176). — II, 530.
- 13)  $\beta$ -Benzylamid d. i- $\alpha$ -Benzoxyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 116° (B. 37, 2126 C. 1904 [2] 439).
- 14) Benzoxylmethylamid d.  $\alpha$ -Benzoxylpropionsäure. Sm. 124° (A. 361, 141 C. 1908 [2] 398).
- $C_{18}H_{17}O_5N_3$  C 60,8 — H 4,8 — O 22,5 — N 11,8 — M. G. 355.
- 1) 6-Acetat d. 2'-Nitro-5,6-Dioxy-3-Allylazobenzol-5-Methyläther. Sm. 124° (G. 36 [2] 38 C. 1906 [2] 1193).
- 2) 6-Acetat d. 3'-Nitro-5,6-Dioxy-3-Allylazobenzol-5-Methyläther. Sm. 112° (G. 36 [2] 40 C. 1906 [2] 1193).
- 3) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-2-Oxy-3-Methylbenzyliden]-hydrazin. Sm. 199—200° (B. 37, 3922 C. 1904 [2] 1594).
- 4) Acetat d.  $\alpha$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -[5-Nitro-6-Oxy-3-Methylbenzyliden]-hydrazin. Sm. 130—150° (B. 37, 3926 C. 1904 [2] 1595).
- $C_{18}H_{17}O_6N$  C 62,9 — H 5,0 — O 28,0 — N 4,1 — M. G. 343.
- 1) 2<sup>2</sup>,2<sup>4</sup>,6-Trimethyläther d. 3-Oximido-6-Oxy-2-[2,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 173—175° u. Zers. (B. 39, 89 C. 1906 [1] 678).
- 2) 2<sup>3</sup>,2<sup>4</sup>,6-Trimethyläther d. 3-Oximido-6-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 168° u. Zers. (B. 37, 780 C. 1904 [1] 1156).
- 3) 2<sup>2</sup>,2<sup>4</sup>,7-Trimethyläther d. 3-Oximido-7-Oxy-2-[2,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 172° u. Zers. (B. 39, 94 C. 1906 [1] 679).
- 4) 2<sup>3</sup>,2<sup>4</sup>,7-Trimethyläther d. 3-Oximido-7-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 183° u. Zers. (B. 38, 3588 C. 1905 [2] 1731).
- 5) 2<sup>4</sup>,5,7-Trimethyläther d. 3-Oximido-5,7-Dioxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 189—190° u. Zers. (B. 37, 2097 C. 1904 [2] 121).
- 6) 2<sup>2</sup>,7,8-Trimethyläther d. 3-Oximido-7,8-Dioxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 170° u. Zers. (B. 37, 2629 C. 1904 [2] 539).
- 7) 2<sup>3</sup>,7,8-Trimethyläther d. 3-Oximido-7,8-Dioxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 168° u. Zers. (B. 37, 2632 C. 1904 [2] 540).



- C<sub>18</sub>H<sub>17</sub>O<sub>6</sub>N** 8) 2',7,8-Trimethyläther d. 3-Oximido-7,8-Dioxy-2-[4-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 152° u. Zers. (B. 38, 2750 C. 1905 [2] 1257).
- 9) α-[2-Methylphenyl]-β-[2-Nitro-3,4-Dioxyphenyl]akryl-3,4-Dimethyl-äthersäure. Sm. 255° (corr.) (B. 39, 3108 C. 1906 [2] 1327).
- 10) α-[4-Methylphenyl]-β-[2-Nitro-3,4-Dioxyphenyl]akryl-3,4-Dimethyl-äthersäure. Sm. 245° (B. 39, 3113 C. 1906 [2] 1329).
- 11) Corydinsäure +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 218° (224°). K, Ag<sub>2</sub> (Soc. 71, 661; Soc. 81, 147 C. 1902 [1] 356; Soc. 83, 620 C. 1903 [1] 1364; Ar. 243, 180 C. 1905 [2] 55). — \*III, 650.
- 12) α,2-Lakton d. α-Oxy-4-Methoxyl-3'-Dimethylamido-1'-Oxydiphenylmethan-2,α-Dicarbonsäure? Sm. 180° (A. 296, 360). — \*II, 1166.
- 13) Aldehyd (aus Bebeerin). Sm. 255° (Ar. 236, 538). — \*III, 621.
- 14) Diacetat d. 1-Diacetylamido-2,7-Dioxy-naphtalin. Sm. 135° (B. 30, 1123). — \*II, 598.
- 15) Amid d. r-Usninsäure. Sm. 245–246° (A. 310, 259). — \*II, 1203.
- C<sub>18</sub>H<sub>17</sub>O<sub>6</sub>N<sub>3</sub>** C 58,2 — H 4,6 — O 25,9 — N 11,3 — M. G. 371.
- 1) Dimethyläther d. β-[4-Nitrophenyl]azo-αγ-Diketo-α-[2,4-Dioxyphenyl]butan. Sm. 161° (B. 40, 2725 C. 1907 [2] 326).
- 2) N-Acetate d. αβ-Diacetyl-β-Oximido-oxyacetyl-α-[1-Naphtyl]hydrazin. Sm. 155° u. Zers. (A. 309, 204). — \*IV, 613.
- C<sub>18</sub>H<sub>17</sub>O<sub>7</sub>N** C 60,2 — H 4,7 — O 31,2 — N 3,9 — M. G. 359.
- 1) α-[2-Methoxyphenyl]-β-[2-Nitro-3,4-Dimethoxyphenyl]akrylsäure. Sm. 219–221° (B. 40, 2002 C. 1907 [2] 158).
- 2) α-[4-Methoxyphenyl]-β-[2-Nitro-3,4-Dimethoxyphenyl]akrylsäure. Sm. 230–231° (B. 35, 4404 C. 1903 [1] 342).
- 3) d-Usninsäureoxim. Sm. 100–145° u. Zers. (A. 310, 250). — \*II, 1203.
- 4) d-anti-Usninsäureoxim. Sm. 217–220° (A. 324, 164 C. 1902 [2] 1511).
- 5) d-syn-Usninsäureoxim. Sm. 243° (A. 324, 160 C. 1902 [2] 1511).
- 6) l-Usninsäureoxim. Sm. 100–145° u. Zers. (A. 310, 250). — \*II, 1203.
- 7) l-syn-Usninsäureoxim. Sm. 243° (A. 324, 160 C. 1902 [2] 1511).
- 8) i-anti-Usninsäureoxim. Sm. 208° u. Zers. (A. 324, 163 C. 1902 [2] 1511).
- 9) r-Usninsäureoxim. Sm. 243–244° (A. 310, 251, 289). — \*II, 1203.
- 10) Säure (aus Bebeerin). Sm. 270° (Ar. 236, 538). — \*III, 621.
- 11) Triacetat d. 3-Acetylamido-1,2,4-Trioxynaphtalin. Sm. 145° (J. pr. [2] 40, 182). — II, 1027.
- 12) Dimethylester d. 2-[3,4-Dimethoxybenzoyl]pyridin-3,4-Dicarbonsäure (D. d. Papaverinsäure). Sm. 122–124° (M. 14, 521; 17, 492). — IV, 176.
- 13) 3-Äthylester d. 2-[3,4-Dimethoxybenzoyl]pyridin-3,4-Dicarbonsäure (β-Ä. d. Papaverinsäure). Sm. 187–188° (M. 10, 160; 13, 699). — IV, 177.
- 14) 4-Äthylester d. 2-[3,4-Dimethoxybenzoyl]pyridin-3,4-Dicarbonsäure (γ-Ä. d. Papaverinsäure). Sm. 184° (M. 18, 464). — \*IV, 131.
- 15) Verbindung (aus d-Usninsäureoximanhydrid). Sm. 255° u. Zers. (A. 324, 167 C. 1902 [2] 1511).
- C<sub>18</sub>H<sub>17</sub>O<sub>7</sub>N<sub>3</sub>** C 55,8 — H 4,4 — O 28,9 — N 10,8 — M. G. 387.
- 1) Monamid d. αβ-Dioxybernsteinsäurediphenylamid-3,3'-Dicarbonsäure. Cu + H<sub>2</sub>O (A. 232, 165). — II, 1267.
- 2) Phenylmonamid d. β-[3,5-Dinitro-4-Methylphenyl]propan-αγ-Dicarbonsäure. Sm. 169–170° (C. 1908 [2] 1601).
- C<sub>18</sub>H<sub>17</sub>O<sub>9</sub>N** C 55,2 — H 4,3 — O 36,8 — N 3,6 — M. G. 391.
- 1) Trimethyläther d. Nitrokatechon. Sm. 141° u. Zers. (B. 35, 2409 C. 1902 [2] 448; B. 39, 4013 C. 1907 [1] 260).
- C<sub>18</sub>H<sub>17</sub>O<sub>10</sub>N<sub>3</sub>** C 49,7 — H 3,9 — O 36,8 — N 9,6 — M. G. 435.
- 1) Trinitrotruxen. Zers. bei 235° (Soc. 65, 288).
- 2) Isoapiol + 1,3,5-Trinitrobenzol. Sm. 66–67° (C. 1905 [1] 1147).
- 3) Dillisoapiol + 1,3,5-Trinitrobenzol. Sm. 76–77° (C. 1905 [1] 1147).
- C<sub>18</sub>H<sub>17</sub>O<sub>10</sub>N<sub>5</sub>** C 46,6 — H 3,7 — O 34,6 — N 15,1 — M. G. 463.
- 1) 2,4-Dinitrophenylamid d. Oxyessig-β-Dinitro-4-tert. Butylphenyl-äthersäure. Sm. 135–140° (Am. 19, 74). — \*II, 458.
- C<sub>18</sub>H<sub>17</sub>O<sub>11</sub>N** C 51,1 — H 4,0 — O 41,6 — N 3,3 — M. G. 423.
- 1) Methylentanninurethan. Zers. bei 190° (D. R. P. 160273 C. 1905 [1] 1488).

- C<sub>18</sub>H<sub>17</sub>N<sub>2</sub>Cl** 1) *p*-Chlor- $\varepsilon$ -Phenylimidomethylphenylamido- $\alpha\gamma$ -Pentadiën. HCl (A. 339, 199 C. 1905 [1] 1407).  
 2)  $\varepsilon$ -[4-Chlorphenyl]imido- $\alpha$ -Methylphenylamido- $\alpha\gamma$ -Pentadiën. Sm. 127°. HCl (A. 338, 135 C. 1905 [1] 455).  
 3) 2-Methyl-3-[2-Chlor-4-Dimethylamidobenzyliden]pseudindol. Sm. 282° (B. 36, 309; B. 38, 2645 C. 1905 [2] 629). — \*IV, 694.
- C<sub>18</sub>H<sub>17</sub>N<sub>2</sub>Cl<sub>3</sub>** 1)  $\alpha\beta\delta$ -Trichlor- $\alpha\gamma$ -Di[4-Methylphenylimido]butan. Sm. 263—265° (A. 279, 63). — \*II, 275.
- C<sub>18</sub>H<sub>17</sub>N<sub>8</sub>S** 1)  $\alpha$ -[2-Methylphenyl]- $\beta$ -[8-Amido-1-Naphtyl]thioharnstoff. Sm. 229° (A. 365, 146 C. 1909 [1] 1822).  
 2)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[8-Amido-1-Naphtyl]thioharnstoff. Sm. 259° (A. 365, 147 C. 1909 [1] 1822).  
 3)  $\beta$ -[1-Naphtyl]amido- $\alpha$ -[4-Methylphenyl]thioharnstoff. Sm. 169° (B. 32, 1087). — \*IV, 613.  
 4)  $\beta$ -[2-Naphtyl]amido- $\alpha$ -[2-Methylphenyl]thioharnstoff. Sm. 192° (B. 32, 1087). — \*IV, 615.  
 5)  $\beta$ -[2-Naphtyl]amido- $\alpha$ -[4-Methylphenyl]thioharnstoff. Sm. 195° (B. 32, 1087). — \*IV, 615.  
 6)  $\beta$ -[2-Methylphenyl]amido- $\alpha$ -[1-Naphtyl]thioharnstoff. Sm. 176° (B. 32, 1086). — \*IV, 531.  
 7)  $\beta$ -[4-Methylphenyl]amido- $\alpha$ -[1-Naphtyl]thioharnstoff. Sm. 183° (B. 32, 1086). — \*IV, 534.  
 8)  $\beta$ -[4-Methylphenyl]amido- $\alpha$ -[2-Naphtyl]thioharnstoff. Sm. 184° (B. 32, 1086). — \*IV, 534.  
 9)  $\alpha$ -Amido- $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Naphtyl]thioharnstoff. Sm. 125° (B. 32, 1086; 34, 320). — \*IV, 534.  
 10)  $\alpha$ -Phenyl- $\beta$ -[2,4-Dimethyl-5(oder 7)-Chinolyl]thioharnstoff. Sm. 173 bis 174° (A. 274, 372). — IV, 938.  
 11)  $\alpha$ -Phenyl- $\beta$ -[5,8-Dimethyl-6-Chinolyl]thioharnstoff. Sm. 157—159°. (2HCl, PtCl<sub>4</sub>) (B. 23, 1025). — IV, 939.
- C<sub>18</sub>H<sub>17</sub>N<sub>8</sub>S<sub>2</sub>** 1) Phenylimethylimidothiazolinthiobenzylpseudoharnstoff. Sm. 89—90° (B. 32, 846). — \*IV, 336.
- C<sub>18</sub>H<sub>17</sub>N<sub>8</sub>Si** 1) Silikotriphenylguanidin. Sm. 230° (Soc. 77, 837). — \*II, 166.
- C<sub>18</sub>H<sub>17</sub>N<sub>4</sub>Cl** 1) 5-Chlor-4-[4-Methylphenyl]azo-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 155—156° (A. 338, 215 C. 1905 [1] 1158).  
 2) Chloräthylat d. 4-Methylphenylpseudoimidochinolin (J. pr. [2] 60, 78).  
 3) 7-Chloräthylat d. 5,10-Diamido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl<sub>4</sub> (C. 1898 [2] 920). — IV, 1296.  
 4) 5-Chlorphenylat d. 1,3-Diamidodihydro-5,10-Phenazin (B. 33, 3077). — \*IV, 950.
- C<sub>18</sub>H<sub>17</sub>N<sub>4</sub>Br** 1) Bromäthylat d. 4-Methylphenylpseudoazimidochinolin. Sm. 203° (J. pr. [2] 60, 78). — \*IV, 949.
- C<sub>18</sub>H<sub>17</sub>N<sub>4</sub>J** 1) 2-Jodmethylat d. 3-Methyl-1,4-Diphenylbipyrazol. Sm. 221° (B. 36, 528 C. 1903 [1] 642). — \*IV, 950.  
 2) Jodäthylat d. 4-Methylphenylpseudoazimidochinolin (J. pr. [2] 60, 78). — \*IV, 949.
- C<sub>18</sub>H<sub>18</sub>ON<sub>2</sub>** C 77,7 — H 6,5 — O 5,7 — N 10,1 — M. G. 278.  
 1) 4-[4-Oxyphenyl]amido-1-Äthylamidonaphtalin. Sm. 170° (D. R. P. 133481 C. 1902 [2] 555). — \*IV, 609.  
 2) 7-[4-Dimethylamidophenyl]amido-2-Oxynaphtalin. Sm. 126—127° (B. 35, 3088 C. 1902 [2] 1116; J. pr. [2] 69, 242 C. 1904 [1] 1269). — \*IV, 383.  
 3) Äthyläther d. 3-Phenylamido-4-Amido-1-Oxynaphtalin. Sm. 167°. HCl (B. 25, 1013; 27, 2352). — II, 866; \*II, 507.  
 4) Äthyläther d. 4-Amido-3-Oxy-1-[*p*-Amidophenyl]naphtalin. Sm. 72°. 2HCl (B. 20, 3178). — II, 903.  
 5)  $\alpha$ -Äthylimido- $\alpha$ -[4-Methylbenzoyl]methylenamido- $\alpha$ -Phenylmethan. Sm. 257° (B. 34, 3027). — \*IV, 569.  
 6) 2[oder 3]-[ $\alpha\beta$ -Diphenylureido]-2,3-Dihydro-R-Penten. Sm. 112° (B. 33, 3351). — \*II, 188.  
 7) 2-Phenylhydrazon-3-Isopropyl-1,2-Benzpyran. Sm. 112° (B. 24, 3464). — IV, 698.  
 8) 2-Phenylhydrazon-3,4,7-Trimethyl-1,2-Benzpyran. Sm. 135° (Soc. 93, 530 C. 1908 [1] 1932).

- C<sub>18</sub>H<sub>18</sub>ON<sub>2</sub>** 9) 3-Keto-1,5-Dimethyl-2-Phenyl-4-Benzyl-2,3-Dihydropyrazol (4-Benzylantipyrin). Sm. 70°. HCl (B. 34, 1308). — \*IV, 622.
- 10) 3-[4-Äthylphenyl]imido-2-Keto-5-Äthyl-2,3-Dihydroindol (p-Phen-äthyl-p-Äthylmesatin) (B. 17, 2805). — II, 1660.
- 11) 3-[4-Methylphenyl]imido-2-Keto-5-Methyl-1-Äthyl-2,3-Dihydroindol. Sm. 151—152° (B. 18, 198). — II, 1652.
- 12) Phenyläther d. 4-Oxy-1-Isobutyl-2,3-Benzdiazin. Sm. 108° (B. 38, 3926 C. 1908 [1] 247).
- 13) 2-Amido-5-Oxy-3,7,10-Trimethyl-5,10-Dihydroakridin. Sm. 210° (Soc. 85, 532 C. 1904 [1] 1525).
- 14) m-Tolylmethyloxychinizin. Sm. 143° (B. 19, 2141). — IV, 1503.
- 15) Base (aus α-Oximidoäthylphenylketon). Fl. (B. 22, 563). — III, 140.
- 16) Verbindung (aus d. Verb. C<sub>18</sub>H<sub>18</sub>ON<sub>3</sub>). Sm. 117°. (2HCl, PtCl<sub>4</sub>) (B. 21, 1596). — IV, 1284.
- C<sub>18</sub>H<sub>18</sub>ON<sub>4</sub>** C 70,6 — H 5,9 — O 5,2 — N 18,3 — M. G. 306.
- 1) 3,5-Di[Phenylhydrazido]-1-Oxybenzol. Sm. 143—144° (B. 22, 2191). — IV, 1506.
- 2) Äthyläther d. 4-[4-Amidophenyl]azo-1-Amido-2-Oxynaphtalin (D.R.P. 72393). — \*IV, 1044.
- 3) 4-Nitroso-5-Äthylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 98°. HCl (B. 40, 4486 C. 1908 [1] 138).
- 4) 4-[4-Dimethylamidophenyl]imido-5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 187° (B. 35, 1438 C. 1902 [1] 1230). — \*IV, 396.
- 5) 3-Keto-4-[α-Hydrazonbenzyl]-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 215°. HCl (B. 41, 2671 C. 1908 [2] 1363).
- 6) 4-[4-Methylphenyl]hydrazon-5-Keto-3-Methyl-1-[4-Methylphenyl]-4,5-Dihydropyrazol. Sm. 216—217° (Soc. 59, 340; A. 338, 215 C. 1905 [1] 1158). — IV, 807.
- 7) Amid d. 1-[Methyl-α-Carboxyäthylamido]-4-[α-Cyanbenzyliden]-amidobenzol. Sm. 154° (B. 36, 761 C. 1903 [1] 963). — \*IV, 391.
- 8) Verbindung (aus s-Diacetylphenylhydrazin). Sm. 192° (Bl. [3] 11, 115; J. pr. [2] 55, 165). — IV, 666.
- 9) Verbindung (aus Glyoxal u. 2,4-Diamido-1-Methylbenzol) (B. 11, 831). — IV, 607.
- C<sub>18</sub>H<sub>18</sub>OBr<sub>2</sub>** 1) βγ-Dibrom-α-Keto-γ-Phenyl-α-[2,4,6-Trimethylphenyl]propan. Sm. 122° u. Zers. (Am. 38, 555 C. 1908 [1] 229).
- C<sub>18</sub>H<sub>18</sub>OS** 1) Phenyläther d. γ-Merkapto-α-Keto-α-Phenyl-α-Hexen. Sm. 53—54° (Soc. 87, 465 C. 1905 [1] 1640).
- C<sub>18</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** C 73,5 — H 6,1 — O 10,9 — N 9,5 — M. G. 294.
- 1) β-[4-Dimethylamidophenyl]imido-αγ-Diketo-α-Phenylbutan. Sm. 99° (B. 35, 3314 C. 1902 [2] 1109). — \*IV, 395.
- 2) δ-Phenylimido-δ-Phenylamido-γ-Acetyl-β-Ketobutan. Sm. 150° (B. 32, 3178). — \*II, 160.
- 3) βγ-Di[Benzoylamido]-β-Buten. Sm. 241° (B. 42, 761 C. 1909 [1] 1099).
- 4) αβ-Di[4-Acetylamidophenyl]äthen. Sm. 312° u. Zers. (B. 16, 945; 19, 3237). — IV, 994.
- 5) α-Acetylimido-α-Acetylphenylamido-α-[4-Methylphenyl]methan. Sm. 121—122° (J. pr. [2] 54, 129). — IV, 851.
- 6) 1,5-Di[Dimethylamido]-9,10-Anthrachinon (D.R.P. 136777 C. 1902 [2] 1373; D.R.P. 165728 C. 1906 [1] 516).
- 7) 1,7-Di[Dimethylamido]-9,10-Anthrachinon (D.R.P. 136777 C. 1902 [2] 1373).
- 8) 1,8-Di[Dimethylamido]-9,10-Anthrachinon (D.R.P. 136777 C. 1902 [2] 1373).
- 9) Dehydroacetylisomethylpäonolphenylhydrazon. Sm. 150° (B. 25, 1299). — IV, 772.
- 10) 3-Keto-4-[α-Oxybenzyl]-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 173° (B. 41, 2671 C. 1908 [2] 1364).
- 11) Äthyläther d. 5-Oxy-2-Keto-1-Methyl-4,5-Diphenyl-2,5-Dihydroimidazol. Sm. 155° (A. 368, 204 C. 1909 [2] 1465).
- 12) 4,5-Diketo-2-Methyl-1,3-Di[4-Methylphenyl]tetrahydroimidazol. Sm. 223° (B. 33, 618). — \*II, 284.
- 13) 2,5-Diketo-1,4-Dibenzylhexahydro-1,4-Diazin. Sm. 170° (Soc. 65, 190). — II, 525.



- $C_{18}H_{18}O_2N_2$  14) 3,6-Diketo-2,5-Dibenzylhexahydro-1,4-Diazin (Phenyllaktimid). Sm. 290—291° (A. 219, 206; B. 34, 451). — II, 1365.
- 15) 2,3-Diketo-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 183,5 bis 184° (B. 22, 1805; B. 35, 3439 C. 1902 [2] 1303). — II, 467.
- 16) 2,5-Diketo-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 159 bis 160°. (2HCl,  $PtCl_4 + 4H_2O$ ) (J. pr. [2] 38, 299; B. 22, 1787; 23, 1992). — II, 470.
- 17) 2,3-Diketo-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 263° (B. 23, 2036; B. 35, 3439 C. 1902 [2] 1303). — II, 501.
- 18) 2,5-Diketo-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 252 bis 253° (B. 21, 1260; 22, 1806; 25, 2287; J. pr. [2] 40, 433). — II, 506.
- 19) 2,6-Diketo-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 185° (B. 25, 2287). — II, 506.
- 20) 2,5-Diketo-1-[2-Methylphenyl]-4-[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 179—180° (J. pr. [2] 40, 443). — II, 506.
- 21) 3,6-Diketo-2,5-Dimethyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 183,5° (B. 22, 1793; 23, 2012, 2016; 25, 2300). — II, 432.
- 22) isom. 3,6-Diketo-2,5-Dimethyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 144—146° (B. 22, 1794; 23, 2013, 2017; 25, 2299). — II, 432.
- 23) isom. 3,6-Diketo-2,5-Dimethyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 172—173° (B. 23, 2019; 25, 2301). — II, 435.
- 24) 1,4-Dibenzoylhexahydro-1,4-Diazin. Sm. 191° (B. 23, 3301; 26, 725). — II, 1169.
- 25) Dimethyläther d. 5,6-Di[4-Oxyphenyl]-2,3-Dihydro-1,4-Diazin. Sm. 126—127° (Soc. 63, 1301). — III, 295.
- 26) Benzoylcytisin. Sm. 116° (B. 41, 1636 C. 1908 [2] 77).
- 27) 5-Methyl-1-[4-Methylphenyl]benzimidazol-2-Äthyl-β-Carbonsäure. Sm. 228° (B. 27, 2781). — IV, 616.
- 28) Äthylester d. α-Cyan-αα'-Diphenyldimethylamin-α'-Carbonsäure. Sm. 43—45°. HCl (B. 41, 4369 C. 1909 [1] 370).
- 29) Amid d. α-Truxillsäure. Sm. 265° (B. 22, 2261). — II, 1901.
- 30) Phenylamid d. β-Methylbenzoylamidocrotonsäure. Sm. 175° u. Zers. (B. 25, 1874). — II, 1192.
- 31) Phenylamid d. 5-Keto-2-Methyl-1-Phenyltetrahydropyrrol-2-Carbonsäure. Sm. 205—206° (B. 42, 2838 C. 1909 [2] 622).
- 32) 4-Methylphenylamid d. Fumarsäure. Sm. oberhalb 330° (B. 23, 2045; 24, 2004; A. 279, 134). — II, 502.
- 33) 4-Methylphenylamid d. Maleinsäure. Sm. 142° (G. 23 [1] 170, 182; A. 279, 134). — \*II, 279.
- 34) Methylphenylaminfumarid? Sm. 187,5° (G. 16, 14). — II, 416.
- 35) α-Phenylamid-β-[4-Methylphenyl]amid d. Mesakonsäure. Sm. 189° (A. 353, 195 C. 1907 [2] 139).
- 36) β-Phenylamid-α-[4-Methylphenyl]amid d. Mesakonsäure. Sm. 183° (A. 353, 195 C. 1907 [2] 139).
- 37) β-[m-Dimethylphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 123° (B. 24, 2197). — II, 1800.
- 38) 3-Diäthylamidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 120° (B. 42, 4019 C. 1909 [2] 2167).
- 39) 4-Diäthylamidophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 217° (B. 42, 4019 C. 1909 [2] 2167).
- 40) γ-[4-Methylphenyl]amidopropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 134—136°. HCl (B. 30, 2498). — \*II, 1053.
- $C_{18}H_{18}O_2N_4$  C. 67,1 — H 5,6 — O 9,9 — N 17,4 — M. G. 322.
- 1) 3,5-Dioximido-4-Phenylhydrazon-1-Phenylhexahydrobenzol. Sm. 228° u. Zers. (A. 294, 309). — IV, 1480.
- 2) βγ-Di[Benzoylhydrazon]butan. Sm. 286—287° (B. 33, 645; B. 42, 663 C. 1909 [1] 1016). — \*II, 810.
- 3) Di[β-Oximido-β-Phenylisopropyliden]hydrazin. Sm. 187—188° u. Zers. (G. 38 [2] 125 C. 1908 [2] 1162).
- 4) Di[2-Acetylamidobenzyliden]hydrazin. Sm. 285—288° (G. 35 [1] 513 C. 1905 [2] 472).
- 5) 1-Äthyl-4,5-Diphenylacetylendiurein. Sm. 284—285° u. Zers. (A. 368, 234 C. 1909 [2] 1468).

- $C_{18}H_{18}O_2N_4$  6) 1,3-Dimethyl-4,5-Diphenylacetylendiurein. Sm. noch nicht bei 365° (A. 368, 252 C. 1909 [2] 1566).
- 7) 1,7-Dimethyl-4,5-Diphenylacetylendiurein. Sm. 345° u. Zers. (A. 368, 256 C. 1909 [2] 1567).
- 8) 1,9-Dimethyl-4,5-Diphenylacetylendiurein. Sm. noch nicht bei 365° (A. 368, 254 C. 1909 [2] 1566).
- 9) Äthyläther d. 5-Keto-4-[4-Oxyphenyl]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 159° (D.R.P. 153861 C. 1904 [2] 680).
- 10) p-Xylylendimethyloxypyrimidin. Sm. oberhalb 250° (B. 21, 2661). — IV, 1295.
- 11) Äthylester d.  $\gamma$ -Phenylazo- $\gamma$ -Phenylhydrazonerotonsäure. Sm. 128° (123°) (A. 338, 381 C. 1905 [1] 1223; B. 40, 4928 C. 1908 [1] 458).
- 12) Nitril d. 4-Diäthylamidophenylimido-4-Nitrophenylessigsäure. Sm. 152°. HCl (B. 32, 2346; 33, 963; 34, 121). — \*IV, 392.
- 13) Di[Benzylidenhydrazid] d. Äthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 249° (B. 39, 3375 C. 1908 [2] 1561).
- 14) Di[Benzylidenhydrazid] d. Äthan- $\alpha\beta$ -Dicarbonsäure (J. pr. [2] 51, 191). — III, 40.
- 15) Di[Phenylhydrazon] d. Verb.  $C_8H_6O_4$ . Sm. 144,5° u. Zers. (B. 40, 1628 C. 1907 [1] 1732).
- $C_{18}H_{18}O_2N_6$  C 61,7 — H 5,1 — O 9,1 — N 24,0 — M. G. 350.
- 1) 4,5-Di[ $\alpha$ -Phenylhydrazonäthyl]-1,2,3,6-Dioxdiazin. Sm. 175° (C. 1903 [2] 1433).
- $C_{18}H_{18}O_2Cl_2$  1) Diäthyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 106,5° (A. 306, 79). — \*II, 606.
- $C_{18}H_{18}O_2Cl_4$  1) Diäthyläther d.  $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 172° (A. 279, 342). — II, 993.
- $C_{18}H_{18}O_2Br_2$  1) Diäthyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 210° (A. 279, 342). — II, 998.
- $C_{18}H_{18}O_2Br_4$  1)  $\alpha\beta$ -Di[4,6-Dibrom-2-Oxy-3,5-Dimethylphenyl]äthan. Sm. 261—262° (A. 353, 346 C. 1907 [2] 399).
- 2) Dimethyläther d.  $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha\delta$ -Di[4-Oxyphenyl]butan (A. 255, 309). — II, 1001.
- $C_{18}H_{18}O_2S$  1) Phenyläther d.  $\alpha$ -Merkapto- $\gamma$ -Keto- $\beta$ -Acetyl- $\alpha$ -Phenylbutan. Sm. 119—120° (Soc. 87, 21 C. 1905 [1] 741).
- $C_{18}H_{18}O_2Se$  1) Di[4-Methylbenzoylmethyl]selenid (Selenomethyl-p-Tolylketon). Sm. 103° (A. 314, 291). — \*III, 117.
- $C_{18}H_{18}O_2Si$  1) Acetat d. Siliciumtriphenylhydroxyd. Sm. 96—97° (B. 40, 2276 C. 1907 [2] 322).
- $C_{18}H_{18}O_3N_2$  C 69,7 — H 5,8 — O 15,5 — N 9,0 — M. G. 310.
- 1) 4-Acetylamido-4'-(Diacetylamido)biphenyl. Sm. 215—216° (B. 31, 663). — IV, 964.
- 2)  $\alpha$ -Keto- $\alpha\beta$ -Di[Acetylamidophenyl]äthan. Sm. 272° (A. 325, 75 C. 1903 [1] 463).
- 3)  $\alpha$ -Benzoylamido- $\beta$ -Acetylbenzoylamidoäthan. Sm. 113—114° (B. 28, 3068). — \*II, 735.
- 4) Dihydrindendioxynitrosamin (B. 26, 1542). — II, 170.
- 5) Methylfurfurin. (2HCl, PtCl<sub>4</sub>), Dioxalat (A. 258, 123). — III, 726.
- 6) Hydromethylfurfuramid. Sm. 86—87° (A. 258, 123; Am. 15, 163). — III, 726.
- 7) 3-Methyläther-4-Äthyläther d. 1-Nitrosamido-2-[3,4-Dioxyphenyl]-indol (B. 37, 873 C. 1904 [1] 1154).
- 8) 5-[4-Dimethylamidocinnamyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 206° (C. 1907 [1] 109).
- 9) 1-Nitroso-2,6-Diphenylhexahydropyridin-4-Carbonsäure. Sm. 159° (B. 20, 2763). — IV, 403.
- 10) Äthylester d.  $\beta$ -[2- $\beta$ -Phenylureidophenyl]akrylsäure. Sm. 112° (B. 28, 3228).
- 11) Äthylester d.  $\beta$ -[3- $\beta$ -Phenylureidophenyl]akrylsäure. Sm. 198° (B. 28, 3230). — \*II, 856.
- 12) Äthylester d.  $\beta$ -[4- $\beta$ -Phenylureidophenyl]akrylsäure. Sm. 204° (B. 28, 3231). — \*II, 856.
- 13) Äthylester d.  $\alpha$ -[4-Benzoylphenyl]hydrazonpropionsäure. Sm. 145° u. Zers. (Soc. 55, 616). — III, 187.

- $C_{18}H_{18}O_3N_2$  14) Äthylester d.  $\alpha$ -[2-Methylphenylazo]benzoylessigsäure. Sm.  $86^\circ$  (B. 35, 926 C. 1902 [1] 807). — \*IV, 1059.
- 15) Acetat d. 4-Oxy-3-Acetylphenylhydrazonmethyl-1-Methylbenzol. Sm.  $149^\circ$  (B. 35, 4106 C. 1903 [1] 149). — \*IV, 494.
- 16) 6-Acetat d. 5,6-Dioxy-3-Allylazobenzol-5-Methyläther. Sm.  $65^\circ$  ( $70-73^\circ$ ) (G. 35 [1] 67 C. 1905 [1] 1238; B. 41, 412 C. 1908 [1] 1048).
- 17) Acetat d. 4-Oxy-3-Keto-2-Methyl-1,5-Diphenyltetrahydropyrazol. Sm.  $155^\circ$  (Soc. 85, 1494 C. 1905 [1] 173).
- 18) 5-Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Methylhydroxyd. Chlorid, Jodid, Pikrat (A. 293, 42). — IV, 513.
- 19) Äthylamid d. 4,9-Diketo-2-Methyl-1-Äthyl-4,9-Dihydro- $\beta\beta$ -Naphtindol-3-Carbonsäure (B. 33, 571). — \*II, 1144.
- 20) Phenylmonamid d.  $\beta$ -Phenylamidoäthen- $\alpha\alpha$ -Dicarbonsäuremon-äthylester. Sm.  $118^\circ$  (B. 27, 2745; A. 285, 123, 127, 128, 145, 147; B. 35, 2507 C. 1902 [2] 439). — \*II, 232.
- 21) Phenylmonamid d. 1-Phenyltetrahydropyrrol-2,5-Dicarbonsäure. Zers. bei  $184^\circ$  (Soc. 95, 278 C. 1909 [1] 1485).
- 22) 2-Methylphenylmonamid d.  $\beta$ -[2-Methylphenyl]amidoäthen- $\alpha\alpha$ -Dicarbonsäure. Sm.  $161^\circ$  (B. 35, 2507 C. 1902 [2] 438).
- $C_{18}H_{18}O_3N_4$  C 63,9 — H 5,3 — O 14,2 — N 16,6 — M. G. 338.
- 1) Benzylidenhydrazid d. Benzoylamidoacetylamidoessigsäure. Sm.  $215-217^\circ$  (J. pr. [2] 70, 79 C. 1904 [2] 1033).
- 2) Benzylidenmonohydrazid d. 4-Methylphenylhydrazonmalonsäuremonomethylester. Sm.  $163^\circ$  (B. 40, 4328 C. 1908 [1] 26).
- 3) Phenylhydrazid-Phenylamidoimid d. Propan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm.  $229-230^\circ$  (G. 29 [2] 152). — \*IV, 470.
- 4) Verbindung (aus Phenylharnstoff u.  $\beta$ -Amidocrotonsäureäthylester). Sm.  $198^\circ$  (A. 349, 314 C. 1906 [2] 1569).
- $C_{18}H_{18}O_3N_6$  C 59,0 — H 4,9 — O 13,1 — N 22,9 — M. G. 366.
- 1) Di[Benzylidenhydrazid] d. Nitrosimidodiessigsäure. Sm.  $215^\circ$  u. Zers. (B. 41, 358 C. 1908 [1] 814).
- $C_{18}H_{18}O_3Br_2$  1) 5-Benzoat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol-2-Äthyläther. Sm.  $109-110^\circ$  (B. 28, 2905). — \*II, 721.
- $C_{18}H_{18}O_5Br_4$  1) Di[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]äther. Sm.  $252^\circ$  ( $255^\circ$ ) (B. 28, 2917; 34, 4289). — \*II, 688.
- 2) Di[2,6-Dibrom-4-Oxy-3,5-Dimethylbenzyl]äther. Sm.  $256^\circ$  (B. 32, 3316; A. 302, 94). — \*II, 692.
- $C_{18}H_{18}O_4N_2$  C 66,3 — H 5,5 — O 19,6 — N 8,6 — M. G. 326.
- 1) 4,8-Di[Äthylamido]-1,5-Dioxy-9,10-Anthrachinon. Sm.  $292^\circ$  (D.R.P. 185546 C. 1907 [2] 863).
- 2) 4,8-Di[Dimethylamido]-1,5-Dioxy-9,10-Anthrachinon. Sm.  $300^\circ$  (D.R.P. 136777 C. 1902 [2] 1374; D.R.P. 185546 C. 1907 [2] 863).
- 3) 2,5-Dioxy-3,6-Diketo-2,5-Dimethyl-1,4-Diphenylhexahydro-1,3-Diazin. Sm.  $196^\circ$  (B. 34, 1147; B. 40, 2313 C. 1907 [2] 299).
- 4) 1,3,6-Diketo-2,5-Di[4-Oxybenzyl]hexahydro-1,4-Diazin (l-Tyrosin-anhydrid). Sm.  $277-280^\circ$  (corr.) (A. 354, 35 C. 1907 [2] 460).
- 5) i-3,6-Diketo-2,5-Di[4-Oxybenzyl]hexahydro-1,4-Diazin (i-Tyrosin-anhydrid). Sm. bei  $300^\circ$  (A. 354, 37 C. 1907 [2] 460).
- 6) Trimethyläther d. 2-Keto-3-[3,4,5-Trioxybenzyl]-1,2-Dihydro-1,4-Benzdiazin. Sm.  $196-197^\circ$  (B. 41, 3664 C. 1908 [2] 1864).
- 7) Anilinfurobenzamat (A. 239, 361). — III, 724.
- 8) Tetramethyldiacetylpyrokoll. Sm.  $206-208^\circ$  (G. 24 [1] 551). — IV, 102.
- 9) Oxim d. Benzoylhydrastinin. Sm.  $146^\circ$  (A. 271, 387). — III, 106.
- 10) Isonitrosopseudokodeinon. Zers. bei  $200^\circ$  (B. 40, 3353 C. 1907 [2] 921).
- 11)  $\alpha\gamma$ -Di[Benzoylamido]buttersäure. Sm.  $200-201^\circ$  (B. 34, 2905).
- 12)  $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionylamidoessigsäure. Sm.  $230-240^\circ$  u. Zers. (B. 42, 2523 C. 1909 [2] 606).
- 13)  $\alpha$ -Benzoylamidoacetyl- $\beta$ -Phenylpropionsäure. Sm.  $172^\circ$ . Ag (J. pr. [2] 70, 226 C. 1904 [2] 1461).
- 14) Dibenzoylderivat d.  $\alpha$ -Methylamido- $\beta$ -Amidopropionsäure. Sm.  $202$  bis  $204^\circ$  (B. 42, 3142 C. 1909 [2] 1216).
- 15)  $\alpha$ -Diamido- $\alpha$ -Truxillsäure. 2HCl (B. 24, 2591). — II, 1902.



- $C_{18}H_{18}O_4N_2$  16)  $\beta$ -Diamido- $\alpha$ -Truxillsäure. 2 HCl (B. 24, 2591). — II, 1902.  
 17) Säure (aus Azobenzol-3,3'-Dicarbonsäure). Ba, Ag<sub>2</sub> (J. r. 6, 251; 16, 412). — IV, 1459.  
 18) Dimethylester d. Di[Phenylamido]maleinsäure. Sm. 172° (B. 38, 2598 C. 1905 [2] 759).  
 19) Äthylester d.  $\alpha\beta$ -Dibenzoylhydrazidoessigsäure. Sm. 113° (B. 31, 166; J. pr. [2] 70, 277 C. 1904 [2] 1544). — \*II, 809.  
 20) Äthylester d. 6-Acetoxy-3-Methylazobenzol-4'-Carbonsäure. Sm. 81° (A. 365, 311 C. 1909 [1] 1865).  
 21) Diäthylester d. Azobenzol-2,2'-Dicarbonsäure. Sm. 85° (J. pr. [2] 17, 216; A. 326, 344). — IV, 1458; \*IV, 1054.  
 22) Diäthylester d. Azobenzol-3,3'-Dicarbonsäure. Sm. 108—109° (90 bis 92°; 97°) (B. 8, 252; 320, 138; J. r. 6, 251; A. 326, 341 C. 1903 [1] 1130). — IV, 1458; \*IV, 1054.  
 23) Diäthylester d. Azobenzol-4,4'-Dicarbonsäure. Sm. 144° (145,5°) (A. 132, 148; 320, 136; B. 8, 252; J. r. 23, 93; A. 326, 332 C. 1903 [1] 1130). — IV, 1459; \*IV, 1054.  
 24) Diphenylester d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure (Phenol-piperazindiurethan). Sm. 177—178° (Bl. [3] 19, 186). — \*II, 362.  
 25) 4-Acetat d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[4,6-Dioxy-3-Acetylphenyl]äthan. Sm. 191—192° (C. 1908 [2] 308).  
 26)  $\beta^2$ -Acetat d.  $\alpha$ -Acetyl- $\alpha$ -[2-Oxyphenyl]- $\beta$ -[2-Oxybenzyliden]hydrazin- $\alpha^2$ -Methyläther. Sm. 155—156° (A. 365, 322 C. 1909 [1] 1866).  
 27) Dibenzoat d. 2,5-Dioxyhexahydro-1,4-Diazin. Sm. 230—250° u. Zers. (B. 27, 171). — \*I, 476.  
 28) polym. Phenylamid d. Brenztraubensäure. Sm. 209° (A. 279, 78). — \*II, 205.  
 29) 1,5-Naphtylenamid d. Acetessigsäure (J. pr. [2] 79, 447 C. 1909 [2] 133).  
 30) Verbindung (aus Azobenzol-3,3'-Dicarbonsäure). Sm. 74—76° (J. r. 6, 251; 16, 412). — IV, 1459.  
 31) Verbindung (aus d. Verb.  $C_{18}H_{18}O_2N_2$ ). Sm. 111° (B. 42, 1570 C. 1909 [1] 1934).  
 $C_{18}H_{18}O_4N_4$  C 61,0 — H 5,1 — O 18,1 — N 15,8 — M. G. 354.  
 1) s-Di[Benzoylamidoacetyl]hydrazin. Sm. 268—269° (J. pr. [2] 52, 251). — \*II, 808.  
 2) 4,4'-Biphenylen- $\alpha\alpha$ -Dihydrazonpropionsäure. Sm. 197—198° u. Zers. (A. 239, 211). — IV, 1276.  
 3) 2,4-Lakton d. 2-Oxy-1,2-Di[4-Äthoxyphenyl]-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure + 2 H<sub>2</sub>O. Sm. 113° (B. 28, 1694). — IV, 1241.  
 4) Diacetat d.  $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[Phenylamido]äthan. Sm. oberhalb 200° u. Zers. (B. 26, 1406). — II, 410.  
 5) Dibenzoat d.  $\alpha\delta$ -Diamido- $\alpha\delta$ -Dioximidobutan. Sm. 192° (B. 22, 2960). — II, 1210.  
 6) Monoureid d. 6-[4-Methylphenyl]amido-3-Methylphenylimidomalonensäure. Sm. 190° (B. 39, 1321 C. 1906 [1] 1738).  
 7) Monoureid d. 2-[4-Methylphenyl]amido-4-Methylphenylimidomalonensäure + H<sub>2</sub>O. Sm. 180° (B. 39, 1322 C. 1906 [1] 1738).  
 8) Di[Benzylidenhydrazid] d.  $\alpha\beta$ -Dioxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 225° (230° u. Zers.) (B. 26, 2058; Soc. 83, 1364 C. 1904 [1] 84). — III, 41.  
 9) Di[4-Oxybenzylidenhydrazid] d. Äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 216° (J. pr. [2] 51, 192). — III, 86.  
 10) Phenylhydrazid-Phenylamidoimid d.  $\beta$ -Oxypropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 208° (G. 29 [2] 155). — \*IV, 472.  
 11) Di[ $\beta$ -Formyl- $\alpha$ -Phenylhydrazid] d. Bernsteinsäure. Sm. 246—247° (B. 26, 2496). — IV, 704.  
 12) Di[ $\alpha$ -Acetyl- $\beta$ -Phenylhydrazid] d. Oxalsäure (B. 35, 3689 C. 1902 [2] 1451).  
 $C_{18}H_{18}O_4N_8$  C 56,6 — H 4,7 — O 16,7 — N 22,0 — M. G. 382.  
 1) Verbindung (aus Eulyt). Sm. 110—111° (B. 24, 1304). — I, 710.  
 $C_{18}H_{18}O_4Cl_4$  1)  $\alpha\beta$ -Diäthyläther d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 183—184° (186°) (A. 325, 59 C. 1903 [1] 462; A. 338, 244 C. 1905 [1] 1150).

- $C_{18}H_{18}O_4Cl_4$  2) Di- $\alpha$ -Dimethylisocrotonat d. 2,3,5,6-Tetrachlor-1,4-Dioxybenzol. Sm. 130—134° (C. 1899 [2] 337; Bl. [3] 21, 1064). — \*II, 574.
- $C_{18}H_{18}O_4Br_2$  1) Tetramethyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthen. Sm. 208° (A. 329, 47 C. 1903 [2] 1448).
- $C_{18}H_{18}O_4Br_4$  1) Tetrabromgeraniolmonoester d. Benzol-1,2-Dicarbonsäure. Sm. 114—115° (Bl. [3] 19, 638).
- $C_{18}H_{18}O_4S$  1) Dibenzylester d. Merkaptobernsteinsäure. Sd. 250—280° u. Zers. (B. 38, 2689 C. 1905 [2] 1166).
- 2) 2,5-Diacetat d. 4-Merkapto-2,5-Dioxy-1-Methylbenzol-4-Benzyläther. Sm. 120—122° (A. 336, 164 C. 1904 [2] 1300).
- 3) Diacetat d. Di[ $p$ -Oxy- $p$ -Methylphenyl]sulfid. Sm. 83—84° (G. 19, 347). — II, 967.
- $C_{18}H_{18}O_4S_2$  1) Diäthylester d. Diphenyldisulfid-2,2'-Dicarbonsäure. Sm. 119 bis 120° (118°) (B. 31, 1670; 32, 1151). — \*II, 901.
- $C_{18}H_{18}O_5N_2$  C 63,1 — H 5,3 — O 23,4 — N 8,2 — M. G. 342.
- 1) Monophenylhydrazon d. 2,4,6-Triketo-1,3,5-Triacetylhexahydrobenzol. Sm. 145° (B. 42, 2742 C. 1909 [2] 808).
- 2) Diphenylhydrazon d. Glykuronsäurelaktone. Sm. 150° (B. 33, 3318). — \*IV, 472.
- 3) Diäthylester d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 81—82° (76 bis 77°) (C. 1902 [1] 1190; B. 35, 1999; A. 326, 345 C. 1903 [1] 1130). — \*IV, 1003.
- 4) Diäthylester d. Azoxybenzol-3,3'-Dicarbonsäure. Sm. 76—78° (J. r. 23, 93; A. 326, 342 C. 1903 [1] 1130). — IV, 1344; \*IV, 1003.
- 5) Diäthylester d. Azoxybenzol-4,4'-Dicarbonsäure. Sm. 114,5° (122,5°) (A. 326, 334 C. 1903 [1] 1130; Am. 32, 398 C. 1904 [2] 1499). — \*IV, 1003.
- 6) Di[Phenylamid] d. Monacetylweinsäure. Sm. 148° (Soc. 71, 1060). — \*II, 222.
- 7) Phenylamid d. Isozuckersäure. Sm. 231° (B. 19, 1265; 27, 124). — II, 424.
- 8) Di[Phenylamid] d. Citronensäure ( $\alpha$ -Citrodianilsäure). Sm. 183° (153°). Ba, Ag, Anilinsalz (A. 82, 89; 98, 89; Soc. 61, 1006). — II, 423.
- 9) isom. Di[Phenylamid] d. Citronensäure ( $\beta$ -Citrodianilsäure). Sm. 184° (B. 22, 985, 986; Soc. 61, 1006; 63, 699). — II, 423.
- 10)  $\alpha\gamma$ -Di[Phenylamid] d.  $\beta$ -Oxypropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 181°. K, Anilinsalz (B. 38, 1623 C. 1905 [1] 1533).
- $C_{18}H_{18}O_5S_2$  1) Diphenyldimerkaptodilaktysäure. Fl. Ag (B. 18, 266). — II, 788.
- $C_{18}H_{18}O_6N_2$  C 60,3 — H 5,0 — O 26,8 — N 7,8 — M. G. 358.
- 1)  $\alpha\beta$ -Di[4-Nitro-2-Äthylbenzoyl]hydrazin. Sm. 245—245,5° u. Zers. (B. 29, 2540). — \*II, 838.
- 2) Dicyanmalonbenzoylessigesterlaktam. Sm. 194° (A. 332, 131 C. 1904 [2] 190).
- 3) Dimethylester d.  $\beta$ -Phenylamido- $\alpha$ -[2-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 157° (B. 35, 516 C. 1902 [1] 658).
- 4) Äthylester d.  $\beta\beta'$ -Di[2-Nitrophenyl]isobuttersäure. Sm. 62° (B. 27, 2250). — II, 1471.
- 5) Äthylester d.  $\beta\beta'$ -Di[4-Nitrophenyl]isobuttersäure. Sm. 104,5° (106 bis 107°) (G. 32 [2] 357 C. 1903 [1] 629; B. 37, 1996 C. 1904 [2] 27).
- 6) Diäthylester d. 1,4-Naphtylendioxaminsäure. Sm. 203° (B. 30, 773). — IV, 922.
- 7) Diäthylester d. 1,5-Naphtylendioxaminsäure. Sm. 206—208° (B. 30, 774). — IV, 924.
- 8) Dibenzozat d.  $\gamma$ -Methylnitramido- $\alpha\beta$ -Dioxybutan. Sm. 102° (R. 15, 204). — \*I, 651.
- $C_{18}H_{18}O_6N_4$  C 55,9 — H 4,7 — O 24,9 — N 14,5 — M. G. 386.
- 1)  $\alpha\beta$ -Di[Acetylamido]- $\alpha\beta$ -Di[2-Nitrophenyl]äthan. Sm. 215—216° (J. pr. [2] 48, 197). — II, 368.
- 2)  $\alpha$ -Acetyl[4-Nitrophenyl]amido- $\alpha$ -[5-Nitro-2-Acetylmethylamido-phenyl]methan. Sm. 216—218° (B. 35, 743 C. 1902 [1] 754). — \*IV, 409.
- 3) 5,5'-Dinitro-4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Zers. bei 320° (B. 21, 748). — IV, 981.
- 4) 6,6'-Dinitro-4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Sm. 275° u. Zers. (GERBER, Dissert. Basel 1889). — \*IV, 655.

- $C_{18}H_{18}O_6N_4$  5) Di[3-Nitro-4-Oxy-2,5-Dimethylbenzyliden]hydrazin. Zers. bei  $237^\circ$  (A. 357, 326 C. 1908 [1] 354).
- 6)  $\beta\beta$ -Diacetyl- $\alpha\alpha$ -Di[2-Nitrobenzyl]hydrazin. Sm.  $125-126^\circ$  (B. 33, 2707). — \*IV, 540.
- 7)  $\alpha\beta$ -Di[4-Methylphenylnitrosamido]bernsteinsäure. Sm.  $125^\circ$  (B. 26, 1767). — II, 509.
- 8) Methylester d.  $\alpha$ -Phenylhydrazon-3,5-Dinitro-2,4,6-Trimethylphenylessigsäure. Sm.  $197-198^\circ$  (A. 264, 144). — IV, 698.
- 9) Di[p-Nitro-4-Methylphenylamid] d. Bernsteinsäure. Sm.  $217^\circ$  (A. 209, 381). — II, 502.
- $C_{18}H_{18}O_8N_{12}$  C 43,4 — H 3,6 — O 19,3 — N 33,7 — M. G. 498.
- 1) Verbindung (aus Glykoluril u. Formaldehyd) (A. 339, 11 C. 1905 [1] 1226).
- $C_{18}H_{18}O_8S$  1) Diacetat d. s-Di[p-Oxy-p-Methylphenyl]sulfon. Sm.  $132-133^\circ$  (G. 19, 346). — II, 967.
- 2) Diacetat d. s-Di[p-Oxy-p-Methylphenyl]sulfon. Sm.  $206-208^\circ$  (G. 19, 348). — II, 967.
- $C_{18}H_{18}O_6S_2$  1) Retendisulfonsäure +  $10H_2O$ . Salze meist bekannt (J. 1860, 476; A. 185, 86). — II, 277.
- $C_{18}H_{18}O_7N_2$  C 57,8 — H 4,8 — O 29,9 — N 7,5 — M. G. 374.
- 1) 3-[6-Oxy-3-Methylearboxyphenylamid] d. 4-Oxybenzol-1-Carbonsäure-3-Amidoessigsäure-1-Methylester. Sm.  $219^\circ$  (A. 325, 333 C. 1903 [1] 771).
- $C_{18}H_{18}O_8N_4$  C 51,7 — H 4,3 — O 30,6 — N 13,4 — M. G. 418.
- 1) p-Tetranitro- $\alpha\beta$ -Di[3,5-Dimethylphenyl]äthan. Sm.  $160^\circ$  (B. 27, 2524; 33, 340). — \*II, 117.
- 2) isom. p-Tetranitro- $\alpha\beta$ -Di[3,5-Dimethylphenyl]äthan. Sm.  $206^\circ$  (B. 27, 2524). — \*II, 117.
- 3) p-Tetranitro-2,4,6,3',5'-Pentamethyldiphenylmethan. Sm.  $233^\circ$  (B. 27, 2525). — \*II, 117.
- 4) Dimethyläther d. 6,6'-Dinitro-4,4'-Di[Acetylamido]-3,3'-Dioxybiphenyl. Zers. oberhalb  $220^\circ$  (J. pr. [2] 59, 218). — \*II, 602.
- 5) Di[5-Nitro-2-Oxybenzylamid] d. Äthan- $\alpha\beta$ -Dicarbonsäure. Sm.  $257^\circ$  u. Zers. (D.R.P. 156398 C. 1905 [1] 55; A. 343, 278 C. 1906 [1] 927).
- 6) Di[2-Nitro-4-Methoxyphenylamid] d. Äthan- $\alpha\beta$ -Dicarbonsäure. Sm.  $215^\circ$  (C. 1902 [2] 1449).
- $C_{18}H_{18}O_8Cl_2$  1) Diäthylester d. 2,5-Dichlor-1,4-Benzochinon-3,6-Di[Acetylessigsäure]. Sm.  $127-128^\circ$  (J. pr. [2] 45, 71). — II, 2077.
- 2) Diäthylester d. 3,6-Dichlor-1,4-Benzochinondi[Methylfurancarbon-säure]. Sm.  $171^\circ$  (J. pr. [2] 45, 75). — II, 2078.
- $C_{18}H_{18}O_8S$  1) Verbindung (aus 1,4-Dioxybenzol u.  $SO_2$ ) (A. 110, 358). — II, 939.
- $C_{18}H_{18}O_8S_3$  1) Retentrisulfonsäure.  $Ba_3 + 18H_2O$ ,  $Pb_3 + 18H_2O$  (A. 185, 93). — II, 277.
- $C_{18}H_{18}O_{10}N_4$  C 48,0 — H 4,0 — O 35,6 — N 12,4 — M. G. 450.
- 1) Diäthyläther d. p-Tetranitro-4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm.  $142^\circ$  (Am. 31, 127 C. 1904 [1] 809).
- $C_{18}H_{18}NJ$  1) Jodäthylat d. 4-Benzylisochinolin. Sm.  $188-189^\circ$  (A. 326, 295 C. 1903 [1] 929). — \*IV, 260.
- $C_{18}H_{18}N_2Cl_2$  1) 1,2-Xylylendipyridoniumchlorid.  $2 + PtCl_4$ ,  $2 + 2AuCl_3$  (B. 31, 430). — \*IV, 413.
- 2) 1,3-Xylylendipyridoniumchlorid.  $2 + PtCl_4$  (B. 36, 1679 C. 1903 [2] 29). — \*IV, 416.
- 3) 1,4-Xylylendipyridoniumchlorid.  $2 + PtCl_4$ ,  $2 + 2AuCl_3$  (B. 34, 2089). — \*IV, 417.
- 4) Chlormethylat d. 5-Chlor-3-Methyl-1-Phenyl-4-Benzylpyrazol +  $2H_2O$ . Sm.  $148^\circ$  (A. 339, 159 C. 1905 [1] 1401).
- $C_{18}H_{18}N_2Br_2$  1) 1,2-Xylylendipyridoniumbromid. Sm.  $134^\circ$ . +  $Br_4$  (B. 31, 430). — \*IV, 413.
- 2) 1,3-Xylylendipyridoniumbromid. Sm.  $264^\circ$ . +  $Br_4$  (B. 36, 1679 C. 1903 [2] 29). — \*IV, 416.
- 3) 1,4-Xylylendipyridoniumbromid. Sm.  $260^\circ$ . +  $Br_4$  (B. 34, 2089). — \*IV, 417.
- $C_{18}H_{18}N_2Br_6$  1) Tetrabromid d. 1,2-Xylylendipyridoniumbromid. Sm.  $141^\circ$  (B. 31, 430). — \*IV, 413.



- C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>S** 1) 2[oder 3]-[ $\alpha\beta$ -Diphenylthioureido]-2,3-Dihydro-R-Penten. Sm. 130° (B. 33, 3351). — \*II, 197.  
 2) 2-Dibenzylamido-4-Methylthiazol. Sm. 50° (G. 24 [1] 65). — IV, 520.  
 3) 2-Benzylimido-4-Methyl-3-Benzyl-2,3-Dihydrothiazol. HCl, HBr (G. 24 [1] 67). — IV, 520.  
 4) 2-Methyläther d. 2-Merkapto-1-Äthyl-4,5-Diphenylimidazol. Sm. 106° (A. 284, 27). — III, 224.
- C<sub>18</sub>H<sub>18</sub>N<sub>2</sub>S<sub>2</sub>** 1)  $\gamma$ -Phenylhydrazon- $\beta\beta$ -Dithiänylbutan. Fl. (B. 30, 2040). — IV, 1812.
- C<sub>18</sub>H<sub>18</sub>N<sub>3</sub>Cl** 1)  $\beta$ -Chlor- $\sigma$ -Phenylhydrazon- $\alpha$ -Methylphenylamido- $\alpha\gamma$ -Pentadien. Sm. 147° u. Zers. (A. 339, 200 C. 1905 [1] 1407).
- C<sub>18</sub>H<sub>18</sub>N<sub>3</sub>J** 1) Jodmethylat d. 6-Phenylamido-4-Methyl-2-Phenyl-1,3-Diazin + 2H<sub>2</sub>O. Sm. 210—213° u. Zers. (Am. 20, 486). — IV, 1167.
- C<sub>18</sub>H<sub>18</sub>N<sub>3</sub>P** 1) Tri[Phenylamid] d. Phosphorigensäure. 3HCl, (6HCl, 3ZnCl<sub>2</sub>), (6HCl, 3PtCl<sub>4</sub>) (Z. 1865, 648). — II, 356.
- C<sub>18</sub>H<sub>18</sub>N<sub>3</sub>As** 1) Tri[ $\beta$ -Amidophenyl]arsin. Sm. 176°. 2 + 3H<sub>2</sub>O, 3HCl, (6HCl, 3PtCl<sub>4</sub>) (B. 19, 1034; A. 321, 185 C. 1902 [2] 45). — IV, 1689; \*IV, 1190.
- C<sub>18</sub>H<sub>18</sub>N<sub>4</sub>S** 1) Anhydroacetylderivat d.  $\alpha$ -Imido- $\alpha$ -[4-Methylphenyl]amido- $\alpha'$ -Merkapto- $\alpha'$ -[4-Methylphenyl]imidodimethylamin. Sm. 206° (A. 361, 315 C. 1908 [2] 881).  
 2) 5-Merkapto-4-[4-Methylphenyl]-3-Methyl-1-[4-Methylphenyl]-pyrazol. Sm. 174° (A. 338, 216 C. 1905 [1] 1158).  
 3) Methyläther d. 5-Merkapto-4-Phenylazo-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 82° (A. 338, 212 C. 1905 [1] 1158).  
 4) Äthyläther d. 5-Merkapto-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 71° (A. 338, 198 C. 1905 [1] 1156).
- C<sub>18</sub>H<sub>18</sub>N<sub>4</sub>S<sub>4</sub>** 1) Sulfid d. 5-Merkapto-2-Methyl-3-Phenyl-2,3-Dihydro-1,3,4-Thio-diazol. Sm. 140° (B. 28, 2641; J. pr. [2] 60, 216). — IV, 746; \*IV, 479.
- C<sub>18</sub>H<sub>19</sub>ON** C 81,5 — H 7,2 — O 6,0 — N 5,3 — M. G. 265.  
 1) 4-Oxy-1-[4-Methylphenyl]imidomethyl-1,2,3,4-Tetrahydronaphthalin. Sm. 209—210° (A. 357, 333 C. 1908 [1] 354).  
 2)  $\gamma$ -Keto- $\alpha$ -[4-Dimethylamidophenyl]- $\delta$ -Phenyl- $\alpha$ -Buten. Sm. 70—71° (M. 28, 598 C. 1907 [2] 1171).  
 3)  $\beta$ -Benzoyl- $\alpha$ -Methylphenylamido- $\alpha$ -Buten. Sm. 72—73° (A. 281, 398). — III, 166.  
 4) 6-[1-Naphtyl]amido-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 175°. HCl (C. 1906 [1] 35).  
 5) 1- $\alpha$ -Benzoylamidophenoheptamethylen. Sm. 175—176° (Soc. 81, 581 C. 1902 [1] 862).  
 6)  $\alpha$ -Benzoylamidophenoheptamethylen. Sm. 171—172° (Soc. 79, 610).  
 7) 1-1-Benzoyl-2,6-Dimethyl-1,2,3,4-Tetrahydrochinolin. Sm. 100—101° (Soc. 75, 1100). — \*IV, 149.  
 8) 1-1-Benzoyl-2,6-Dimethyl-1,2,3,4-Tetrahydrochinolin. Sm. 103—105° (Soc. 75, 1104). — \*IV, 149.  
 9) Phenylamid d.  $\beta$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 85° (Bl. [3] 35, 359 C. 1906 [2] 318).  
 10) 4-Methylphenylamid d.  $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 111° (J. pr. [2] 74, 338 C. 1906 [2] 1824).  
 11) 4-Methylphenylamid d.  $\alpha$ -Phenyl- $\beta$ -Buten- $\beta$ -Carbonsäure. Sm. 107° (J. pr. [2] 74, 336 C. 1906 [2] 1824).  
 12) Phenylbenzylamid d.  $\beta$ -Methylpropen- $\alpha$ -Carbonsäure. Sd. 226°<sub>20</sub> (B. 34, 2138).  
 13) 1-Naphtylamid d.  $\alpha$ -Heptin- $\alpha$ -Carbonsäure. Sm. 113—114° (C. 1901 [1] 1149).  
 14) Verbindung (aus p-Tetroliditoly) (B. 14, 2093). — IV, 1035.
- C<sub>18</sub>H<sub>19</sub>ON<sub>3</sub>** C 73,7 — H 6,5 — O 5,5 — N 14,3 — M. G. 293.  
 1) 4-Phenylhydrazon-2-Keto-3,3-Dimethyl-1-Phenyltetrahydropyrrol. Sm. 196° (B. 32, 1207). — \*IV, 528.  
 2) Äthyläther d. 5-Oxy-3-Phenyl-6,7,8,9-Tetrahydro- $\beta$ -Naphtisotriazol. Sm. 125—126° (B. 31, 901). — IV, 1576.

- $C_{18}H_{19}ON_3$  3) Nitril d.  $\alpha$ -[4-Äthoxylphenyl]imido- $\alpha$ -[4-Dimethylamidophenyl]-essigsäure. Sm. 133—134° (B. 35, 3574 C. 1902 [2] 1384).
- 4) Verbindung (aus Phenosafranin). Sm. 130° (B. 21, 1595). — IV, 1284.
- $C_{18}H_{19}OBr$  1)  $\delta$ -Brom- $\gamma$ -Keto- $\varepsilon\varepsilon$ -Diphenyl- $\beta$ -Methylpentan. Sm. 108° (Am. 38, 536 C. 1908 [1] 227).
- $C_{18}H_{19}O_2N$  C 76,8 — H 6,8 — O 11,4 — N 5,0 — M. G. 281.
- 1) Dihydrindendioxyamin. Sm. 188,5° (B. 26, 1542). — II, 170.
- 2)  $\gamma$ -[3-Oxyphenyl]imido- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\alpha$ -Hexen. Sm. 152° (B. 36, 4019 C. 1904 [1] 293).
- 3)  $\alpha$ -Phenylamido- $\gamma$ -Oxy- $\beta$ -Acetyl- $\alpha$ -Phenyl- $\beta$ -Buten. Sm. 109° (B. 31, 1393). — \*III, 211.
- 4) Äthyläther d.  $\alpha$ -Keto- $\gamma$ -Phenylimido- $\alpha$ -[2-Oxyphenyl]buten (Anilid d. o-Äthoxybenzoylacetone). Sm. 110—111° (B. 27, 3037). — III, 271.
- 5)  $\beta\delta$ -Diketo- $\gamma$ -[ $\alpha$ -Phenylamidobenzyl]pentan. Sm. 113° (Soc. 85, 466 C. 1904 [1] 1080, 1438).
- 6) Di [ $\beta$ -Benzoyläthyl]amin. (2HCl, PtCl<sub>4</sub>) (B. 39, 2189 C. 1906 [2] 430).
- 7)  $\alpha$ -Phenylamido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 83—84° (B. 31, 1392). — \*III, 210.
- 8)  $\beta$ -Acetylamido-2,4,5-Trimethyldiphenylketon. Sm. 170° (B. 17, 2674). — III, 236.
- 9) N-Benzoylbenzimidisobutyläther. Sm. 54,5°; Sd. 228—235°<sub>15</sub> (Am. 20, 75). — \*II, 761.
- 10) Pinenphtalimid. Sm. 90—100° (G. 21, 1). — IV, 77.
- 11) 9-Isovalerylamidoxanthen. Sm. 182—184° (C. r. 145, 815 C. 1908 [1] 140).
- 12) 3-Methyläther-4-Äthyläther d. 3-Methyl-2-[3,4-Dioxyphenyl]indol. Sm. 165° (B. 37, 873 C. 1904 [1] 1154).
- 13) 2-Methyl-5-Isopropylphenyläther d. 1-Oxymethylbenzoxazol. Sm. 195—197° (J. pr. [2] 64, 295).
- 14) 3-Methyl-6-Isopropylphenyläther d. 1-Oxymethylbenzoxazol. Sm. 191—192° (J. pr. [2] 64, 295).
- 15) Apocodein. Fl. HCl, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (A. 158, 131; B. 36, 1592 C. 1903 [2] 53). — III, 907.
- 16) 3-Methyläther d. Apomorphin (Pseudoapocodein). Sm. 105°. + CH<sub>3</sub>O, + C<sub>2</sub>H<sub>5</sub>O, HJ (B. 35, 4388 C. 1903 [1] 339; B. 40, 3357 C. 1907 [2] 922; B. 41, 3050 C. 1908 [2] 1445).
- 17) 2,6-Diphenylhexahydropyridin-4-Carbonsäure (B. 20, 2762; 29, 798). — IV, 403.
- 18) Äthylester d.  $\beta$ -Benzylamido- $\beta$ -Phenylakrylsäure. Sm. 68° (72°) (B. 30, 3005; C. r. 143, 597 C. 1907 [1] 25). — \*II, 959.
- 19) Acetat d. anti- $\alpha$ -Oximido-4-Propyldiphenylmethan. Sm. 66° (B. 24, 4034). — III, 236.
- 20) Acetat d. syn- $\alpha$ -Oximido-4-Propyldiphenylmethan. Sm. 116° (B. 24, 4034). — III, 236.
- 21) Acetat d. anti- $\alpha$ -Oximido-4-Isopropyldiphenylmethan. Sm. 90° (B. 24, 4036). — III, 236.
- 22) Acetat d. syn- $\alpha$ -Oximido-4-Isopropyldiphenylmethan. Fl. (B. 24, 4036). — III, 236.
- 23) Phenylamidoformiat d. 3-Oxy-1-Phenyl-R-Pentamethylen. Sm. 99 bis 100° (B. 41, 204 C. 1908 [1] 945).
- 24) Phenylamid d.  $\delta$ -Keto- $\beta$ -Phenylpentan- $\alpha$ -Carbonsäure. Sm. 135° (A. 294, 329). — \*II, 975.
- 25) 2-Naphtylimid d. mal. Hexan- $\gamma\delta$ -Dicarbonsäure. Sm. 118—119° (A. 309, 341). — \*II, 340.
- 26) 2-Naphtylimid d.  $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 152° (A. 292, 177). — \*II, 341.
- 27) Piperidid d.  $\beta$ -Furanyl- $\alpha$ -Phenylakrylsäure (P. d. Furalphenylessigsäure). Sm. 105° (B. 31, 282). — \*IV, 13.
- 28) Oxim d. Verb.  $C_{18}H_{18}O_2$ . Sm. 195—196° (B. 35, 969 C. 1902 [1] 871). — \*III, 132.
- 29) Verbindung (aus 2,3,3-Trimethylpseudoindol). Sm. 183° (G. 29 [1] 111). — \*IV, 164.

- $C_{18}H_{19}O_2N_8$  C 70,0 — H 6,1 — O 10,3 — N 13,6 — M. G. 309.
- 1) Äthyläther d.  $\gamma$ -Oximido- $\gamma$ -Phenylureido- $\alpha$ -Phenylpropen (Ä. d.  $\gamma$ -Phenylallenylphenyluramidoxim). Sm. 155—156° (B. 22, 2398). — II, 1409.
  - 2)  $\gamma$ -Phenylsemicarbazone- $\alpha$ -[6-Oxy-3-Methylphenyl]- $\alpha$ -Buten +  $H_2O$ . Sm. 177° (B. 37, 3186 C. 1904 [2] 991).
  - 3) 2,7-Di[Acetylamido]-3,6-Dimethylcarbazol. Sm. oberhalb 300° (B. 24, 1035). — IV, 1175.
  - 4) Verbindung (aus Phenylcarbonimid u.  $\beta$ -Methylamidocrotonsäureanilid). Sm. 173° (B. 25, 1873). — II, 383.
- $C_{18}H_{19}O_2N_5$  C 64,1 — H 5,6 — O 9,5 — N 20,8 — M. G. 337.
- 1) Nitril d. 2,4-Di[Dimethylamido]phenylimido-4-Nitrophenylessigsäure. Sm. 130° (B. 41, 112 C. 1908 [1] 522).
- $C_{18}H_{19}O_2Cl$  1) Diäthyläther d.  $\beta$ -Chlor- $\alpha$ -Di[4-Oxyphenyl]äthen. Sm. 67° (A. 279, 342). — II, 998.
- $C_{18}H_{19}O_2Cl_3$  1)  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Oxy-2,5-Dimethylphenyl]äthan. Sm. 175 bis 176° (B. 36, 1892 C. 1903 [2] 291).
- 2) Diäthyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 105° (A. 306, 77). — \*II, 604.
- $C_{18}H_{19}O_8N$  C 72,7 — H 6,4 — O 16,2 — N 4,7 — M. G. 297.
- 1) Äthyläther d. Acetylphenacyl-4-Oxyphenylamin. Sm. 87° (C. 1901 [2] 472). — \*III, 97.
  - 2) 9,9-Diäthyläther d. 10-Oximido-9,9-Dioxy-9,10-Dihydroanthracen. Sm. 172—173° u. Zers. (A. 323, 229 C. 1902 [2] 802).
  - 3) 3-Methyläther-4-[ $\beta$ -Oximido- $\beta$ -Phenyläthyläther] d. 3,4-Dioxy-1-Allylbenzol (Eugenolacetophenonoxim). Sm. 81—82° (B. 27, 2462). — III, 133.
  - 4) 3-Methyläther-4-[ $\beta$ -Oximido- $\beta$ -Phenyläthyläther] d. 3,4-Dioxy-1-Propenylbenzol (Iseugenolacetophenonoxim). Sm. 141—142° (B. 27, 2462). — III, 133.
  - 5) Äthyläther d. 4-Methylbenzoyl-4-Methylbenzhydroxamsäure. Sm. 70,5° (A. 281, 267). — II, 1345.
  - 6) Anthracenisobutylnitrat. Sm. 121° u. Zers. (Soc. 61, 867). — II, 260.
  - 7) 6,7-Methylenäther-8-Methyläther d. 6,7,8-Trioxy-2-Methyl-1-Phenyl-1,2,3,4-Tetrahydroisochinolin (Phenylhydrocotarnin). Sm. 97—98° (B. 39, 2229 C. 1906 [2] 440).
  - 8) Berbamin +  $2H_2O$ . Sm. 197—210° (156° wasserfrei).  $HCl$ , ( $2HCl$ ,  $PtCl_4$  +  $5H_2O$ ), ( $HCl$ ,  $AuCl_3$  +  $5H_2O$ ),  $H_2SO_4$  +  $4H_2O$  (B. 19, 3193; 28 [2] 614). — III, 803.
  - 9) Codeinon. Sm. 185—186°.  $HCl$  +  $H_2O$ , Pikrat, Pikrolonat (B. 36, 3070 C. 1903 [2] 953; B. 39, 1411 C. 1906 [1] 1662).
  - 10) Pseudokodeinon. Sm. 174—175° (B. 40, 2035 C. 1907 [2] 161; B. 40, 3342 Anm. C. 1907 [2] 921; B. 40, 3849 C. 1907 [2] 1631).
  - 11) Curin. Sm. 212°. +  $C_2H_6O$  (Sm. 159—163°); +  $C_6H_6$  (Sm. 161°). ( $2HCl$ ,  $PtCl_4$ ), ( $HCl$ ,  $AuCl_3$ ) (C. 1895 [2] 1085). — \*III, 652.
  - 12) Morphothebain. Sm. 190—191° (197° u. Zers.).  $HCl$ ,  $2HCl$ ,  $HBr$ ,  $HJ$ ,  $HNO_3$  +  $2H_2O$ ,  $H_2SO_4$  +  $7H_2O$  (B. 17, 529; 19, 1598; 32, 188; M. 18, 388; B. 36, 3083 C. 1903 [2] 955; B. 38, 3154 C. 1905 [2] 1439; B. 40, 2004 C. 1907 [2] 158). — III, 910; \*III, 676.
  - 13) Pellutein (Flavobuxin; Siperin). ( $2HCl$ ,  $PtCl_4$ ) (A. 48, 109; 69, 59; J. 1859, 565; 1869, 740). — III, 798.
  - 14) Thebenin.  $HCl$  +  $3H_2O$ , ( $2HCl$ ,  $HgCl_2$  +  $2H_2O$ ),  $H_2SO_4$  +  $H_2O$ , Di-oxalat +  $H_2O$  (A. 153, 69; B. 27, 2961; 30, 1375; 32, 180; 34, 768; B. 36, 3082 C. 1903 [2] 955). — III, 910; \*III, 675.
  - 15)  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylpentan- $\epsilon$ -Carbonsäure. Sm. 148° (Bl. [3] 33, 397 C. 1905 [1] 1317).
  - 16)  $\delta$ -[2-Benzoylamidophenyl]valeriansäure. Sm. 127° (B. 40, 1842 C. 1907 [2] 39).
  - 17) 4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 180°. +  $CH_4O$ , +  $C_2H_6O$  (B. 27 [2] 665; Bl. [3] 19, 830; [3] 25, 172). — \*II, 1000.
  - 18) 2-Oxyphenylcamphorformenamincarbonsäure. Sm. 159,5° (Am. 39, 283 C. 1908 [1] 1182).
  - 19) Laktone d. 1-[ $\gamma$ -Oximido- $\alpha$ -Oxy- $\delta\delta$ -Dimethylamyl]naphthalin-8-Carbonsäure. Sm. 187—189° (M. 26, 759 C. 1905 [2] 828).



- $C_{18}H_{19}O_3N$  20) Methylester d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 125° (B. 36, 942 C. 1903 [1] 1018).
- 21) Methylester d. isom.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 86° (B. 36, 942 C. 1903 [1] 1018).
- 22) Äthylester d.  $\alpha$ -Benzoylamido- $\beta$ -Phenylpropionsäure. Sm. 90° (95 bis 95,5°) (B. 42, 2523 C. 1909 [2] 606; A. 369, 281 C. 1909 [2] 2140).
- 23) Äthylester d.  $\beta$ -Oximido- $\alpha$ - $\gamma$ -Diphenylpropan- $\alpha$ -Carbonsäure. Sm. 112–113° (A. 296, 5). — \*II, 1010.
- 24) Äthylester d. 3-Benzoyl-2,4,6-Trimethylpyridin-5-Carbonsäure. Fl. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (B. 24, 1668). — IV, 157.
- 25) Äthylester d. 5-Acetyl-2,6-Dimethyl-4-Phenylpyridin-3-Carbonsäure. Sm. 85–86° (B. 31, 1028). — \*IV, 230.
- 26) Acetat d.  $\beta$ -Acetylamido- $\alpha$ -Oxy- $\alpha$ - $\beta$ -Diphenyläthan. Sm. 212–213° (159°) (B. 20, 494; 29, 1214). — II, 1080; \*II, 660.
- 27) Acetat d.  $\alpha$ -Oxy- $\alpha$ -[2-Acetylamidophenyl]- $\alpha$ -Phenyläthan. Sm. 160 bis 162° (B. 42, 3120 C. 1909 [2] 1353).
- 28) Benzoat d.  $\delta$ -Benzoylamido- $\alpha$ -Oxybutan. Sm. 58° (C. 1900 [2] 1008). — \*II, 738.
- 29) Benzoat d.  $\alpha$ -Benzoylamido- $\beta$ -Oxybutan. Sm. 107° (C. 1902 [1] 716).
- 30) 3-Methylbenzoat d. Äthyl-3-Methylbenzhydroxamsäure. Fl. (A. 281, 244). — II, 1336.
- 31) 4-Methylbenzoat d.  $\alpha$ -Äthyl-4-Methylbenzhydroxamsäure. Sm. 78° (A. 281, 244). — II, 1345.
- 32) 4-Methylbenzoat d.  $\beta$ -Äthyl-4-Methylbenzhydroxamsäure. Sm. 54° (A. 281, 246). — II, 1345.
- 33) Amid d. 1-Oxymethylbenzoleugenoläther-4-Carbonsäure. Sm. 178° (D. R. P. 82924). — \*II, 927.
- 34) Amid d. 1-Oxymethylbenzolisoeugenoläther-4-Carbonsäure. Sm. 191–192° (D. R. P. 82924). — \*II, 927.
- 35) Monamid d.  $\alpha$ - $\beta$ -Diphenyläthan-2,2'-Dicarbonsäuremonäthylester. Sm. 65–68° (A. 239, 68). — II, 1889.
- 36) Phenylmonamid d.  $\beta$ -[4-Methylphenyl]propan- $\alpha$ - $\gamma$ -Dicarbonsäure. Sm. 194–196°. Ag (Am. 28, 51 C. 1902 [2] 702).
- 37) Phenylamid d. Oxyessig-2-Methoxyl-4-Allylphenyläthersäure. Sm. 54° (58°) (Bl. [3] 17, 361; M. 22, 131). — \*II, 589.
- 38) 4-Methylphenylmonamid d.  $\beta$ -Phenylpropan- $\alpha$ - $\gamma$ -Dicarbonsäure. Sm. 154–155°. Ag (Am. 20, 513). — \*II, 1071.
- 39)  $\alpha$ -[4-Methylphenyl]amid d.  $\alpha$ -Phenyläthan- $\alpha$ - $\beta$ -Dicarbonsäure- $\beta$ -Methylester. Sm. 118° (A. 354, 142 C. 1907 [2] 694).
- 40)  $\beta$ -[4-Methylphenyl]amid d.  $\alpha$ -Phenyläthan- $\alpha$ - $\beta$ -Dicarbonsäure- $\alpha$ -Methylester. Sm. 118° (A. 354, 141 C. 1907 [2] 694).
- $C_{18}H_{19}O_3N_3$  C 66,5 — H 5,8 — O 14,8 — N 12,9 — M. G. 325.
- 1) 4-Methyläther- $\beta$ -Phenyläther d.  $\gamma$ -Semicarbazon- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]- $\alpha$ -Buten. Sm. 193° (B. 35, 3556 C. 1902 [2] 1311).
- 2) Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[4-Methylbenzoyl]- $\beta$ -[4-Methylphenyl]-oxyhydrazonäthan (R. 16, 333). — \*III, 231.
- 3)  $\alpha$ -Semicarbazon- $\alpha$ - $\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 212,5–213° (B. 34, 655). — \*II, 1012.
- 4) Phenylmonamid d.  $\beta$ -Phenylhydrazonäthan- $\alpha$ -Dicarbonsäuremonöthylester. Sm. 136–137° (B. 38, 36 C. 1905 [1] 603).
- $C_{18}H_{19}O_3N_5$  C 61,2 — H 5,4 — O 13,6 — N 19,8 — M. G. 353.
- 1) 2,4,3'-Tri[Acetylamido]azobenzol. Sm. 264° (B. 30, 2205). — IV, 1363.
- 2) Benzylidenhydrazid d.  $\beta$ -Phenylureidoacetylamidoessigsäure. Sm. 243° u. Zers. (J. pr. [2] 70, 256 C. 1904 [2] 1464).
- $C_{18}H_{19}O_3Br$  1) 4-Methyläther- $\alpha$ -Äthyläther d.  $\beta$ -Brom- $\gamma$ -Keto- $\alpha$ -Oxy- $\gamma$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan. Sm. 70° (B. 38, 35 C. 1906 [1] 674).
- 2) 4-Methyläther- $\beta$ -Äthyläther d.  $\alpha$ -Brom- $\beta$ -Oxy- $\gamma$ -Keto- $\alpha$ -[4-Oxyphenyl]- $\gamma$ -Phenylpropan. Sm. 74–75° (C. 1900 [2] 1014). — \*III, 168.
- $C_{18}H_{19}O_3Br_3$  1) Tribromostruthin. Sm. 133° (A. 183, 341). — III, 639.
- $C_{18}H_{19}O_4N$  C 69,0 — H 6,1 — O 20,4 — N 4,5 — M. G. 313.
- 1) 1-Äthyläther d. 4-Acetylamygdalylamido-1-Oxybenzol. Sm. 154° (B. 28 [2] 991).
- 2) 4,4'-Diäthyläther d.  $\alpha$ - $\beta$ -Dioximido- $\alpha$ - $\beta$ -Di[4-Oxyphenyl]äthan. Sm. 136° (A. 279, 343). — III, 296.

- $C_{18}H_{19}O_4N$  3) 2'-Methyläther-6-Äthyläther d. 4-Oximido-6-Oxy-2-[4-Oxyphenyl]-2,3-Dihydrobenzpyran. Sm. 190—191° (B. 33, 1484). — \*III, 560.  
 4) Apocorydalin. HCl, HJ (Soc. 79, 89; Ar. 241, 652 C. 1904 [1] 182). — \*III, 651.  
 5) Benzoylanhalamin. Sm. 167,5° (B. 34, 3007). — \*III, 603.  
 6)  $\alpha$ -[2-Methylphenyl]- $\beta$ -[2-Amido-3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure. Sm. 192° (B. 39, 3109 C. 1906 [2] 1328).  
 7)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[2-Amido-3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure. Sm. 203° (B. 39, 3114 C. 1906 [2] 1329).  
 8) 4'-Diäthylamido-2'-Oxydiphenylketon-2-Carbonsäure. Sm. 203° u. Zers. (Bl. [3] 19, 830; C. 1898 [1] 1296). — \*II, 1094.  
 9) d- $\alpha$ -Dibenzylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 152—153°.  $Ag_2$  (B. 41, 843 C. 1908 [1] 2039).  
 10)  $\alpha$ -Dimethylamido- $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. Sm. 208 bis 270°. HCl, (2HCl,  $PtCl_4$ ). Pikrat (B. 28, 1143). — II, 1889.  
 11) 1,2-Lakton d. 3,4-Dioxy-1-Äthylphenylamidooxymethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opiansäureäthylanilid). Sm. 116—117° (B. 29, 182). — \*II, 1119.  
 12)  $\alpha\beta^2$ -Lakton d.  $\alpha$ -Oxy- $\beta$ -Phenylakroyltropein- $\beta^2$ -Carbonsäure (Isocumarincarboxyltropein). Sm. 179—180°. HCl, (2HCl,  $PtCl_4$  +  $H_2O$ ), (HCl,  $AuCl_3$ ),  $HBr$  +  $\frac{1}{2}H_2O$ ,  $HJ$  +  $H_2O$ ,  $HNO_3$  +  $\frac{1}{2}H_2O$ , Pikrat (Soc. 91, 95 C. 1907 [1] 1137).  
 13) Dimethylester d.  $\alpha$ -Phenylamido- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 117—118°. HCl (B. 28, 146). — II, 1850.  
 14) Dimethylester d.  $\beta$ -Phenylamido- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 94° (B. 35, 516 C. 1902 [1] 658).  
 15) Dimethylester d. Benzol-1-Carbonsäure-2-Benzylamidoessigsäure. Sm. 82—83° (B. 35, 1700 C. 1902 [1] 1364).  
 16) Propylester d. Benzoyl-4-Methoxyphenylamidoameisensäure. Sm. 78—80° (D.R.P. 73285). — \*II, 740.  
 17) 4'-Acetat d. 4-[Acetyl-2-Oxybenzylamido]-1-Oxybenzol-1-Methyläther (Ar. 240, 682 C. 1903 [1] 395).  
 18)  $\alpha$ -Benzoat d.  $\beta$ -Dimethylamido- $\alpha$ -Oxy- $\alpha$ -[3,4-Dioxyphenyl]äthan-3,4-Methylenäther. Fl. HCl, (2HCl,  $PtCl_4$ ),  $H_2SO_4$  +  $H_2O$ , Pikrat (Soc. 93, 1807 C. 1909 [1] 146).  
 19) 4-Äthoxyphenylamid d.  $\alpha$ -Acetoxyphenylessigsäure. Sm. 157° (A. 368, 62 C. 1909 [2] 1444).  
 20) 1- $\beta$ -Dibenzylmonamid d.  $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 169 bis 170° (B. 41, 844 C. 1908 [1] 2039).  
 21) i- $\beta$ -Dibenzylmonamid d.  $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 153 bis 154° (C. 1900 [2] 1012).  
 22)  $\beta$ -[2,4-Dimethylphenoxy]äthylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 130—131° (B. 29, 2400). — \*II, 1049.  
 23) 2-Naphtylmonamid d. Säure  $C_8H_{12}O_5$  (aus Camphersäure). Sm. 178° (B. 30, 1902). — \*II, 341.  
 24) Verbindung (aus Bebeerin). Zers. oberhalb 260° (B. 29, 2058). — III, 798.
- $C_{18}H_{19}O_4N_3$  C 63,3 — H 5,6 — O 18,8 — N 12,3 — M. G. 341.  
 1) 5-Nitro-4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Sm. 290° (B. 25, 1033). — IV, 981.  
 2) 5-Methyläther-6-Äthyläther d. 2'-Nitro-5,6-Dioxy-3-Allylazonbenzol. Sm. 72—73° (G. 36 [2] 38 C. 1906 [2] 1193).  
 3) 5-Methyläther-6-Äthyläther d. 3'-Nitro-5,6-Dioxy-3-Allylazonbenzol. Sm. 86° (G. 36 [2] 40 C. 1906 [2] 1193).  
 4) Äthylester d.  $\alpha$ -[4-Methylphenyl]- $\beta$ -[3-Nitrobenzyliden]hydrazidoessigsäure. Sm. 123—124° (J. pr. [2] 75, 130 C. 1907 [1] 1037).  
 5) Diäthylester d. Diazoamidobenzol-3,3'-Dicarbonsäure. Sm. 144° (146°) (A. 117, 11; A. 319, 339 C. 1902 [1] 351). — IV, 1577; \*IV, 1137.  
 6)  $\alpha$ -Phenylamidoformyl- $\beta$ -Phenylhydrazid d. Malonsäuremonoäthylester. Sm. 158° (B. 24, 1800). — IV, 702.
- $C_{18}H_{19}O_4Cl$  1) Tetramethyläther d.  $\beta$ -Chlor- $\alpha\alpha$ -Di[3,4-Dioxyphenyl]äthan. Sm. 98° (A. 329, 44 C. 1903 [2] 1448).
- $C_{18}H_{19}O_4Cl_3$  1) Tetramethyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3,4-Dioxyphenyl]äthan (B. 34, 415). — \*II, 632.

- C<sub>18</sub>H<sub>19</sub>O<sub>4</sub>Br** 1) 4-Benzoat d. 3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol- $\alpha$ ,3-Dimethyl-äther. Sm. 66—68° (B. 35, 122 C. 1902 [1] 474).  
C 65,7 — H 5,8 — O 24,3 — N 4,2 — M. G. 329.
- C<sub>18</sub>H<sub>19</sub>O<sub>5</sub>N** 1) Anhydrocotarninresorcin. Sm. 220° u. Zers. HCl (B. 37, 2743 C. 1904 [2] 544).  
2)  $\beta$ -Oxy- $\alpha$ -[2-Methoxybenzyliden]amido- $\beta$ -[2-Methoxyphenyl]propionsäure. Na +  $\frac{1}{2}$  C<sub>8</sub>H<sub>8</sub>O (A. 337, 225 C. 1905 [1] 242).  
3)  $\alpha$ -[2-Methoxyphenyl]- $\beta$ -[2-Amido-3,4-Dimethoxyphenyl]akrylsäure. Sm. 189—190° (B. 40, 2002 C. 1907 [2] 158).  
4)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Amido-3,4-Dimethoxyphenyl]akrylsäure. Sm. 176—177° (B. 35, 4405 C. 1903 [1] 342).  
5) 3,4-Dimethoxy-1-[4-Äthoxyphenyl]imidomethylbenzol-2-Carbonsäure (Opiansäure-p-Phenetidin). Sm. 175° (C. 1897 [1] 1121). — \*II, 1120.  
6) 4-Äthylbenzylamidophenyltartronsäure. K (C. 1900 [2] 791).  
7) Morphinkohlensäure (B. 25 [2] 202; D. R. P. 38729). — III, 900; \*III, 670.  
8) Dimethylcolchicinsäure +  $4\frac{1}{2}$  H<sub>2</sub>O. Sm. 141—142°. HCl + H<sub>2</sub>O (M. 9, 17). — III, 875.  
9) Säure (aus Thetain) (B. 40, 3652 C. 1907 [2] 1423).  
10) 2-Acetat-5,5'-Dimethyläther d. 2'-Nitroso-2,5,5'-Trioxy-3,3'-Dimethylbiphenyl (B. 31, 1335). — \*II, 578.  
11) 4-Methoxybenzoat d.  $\alpha$ -Äthyl-4-Methoxybenzhydroxamsäure. Sm. 94° (A. 281, 255). — II, 1535.  
12) 4-Methoxybenzoat d.  $\beta$ -Äthyl-4-Methoxybenzhydroxamsäure. Sm. 77° (A. 281, 257). — II, 1535.  
13) 1-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure-2-Methylester. Sm. 113° (R. 15, 341). — \*II, 1161.  
14) 2-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure-1-Methylester. Sm. 96—97° (R. 15, 340). — \*II, 1161.
- C<sub>18</sub>H<sub>19</sub>O<sub>5</sub>Cl** 1) Diäthylester d. 2-Chlor-1-Ketoinden-3-[Propyl- $\alpha$ -Dicarbonsäure]. Sm. 109° (WIEDERMANN, Dissert. Berlin 1900).  
C 62,6 — H 5,5 — O 27,8 — N 4,1 — M. G. 345.
- C<sub>18</sub>H<sub>19</sub>O<sub>8</sub>N** 1) 3,4,3',4'-Tetramethyläther d.  $\beta$ -Oximido- $\alpha$ -Keto- $\alpha$ -Di[3,4-Dioxyphenyl]äthan. Sm. 149—150° (A. 329, 52 C. 1903 [2] 1448).  
2) Diäthylester d.  $\delta$ -Phtalylamido- $\alpha$ -Buten- $\delta\delta$ -Dicarbonsäure. Sm. 61,5 bis 62° (B. 41, 3388 C. 1908 [2] 1593).  
3) Verbindung (aus Ketacetsäurediäthylester u. Anilin). Sm. 137—138° (A. 269, 43). — I, 848.
- C<sub>18</sub>H<sub>19</sub>O<sub>6</sub>N<sub>3</sub>** C 57,9 — H 5,1 — O 25,7 — N 11,3 — M. G. 373.  
1) Diäthylester d. 4-Semicarbazon-3-Oxy-1,4-Dihydronaphtalin-1-Methylendicarbonsäure. Sm. 174° (C. 1907 [1] 1130).
- C<sub>18</sub>H<sub>19</sub>O<sub>8</sub>Cl** 1) Verbindung (aus Chlorhexaoxybiphenyltetraäthyläther). Sm. 159° (B. 31, 618). — \*II, 634.
- C<sub>18</sub>H<sub>19</sub>O<sub>6</sub>Br** 1) Pentamethyläther d.  $\beta$ -Brom-2,4,6,3',4'-Pentaoxydiphenylketon. Sm. 144° (B. 25, 1132; C. 1907 [1] 817). — III, 208.
- C<sub>18</sub>H<sub>19</sub>O<sub>6</sub>P** 1) Di[2,4-Dimethylphenyl]phosphinsäure-5,5'-Dicarbonsäure. Sm. 185°. Ag<sub>3</sub> (A. 294, 32). — IV, 1679.
- C<sub>18</sub>H<sub>19</sub>O<sub>9</sub>N<sub>2</sub>** 1) Verbindung (aus Gelseminin). Sm. 238° (C. 1896 [1] 111).  
C 49,0 — H 4,3 — O 43,5 — N 3,2 — M. G. 441.
- C<sub>18</sub>H<sub>19</sub>O<sub>12</sub>N** 1) Diäthylester d. 5-Nitro-2,4,6-Triacetoxybenzol-1,3-Dicarbonsäure. Sm. 94—95° (B. 41, 4182 C. 1909 [1] 285).
- C<sub>18</sub>H<sub>19</sub>NS** 1) Äthyläther d. Benzylechinolinammoniumsulfhydrat. 2 + PtCl<sub>4</sub> (J. pr. [2] 51, 96). — IV, 252.
- C<sub>18</sub>H<sub>19</sub>N<sub>2</sub>Cl** 1) Base (aus Essigsäure-4-Methylphenylamid). Sm. 71—72° (2HCl, PtCl<sub>4</sub>) (A. 214, 205; siehe auch B. 9, 1214). — II, 491.
- C<sub>18</sub>H<sub>19</sub>N<sub>2</sub>J** 1) Jodäthylat d. 4-Methyl-2-[4-Amidophenyl]chinolin (B. 15, 1502). — IV, 1030.
- C<sub>18</sub>H<sub>19</sub>N<sub>3</sub>S** 1)  $\alpha$ -Benzylidenamido- $\beta$ -Allyl- $\alpha$ -Benzylthioharnstoff. Sm. 106—107° (B. 37, 2328 C. 1904 [2] 313).
- C<sub>18</sub>H<sub>19</sub>N<sub>8</sub>Si** 1) Verbindung (aus Anilin u. Siliciumchloroform). Zers. bei 114° (C. 1896 [1] 803; B. 41, 3743 C. 1908 [2] 1805).  
C 77,1 — H 7,1 — O 5,7 — N 10,0 — M. G. 280.
- C<sub>18</sub>H<sub>20</sub>ON<sub>2</sub>** 1)  $\alpha$ -Äthylimido- $\alpha$ -Benzoyläthylamido- $\alpha$ -Phenylmethan. Sm. 90—91,5°. (2HCl, PtCl<sub>4</sub>) (Soc. 83, 323 C. 1903 [1] 581, 876). — \*IV, 568.



- $C_{18}H_{20}ON_2$  2) 4-[ $\beta$ -Benzoylisopropyliden]amido-1-Dimethylamidobenzol? Sm. 135 bis 136° (B. 25, 636). — IV, 598.
- 3)  $\alpha$ -Phenyl- $\beta$ -[1,2,3,4-Tetrahydro-1-Naphtylmethyl]harnstoff. Sm. 126,5° (B. 22, 1917). — II, 589.
- 4)  $\alpha$ -Phenyl- $\beta$ -[1,2,3,4-Tetrahydro-2-Naphtylmethyl]harnstoff. Sm. 141° (B. 22, 1913). — II, 590.
- 5)  $\gamma$ -Oximido- $\alpha$ -[4-Dimethylamidophenyl]- $\delta$ -Phenyl- $\alpha$ -Buten. Sm. 181 bis 182° (M. 28, 601 C. 1907 [2] 1171).
- 6)  $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]- $\alpha$ -Hexen. Sm. 119° (B. 29, 376). — IV, 774.
- 7)  $\alpha$ -Acetyl- $\beta$ -[4-Methylbenzyliden]- $\alpha$ -[4-Methylbenzyl]hydrazin. Sm. 95° (J. pr. [2] 62, 104). — \*IV, 545.
- 8) Äthyläther d. 8-Phenylazo-5-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 91,5° (B. 31, 899). — IV, 1426.
- 9) 2-Keto-4-Methyl-1,3-Di[2-Methylphenyl]tetrahydroimidazol. Sm. 93° (B. 25, 3276). — II, 464.
- 10) 2-Keto-4-Methyl-1,3-Di[4-Methylphenyl]tetrahydroimidazol. Sm. 129,9° (B. 25, 3278). — II, 495.
- 11) 2-Keto-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 79° (B. 25, 2933). — II, 470.
- 12) 2-Keto-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 168,5° (B. 22, 1785). — II, 506.
- 13) 3-Keto-2-Äthyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 93—94° (B. 25, 2938). — II, 434.
- 14) 3-Keto-2,2-Dimethyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 116° (B. 25, 2939). — II, 435.
- 15) Phenyläther d.  $\alpha$ -Phenylimido- $\alpha$ -Oxy- $\alpha$ -[1-Piperidyl]methan (Diphenylpiperidylisoharnstoff). Sm. 86° (B. 28, 983). — IV, 13.
- 16) 3-[2,4-Dimethylphenyl]amido-2-Keto-5,7-Dimethyl-2,3-Dihydroindol. Sm. 234° (A. 358, 364 C. 1908 [1] 1172).
- 17) 3-[3,5-Dimethylphenyl]amido-2-Keto-4,6-Dimethyl-2,3-Dihydroindol. Sm. 250° (A. 358, 367 C. 1908 [1] 1172).
- 18) Phenylhydrazid d.  $\beta$ -Phenyl- $\gamma$ -Methyl- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 159° (Bl. [3] 35, 359 C. 1906 [2] 318).
- 19) Verbindung (aus 4-Amido-1-Methylbenzol) (C. 1906 [1] 1414).
- 20) Verbindung (aus Benzylamin u. Acetessigsäureäthylester (B. 27, 3380). — \*II, 299.
- $C_{18}H_{20}OCl_4$  1) Tetrachlorcarotin. Sm. 120° (A. 117, 228). — III, 626.
- $C_{18}H_{20}OS$  1) Äthylidenbenzylsulfonhydroxyd. Ferrocyanid (B. 40, 4935 C. 1908 [1] 460).
- $C_{18}H_{20}OS_2$  1) Diäthyläther d.  $\beta$ -Keto- $\alpha\alpha$ -Dimerkapto- $\alpha\beta$ -Diphenyläthan. Sm. 59,5—60° (73—74°) (B. 33, 2989; Bl. [3] 23, 508). — \*III, 224.
- 2) Diphenyläther d.  $\delta\delta$ -Dimerkapto- $\beta$ -Keto- $\gamma$ -Methylpentan. Fl. (B. 35, 502 C. 1902 [1] 637).
- $C_{18}H_{20}O_2N_2$  C 73,0 — H 6,7 — O 10,8 — N 9,5 — M. G. 296.
- 1) Methyläther d. Benzoylimido-2,4,5-Trimethylphenylamidooxymethan (Benzoylpseudomethylpseudocumylharnstoff). Sm. 87—89° (Am. 24, 221; Am. 32, 365 C. 1904 [2] 1507).
- 2) Dimethyläther d.  $\alpha\beta$ -Di[2-Oxybenzylidenamido]äthan. Sm. bei 113° (B. 20, 272). — III, 72.
- 3) Dimethyläther d.  $\alpha\beta$ -Di[4-Oxybenzylidenamido]äthan. Sm. 110 bis 111° (B. 20, 272). — III, 85.
- 4) Diäthyläther d.  $\alpha\beta$ -Di[Phenylimido]- $\alpha\beta$ -Dioxyäthan. Sd. 205°<sub>12</sub> (Soc. 79, 700).
- 5)  $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Dimethylamidophenyl]äthan. Sm. 197—198° (B. 42, 3496 C. 1909 [2] 1541).
- 6)  $\alpha$ -[ $\alpha\beta$ -Diphenylureido]- $\gamma$ -Ketopentan. Sm. 76—77° (Bl. [4] 3, 660 C. 1908 [2] 174).
- 7) Isobutyläther d.  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oxybenzyliden]harnstoff (Phenylcarbamidimidoisobutylbenzoat). Sm. 99—100° (C. 1900 [2] 530). — \*II, 761.
- 8)  $\beta$ -Di[Acetyl-amido]-2-Benzyl-1-Methylbenzol. Sm. 220° (B. 26, 1855). — IV, 983.

- $C_{18}H_{20}O_2N_2$  9)  $\alpha\beta$ -Di[Phenacylamido]äthan. Sm. 207° (Soc. 87, 384 C. 1905 [1] 1587).
- 10)  $\alpha\beta$ -Di[Phenylacetylamido]äthan. Sm. 158° (B. 22, 1785). — II, 368.
- 11) meso- $\alpha\beta$ -Di[Acetylamido]- $\alpha\beta$ -Diphenyläthan. Sm. oberhalb 350° (B. 22, 2300). — IV, 978; \*IV, 652.
- 12) r- $\alpha\beta$ -Di[Acetylamido]- $\alpha\beta$ -Diphenyläthan. Sm. oberhalb 360° (B. 28, 3176). — IV, 978; \*IV, 653.
- 13)  $\alpha\beta$ -Di[2-Acetylamidophenyl]äthan. Sm. 249—250° (A. 305, 99). — \*IV, 656.
- 14) 2-Acetylamido-1-[Acetyl-4-Methylphenylamido]methylbenzol. Sm. 185—186° (B. 23, 2190). — IV, 631.
- 15) 4,4'-Di[Acetylamido]-2,2'-Dimethylbiphenyl. Sm. 281° (274—275°) (B. 22, 839; 28, 2554). — IV, 980.
- 16) 4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Sm. 314° (306°) (A. 278, 377; B. 17, 468; 21, 746, 1065). — IV, 981.
- 17) 2,2'-Di[Acetylamido]-4,4'-Dimethylbiphenyl. Sm. 189° (B. 34, 3333). — \*IV, 657.
- 18)  $\alpha\delta$ -Di[Benzoylamido]butan. Sm. 176—177° (H. 13, 574; B. 31, 3184). — II, 1170.
- 19) 4-Methylacetylamido-4'-Dimethylamidodiphenylketon. Sm. 145° (B. 24, 3199). — III, 185.
- 20)  $\alpha$ -Dioximido- $\alpha$ -Diphenylhexan. Sm. 216—218° (C. 1896 [2] 1091).
- 21) Glyoxim-N-2,4-Dimethylphenyläther. Sm. 198° (B. 31, 560). — \*II, 314.
- 22) Glyoxim-N-2,5-Dimethylphenyläther. Sm. 204—205° (B. 35, 1881 C. 1902 [2] 33).
- 23) Glyoxim-N-2,6-Dimethylphenyläther. Sm. 203,5° u. Zers. (B. 31, 560). — \*II, 310.
- 24) Peroxyd d. anti-2,5-Dimethylbenzaloxim. Sm. 97—98° u. Zers. (G. 32 [2] 481 C. 1903 [1] 831).
- 25) Di[4-Oxy-3-Äthylbenzyliden]hydrazin. Sm. 262° (A. 357, 323 C. 1908 [1] 353).
- 26) Di[4-Oxy-2,3-Dimethylbenzyliden]hydrazin. Sm. 254° (A. 357, 327 C. 1908 [1] 354).
- 27) Di[4-Oxy-2,5-Dimethylbenzyliden]hydrazin. Sm. 280° u. Zers. (A. 357, 325 C. 1908 [1] 353).
- 28) Di[4-Oxy-2,6-Dimethylbenzyliden]hydrazin. Sm. 240° (A. 357, 328 C. 1908 [1] 354).
- 29) Di[6-Oxy-3,4-Dimethylbenzyliden]hydrazin. Sm. 317° u. Zers. (A. 357, 329 C. 1908 [1] 354).
- 30) Di[4-Oxy-3,5-Dimethylbenzyliden]hydrazin. Sm. 262—263° (A. 357, 327 C. 1908 [1] 354).
- 31) Dimethyläther d. Di[4-Oxy-2-Methylbenzyliden]hydrazin. Sm. 141° (A. 357, 359 C. 1908 [1] 356).
- 32) Dimethyläther d. Di[4-Oxy-3-Methylbenzyliden]hydrazin. Sm. 172 bis 173° (A. 357, 355 C. 1908 [1] 356).
- 33) Diäthyläther d. Di[ $\alpha$ -Oxybenzyliden]hydrazin. Sm. 83—84° (J. pr. [2] 73, 299 C. 1906 [1] 1784).
- 34) Diäthyläther d. Di[4-Oxybenzyliden]hydrazin. Sm. 172° (A. 357, 348 C. 1908 [1] 355).
- 35) Diphenyläther d. Di[ $\beta$ -Oxyisopropyliden]hydrazin. Sm. 100—101° (A. 312, 273). — \*II, 355.
- 36) Dibenzoylisobutylhydrazin. Sm. 167° (B. 34, 3268).
- 37) s-Di[ $\beta$ -Phenylpropionyl]hydrazin. Sm. 208° (J. pr. [2] 64, 304).
- 38)  $\alpha\beta$ -Diacetyl- $\alpha\beta$ -Dibenzylhydrazin. Sm. 117—118° (J. pr. [2] 62, 93). — \*IV, 540.
- 39)  $\beta$ -Acetyl- $\alpha$ -[4-Isopropylbenzoyl]- $\alpha$ -Phenylhydrazin. Sm. 40—42°. — IV, 670.
- 40) 5'-Methyläther d. 5',6'-Dioxy-3'-Allyl-2,4-Dimethylazobenzol. Sm. 108° (G. 36 [2] 34 C. 1906 [2] 1192).
- 41) 5'-Methyläther d. 5',6'-Dioxy-3'-Allyl-2,5-Dimethylazobenzol. Sm. 97° (G. 36 [2] 36 C. 1906 [2] 1193).
- 42) 5-Methyläther-6-Äthyläther d. 5,6-Dioxy-3-Allylazobenzol. Sd. 175°<sub>30</sub> (G. 35 [1] 65 C. 1905 [1] 1238; B. 41, 411 C. 1908 [1] 1048).

- $C_{18}H_{20}O_2N_2$  43) Hydrokurin (*M.* 2, 83). — IV, 270.
- 44) o-Kresolantipyrin. Sm. 60—62° (*Bl.* [3] 15, 609). — IV, 510.
- 45) m-Kresolantipyrin. Fl. (*Bl.* [3] 15, 610). — IV, 510.
- 46) p-Kresolantipyrin. Fl. (*Bl.* [3] 15, 610). — IV, 510.
- 47) 1,3-Xylylendipyridoniumhydroxyd. 2 Chlorid +  $PtCl_4$ , 2 Bromid +  $Br_4$ , 2 Pikrat (*B.* 36, 1679 *C.* 1903 [2] 29). — \*IV, 416.
- 48)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenyl- $\beta$ -Äthylpropan- $\gamma$ -Carbonsäure. Sm. 136° (*C.* 1904 [1] 1258).
- 49) 1-Phenyl-4,5-Camphylpyrazol-3-Carbonsäure. Sm. 197° (193—194°).  $C_6H_6$  (*Am.* 19, 405; 20, 336; *Am.* 36, 276 *C.* 1906 [2] 1426). — IV, 864.
- 50) Methylester d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[Methyl-4-Methylphenyl]amidoessigsäure. Sm. 91—92° (*Soc.* 85, 996 *C.* 1904 [2] 321, 831).
- 51) Äthylester d. 4-Methylphenylimido-4-Methylphenylamidoessigsäure. Sm. 98—100°. (2HCl,  $PtCl_4$ ) (*Soc.* 85, 991 *C.* 1904 [2] 831).
- 52) Äthylester d.  $\beta$ -Diphenylhydrazonbuttersäure. Sm. 120—135° (*B.* 30, 3008). — IV, 690.
- 53) Äthylester d. isom.  $\beta$ -Diphenylhydrazonbuttersäure. Fl. (*B.* 30, 3008). — IV, 690.
- 54) Äthylester d.  $\beta$ -Phenylhydrazon- $\alpha$ -Phenylpropan- $\alpha$ -Carbonsäure. Sm. 104° (*B.* 31, 3164). — \*IV, 456.
- 55) Benzoat d. d-Limonen- $\alpha$ -Nitrosocyanid. Sm. 108° (*C.* 1904 [2] 440; *Soc.* 85, 932 *C.* 1904 [2] 705; *Soc.* 87, 419 *C.* 1905 [1] 1643).
- 56) Benzoat d. d-Limonen- $\beta$ -Nitrosocyanid. Sm. 121° (*Soc.* 87, 421 *C.* 1905 [1] 1644).
- 57) Benzoat d. l-Limonen- $\alpha$ -Nitrosocyanid. Sm. 108° (*Soc.* 87, 419 *C.* 1905 [1] 1643).
- 58) Benzoat d. l-Limonen- $\beta$ -Nitrosocyanid. Sm. 121° (*Soc.* 87, 421 *C.* 1905 [1] 1644).
- 59) Benzoat d. r-Limonen- $\alpha$ -Nitrosocyanid. Sm. 96° (*Soc.* 87, 425 *C.* 1905 [1] 1644).
- 60) Benzoat d. r-Limonen- $\beta$ -Nitrosocyanid. Sm. 98° (*Soc.* 87, 425 *C.* 1905 [1] 1644).
- 61) Benzoat d. Pinenisonitrosocyanid. Sm. 102° (*Soc.* 87, 345 *C.* 1905 [1] 1644).
- 62) Nitril d. 6-Benzoximido-1-Methyl-4-Isopropenylhexahydrobenzol-2-Carbonsäure. Sm. 177—178° (*Soc.* 89, 954 *C.* 1906 [2] 609).
- 63) Äthylidenamid d. Phenylessigsäure. Sm. 227—228° (224—225°) (*A.* 184, 318; *B.* 38, 1371 *C.* 1905 [1] 1373). — II, 1312.
- 64) 2-Methylphenylamid d. 2-Methylphenylimidooxyessigäthyläthersäure. Sm. 91° (*B.* 40, 2659 *C.* 1907 [2] 224).
- 65) Di[Phenylamid] d. Butan- $\alpha\delta$ -Dicarbonsäure. Sm. 235° (233°; 240°) (*Bl.* [3] 25, 444; *G.* 32 [1] 446 *C.* 1902 [2] 402; *B.* 39, 2765 *C.* 1906 [2] 1247).
- 66) Di[Phenylamid] d. anti-Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 222° (*B.* 23, 644). — II, 415.
- 67) Di[Phenylamid] d. syn-Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 235° (*B.* 23, 644). — II, 415.
- 68) Di[4-Methylphenylamid] d. Äthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 245° (*G.* 35 [2] 313 *C.* 1905 [2] 1331).
- 69) Di[Methylphenylamid] d. Bernsteinsäure. Sm. 154,5—155° (*A.* 292, 192). — \*II, 211.
- 70) Di[2-Methylphenylamid] d. Bernsteinsäure. Sm. 100° (*B.* 12, 323). — II, 468.
- 71) Di[4-Methylphenylamid] d. Bernsteinsäure. Sm. 256° (*B.* 12, 323; *A.* 126, 165; 209, 380). — II, 502.
- 72) Dibenzylamid d. Bernsteinsäure. Sm. 205—206° (*Soc.* 55, 631). — II, 530.
- 73) Di[ $\alpha$ -Phenyläthylamid] d. Oxalsäure. Sm. 185° (186°) (*B.* 27, 2308; *J. pr.* [2] 50, 559). — \*II, 307.
- 74) Di[ $\beta$ -Phenyläthylamid] d. Oxalsäure. Sm. 186° (180°) (*B.* 19, 1826; *J. pr.* [2] 50, 558). — II, 540.
- 75) Di[2,4-Dimethylphenylamid] d. Oxalsäure. Sm. 210° (204°) (*B.* 3, 227; 33, 619; *M.* 9, 746). — II, 544; \*II, 313.



- $C_{18}H_{20}O_2N_2$  76) Di[2,5-Dimethylphenylamid] d. Oxalsäure. Subl. bei  $125^\circ$  (B. 11, 1538). — II, 547.
- 77) 1-Methylamid-2-[2,4,5-Trimethylphenyl]amid d. Benzol-1,2-Dicarbonsäure. Sm.  $215^\circ$  u. Zers. (B. 17, 1808). — II, 1808.
- 78) Verbindung (aus Furfuröl, Anilin u. Methylanilin). HCl (A. 239, 356). — III, 723.
- 79) Verbindung (aus 1,4-Dioxybenzol u. Amidobenzol). Sm.  $89-90^\circ$  (B. 15, 1973). — II, 939.
- 80) Verbindung (aus 2-Methylphenylcarbonimid u. anti-4-Isopropylbenzal-doxim). Sm.  $70^\circ$  (B. 26, 2095). — III, 57.
- 81) Verbindung (aus 4-Methylphenylcarbonimid u. anti-4-Isopropylbenzal-doxim). Sm.  $115^\circ$  (B. 26, 2095). — III, 57.
- 82) Verbindung (aus 4-Methylphenylcarbonimid u. syn-4-Isopropylbenzal-doxim). 2 isom. Formen. Sm.  $113^\circ$  u.  $120^\circ$  (B. 26, 2095). — III, 57.
- 83) Verbindung (aus Campheroxalsäure u. 1,2-Diamidobenzol). Sm.  $246^\circ$  (Am. 23, 223). — \*IV, 366.
- $C_{18}H_{20}O_2N_4$
- 1)  $\alpha\gamma$ -Di[Methylphenylnitrosamido]- $\alpha$ -Buten. Sm.  $130^\circ$  (B. 33, 3467). — \*II, 259.
- 2) isom.  $\alpha\gamma$ -Di[2-Methylphenylnitrosamido]- $\alpha$ -Buten. Sm.  $155^\circ$  (B. 33, 3463). — \*II, 259.
- 3)  $\alpha\gamma$ -Di[4-Methylphenylnitrosamido]- $\alpha$ -Buten. Sm.  $156^\circ$  ( $165^\circ$ ) (A. 318, 88; A. 329, 222 C. 1903 [2] 1428).
- 4) Dinitrosoderivat d. Base  $C_{18}H_{22}N_2$  (aus Anilin u. Propionaldehyd). Sm.  $135^\circ$  (A. 318, 88).
- 5)  $\alpha$ -Phenylureido- $\alpha$ -Phenylamidoformylimidobutan (Butenyldiphenyldiureid). Sm.  $169^\circ$  (PINNER, Imidoäther S. 124). — II, 378.
- 6)  $\alpha$ -Phenylureido- $\alpha$ -Phenylamidoformylimido- $\beta$ -Methylpropan (Isobutenyldiphenyldiureid). Sm.  $161^\circ$  (PINNER, Imidoäther S. 127). — \*II, 186.
- 7) 1,4,5,8-Tetra[Methylamido]-9,10-Anthrachinon (D.R.P. 144634 C. 1903 [2] 750).
- 8)  $\alpha\beta$ -Succinyldiphenylhydrazidoäthan. Sm. bei  $126^\circ$  (A. 254, 123). — IV, 704.
- 9) 2,4-Di[Acetylamido]-3,5-Dimethylazobenzol. Sm. oberhalb  $260^\circ$  (Soc. 81, 94 C. 1902 [1] 186). — \*IV, 1025.
- 10) 2,6-Di[Acetylamido]-3,5-Dimethylazobenzol. Sm. oberhalb  $260^\circ$  (Soc. 81, 95 C. 1902 [1] 186). — \*IV, 1026.
- 11) 3,3'-Di[Acetylamido]-2,2'-Dimethylazobenzol. Sm. oberhalb  $340^\circ$  (Soc. 59, 1016). — IV, 1377.
- 12) 4,4'-Di[Acetylamido]-3,3'-Dimethylazobenzol. Sm. noch nicht bei  $310^\circ$  (Am. 17, 450). — IV, 1377.
- 13) 6,6'-Di[Acetylamido]-3,3'-Dimethylazobenzol (B. 22, 1397). — IV, 1377.
- 14) 3,3'-Di[Acetylamido]-4,4'-Dimethylazobenzol. Sm. bei  $300^\circ$  (Soc. 59, 1016). — IV, 1379.
- 15)  $\gamma\delta$ -Di[Phenylhydrazon]- $\beta$ -Methylbutan- $\beta$ -Carbonsäure. Sm.  $190^\circ$  (B. 30, 859). — IV, 707.
- 16) Äthylester d.  $\alpha$ -Phenylazo- $\beta$ -Phenylhydrazonbuttersäure. Sm. 108 bis  $109^\circ$  (B. 32, 208). — \*IV, 461.
- 17) Äthylester d.  $\alpha$ -[2-Methylphenyl]azo- $\alpha$ -[2-Methylphenyl]hydrazon-essigsäure. Sm.  $99-100^\circ$  (Bl. [3] 31, 85 C. 1904 [1] 580).
- 18) Di[Phenylamid] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure (Di-äthylenbisphenylharnstoff) (J. pr. [2] 53, 21). — \*II, 185.
- $C_{18}H_{20}O_2Cl_2$  1) Diäthyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm.  $72^\circ$  (A. 279, 341). — II, 995.
- $C_{18}H_{20}O_2Br_2$  1) ?-Dibrom-5,5'-Dioxy-1,2,4,1',2',4'-Hexamethyl-?-Biphenyl. Sm. 186 bis  $187^\circ$  (B. 18, 2690). — II, 996.
- 2) Diäthyläther d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm.  $192^\circ$  (A. 279, 344). — II, 993.
- 3) Di[6-Brom-2,4-Dimethylphenyläther] d.  $\alpha\beta$ -Dioxyäthan. Sm.  $100^\circ$  (B. 36, 2876 C. 1903 [2] 834).
- $C_{18}H_{20}O_2S_2$  1) Äthylester d.  $\beta\beta$ -Dimerkaptobutterdiphenyläthersäure. Sm.  $57-58^\circ$  (B. 19, 1790). — II, 788.

$C_{18}H_{20}O_3N_2$ 

- C 69,2 — H 6,4 — O 15,4 — N 9,0 — M. G. 312.
- 1) 6-Methyläther-4,5-Methylenäther d. 4,5,6-Trioxy-2-[ $\beta$ -Methylamido-äthyl]-1-Phenylimidomethylbenzol (Cotarninanil). Sm. 124° u. Zers. (B. 36, 1528 C. 1903 [2] 51).
  - 2) Diacetylderivat d. 4-Dimethylamido-3'-Oxydiphenylamin. Sm. 101° (B. 35, 3087 C. 1902 [2] 1116; J. pr. [2] 69, 234 C. 1904 [1] 1269). — \*IV, 385.
  - 3) Diacetylderivat d. 4-Dimethylamido-4'-Oxydiphenylamin. Sm. 131° (B. 35, 3086 C. 1902 [2] 1116; J. pr. [2] 69, 164 C. 1904 [1] 1268). — \*IV, 385.
  - 4) Äthyläther d. 5-[4-Formylamido-3-Methylphenyl]formylamido-2-Oxy-1-Methylbenzol. Sm. 146—147° (A. 287, 194).
  - 5) Äthyläther d. 6,4'-Di[Acetylamido]-3-Oxybiphenyl. Sm. 190—191° (A. 303, 350). — \*II, 537.
  - 6) Äthyläther d. 4-Diacetylamido-4'-Oxydiphenylamin. Sm. 175—176° (B. 26, 693). — IV, 584.
  - 7) Cyan-2-Nitrobenzylcampher. Sm. 104—105° (B. 24 [2] 733). — III, 514.
  - 8) Guajakolantipyryrin (Bl. [3] 15, 172). — IV, 510.
  - 9) Orcinantipyryrin. Fl. (Bl. [3] 15, 612). — IV, 510.
  - 10) Saligeninantipyryrin. Fl. (Bl. [3] 15, 849). — IV, 510.
  - 11) Dimethyläther d. anti-4,5-Dioxy-2-Keto-1-Methyl-4,5-Diphenyl-tetrahydroimidazol. Zers. bei 188° (A. 368, 203 C. 1909 [2] 1465).
  - 12) Dimethyläther d. syn-4,5-Dioxy-2-Keto-1-Methyl-4,5-Diphenyl-tetrahydroimidazol. Sm. 110° u. Zers. (A. 368, 202 C. 1909 [2] 1465).
  - 13) Cinchotenin + 3H<sub>2</sub>O. Sm. 197—198°. (2HCl, PtCl<sub>4</sub>), (2HCl, AuCl<sub>3</sub>) (A. Spl. 7, 249; A. 176, 232; 197, 376; B. 11, 1984; 28, 12, 1072, 1988; M. 15, 787; 16, 62, 159). — III, 840.
  - 14) Cinchotenicin. Sm. 153° (B. 11, 1983). — III, 844.
  - 15) Cinchotenidin + 3H<sub>2</sub>O. Sm. 256° u. Zers. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + 2½H<sub>2</sub>O (A. 197, 237; B. 14, 1892; M. 10, 54). — III, 854.
  - 16) Codeinonoxim. Sm. 212°. + C<sub>2</sub>H<sub>6</sub>O (B. 36, 3072 C. 1903 [2] 953; B. 40, 4890 C. 1908 [1] 389).
  - 17) Pseudocodeinonoxim (B. 40, 2036 C. 1907 [2] 161; B. 40, 3342 Anm. C. 1907 [2] 921).
  - 18)  $\alpha$ -[ $\alpha$ -Amido- $\beta$ -Phenylpropionyl]amido- $\beta$ -Phenylpropionsäure + 2H<sub>2</sub>O. Sm. 288° (B. 37, 3069 C. 1904 [2] 1208).
  - 19)  $\alpha$ -[ $\alpha$ -Phenylamidopropionylphenyl]amidopropionsäure. Sm. 79 bis 80° u. Zers. (B. 23, 2016). — II, 433.
  - 20) 2-Methylphenylamidoacetyl-2-Methylphenylamidoessigsäure. Sm. 129° (J. pr. [2] 38, 308). — II, 470.
  - 21) 2-Methylphenylamidoäthyl-[2-Methylphenyl]amidoformylameisensäure + xH<sub>2</sub>O. Sm. 100° u. Zers. Ba + H<sub>2</sub>O (B. 23, 2035). — II, 467.
  - 22) Anhydrid d. 4-Dimethylamidobenzol-1-Carbonsäure. Sm. 163—164° (D. R. P. 180291 C. 1907 [1] 1365).
  - 23) Benzylidenderivat d. Lakton C<sub>11</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>. Sm. 120° (Soc. 91, 1926 C. 1908 [1] 368).
  - 24) Äthylester d.  $\alpha$ -Di[Phenylamido]- $\beta$ -Ketobuttersäure? Sm. 117 bis 118° (Bl. [3] 33, 483 C. 1905 [1] 1591).
  - 25) 6-Acetat d.  $\alpha$ -Phenyl- $\beta$ -[5,6-Dioxy-3-Allylphenyl]hydrazin-5-Methyläther. Sm. 97° (B. 41, 412 C. 1908 [1] 1048).
  - 26) Phenylmonamid d. Phenylamidobernsteinsäuremonoäthylester. Sm. 144° (B. 25, 650). — II, 437.
  - 27) Phenylmonamid d. Phenylimidodiessigsäuremonoäthylester. Sm. 121—122° (B. 22, 1801). — II, 431.
  - 28) Benzylmonamid d. Benzylamidobernsteinsäure. Sm. 204—205°. Ba (C. 1896 [1] 244).
  - 29) 2-Methylphenylmonamid d. 2-Methylphenylimidodiessigsäure. Sm. 146—148° (B. 23, 1994). — II, 470.
  - 30) 4-Methylphenylmonamid d. 4-Methylphenylimidodiessigsäure. Sm. 222° u. Zers. (B. 23, 2001; 25, 2288). — II, 507.
  - 31) Di[Phenylamid] d.  $\alpha$ -Oxybutan- $\alpha$  $\beta$ -Dicarbonsäure. Sm. 203—204° (B. 37, 2382 C. 1904 [2] 306).

- $C_{18}H_{20}O_3N_2$  32) **s-Dibenzylamid d. d-Äpfelsäure.** Sm. 157° (B. 37, 2128 C. 1904 [2] 439).
- 33) **s-Dibenzylamid d. l-Äpfelsäure.** Sm. 155,5° (157°) (Soc. 83, 1325 C. 1904 [1] 82; B. 37, 2127 C. 1904 [2] 439).
- 34) **Di[2-Methylphenylamid] d. Äpfelsäure.** Sm. 180,5—181,5° (179°) (B. 23, 2044; G. 23, 183; Ph. Ch. 17, 250; C. 1899 [1] 467). — II, 468; \*II, 257.
- 35) **Di[3-Methylphenylamid] d. Äpfelsäure.** Sm. 153° (C. 1899 [1] 467). — \*II, 262.
- 36) **Di[4-Methylphenylamid] d. Äpfelsäure.** Sm. 195° (206°) (G. 23, 180; Ph. Ch. 17, 250; A. 279, 134; C. 1899 [1] 467). — II, 503; \*II, 280.
- 37) **Phenylhydrazid d. Oxyessigeugenoläthersäure.** Sm. 113° (M. 22, 132). — \*IV, 451.
- 38) **Verbindung** (aus p-Anisidin) (C. 1906 [1] 1414).
- 39) **Verbindung** (aus d. Diäthyläther d. 2-Amido-1,3-Dioxybenzol). Sm. 207° (B. 20, 1149). — II, 928.
- $C_{18}H_{20}O_3N_4$  C 63,5 — H 5,9 — O 14,1 — N 16,5 — M. G. 340.
- 1)  **$\alpha$ -[ $\alpha$ -Benzoylamidoacetylamidoäthyl]- $\beta$ -Phenylharnstoff.** Sm. 216° (J. pr. [2] 70, 121 C. 1904 [2] 1037).
- 2) **Di[Phenylhydrazon]trioxyhexahydrobenzol.** Sm. 209° (Soc. 85, 628 C. 1904 [2] 329).
- 3) **Di[Phenylhydrazon] d. Keton  $C_6H_5O_3$**  (aus d-Quercit). Sm. 180° u. Zers. (B. 29, 1766). — IV, 788.
- 4) **3,3'-Di[Acetylamido]-2,2'-Dimethylazoxybenzol.** Sm. 307° (Soc. 59, 1013). — IV, 1339.
- 5) **5,5'-Di[Acetylamido]-2,2'-Dimethylazoxybenzol.** Sm. 280—281° u. Zers. (J. pr. [2] 63, 564). — \*IV, 998.
- 6) **6,6'-Di[Acetylamido]-3,3'-Dimethylazoxybenzol.** Sm. 196° (B. 22, 1397). — IV, 1341.
- 7) **3,3'-Di[Acetylamido]-4,4'-Dimethylazoxybenzol.** Sm. 290° (Soc. 59, 1016). — IV, 1341.
- 8) **Hydrazid d.  $\alpha$ -Benzoylamidoacetylamido- $\beta$ -Phenylpropionsäure.** Sm. 183°. HCl (J. pr. [2] 70, 227 C. 1904 [2] 1461).
- 9)  **$\alpha$ -Phenylhydrazid d.  $\gamma$ -Phenylhydrazonpropan- $\alpha\beta$ -Dicarbonsäure- $\beta$ -Methylester.** Sm. 167° (B. 27, 3441; A. 339, 377, 379 C. 1905 [2] 32). — IV, 708.
- 10)  **$\alpha$ -Phenyl- $\beta$ -Acetylhydrazid d.  $\beta$ -Acetyl- $\alpha$ -Phenylhydrazidoessigsäure.** Sm. 198° (A. 301, 87). — \*IV, 477.
- $C_{18}H_{20}O_3Br_2$  1) **Di[3-Brom-4-Oxy-2,5-Dimethylbenzyl]äther.** Sm. 162° (A. 302, 122). — \*II, 686.
- $C_{18}H_{20}O_4N_2$  C 65,9 — H 6,1 — O 19,5 — N 8,5 — M. G. 328.
- 1)  **$\alpha\beta$ -Di[Acetylamido]- $\alpha\beta$ -Di[2-Oxyphenyl]äthan.** Sm. oberhalb 300° (Soc. 45, 680; B. 17, 2409). — II, 994; \*III, 286.
- 2) **Dimethyläther d.  $\alpha\beta$ -Di[Formylamido]- $\alpha\beta$ -Di[4-Oxyphenyl]äthan.** Sm. 290° u. Zers. (J. pr. [2] 77, 132 C. 1908 [1] 962).
- 3) **Dimethyläther d. 4,4'-Di[Acetylamido]-3,3'-Dioxybiphenyl.** Sm. 231° (242—243°) (J. pr. [2] 59, 214; B. 35, 112 C. 1902 [1] 414). — \*II, 601.
- 4) **Di[2-Acetylamidophenyläther] d.  $\alpha\beta$ -Dioxyäthan.** Sm. 226° (J. pr. [2] 27, 204). — II, 705.
- 5) **Di[4-Acetylamidophenyläther] d.  $\alpha\beta$ -Dioxyäthan.** Sm. 257° (260°) (C. 1898 [2] 423; D. R. P. 85988). — \*II, 401.
- 6) **4,4'-Äthylenäther d. 4-Oxy-3-Methylbenzaloxim.** Sm. 191—192° (A. 357, 377 C. 1908 [1] 358).
- 7) **6,6'-Dimethyläther d. Di[4,6-Dioxy-2-Methylbenzyliden]hydrazin.** Sm. 253° u. Zers. (A. 357, 347 C. 1908 [1] 355).
- 8) **Tetramethyläther d. Di[2,4-Dioxybenzyliden]hydrazin.** Sm. 195° (A. 357, 369 C. 1908 [1] 357).
- 9) **Tetramethyläther d. Di[2,5-Dioxybenzyliden]hydrazin.** Sm. 160° (B. 40, 2357 C. 1907 [2] 310).
- 10) **Tetramethyläther d. Di[3,4-Dioxybenzyliden]hydrazin.** Sm. 190° (191°) (Bl. [3] 17, 946; B. 39, 807 C. 1908 [1] 1246; A. 357, 368 C. 1908 [1] 357). — \*III, 77.



- $C_{18}H_{20}O_4N_2$  11) Di[ $\beta$ -Oxyäthyläther] d. Di[4-Oxybenzyliden]hydrazin. Sm. 184° (A. 357, 354 C. 1908 [1] 356).
- 12) Phenylazoaspidinol. Sm. 132° (A. 318, 250). — \*IV, 1073.
- 13) Phenylazofilicinsäurebutanon. Sm. 137° (A. 318, 241, 304). — \*IV, 1071.
- 14) Oxim d. Oxycodämon. Sm. 272—273° u. Zers. (B. 39, 849 C. 1906 [1] 1174).
- 15) Chitenol +  $H_2O$ . Zers. oberhalb 270°.  $2HCl + H_2O$ , ( $2HCl$ ,  $PtCl_4$ ),  $H_2SO_4 + H_2O$  (M. 14, 603). — III, 820.
- 16)  $\alpha\beta$ -Di[4-Methylphenylamido]bernsteinsäure. Sm. 200°.  $Na_2$ , Ca, Cu (B. 26, 1767). — II, 509.
- 17) Dimethylester d.  $\alpha\alpha$ -Di[Phenylamido]äthan-2,2'-Dicarbonsäure. Sm. 130—131° (J. pr. [2] 63, 259).
- 18) Dimethylester d.  $\alpha$ -Phenylhydrazido- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 94,5° u. Zers. (B. 28, 147). — IV, 741.
- 19) Dimethylester d. Phenylhydrazonanemonsäure. Sm. 170° (M. 17, 294). — IV, 797.
- 20) Äthylester d.  $\alpha$ -Phenyl- $\beta$ -[6-Acetoxy-3-Methylphenyl]hydrazin- $\alpha^4$ -Carbonsäure. Sm. 81° (A. 365, 311 C. 1909 [1] 1865).
- 21) Diäthylester d. s-Diphenylhydrazin-4,4'-Dicarbonsäure. Sm. 118° (A. 326, 333 C. 1903 [1] 1130). — \*IV, 1094.
- 22) Diäthylester d. Biphenylen-4,4'-Diamidoameisensäure (Biphenylen-diurethan). Sm. 230° (A. 258, 368; Soc. 49, 256). — IV, 964.
- 23) Di[Phenylamidoformiat] d.  $\alpha\delta$ -Dioxybutan. Sm. 180—181° (Bl. [3] 33, 525 C. 1905 [1] 1698).
- 24) 3-Nitrophenylamid d. Oxyessig-4-tert. Butylphenyläthersäure. Sm. 136—139° (Am. 19, 74). — \*II, 458.
- 25) Di[Phenylamid] d. meso- $\alpha\delta$ -Dioxybutan- $\alpha\delta$ -Dicarbonsäure. Sm. 216° (Soc. 93, 724 C. 1908 [1] 2022).
- 26) Di[Phenylamid] d. r- $\alpha\delta$ -Dioxybutan- $\alpha\delta$ -Dicarbonsäure. Sm. 186° (Soc. 93, 720 C. 1908 [1] 2022).
- 27) Di[Benzylamid] d. d-Weinsäure. Sm. 199° (Soc. 83, 1362 C. 1904 [1] 84).
- 28) Di[2-Methylphenylamid] d. d-Weinsäure. Sm. 182—183° (200° u. Zers.; 184—185°) (B. 23, 2049; C. 1899 [1] 467; Soc. 83, 1357 C. 1904 [1] 84). — II, 468; \*II, 257.
- 29) Di[3-Methylphenylamid] d. d-Weinsäure. Sm. 182° u. Zers. (184°) (C. 1899 [1] 467; Soc. 83, 1358 C. 1904 [1] 84). — \*II, 262.
- 30) Di[4-Methylphenylamid] d. d-Weinsäure. Sm. 264° u. Zers. (230° u. Zers.; 240°) (B. 23, 2050; A. 279, 145; C. 1899 [1] 467; Soc. 83, 1356 C. 1904 [1] 84). — II, 503; \*II, 281.
- 31) 4-Äthoxyphenylamid d. 4-Acetylamidophenoxylessigsäure. Sm. 198° (B. 30, 2107). — \*II, 408.
- 32) Di[4-Methoxyphenylamid] d. Äthan- $\alpha\alpha$ -Dicarbonsäure. Sm. 200 bis 201° (G. 35 [2] 315 C. 1905 [2] 1332).
- 33) Di[4-Methoxyphenylamid] d. Bernsteinsäure. Sm. 243° (C. 1902 [2] 1449).
- 34) Di[4-Äthoxyphenylamid] d. Oxalsäure. Sm. 265° (256—258°) (B. 28 [2] 991; G. 25 [2] 536; B. 39, 3977 C. 1907 [1] 155). — \*II, 409.
- 35) s-Hydrazid d.  $\beta$ -[2-Oxyphenyl]propionsäure. Sm. 176—177° (B. 38, 2070 C. 1905 [2] 232).
- 36) Phenazinderivat (aus d. 3,4-Diketo-1-Methyl-R-Pentamethylen-2,5-Dicarbonsäurediäthylester). Sm. 160—161° (B. 32, 1932). — \*IV, 661.
- 37) Hydrazon d. Verb.  $C_{18}H_{18}O_5$ . Sm. 141—142° (B. 42, 1412 C. 1909 [1] 1888).
- $C_{19}H_{20}O_4N_4$  C 60,7 — H 5,6 — O 18,0 — N 15,7 — M. G. 356.
- 1)  $\alpha\beta$ -Di[ $\beta$ -Phenylureido]buttersäure. Sm. 238° (C. 1906 [2] 766).
- 2) 4-Äthoxyphenylazo-4-Äthoxyphenylhydrazonessigsäure. Sm. 147 bis 148° (B. 28, 1693). — IV, 1240.
- 3) Tetraamido- $\alpha$ -Truxillsäure.  $2HCl$  (B. 39, 4088 C. 1907 [1] 248).
- 4) Verbindung (aus Phenylecyanat u. Urethanophenylloxamin). Sm. 183° u. Zers. (B. 34, 377). — \*II, 821.
- $C_{19}H_{20}O_4N_6$  C 56,2 — H 5,2 — O 16,7 — N 21,9 — M. G. 384.
- 1) Dimethyläther d.  $\alpha\beta$ -Disemicarbazon- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 254—255° u. Zers. (A. 339, 268 C. 1905 [2] 47).

- $C_{18}H_{20}O_4N_6$  2)  $\alpha\beta$ -Di[4-Nitrophenylhydrazon]hexan. Sm. 256—257° u. Zers. (*C.* 1909 [2] 1636).
- 3)  $\alpha\zeta$ -Di[4-Nitrophenylhydrazon]hexan. Sm. 169—170° (*B.* 39, 895 *C.* 1906 [1] 1231).
- 4)  $\beta\epsilon$ -Di[4-Nitrophenylhydrazon]hexan. Sm. 210—212° (*B.* 41, 1827 *C.* 1908 [2] 168).
- $C_{13}H_{20}O_4Cl_2$  1) Tetramethyläther d.  $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[3,4-Dioxyphenyl]äthan. Sm. 122° (*A.* 329, 43 *C.* 1903 [2] 1448).
- $C_{13}H_{20}O_4S_2$  1) Hexamethyldiphenylendisulfon. Zers. oberhalb 300° (*Bl.* [3] 15, 1040). — \*II, 586.
- $C_{13}H_{20}O_4Pb$  1) Diacetat d. Bleidi[4-Methylphenyl]dihydroxyd + 2H<sub>2</sub>O. Sm. 183,5° (wasserfrei) (*B.* 21, 3427). — IV, 1716.
- $C_{18}H_{20}O_5N_2$  1) Äthyläther d.  $\beta\delta$ -Dinitro- $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylbutan. Sm. 156° (*B.* 38, 472 *C.* 1905 [1] 741).
- 2) Nitrocodein (Methyläther d. Nitromorphin). Sm. 217° (221—222°) (*A.* 77, 341; *H.* 38, 162; *B.* 38, 1857 *C.* 1905 [2] 52; *B.* 42, 3503 *C.* 1909 [2] 1471). — III, 903; \*III, 672.
- 3) Nitropseudocodein. Sm. 235° u. Zers. (*B.* 42, 3504 *C.* 1909 [2] 1472; *A.* 368, 314 *C.* 1909 [2] 1661).
- $C_{18}H_{20}O_5N_4$  C 58,1 — H 5,4 — O 21,5 — N 15,0 — M. G. 372.
- 1)  $\delta\epsilon$ -Di[Phenylhydrazon]- $\alpha\beta\gamma$ -Trioxypentan- $\alpha$ -Carbonsäure. Sm. 200 bis 202° (*H.* 44, 111 *C.* 1905 [1] 1086).
- $C_{13}H_{20}O_5S_4$  1) Verbindung (aus  $\beta\gamma$ -Dibrompropylphenylsulfon). Sm. 157—158° (*J. pr.* [2] 56, 448). — \*II, 468.
- $C_{18}H_{20}O_6N_2$  C 60,0 — H 5,6 — O 26,6 — N 7,8 — M. G. 360.
- 1) Nitrooxycodein. Sm. 232° u. Zers. + CH<sub>4</sub>O (*B.* 42, 3504 *C.* 1909 [2] 1472).
- 2) Di[Phenylamidoformiat] d. Dulcid. Sm. 233° (*C. r.* 139, 638 *C.* 1904 [2] 1536).
- 3) Diphenylamid d. Schleimsäure (Mucanilid) (*J. pr.* [2] 6, 138). — II, 424.
- 4) Di[4-Methoxyphenylamid] d.  $\alpha\beta$ -Dioxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 259° (*C.* 1897 [1] 49). — \*II, 411.
- $C_{18}H_{20}O_6Cl_2$  1) Hexamethyläther d. Dichlorhexaoxybiphenyl (*B.* 11, 1624). — II, 1042.
- $C_{18}H_{20}O_6Br_2$  1) Hexamethyläther d. Dibromhexaoxybiphenyl. Sm. 138—140° (*B.* 11, 1623). — II, 1042.
- $C_{18}H_{20}O_6S$  1) Verbindung (aus 1,4-Dioxybenzol u. H<sub>2</sub>S) (*A.* 69, 297). — II, 939.
- $C_{18}H_{20}O_6S_2$  1) Äthylester d.  $\beta\beta$ -Diphenylsulfonbuttersäure. Sm. 97° (98—99°) (*A.* 259, 367; *B.* 34, 2660). — II, 789.
- $C_{13}H_{20}O_7N_2$  C 57,4 — H 5,3 — O 29,8 — N 7,4 — M. G. 376.
- 1) 4-Benzoat d. 4-Oxy-2-Äthyl-1,2,6-Oxdiazin-3,5-Dicarbonsäurediäthylester. Sm. 69° (*B.* 26, 1005). — IV, 545.
- $C_{18}H_{20}O_7N_4$  C 53,5 — H 4,9 — O 27,7 — N 13,9 — M. G. 404.
- 1) Diäthyläther d. 4'-Acetylamido-2,4-Dinitro-3,6-Dioxydiphenylamin. Sm. 199° (*B.* 24, 3828). — II, 949.
- $C_{18}H_{20}O_7N_6$  C 50,0 — H 4,6 — O 25,9 — N 19,5 — M. G. 432.
- 1) 2-Nitro-1,4-Di[Acetylamido]benzol + 2-Nitro-4-Acetylamido-1-Amidobenzol. Sm. 161° (*B.* 30, 985). — IV, 589.
- 2) Di[4-Nitrophenylhydrazon] d. Rhamnose. Sm. 208° (*B.* 33, 2097, 2099). — \*IV, 518.
- $C_{18}H_{20}O_8N_2$  C 55,1 — H 5,1 — O 32,7 — N 7,1 — M. G. 392.
- 1) Tetramethyläther d.  $\alpha\beta$ -Di[6-Nitro-3,4-Dioxyphenyl]äthan. Sm. 206° (*B.* 35, 2610 *C.* 1902 [2] 595; *B.* 35, 2947 *C.* 1902 [2] 1051; *Soc.* 81, 1050, 1065; *M.* 23, 890 *C.* 1904 [2] 1313). — \*III, 482.
- 2) Säure (aus d. Verb. C<sub>18</sub>H<sub>22</sub>O<sub>8</sub>N<sub>2</sub>) (*B.* 42, 3510 *C.* 1909 [2] 1472).
- 3) Verbindung (aus ?-Dichlor-?-Diamido-1,4-Dioxybenzol). Sm. 225° (*A.* 210, 185).
- 4) Verbindung (aus Nitrocodeinsäureäthylester). HCl (*B.* 42, 3509 *C.* 1909 [2] 1472).
- $C_{18}H_{20}O_8N_4$  C 51,4 — H 4,8 — O 30,5 — N 13,3 — M. G. 420.
- 1) Pseudonitrosit d. 4-Methoxyphenyläthen. Zers. bei 107° (*A.* 358, 68 *C.* 1908 [1] 651).

- C<sub>18</sub>H<sub>20</sub>O<sub>8</sub>N<sub>6</sub>** C 48,2 — H 4,5 — O 28,6 — N 18,6 — M. G. 448.  
 1)  $\alpha\beta$ -Di[ $\beta$ -Dinitro-2,4-Dimethylphenylamido]äthan. Sm. 220° (*Soc.* 79, 255).  
 2) isom.  $\alpha\beta$ -Di[ $\beta$ -Dinitro-2,4-Dimethylphenylamido]äthan. Sm. 52 bis 53° (*Soc.* 79, 255).  
 3) Di[2-Nitrophenylhydrazon] d. d-Glykose. Sm. 215—217° (*B.* 41, 3667 *C.* 1908 [2] 1816).  
 4) Di[3-Nitrophenylhydrazon] d. d-Glykose. Sm. 228° (*B.* 41, 3666 *C.* 1908 [2] 1815).  
 5) Di[4-Nitrophenylhydrazon] d. d-Glykose. Sm. 257° u. Zers. (*B.* 32, 1816). — \*IV, 522.  
 6) Di[3-Nitrophenylhydrazon] d. Mannose. Sm. 214° (*B.* 41, 3667 *C.* 1908 [2] 1816).
- C<sub>18</sub>H<sub>20</sub>O<sub>8</sub>Cl<sub>2</sub>** 1) Diäthylester d. 3,6-Dichlor-2,5-Dioxybenzoldi-1,4-[Acetylmethylcarbonsäure] (D. d. p-Dichlorhydrochinondiacetessigsäure). Sm. 154° (*J. pr.* [2] 45, 72). — II, 2076.  
 2) Verbindung (aus Hanf) (*Soc.* 43, 19; 55, 204). — I, 1080.
- C<sub>18</sub>H<sub>20</sub>O<sub>10</sub>N<sub>2</sub>** C 50,9 — H 4,7 — O 37,8 — N 6,6 — M. G. 424.  
 1) Tetracetat d. 3,6-Diacetylamido-1,2,4,5-Tetraoxybenzol. Sm. 240° u. Zers. (*B.* 18, 503). — II, 1033.
- C<sub>18</sub>H<sub>20</sub>O<sub>10</sub>N<sub>6</sub>** C 45,0 — H 4,2 — O 33,3 — N 17,5 — M. G. 480.  
 1) Pyrogallein (*J.* 1858, 259). — II, 1011.
- C<sub>18</sub>H<sub>20</sub>O<sub>12</sub>N<sub>2</sub>** C 47,4 — H 4,4 — O 42,1 — N 6,1 — M. G. 456.  
 1) Tetraäthylester d. 3,6-Dinitrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 130° (*A.* 237, 23). — II, 2074.
- C<sub>18</sub>H<sub>20</sub>O<sub>16</sub>S<sub>2</sub>** 1) Celluloseschwefelsäure. Ca (*Berz. J.* 25, 582; 26, 615; *Z.* 1869, 703; *A.* 53, 134; *H.* 7, 528; *M.* 6, 711; 7, 458). — I, 1077.
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>S** 1) s-Phenyl-[1,2,3,4-Tetrahydro-2-Naphtylmethyl]thioharnstoff. Sm. 139,5—140° (*B.* 22, 1913). — II, 590.  
 2) Dehydrothiopseudocumidin. Sm. 183° u. 125° (*B.* 22, 585). — II, 827; \*II, 489.
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>S<sub>2</sub>** 1) Diäthyläther d. Di[4-Merkaptobenzyliden]hydrazin. Sm. 152° (*Soc.* 89, 279 *C.* 1906 [1] 1487).  
 2) 4,4'-Biphenylenamid d. Thiopropionsäure. Sm. 228—229° (*B.* 37, 876 *C.* 1904 [1] 1004).
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>S<sub>3</sub>** 1) Sulfid d. Äthylphenylamidodithioameisensäure. Sm. 115° (*B.* 36, 2282 *C.* 1903 [2] 560).
- C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>S<sub>4</sub>** 1) Dimethyläther d. Di[4-Methylphenylimidomerkaptomethyl]disulfid. Sm. 158° (*Bl.* [3] 27, 815 *C.* 1902 [2] 696).  
 2) Disulfid d. Äthylphenylamidodithioameisensäure (Diäthylidiphenylthiuramdisulfid). Sm. 169—170° (*B.* 35, 821 *C.* 1902 [1] 712; *B.* 36, 2274 *C.* 1903 [2] 563).
- C<sub>18</sub>H<sub>20</sub>N<sub>3</sub>Cl** 1) Chlormethylat d. 5-Amido-3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 217°. 2 + PtCl<sub>4</sub> (*A.* 339, 161 *C.* 1905 [1] 1401).  
 2) Chlormethylat d. 5-Benzylamido-3-Methyl-1-Phenylpyrazol. 2 + PtCl<sub>4</sub>, + AuCl<sub>3</sub> (*A.* 339, 172 *C.* 1905 [1] 1402).
- C<sub>18</sub>H<sub>20</sub>N<sub>3</sub>J** 1) Jodmethylat d. 5-Amido-3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 182° (*A.* 339, 161 *C.* 1905 [1] 1401).  
 2) Jodmethylat d. 5-Benzylamido-3-Methyl-1-Phenylpyrazol. Sm. 159° (*A.* 339, 173 *C.* 1905 [1] 1402).  
 3) 2-Jodmethylat d. 5-Methylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 194° (*B.* 36, 3277 *C.* 1903 [2] 1189).
- C<sub>18</sub>H<sub>20</sub>N<sub>4</sub>S** 1) 1,2-Di[ $\beta$ -Allylthioureido]naphtalin. Zers. bei 200° (*B.* 19, 808). — IV, 919.  
 2) 3,5-Diimido-2,4-Di[2,4-Dimethylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 79°. (2HCl, PtCl<sub>4</sub>), Pikrat, + AgNO<sub>3</sub> (*B.* 23, 368). — IV, 1236; \*IV, 902.
- C<sub>18</sub>H<sub>20</sub>N<sub>4</sub>S<sub>2</sub>** 1) 3,6-Di[Äthylphenylamido]-1,2,4,5-Dithiodiazin. Sm. 86°. 2HCl (*B.* 39, 1015 *C.* 1906 [1] 1413).
- C<sub>18</sub>H<sub>21</sub>ON** C 80,9 — H 7,9 — O 6,0 — N 5,2 — M. G. 267.  
 1) Methyläther d. 5-Oxy-4-Isopropyl-2-Phenylimidomethyl-1-Methylbenzol. Sm. 80° (*B.* 16, 2099). — III, 90.  
 2) Äthyläther d. Allylbenzyl-4-Oxyphenylamin. Sd. 238—240°<sub>35</sub>. Pikrat (*B.* 40, 1004 *C.* 1907 [1] 1251).



- C<sub>18</sub>H<sub>21</sub>ON**
- 3)  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylhexan. Sm. 88° (*Bl.* [3] 33, 161 *C.* 1905 [1] 601).
  - 4)  $\varepsilon$ -Phenylamido- $\gamma$ -Keto- $\varepsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 119—120° (*Bl.* [3] 33, 396 *C.* 1905 [1] 1317).
  - 5)  $\alpha$ -[2,4-Dimethylphenyl]amidopropylphenylketon. Sm. 106—107° (*Bl.* [3] 17, 78). — \*III, 118.
  - 6)  $\varepsilon$ -Oximido- $\delta\varepsilon$ -Diphenyl- $\beta$ -Methylpentan. Sm. 118° (*B.* 21, 1299). — III, 239.
  - 7)  $\gamma$ -Oximido- $\varepsilon\varepsilon$ -Diphenyl- $\beta$ -Methylpentan. Sm. 99° (*Am.* 38, 536 *C.* 1908 [1] 227).
  - 8) isom.  $\gamma$ -Oximido- $\varepsilon\varepsilon$ -Diphenyl- $\beta$ -Methylpentan. Sm. 151° (*Am.* 38, 536 *C.* 1908 [1] 227).
  - 9)  $\alpha$ -Oximido- $\alpha\gamma$ -Diphenyl- $\gamma$ -Methylpentan. Sd. 222°<sub>15</sub> (*Am.* 38, 557 *C.* 1908 [1] 229).
  - 10) Cyanbenzylcampher. Sm. 58—59° (*B.* 24 [2] 733). — III, 514.
  - 11) 2-[ $\beta$ -4-Oxyphenyläthyl]-6-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 101—102°. Pikrat (*B.* 38, 3703 *C.* 1908 [1] 51).
  - 12) Methyläther d.  $\alpha$ -[4-Oxyphenyl]- $\beta$ -[1,2,3,4-Tetrahydro-2-Chinoly]-äthan. Sm. 71°. HCl (*B.* 35, 2787 *C.* 1902 [2] 994). — \*IV, 241.
  - 13) 1- $\alpha$ -Phenyläthylamid d. d- $\beta$ -Phenylisobuttersäure. Sm. 119—122,5° (*Soc.* 85, 448 *C.* 1904 [1] 1445).
  - 14) 4-Isocamphenylamid d. Benzolcarbonsäure. Sm. 148,5° (147°) (*B.* 14, 2346; 15, 1644; 20, 1259; 34, 3680). — II, 1167.
  - 15) 4-tert. Amylphenylamid d. Benzolcarbonsäure. Sm. 158—159° (*B.* 34, 3680; *A.* 327, 223 *C.* 1903 [1] 1408).
  - 16) 2-Methyl-6-Isobutylphenylamid d. Benzolcarbonsäure. Sm. 141 bis 142° (*B.* 17, 2340). — II, 1167.
  - 17) 2-Methyl-4-Pseudobutylphenylamid d. Benzolcarbonsäure. Sm. 168° (*B.* 17, 2322). — II, 1167.
  - 18) 2-Naphtylamid d.  $\beta$ -Hepten- $\delta$ -Carbonsäure. Sm. 117° (*C.* 1907 [2] 293).
  - 19) 2-Naphtylamid d. lab.  $\gamma$ -Hepten- $\delta$ -Carbonsäure. Sm. 104° (*C.* 1907 [2] 293).
  - 20) 2-Naphtylamid d. stab.  $\gamma$ -Hepten- $\delta$ -Carbonsäure. Sm. 89° (*C.* 1907 [2] 293).
- C<sub>18</sub>H<sub>21</sub>ON<sub>3</sub>**
- C 73,2 — H 7,1 — O 5,4 — N 14,2 — M. G. 295.
  - 1)  $\beta$ -Semicarbazon- $\alpha\alpha$ -Di[2-Methylphenyl]propan. Sm. 152° (*B.* 39, 2305 *C.* 1906 [2] 525).
  - 2)  $\beta$ -Semicarbazon- $\alpha\alpha$ -Di[4-Methylphenyl]propan. Sm. 172° (*B.* 39, 2304 *C.* 1906 [2] 525).
  - 3)  $\alpha$ -Nitroso- $\beta$ -[2,4-Dimethylbenzyliden]- $\alpha$ -[2,4-Dimethylbenzyl]-hydrazin. Sm. 68° (*J. pr.* [2] 62, 117, 120). — \*IV, 546.
  - 4) 2-Methylphenylazocycancampher. Sm. 140° u. Zers. — IV, 1482.
  - 5) 4-Methylphenylazocycancampher. Sm. 137°. — IV, 1482.
  - 6) 4'-Diäthylamido-4-Acetylazobenzol. Sm. 162—163° (*C.* 1909 [2] 524).
  - 7) Nitril d.  $\alpha$ -[4-Äthoxylphenyl]amido- $\alpha$ -[4-Dimethylamidophenyl]-essigsäure. Sm. 100° (*B.* 35, 3574 *C.* 1902 [2] 1384).
- C<sub>18</sub>H<sub>21</sub>OCI**
- 1)  $\alpha$ -Chlor- $\beta$ -Oxy- $\alpha\alpha$ -Di[ $\beta$ -Methylphenyl]- $\beta$ -Methylpropan. Sd. 265° (*J. pr.* [2] 37, 369). — II, 1081.
- C<sub>18</sub>H<sub>21</sub>O<sub>2</sub>N**
- C 76,3 — H 7,4 — O 11,3 — N 4,9 — M. G. 283.
  - 1) 4-Methyläther d.  $\alpha$ -Oximido- $\gamma$ -[4-Oxyphenyl]- $\alpha$ -Phenylpentan. Sm. 92° (*Am.* 38, 551 *C.* 1908 [1] 229).
  - 2) 4-Methyläther d.  $\alpha$ -Oximido- $\alpha$ -[4-Oxyphenyl]- $\gamma$ -Phenylpentan. Sm. 72° (*Am.* 38, 551 *C.* 1908 [1] 229).
  - 3) Methyläther d. 4-Diäthylamido-3'-Oxydiphenylketon. Sm. 120—121° (*D.R.P.* 65952). — \*III, 153.
  - 4) 3-Oxy- $\beta$ -Benzoylamidomethyl-1-Methyl-4-Isopropylbenzol. Sm. 168 bis 169° (*A.* 343, 234 *C.* 1906 [1] 924).
  - 5) Methyläther d.  $\alpha$ -Acetylphenylamido- $\alpha$ -[6-Oxy-3-Methylphenyl]-äthan. Fl. (*B.* 40, 3473 *C.* 1907 [2] 1332).
  - 6) Phenyläther d.  $\varepsilon$ -Benzoylamido- $\alpha$ -Oxypentan. Sm. 89° (*B.* 38, 171 *C.* 1905 [1] 507).
  - 7)  $\alpha$ -[3-Methoxyl-4-Oxyphenyl]- $\beta$ -[1,2,3,4-Tetrahydro-2-Chinoly]-äthan. Sm. 88°. HCl (*B.* 27, 1976). — IV, 402.

- C<sub>18</sub>H<sub>21</sub>O<sub>2</sub>N** 8) Dimethylketenchinaldin. Sm. 119,5—120,5° (B. 40, 1151 C. 1907 [1] 1260).
- 9) Desoxycodein +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 126° (wasserfrei). HCl, HBr (J. 1871, 778; B. 40, 377 C. 1907 [1] 741; B. 40, 3352 C. 1907 [2] 921; B. 40, 3863 C. 1907 [2] 1632; B. 40, 4887 C. 1908 [1] 387). — III, 907.
- 10) 4-Diäthylamidodiphenylmethan-2'-Carbonsäure. Sm. 108° (C. 1898 [1] 1296; Bl. [3] 25, 202). — \*II, 869.
- 11) Äthylester d.  $\alpha$ -Phenylbenzylamidopropionsäure. HCl (B. 31, 2673).
- 12) Äthylester d.  $\alpha$ -Äthylphenylamidophenyllessigsäure. Sm. 38,5 bis 39,5° (B. 30, 3179). — \*II, 820.
- 13) Äthylester d. Phenyl-2,4-Dimethylphenylamidoessigsäure. Sm. 90,5° (B. 30, 2477). — \*II, 821.
- 14) 4-Methylphenylester d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 122° (B. 34, 1850).
- 15) Benzoat d.  $\gamma$ -Dimethylamido- $\alpha$ -Oxy- $\alpha$ -Phenylpropan. Sm. 108°. HCl (C. 1905 [1] 233; 1907 [2] 1087).
- 16) Benzoat d.  $\gamma$ -Dimethylamido- $\beta$ -Oxy- $\alpha$ -Phenylpropan. Fl. HCl (C. 1905 [1] 233).
- 17) Benzoat d.  $\gamma$ -Dimethylamido- $\alpha$ -Oxy- $\beta$ -Phenylpropan. HCl (C. 1905 [1] 233).
- 18) Benzoat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Phenylpropan. HCl (C. r. 138, 768 C. 1904 [1] 1196; D.R.P. 169 746 C. 1906 [1] 1585).
- 19) Benzoat d. 2-Diäthylamido-4-Oxy-1-Methylbenzol. Sm. 36° (C. 1902 [2] 378).
- 20) 2-Methylbenzoat d. d-Carvoxim (Ph. Ch. 14, 404). — III, 114; \*III, 85.
- 21) 3-Methylbenzoat d. d-Carvoxim (Ph. Ch. 14, 404). — III, 114; \*III, 85.
- 22) 4-Methylbenzoat d. d-Carvoxim (Ph. Ch. 14, 404). — III, 114; \*III, 85.
- 23) Phenylacetat d. d-Carvoxim (Ph. Ch. 14, 404). — III, 114; \*III, 85.
- 24) Phenylamidoformiat d.  $\beta$ -Oxy- $\delta$ -Phenyl- $\beta$ -Buten. Sm. 143—144° (B. 37, 2314 C. 1904 [2] 217).
- 25) Phenylamidoformiat d. 5-[ $\alpha$ -Oxyäthyl]-1,2,4-Trimethylbenzol. Sm. 108° (B. 31, 1006). — \*II, 650.
- 26) Phenylamidoformiat d. 2-[ $\alpha$ -Oxyäthyl]-1,3,5-Trimethylbenzol. Sm. 124° (B. 31, 1009). — \*II, 650.
- 27) Phenylamid d. 5-Oxy-4-Isopropyl-1-Methylbenzolmethyläther-2-Carbonsäure. Sm. 166° (J. pr. [2] 41, 315). — II, 1589.
- 28) Phenylamid d. Oxyessig-4-tert. Butylphenyläthersäure. Sm. 97° (Am. 19, 73). — \*II, 458.
- 29) Phenylamid d. Oxyessig-3-Methyl-6-Isopropylphenyläthersäure. Sm. 81° (Bl. [3] 17, 360). — \*II, 464.
- 30) 2-Methylphenylamid d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 116 bis 117° (B. 34, 1847).
- 31) 3-Methylphenylamid d.  $\alpha$ -Oxyisovalerianphenyläthersäure. Sm. 89 bis 90° (B. 34, 1848).
- C<sub>18</sub>H<sub>21</sub>O<sub>2</sub>N<sub>8</sub>** C 69,4 — H 6,8 — O 10,3 — N 13,5 — M. G. 311.
- 1) 5-Dimethylamido-2,4'-Di[Acetylamid]biphenyl. Sm. 233° (A. 303, 356). — \*IV, 822.
- 2) Äthyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[5-Acetylamido-2-Oxyphenyl]-äthan. Zers. bei 180° (B. 34, 127). — \*IV, 503.
- 3) Nitroso- $\delta$ -Cinchonin (M. 22, 166). — \*III, 641.
- 4) Mono[4-Methylphenyl]diamid d. 4-Methylphenylimidodiessigsäure. Sm. 209° (B. 25, 2288). — II, 507.
- 5) Di[2-Methylphenylamid] d. Imidodiessigsäure. Sm. 155° (D.R.P. 59 121). — \*II, 251.
- 6) Di[3-Methylphenylamid] d. Imidodiessigsäure. Sm. 150,5° (D.R.P. 59 121). — \*II, 261.
- 7) Di[4-Methylphenylamid] d. Imidodiessigsäure. Sm. 149,5° (150,5°; 107°) (B. 8, 1155; D.R.P. 59 121, 59 874). — II, 493; \*II, 270.
- C<sub>18</sub>H<sub>21</sub>O<sub>2</sub>N<sub>5</sub>** C 63,7 — H 6,2 — O 9,4 — N 20,6 — M. G. 339.
- 1)  $\beta$ -Methyl- $\alpha$ -Phenylhydrazid d.  $\alpha$ -Methoximido- $\beta$ -Phenylhydrazonbuttersäure. Zers. bei 208° (A. 328, 69 C. 1903 [2] 249). — \*IV, 462.
- C<sub>18</sub>H<sub>21</sub>O<sub>3</sub>N** C 72,2 — H 7,0 — O 16,0 — N 4,7 — M. G. 299.
- 1) 3-Oxy-P-[2-Oxybenzoylamido]methyl-1-Methyl-4-Isopropylbenzol. Sm. 170—172° (A. 343, 261 C. 1906 [1] 925).

- $C_{18}H_{21}O_3N$  2) 4,4'-Diäthyläther d.  $\alpha$ -Oximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 119° (A. 279, 343). — III, 227.
- 3) Methylpiperin (3,4-Methylenäther d.  $\epsilon$ -Keto- $\epsilon$ -Piperidyl- $\alpha$ -[3,4-Dioxyphenyl]- $\delta$ -Methyl- $\alpha\gamma$ -Pentadien). Sm. 125—126° (B. 28, 1195). — IV, 17.
- 4) d-Bebeerin. Sm. 214° (Ar. 244, 557 C. 1907 [1] 354).
- 5) l-Bebeerin (Bebirin; Buxin; Pelosin). Amorph. Sm. 180° (214°); kryst. Sm. 214°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>CrO<sub>4</sub> + H<sub>2</sub>O (A. 33, 81; 48, 111; 55, 105; 69, 53; 77, 333; B. 29, 2054; J. 1858, 375; 1860, 548; 1869, 738, 739; 1871, 771, 777; G. 12, 97; C. 1899 [1] 1245; M. 18, 385; Ar. 244, 555 C. 1907 [1] 354). — III, 797; \*III, 621.
- 6) r-Bebeerin. Sm. 300° (Ar. 244, 557 C. 1907 [1] 354).
- 7) Codein + H<sub>2</sub>O (Methyläther d. Morphin). Sm. 153° (155° wasserfrei); Sd. 179°. Salze meist bekannt. Lit. bedeutend. — III, 901; \*III, 671.
- 8)  $\alpha$ -Isocodein (aus  $\alpha$ -Isomorphin). Sm. 171—172°. Oxalat (Soc. 91, 1416 C. 1907 [2] 1250; B. 40, 4888 C. 1908 [1] 387; B. 40, 4889 C. 1908 [1] 387; B. 41, 972 C. 1908 [1] 1708).
- 9)  $\beta$ -Isocodein (Allopseudocodein). Fl. HJ, Oxalat (Soc. 91, 1415 C. 1907 [2] 1250; B. 40, 3848 C. 1907 [2] 1631; B. 40, 4888 C. 1908 [1] 387; B. 41, 974 Anm. C. 1908 [1] 1708).
- 10) isom. Isocodein (aus Dihydrothebain). Sm. 70—80° (B. 32, 196). — \*III, 677.
- 11) Pseudocodein + H<sub>2</sub>O (Neoisocodein). Sm. 178—180° (181—182°). HCl, (2HCl + 3HgCl<sub>2</sub> + 1 $\frac{1}{2}$  H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub> + 3H<sub>2</sub>O), HBr + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Pikrat (B. 24 [2] 643; B. 39, 4409 C. 1907 [1] 353; Soc. 91, 1415 C. 1907 [2] 1250; B. 41, 972 C. 1908 [1] 1708; B. 41, 980 C. 1908 [1] 1709; A. 368, 309 C. 1909 [2] 1661). — III, 906.
- 12) Thebainon (Dihydrocodeinon). Sm. 89—90°. + CH<sub>3</sub>O (Sm. 115—118°). Na (B. 38, 3163 C. 1905 [2] 1441; B. 38, 3171 C. 1905 [2] 1442).
- 13)  $\beta$ -Morphimethin. HCl + H<sub>2</sub>O (B. 32, 2379). — \*III, 669.
- 14) Methylhydroxyd d. Apomorphin. Chlorid, Bromid (D.R.P. 158620 C. 1905 [1] 702).
- 15) 4-Diäthylamido-2-Oxydiphenylmethan-2'-Carbonsäure. Sm. 188° (194°) (Bl. [3] 19, 830; [3] 25, 204; C. 1898 [1] 1296). — \*II, 996.
- 16) 4-Keto-2,6-Dimethyl-1-[2,3,4,6-Tetramethylphenyl]-1,4-Dihydropyridin-3-Carbonsäure. Sm. 145° (B. 21, 1656). — II, 562.
- 17) Phenylamidocamphoformencarbonsäure. Sm. 174° u. Zers. Anilinsalz (Am. 21, 249). — \*II, 219.
- 18) 4-Oxyphenylcamphoformenamincarbonsäure. Sm. 178° u. Zers. (Am. 39, 283 C. 1908 [1] 1182).
- 19) Pinenphtalamidsäure. Sm. 109—111° (G. 21, 2). — IV, 77.
- 20) Äthylester d. 3-Benzoyl-2,4,6-Trimethyl-1,4-Dihydropyridin-5-Carbonsäure. Sm. 186—187° (B. 24, 1667). — IV, 90.
- 21) Äthylester d. 5-Acetyl-2,6-Dimethyl-4-Phenyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 167°; Sd. 210—230°<sub>25-30</sub> (B. 31, 1027). — \*IV, 217.
- 22) 4-Methoxybenzoat d.  $\beta$ -Dimethylamido- $\alpha$ -[4-Oxyphenyl]äthan. HCl + H<sub>2</sub>O (C. r. 144, 210 C. 1907 [1] 1055).
- 23)  $\alpha$ -Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[3-Oxyphenyl]butan-3-Methyläther. Sm. 63—64° (B. 37, 3999 C. 1904 [2] 1641).
- 24)  $\alpha$ -Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[4-Oxyphenyl]propan-4-Äthyläther. Sm. 82° (B. 35, 2264 C. 1902 [2] 276).
- 25)  $\alpha$ -Phenylamidoformiat d. 5-Oxy-2-[ $\alpha$ -Oxypropyl]-1-Methylbenzol-5-Methyläther. Sm. 94—95° (B. 37, 3994 C. 1904 [2] 1640).
- 26)  $\alpha$ -Phenylamidoformiat d. 4-Oxy-3-[ $\alpha$ -Oxypropyl]-1-Methylbenzol-4-Methyläther. Sm. 91° (B. 37, 3995 C. 1904 [2] 1640).
- 27)  $\alpha$ -Phenylamidoformiat d. 6-Oxy-3-[ $\alpha$ -Oxypropyl]-1-Methylbenzol-6-Methyläther. Sm. 78° (B. 37, 3992 C. 1904 [2] 1640).
- 28)  $\alpha$ -Phenylamidoformiat d. 2-Oxy-1-[ $\alpha$ -Oxypropyl]benzol-2-Äthyläther. Sm. 95—96° (B. 37, 3989 C. 1904 [2] 1639).
- 29) 2-Naphtylmonamid d. fum. Hexan- $\gamma\delta$ -Dicarbonsäure. Sm. 202 bis 203° (A. 309, 340). — \*II, 340.
- 30) 2-Naphtylmonamid d. mal. Hexan- $\gamma\delta$ -Dicarbonsäure. Sm. 145—146° (A. 309, 340). — \*II, 340.
- 31) Verbindung (aus Formylcampher u. Phenylisocyanat). Sm. 138° (B. 38, 46 C. 1905 [1] 603).



- $C_{18}H_{21}O_3N_3$  C 66,1 — H 6,4 — O 14,7 — N 12,8 — M. G. 327.  
 1) Äthyläther d.  $\alpha$ -[2-Methylphenyl]amidoacetyl- $\beta$ -[4-Oxyphenyl]harnstoff. Sm. 183° (C. 1899 [2] 420). — \*II, 405.  
 2) Äthyläther d.  $\alpha$ -[4-Methylphenyl]amidoacetyl- $\beta$ -[4-Oxyphenyl]harnstoff. Sm. 172° (C. 1899 [2] 420). — \*II, 405.
- $C_{18}H_{21}O_3N_5$  C 60,9 — H 5,9 — O 13,5 — N 19,7 — M. G. 355.  
 1) Phenylamido-4-Nitrophenylhydrazonmethyläther d. 1-Oxyhexahydropyridin. Sm. 211° (B. 37, 3237 C. 1904 [2] 1153).
- $C_{18}H_{21}O_3Br$  1) Verbindung (aus Dicyklopentadiënbenzochinon). Sm. 142° (A. 348, 49 C. 1906 [2] 770).
- $C_{18}H_{21}O_4N$  C 68,6 — H 6,7 — O 20,3 — N 4,4 — M. G. 315.  
 1) Tetramethyläther d.  $\beta$ -Oximido- $\alpha$ -Dioxy- $\alpha$ -[4-Oxyphenyl]- $\beta$ -Phenyläthan. Sm. 82–83° (A. 355, 288 C. 1907 [2] 1624).  
 2) d-Cinnamylecgonin. Fl. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (B. 24, 8). — III, 869.  
 3) l-Cinnamylecgonin. Sm. 216° u. Zers. (HCl, AuCl<sub>3</sub>) (B. 21, 3373). — III, 868.  
 4)  $\delta$ -Isatropylecgonin ( $\beta$ -Truxillecgonin). Sm. 202° u. Zers. (HCl, AuCl<sub>3</sub>) (B. 22, 680). — III, 869.  
 5) Oxycodoin. Sm. 207–208°. Pikrat, Pikrolonat (B. 36, 3068 C. 1903 [2] 953; B. 39, 1415 C. 1906 [1] 1663).  
 6) Benzoylmezcalin. Sm. 120,5° (B. 34, 3011). — \*III, 601.  
 7) Base (aus Protopin). Sm. 148° (M. 19, 198).  
 8) Diäthylester d. 1-Naphtylamidobernsteinsäure. Sm. 150° (B. 25, 965). — II, 614.  
 9) Diäthylester d. 2-Naphtylamidobernsteinsäure. Sd. 108°<sub>18–20</sub> u. Zers. (B. 25, 970). — II, 622.  
 10) Diäthylester d. 2,5-Dimethyl-1-Phenylpyrrol-3,4-Dicarbonsäure. Sm. 37–38°; Sd. 280°<sub>500</sub> (B. 18, 303; A. 236, 305). — IV, 92.  
 11) 4-Äthoxyphenylamidoformiat d. 3,4-Dioxy-1-Propylbenzol. Sm. 122° (C. r. 138, 425 C. 1904 [1] 798).  
 12) saures Phtalat d. Campherloxim. Sm. 135,5° u. Zers. (Am. 21, 474). — \*III, 366.  
 13) 4-Äthoxyphenylamid d.  $\alpha$ -Oxypropion-2-Methoxyphenyläthersäure. Sm. 96,5° (B. 33, 1394). — \*II, 553.  
 14) 4-Äthoxyphenylamid d. Oxyessig-2-Methoxy-4-Methylphenyläthersäure. Sm. 80–82° (D. R. P. 83538). — \*II, 580.
- $C_{18}H_{21}O_4N_3$  C 63,0 — H 6,1 — O 18,6 — N 12,2 — M. G. 343.  
 1) Isobutylidi[2-Nitrobenzyl]amin. Sm. 62° (HCl, AuCl<sub>3</sub>) (B. 26, 2586). — II, 521.  
 2) Di[3-Methoxyphenylamid] d. Imidodiessigsäure. Sm. 116° (D. R. P. 59121). — \*II, 395.  
 3) Di[4-Methoxyphenylamid] d. Imidodiessigsäure. Sm. 142° (D. R. P. 59121). — \*II, 403.
- $C_{18}H_{21}O_5N$  C 65,3 — H 6,3 — O 24,2 — N 4,2 — M. G. 331.  
 1) 3<sup>3</sup>-Methyläther d. 1-Oximido-2,4-Diacetyl-5-Methyl-3-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 223–224° (B. 37, 4481 C. 1905 [1] 247).  
 2)  $\alpha\beta^2$ -Lakton d.  $\alpha\beta$ -Dioxy- $\beta$ -Phenylpropionyltropein- $\beta^2$ -Carbonsäure. Sm. 172–173°. HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), HBr + H<sub>2</sub>O, HJ, HNO<sub>3</sub>, Pikrat (Soc. 91, 94 C. 1907 [1] 1137).  
 3) Diäthylester d.  $\alpha$ -Phenylamido- $\alpha$ -[2-Furanyl]äthan- $\beta\beta$ -Dicarbonsäure (D. d. Anilidofurylmalonsäure). Sm. 72–73° (B. 28, 1455). — III, 718.  
 4) Diäthylester d. 2-Keto-6-Methyl-4-Phenyl-1,2,3,4-Tetrahydropyridin-3,5-Dicarbonsäure. Sm. 149,5–150° (B. 31, 763). — \*IV, 221.  
 5) Verbindung (aus d. Diäthyläther d. 4-Amido-1,3-Dioxybenzol). Sm. 170° (B. 20, 1129). — II, 929.
- $C_{18}H_{21}O_6N$  C 62,3 — H 6,0 — O 27,7 — N 4,0 — M. G. 347.  
 1) 3,4,5,3',4'-Pentamethyläther d.  $\alpha$ -Oximido-3,4,5,3',4'-Pentaoxydi-phenylmethan. Sm. 143° (Soc. 89, 1664 C. 1907 [1] 408).  
 2) Diäthylester d.  $\delta$ -Phtalylamidobutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 46 bis 48° (B. 23, 1768). — II, 1812.

- $C_{18}H_{21}O_6N$  3)  $\alpha$ -Phenylamid d.  $\delta$ -Keto- $\alpha$ -Penten- $\alpha\gamma$ -Tricarbonsäure- $\alpha\gamma$ -Diäthylester. Sm. 188° (*Soc.* 93, 1031 *C.* 1908 [2] 524).
- 4) Phenylimid d. d-Diisobutyrylweinsäure. Sm. 96—97° (*C.* 1908 [2] 2005).
- 5) Verbindung (aus 1,3,5-Trioxylbenzyltrimethyläther). +  $C_2H_5O$ ,  $HNO_3$  (*Ar.* 242, 511 *C.* 1904 [2] 1386).
- $C_{18}H_{21}O_6N_6$  C 53,6 — H 5,2 — O 23,8 — N 17,4 — M. G. 403.
- 1)  $\beta$ -Trinitro- $\alpha\beta$ -Di[2,4-Dimethylphenylamido]äthan. Sm. 191—192° (*Soc.* 79, 256).
- $C_{18}H_{21}O_6N_{13}$  C 42,0 — H 4,1 — O 18,6 — N 35,3 — M. G. 515.
- 1)  $\alpha$ -Nitro- $\alpha\alpha$ -Di[Kaffeinäzo]äthan. Sm. 218—219° (*Am.* 23, 68). — \*IV, 1086.
- $C_{18}H_{21}O_6Cl_9$  1) Verbindung (aus  $\alpha$ -Benzolhexachlorid) (*J.* 1862, 482).
- $C_{18}H_{21}O_7N$  C 59,5 — H 5,8 — O 30,9 — N 3,8 — M. G. 363.
- 1) 3,4,3',4',5'-Pentamethyläther d.  $\alpha$ -Oximido-2,3,4,3',4',5'-Hexaoxydiphenylketon. Sm. 178—179° (*Soc.* 89, 1665 *C.* 1907 [1] 408).
- $C_{18}H_{21}O_7N_3$  C 55,2 — H 5,4 — O 28,6 — N 10,7 — M. G. 391.
- 1) Hexacetylderivat d. 2,4,6-Triamido-1-Oxybenzol. Sm. 184° (*M.* 16, 261). — \*II, 415.
- $C_{18}H_{21}O_8N$  C 57,0 — H 5,5 — O 33,8 — N 3,7 — M. G. 379.
- 1) Triacetat d. 5-Diacetyl-amido-2,4,6-Trioxyl-1,3-Dimethylbenzol. Sm. 169° (*M.* 21, 7). — \*II, 623.
- $C_{18}H_{21}O_8N_3$  C 53,1 — H 5,2 — O 31,4 — N 10,3 — M. G. 407.
- 1) Diäthylester d.  $\gamma$ -[4-Nitrophenyl]azo- $\beta\epsilon$ -Diketohehexan- $\gamma\delta$ -Dicarbonsäure. Sm. 153° (*B.* 40, 2410 *C.* 1907 [2] 320).
- $C_{18}H_{21}O_{18}N_{11}$  C 21,6 — H 2,1 — O 60,9 — N 15,4 — M. G. 999.
- 1) Undekanitrat d. Raffinose. Sm. 55—65° (*B.* 31, 85). — \*I, 583.
- $C_{18}H_{21}N_2Cl$  1) 1-Chloräthylat d. 5-Methyl-1-Äthyl-2-Phenylbenzimidazol. HCl, 2 +  $PtCl_4$  (*A.* 210, 374). — IV, 1014.
- $C_{18}H_{21}N_2Cl_3$  1) Verbindung (aus Chloral u. Xylidin). Sm. 95—99° (*A.* 173, 283). — II, 548.
- $C_{18}H_{21}N_2Br_3$  1)  $\beta$ -Tribrom- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]äthan (*Bl.* [3] 23, 24).
- $C_{18}H_{21}N_2J$  1) 1-Jodäthylat d. 5-Methyl-1-Äthyl-2-Phenylbenzimidazol. +  $J_2$  (Sm. 128—129°) (*A.* 210, 373). — IV, 1014.
- $C_{18}H_{21}N_2J_3$  1)  $\beta$ -Trijod- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]äthan (*Bl.* [3] 23, 24).
- $C_{18}H_{21}N_3S$  1) 2-[1-Piperidyl]diphenylthioharnstoff. Sm. 174° (*B.* 24, 2103). — IV, 560.
- $C_{18}H_{21}N_3S_2$  1) Äthyläther d.  $\alpha$ -[ $\beta$ -2-Methylphenylthioureido]- $\alpha$ -[2-Methylphenyl]-imido- $\alpha$ -Merkaptomethan. Sm. 86—87° (*Am.* 30, 181 *C.* 1903 [2] 873).
- 2) Dimethyläthylidiphenyldithiobiuret. Sm. 98,8° (*B.* 26, 1686; *B.* 37, 4323 *C.* 1905 [1] 165). — II, 400.
- 3)  $\alpha$ -Dimethyläthylidiphenylpseudodithiobiuret. Sm. 91,6—92° (*B.* 26, 1688; *B.* 37, 4323 *C.* 1905 [1] 165). — II, 400.
- 4)  $\beta$ -Dimethyläthylidiphenylpseudodithiobiuret. Sm. 95° (*B.* 26, 1688; *B.* 37, 4323 *C.* 1905 [1] 165). — II, 400.
- $C_{18}H_{21}N_4Cl$  1) Chlormethylat d. 5-[ $\beta$ -Methyl- $\beta$ -Phenylhydrazido]-3-Methyl-1-Phenylpyrazol. 2 +  $PtCl_4$  (*B.* 42, 2768 *C.* 1909 [2] 625).
- $C_{18}H_{21}N_4Br_3$  1) 2,4,5,2',4',5'-Hexamethyl-6-Diazoazobenzoltribromid. Sm. 122—124° (*B.* 21, 546). — IV, 1534.
- $C_{18}H_{21}N_4J$  1) Jodmethylat d. 5-[ $\alpha$ -Methyl- $\beta$ -Phenylhydrazido]-3-Methyl-1-Phenylpyrazol. Sm. 201° (*B.* 42, 2767 *C.* 1909 [2] 625).
- $C_{18}H_{21}ClJ_2$  1)  $\beta$ -Joddi[4-Propylphenyl]jodoniumchlorid. Zers. bei 43°. +  $HgCl_2$ , 2 +  $PtCl_4$  (*A.* 327, 316 *C.* 1903 [2] 354).
- 2)  $\beta$ -Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumchlorid. Sm. 157° u. Zers. 2 +  $PtCl_4$  (*J. pr.* [2] 69, 443 *C.* 1904 [2] 590).
- $C_{18}H_{21}BrJ_2$  1)  $\beta$ -Joddi[4-Propylphenyl]jodoniumbromid. Sm. 45° (*A.* 327, 316 *C.* 1903 [2] 354).
- 2)  $\beta$ -Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumbromid. Sm. 151° (*J. pr.* [2] 69, 443 *C.* 1904 [2] 589).
- $C_{18}H_{22}ON_2$  C 76,6 — H 7,8 — O 5,7 — N 9,9 — M. G. 282.
- 1) Di[ $\alpha$ -Phenylpropyl]nitrosamin. Sm. 74° (*J. pr.* [2] 77, 11 *C.* 1908 [1] 629).
- 2) Di[2,4-Dimethylbenzyl]nitrosamin. Sm. 73° (*J. pr.* [2] 62, 116). — \*II, 317.

- $C_{18}H_{22}ON_2$
- 3) 4-[4-Dimethylamidophenyl]imido-1-Keto-3-Methyl-6-Propyl-1,4-Dihydrobenzol (*Bl.* [3] 13, 896).
  - 4) 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol. Sm. 87–88° (*Bl.* [3] 11, 1135). — III, 365; \*III, 271.
  - 5) 4-[4-Dimethylamidophenyl]imido-1-Keto-3-Methyl-6-Isopropyl-1,4-Dihydrobenzol. Sm. 69,5° (*Bl.* [3] 7, 97; [3] 11, 1135). — III, 365; \*III, 271.
  - 6)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Isopropylbenzyl]harnstoff. Sm. 150° (*B.* 22, 932). — II, 561.
  - 7) Äthyläther d. 8-[4-Amidophenyl]amido-5-Oxy-1,2,3,4-Tetrahydro-naphtalin. Sm. 87–88° (*B.* 31, 904). — \*IV, 382.
  - 8) Äthyläther d. 8-Amido-7-Phenylamido-5-Oxy-1,2,3,4-Tetrahydro-naphtalin. Sm. 168–169° (*B.* 31, 901). — \*II, 499.
  - 9) Propyläther d. 2-Methylphenylimido-2-Methylphenylamidooxymethan. Sd. 212–214°<sub>14</sub> (*C.* 1899 [1] 829). — \*II, 253.
  - 10) Propyläther d. 4-Methylphenylimido-4-Methylphenylamidooxymethan. Sd. 221°<sub>18</sub> (*C.* 1899 [1] 830). — \*II, 272.
  - 11) Isoamyläther d. Phenylimidophenylamidooxymethan. Sd. 210°<sub>15</sub> (*C.* 1899 [1] 830). — \*II, 188.
  - 12)  $\gamma$ -Phenylhydrazon- $\alpha$ -[2-Oxyphenyl]hexan. Sm. 149–150° (*B.* 29, 377). — IV, 773.
  - 13) 2,4,5,2',4',5'-Hexamethylazoxybenzol. Sm. 66° (*B.* 42, 3607 *C.* 1909 [2] 1845).
  - 14) Oxyhexamethylazobenzol. Sm. 147–148° (*B.* 17, 885). — IV, 1425.
  - 15) Äthyläther d. 3-[ $\beta$ -Oxypropyl]-1,2-Diphenyl-1,2-Dihydro-R-Azimethylen. Sm. 67–68° (*J. pr.* [2] 64, 158). — \*IV, 1089.
  - 16) 1-Äthylhydroxyd d. 5-Methyl-1-Äthyl-2-Phenylbenzimidazol. Sm. 152–153°. Chlorid, 2Chlorid + PtCl<sub>4</sub>, Jodid, Jodid + J<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (*A.* 210, 375). — IV, 1014.
  - 17) 5-Keto-2-Methyl-1-Phenyl-2,3-Dihydro-4,5-Camphopyrazol. Sm. 182–183° (*B.* 32, 1990). — \*IV, 576.
  - 18) 3-Keto-1-Methyl-2-Phenyl-2,3-Dihydro-4,5-Camphopyrazol. Sm. 193° (*B.* 32, 1991). — \*IV, 576.
  - 19)  $\delta$ -Cinchonin. Sm. 150° (144°; 141°). HCl + 1½ H<sub>2</sub>O, HBr, 2HJ (*C. r.* 118, 29; *M.* 19, 467, 472; 20, 440, 574; 22, 160). — \*III, 640.
  - 20) Base (aus Hydrojodcinchonin). HJ (*M.* 22, 167).
  - 21) Phenylamid d.  $\alpha$ -Phenylamidopentan- $\beta$ -Carbonsäure. Sm. 118,5° (*Bl.* [3] 33, 776 *C.* 1905 [2] 541).
  - 22) Benzylamid d.  $\beta$ -Benzylamidobuttersäure. Sm. 115–116° (*C.* 1906 [2] 430).
  - 23) 4-Methylphenylamid d.  $\beta$ -[4-Methylphenyl]amidobuttersäure. Sm. 101° (*J. pr.* [2] 74, 318 *C.* 1906 [2] 1822).
  - 24) 2,4-Dimethylphenylamid d. 2,4-Dimethylphenylamidoessigsäure. Sm. 128° (*B.* 16, 206). — II, 544.
- $C_{18}H_{22}ON_4$
- C 69,7 — H 7,1 — O 5,1 — N 18,1 — *M. G.* 310.
  - 1) 2,4,5,2',4',5'-Hexamethyl-6-Diazoazobenzol. Tribromid, Nitrat (*B.* 21, 546). — IV, 1533.
  - 2) 4'-Diäthylamido-4-[ $\alpha$ -Oximidoäthyl]azobenzol. Sm. 199–200° (*C.* 1909 [2] 524).
  - 3) 4-Methylphenylhydrazid d.  $\gamma$ -[4-Methylphenyl]hydrazonbuttersäure. Sm. 217° (*J. pr.* [2] 76, 551 *C.* 1908 [1] 451).
- $C_{18}H_{22}OJ_2$
- 1) p-Jod-4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumhydroxyd. Salze, siehe (*J. pr.* [2] 69, 442 *C.* 1904 [2] 589).
- $C_{18}H_{22}OS_2$
- 1)  $\beta\beta$ -Diäthyläther d.  $\beta\beta$ -Dimerkapto- $\alpha$ -Oxy- $\alpha\beta$ -Diphenyläthan (Benzoim-merkaptol). Sm. 93–94° (*Bl.* [3] 23, 507). — \*III, 165.
- $C_{18}H_{22}O_2N_2$
- C 72,5 — H 7,4 — O 10,7 — N 9,4 — *M. G.* 298.
  - 1) Äthyläther d. 4'-Acetylamido-4-Oxy-2,2'-Dimethyldiphenylamin. Sm. 116° (*A.* 287, 208). — \*IV, 404.
  - 2) Äthyläther d. 4'-Acetylamido-4-Oxy-2,3'-Dimethyldiphenylamin. Sm. 144° (*A.* 287, 206). — \*IV, 404.
  - 3) Äthyläther d. 4'-Acetylamido-5-Oxy-2,4'-Dimethyldiphenylamin. Sm. 125° (*B.* 27, 2708). — \*II, 437.
  - 4) Äthyläther d. 4'-Acetylamido-4-Oxy-3,3'-Dimethyldiphenylamin. Sm. 143° (*A.* 287, 194). — \*IV, 404.



- $C_{18}H_{22}O_2N_2$  5) Diäthyläther d.  $\alpha$ -[2-Oxyphenyl]amido- $\alpha$ -[4-Oxyphenyl]imidoäthan. Sm. 75° (D.R.P. 80568). — \*II, 402.
- 5) Diäthyläther d.  $\alpha$ -[4-Oxyphenyl]amido- $\alpha$ -[4-Oxyphenyl]imidoäthan (Holocain). Sm. 121° (117°). HCl (D.R.P. 79868; C. 1897 [1] 875; 1897 [2] 556). — \*II, 403.
- 6) Diäthyläther d.  $\alpha$ -Phenylhydrazon- $\alpha$ -[2,4-Dioxyphenyl]äthan. Sm. 109° (B. 37, 366 C. 1904 [1] 671).
- 7) 3,6-Di[Dimethylamido]-9-Oxy-9-Methylxanthen. Sm. 152°. 2 Chlorid + PtCl<sub>4</sub> (B. 27, 2895). — \*III, 569.
- 8) Dimethyläther d. 1,4-Di[4-Oxyphenyl]hexahydro-1,4-Diazin. Sm. 233° (B. 22, 1782). — II, 716.
- 9) Diphenyläther d. 1,4-Di[Oxymethyl]hexahydro-1,4-Diazin. Sm. 110° (D.R.P. 89979). — \*II, 354.
- 10) Acetaldehydetetramethylamidofluorimium. (2HCl, PtCl<sub>4</sub>) (B. 27, 2895).
- 11) Base (aus Niehin). 3HJ (M. 14, 441). — III, 821.
- 12) Di[4-Dimethylamidophenyl]essigsäure. Sm. 171° (B. 27, 1407; C. 1895 [1] 201). — II, 1465.
- 13) Di[4-Amido-2,5-Dimethylphenyl]essigsäure. Sm. 245°. 2 HCl, H<sub>2</sub>SO<sub>4</sub> (A. 358, 370 C. 1908 [1] 1172).
- 14) Äthylester d. Di[4-Methylphenylamido]essigsäure. Sm. 170° (B. 41, 3032 C. 1908 [2] 1345).
- 15) 2-Methylphenylamidoformiat d. d-Carvoxim (Ph. Ch. 14, 399). — III, 113; \*III, 85.
- 16) 3-Methylphenylamidoformiat d. d-Carvoxim (Ph. Ch. 14, 399). — III, 113; \*III, 85.
- 17) 4-Methylphenylamidoformiat d. d-Carvoxim (Ph. Ch. 14, 399). — III, 113; \*III, 85.
- 18) Phenylhydrazid d. Oxyessig-4-Isobutylphenyläthersäure. Sm. 171,5° (Am. 19, 76). — IV, 687.
- 19) Verbindung (aus 4-Amido-1-Äthoxylbenzol). Sm. 140°. HCl, 2HCl (C. 1897 [2] 38). — \*II, 412.
- 20) Verbindung (aus Aceton u. Phenylhydroxylamin). Sm. 136° u. Zers. (A. 355, 242 C. 1907 [2] 1491).
- 21) Verbindung (aus schleims. p-Toluidin) (B. 14, 2094). — IV, 1035.
- $C_{18}H_{22}O_2N_4$  C 66,3 — H 6,7 — O 9,8 — N 17,2 — M. G. 326.
- 1) Diäthyläther d.  $\alpha\beta$ -Di[4-Oxyphenylamido]- $\alpha\beta$ -Diimidoäthan (Cyan-Phenetidin). Sm. 208—210° (J. pr. [2] 61, 466). — \*II, 413.
- 2)  $\alpha\delta$ -Di[ $\beta$ -Phenylureido]butan. Sm. 240° (H. 43, 355 C. 1905 [1] 274).
- 3) N-Di[4-Dimethylamidophenyl]glyoxim. Sm. 245° u. Zers. Pikrat (B. 31, 293; Am. 28, 113 C. 1902 [2] 791; Am. 34, 475 C. 1906 [1] 341). — \*IV, 396.
- 4)  $\alpha\beta$ -Di[ $\beta$ -Acetyl- $\alpha$ -Phenylhydrazido]äthan. Sm. 222° (A. 254, 121). — IV, 665; \*IV, 425.
- 5) Brenzkatechin + 2 Molec. Phenylhydrazin. Sm. 63° (C. 1909 [2] 696).
- 6) Resorcin + 2 Molec. Phenylhydrazin. Sm. 76° (B. 22, 2195). — IV, 654.
- 7) Hydrochinon + 2 Molec. Phenylhydrazin. Sm. 70—71° (B. 24 [2] 904). — IV, 654.
- 8) Di[Methylphenylhydrazon] d. i-Erythrose. Sm. 158—159° (B. 35, 2627 C. 1902 [2] 575). — \*IV, 519.
- 9) Diäthyläther d. 3-Amido-6-Dimethylamido-1,4-Dioxyphenazin. Pikrat (B. 24, 3827). — II, 949.
- 10) 4,6-Diketo-2,8-Dimethyl-3,7-Dipropyl-3,4,6,7-Tetrahydro-1,3,7,9-Naphttetrazin. Sm. 220° (C. 1909 [2] 2013).
- 11) Di[2-Amido-4-Methylphenylamid] d. Äthan- $\alpha\alpha$ -Dicarbonsäure. 2 Pikrat (A. 347, 39 C. 1906 [2] 507).
- 12) Di[2-Amido-4-Methylphenylamid] d. Äthan- $\alpha\beta$ -Dicarbonsäure? 2HCl (A. 347, 49 C. 1906 [2] 507).
- 13) Di[4-Dimethylamidophenylamid] d. Oxalsäure. Sm. noch nicht bei 270° (B. 12, 533). — IV, 592.
- 14) 4-Dimethylamidophenylhydrazid d.  $\beta$ -Acetyl- $\alpha$ -Phenylhydrazido-essigsäure. Sm. 158° (B. 30, 1101; A. 301, 77). — \*IV, 477.

- $C_{18}H_{22}O_2S$  1) Di[4-Isopropylphenyl]sulfon. Sm. 109—110° (96°) (B. 26, 2945; Bl. 3] 11, 513). — II, 827.
- $C_{18}H_{22}O_3N_2$  1) C 68,8 — H 7,0 — O 15,3 — N 8,9 — M. G. 314.  
 1) Diphenyläther d. Di[ $\gamma$ -Oxypropyl]nitrosamin. Sm. 60—61° (B. 24, 2638). — II, 653.  
 2) Äthyläther d. 4-Formylamido-4'-Oxy-3,3'-Dimethyldiphenylformylamin. Sm. 146—147° (A. 287, 194). — \*IV, 404.  
 3)  $\epsilon$ -Phenylbenzylhydrazon- $\alpha\beta\gamma$ -Trioxypentan. Sm. 117—118° (B. 37, 1201 C. 1904 [1] 1197; B. 38, 2669 C. 1905 [2] 1089).  
 4)  $\delta$ -Phenylbenzylhydrazon- $\alpha\beta\epsilon$ -Trioxypentan. Sm. 124—126° (B. 35, 2369 C. 1902 [2] 511). — \*IV, 543.  
 5) Phenylbenzylhydrazon d. Methyltetrose. Sm. 96—97° (B. 35, 2363 C. 1902 [2] 511). — \*IV, 543.  
 6) 5-Nitro-2-Methylphenylcamphoformenamin. Sm. 192° (Am. 34, 251 C. 1905 [2] 1491).  
 7) Dimethyläther d. Hämatoporphyrin. Sm. 60—85° (H. 30, 428).  
 8) Oxim d. Thebainon. Sm. 200—201°. +  $CH_4O$  (B. 38, 3165 C. 1905 [2] 1442).  
 9)  $\alpha$ -Oxy- $\alpha$ -Di[4-Dimethylamidophenyl]essigsäure. K (B. 27, 3298). — II, 1697.  
 10)  $\beta$ -[4-Methylphenyl]amidoäthyl-[4-Methylphenyl]amidoessigsäure. Ba + 4  $H_2O$  (B. 23, 2035). — II, 506.  
 11) Phenylhydrazoncampheroxalsäure. Sm. 214—215° (Am. 20, 328).  
 12) Methylester d. Di[4-Methylphenylamido]oxyessigmethyläthersäure. Sm. 105°. 2HCl, (2HCl,  $PtCl_4$ ) (A. 306, 13; B. 28, 62). — \*II, 275.  
 13) Methylester d. Phenylazocamphocarbonsäure. Sm. 78° (B. 25 [2] 726). — IV, 1468.  
 14) Äthylester d.  $\beta$ -[5-Äthoxyl-3-Methyl-1-Phenyl-4-Pyrazolyl]crotonsäure. Sm. 117° (B. 38, 3028 C. 1905 [2] 1326).  
 15) Benzoat d. Pinenisonitrocarboxylamid. Sm. 197° (Soc. 87, 346 C. 1905 [1] 1244, 1644).  
 16) Amid d. d- $\alpha$ -Benzoximidolimonencarbonsäure. Sm. 152° (Soc. 87, 422 C. 1905 [1] 1644).  
 17) Amid d. l- $\alpha$ -Benzoximidolimonencarbonsäure. Sm. 152° (Soc. 87, 422 C. 1905 [1] 1644).  
 18) Amid d. r- $\alpha$ -Benzoximidolimonencarbonsäure. Sm. 150° (Soc. 87, 425 C. 1905 [1] 1644).  
 19) 4-Äthoxyphenylamid d. 4-Äthoxyphenylamidoessigsäure. Sm. 139—140° (138°) (B. 22, 1789; D.R.P. 79868). — II, 721; \*II, 411.  
 20) Acetylphenylamidoimid d. Camphersäure. Sm. 107° (B. 25, 2567). — IV, 708.
- $C_{18}H_{22}O_3N_4$  C 63,2 — H 6,4 — O 14,0 — N 16,4 — M. G. 342.  
 1) 3-Nitrobenzylidenpinylpseudosemicarbazon. Sm. 216° (Soc. 91, 22 C. 1907 [1] 1041).  
 2) Di[Phenylhydrazon] d. Chinovose. Sm. 193—194° (B. 26, 2419). — IV, 794.  
 3) Di[Phenylhydrazon] d. Fukose. Sm. 177,5° (B. 37, 3860 C. 1904 [2] 1712; B. 38, 3021 C. 1905 [2] 1238).  
 4) Di[Phenylhydrazon] d. Isodulcit. Sm. 180° (B. 20, 1091, 1189; Soc. 77, 1220; Bl. 47, 761). — IV, 789; \*IV, 518.  
 5) Di[Phenylhydrazon] d. act. Rhodeose. Sm. 176,5° (B. 37, 3859 C. 1904 [2] 1712).  
 6) Di[Phenylhydrazon] d. r-Rhodeose. Sm. 187° (B. 37, 3861 C. 1904 [2] 1712).
- $C_{18}H_{22}O_3S$  1) Dimethyläther d. Di[4-Oxy-2,6-Dimethylphenyl]sulfoxyd. Sm. 154 bis 155° (Soc. 93, 759 C. 1908 [2] 239).
- $C_{18}H_{23}O_3S_2$  1) Anhydrid d. 1,2,4-Trimethylbenzol-5-Sulfinsäure. Sm. 92—93° (B. 41, 3328 C. 1908 [2] 1682).  
 2) Anhydrid d. 1,3,5-Trimethylbenzol-2-Sulfinsäure. Sm. 118—121° (B. 41, 3328 C. 1908 [2] 1682).
- $C_{18}H_{22}O_4N_2$  C 65,5 — H 6,6 — O 19,4 — N 8,5 — M. G. 330.  
 1) Diphenylhydrazon d. Fukose. Sm. 198° (B. 37, 306 C. 1904 [1] 649).  
 2) Diphenylhydrazon d. Isodulcit. Sm. 134° (A. 258, 247). — IV, 789.

- $C_{18}H_{22}O_4N_2$  3) Diphenylhydrazon d. Rhodeose. Sm. 199° (C. 1900 [1] 803). — \*IV, 520.
- 4) Phenylbenzylhydrazon d. Apiose. Sm. 135° (B. 39, 237 C. 1906 [1] 748).
- 5) Phenylbenzylhydrazon d. d-Arabinose. Sm. 174° (B. 32, 3235). — \*IV, 543.
- 6) Phenylbenzylhydrazon d. l-Arabinose. Sm. 174° (B. 32, 3235; 35, 1461; R. 15, 227). — \*IV, 543.
- 7) Phenylbenzylhydrazon d. r-Arabinose. Sm. 185° (B. 33, 2252). — \*IV, 543.
- 8) Phenylbenzylhydrazon d. d-Lyxose +  $H_2O$ . Sm. 116° (128° wasserfrei) (B. 33, 1801) — \*IV, 543.
- 9) Phenylbenzylhydrazon d. l-Xylose. Sm. 99° (B. 32, 3235; B. 37, 4401 C. 1905 [1] 122). — \*IV, 543.
- 10) Phenylbenzylhydrazon d. Pentose  $C_5H_{10}O_5$  (aus Carnin). Sm. 127 bis 128° (B. 42, 1202 C. 1909 [1] 1893).
- 11) Tetramethyläther d. 2,2-Di[Dioxymethyl]azobenzol. Sm. 144° (C. r. 138, 289 C. 1904 [1] 722).
- 12) Tetramethyläther d. 3,3'-Di[Dioxymethyl]azobenzol. Sm. 86° (C. r. 138, 289 C. 1904 [1] 722).
- 13) Tetramethyläther d. 4,4'-Di[Dioxymethyl]azobenzol. Sm. 118°; Sd. 250°, 15—20 (C. r. 134, 1359 C. 1902 [2] 195; C. r. 138, 289 C. 1904 [1] 722; Bl. [3] 31, 453 C. 1904 [1] 1498). — \*IV, 1068.
- 14) 1,3-Diacetyl-4,6-Diketo-5,5-Diäthyl-2-Phenylhexahydro-1,3-Diazin. Sm. 147° (Soc. 91, 270 C. 1907 [1] 1270).
- 15) 4,5-Dicyan-3,6-Dimethyl-1,2-Dipropyl-1,2-Dihydrobenzol-1,2-Dicarbonensäure (C. 1907 [1] 459).
- 16) Diäthylester d. 1-Phenylamido-2,5-Dimethylpyrrol-3,4-Dicarbonensäure. Sm. 127° (B. 18, 304, 1568). — IV, 549.
- 17) Farbstoff (aus Hämopyrrolcarbonsäure) (A. 366, 261 C. 1909 [2] 217).
- 18) Verbindung (aus d. Ester  $C_{20}H_{20}O_8$ ). Sm. 230° u. Zers. (C. 1905 [1] 343).
- $C_{18}H_{22}O_4N_4$  C 60,3 — H 6,1 — O 17,9 — N 15,6 — M. G. 358.
- 1)  $\alpha\alpha$ -Di[ $\beta$ -Nitro-4-Dimethylamidophenyl]äthan. Sm. 195—196° (Bl. [3] 23, 24). — \*IV, 657.
- 2) Äthylenäther d. 3-Oxy-4-Methylphenylharnstoff. Sm. 218° (B. 39, 3251 C. 1906 [2] 1413).
- 3) 3-Nitrobenzylidencamphorylpseudosemicarbazon. Sm. 218—220° (Soc. 87, 729 C. 1905 [2] 242).
- 4) Lycerosazon. Sm. 152° (Ch. Z. 23, 566). — \*IV, 521.
- 5) Morfosazon. Sm. 157° (Ch. Z. 23, 542, 566). — \*IV, 521.
- 6) Di[Phenylhydrazon] d.  $\alpha$ -Akrose. Sm. bei 217° u. Zers. (208—210°) (B. 20, 1093, 2571, 3386, 3388; 22, 360; 23, 383; Soc. 77, 132). — IV, 790.
- 7) Di[Phenylhydrazon] d.  $\beta$ -Akrose. Sm. 148° (156—159°) (B. 20, 2573, 3387; 33, 3108; Soc. 77, 131; C. 1899 [2] 959). — IV, 790; \*IV, 521.
- 8) Di[Phenylhydrazon] d. Cacaoose. Sm. 179—180° (J. pr. [2] 66, 408 C. 1903 [1] 527). — \*IV, 521.
- 9) Di[Phenylhydrazon] d. Cygnose. Sm. 179° (C. 1907 [2] 1347).
- 10) Di[Phenylhydrazon] d. Dulcit. Sm. 205—206° u. Zers. (207°) (B. 20, 3390; 34, 1534; Soc. 75, 10). — IV, 791.
- 11) Di[Phenylhydrazon] d. Formose. Sm. bei 144° (B. 21, 274, 989; J. pr. [2] 33, 339). — IV, 791.
- 12) Di[Phenylhydrazon] d. Galaktose. Sm. 188—191° u. Zers. (B. 17, 581; 20, 826; 32, 3386; R. 16, 265; H. 32, 428; B. 41, 76 C. 1908 [1] 722). — IV, 791; \*IV, 521.
- 13) Di[Phenylhydrazon] d. Galtose. Sm. 182° (R. 16, 270). — \*IV, 521.
- 14) Di[Phenylhydrazon] d. Glutose. Sm. 165° (R. 16, 277). — \*IV, 521.
- 15) Di[Phenylhydrazon] d. d-Glykose. Sm. 205° (B. 17, 579; 19, 50, 1921; 20, 821; 21, 2632; 22, 374; 23, 385; 27, 2488; 32, 3386; B. 40, 75 C. 1908 [1] 722). — IV, 791; \*IV, 522.
- 16) Di[Phenylhydrazon] d. l-Glykose. Sm. 205° u. Zers. (B. 23, 374). — IV, 792.
- 17) Di[Phenylhydrazon] d. Rhodeose. Sm. 170° (C. 1900 [1] 803).



- $C_{18}H_{22}O_4N_4$  18) Di[Phenylhydrazon] d. d-Sorbose. Sm. 164° (B. 20, 827; 32, 3386). — IV, 793; \*IV, 523.
- 19) Di[Phenylhydrazon] d. l-Sorbose (D. d. l-Gulose). Sm. 156° (B. 24, 533; B. 16, 267; 19, 7). — IV, 792; \*IV, 522.
- 20) Di[Phenylhydrazon] d. i-Sorbose (D. d. i-Gulose). Sm. 157—159° (B. 25, 1030). — IV, 792.
- 21) Di[Phenylhydrazon] einer Hexose. Sm. 140—142° (B. 39, 49 C. 1906 [1] 548).
- 22) Di[Phenylhydrazon] einer Hexose. Sm. 186° u. Zers. (G. 35 [1] 45 C. 1905 [1] 1252).
- 23) Phenylsazon d. Zuckers  $C_6H_{12}O_6$  (aus Weinsäure). Sm. 168—170° (Soc. 71, 377). — \*IV, 521.
- 24) Phenylsazon d. Zuckers  $C_6H_{12}O_6$ . Sm. 144° (B. 21, 990).
- 25) Phenylsazon d. Zuckers  $C_6H_{12}O_6$ . Sm. 200° (B. 21, 990).
- 26) Phenylsazon (aus Kalk u. Formaldehyd entstandenen Produkten). Sm. 167° (Ch. Z. 23, 566). — \*IV, 521.
- 27) Dimethylester d. Äthylendi[ $\beta$ -Phenylhydrazidoameisensäure] (D. d. Äthylenbisphenylcarbazinsäure). Sm. 176—177° (A. 310, 159). — \*IV, 430.
- 28) Di[Phenylhydrazid] d.  $\gamma\delta$ -Dioxybutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 214° u. Zers. (B. 40, 308 C. 1907 [1] 536).
- $C_{18}H_{22}O_4Br_4$  1) Tetrabromid d. Phtalsäuremonogeraniolester. Sm. 114—115°. Ba + 4H<sub>2</sub>O (Bl. [3] 19, 87). — \*III, 347.
- $C_{18}H_{22}O_4S_2$  1)  $\alpha\beta$ -Di[2,4-Dimethylphenylsulfon]äthan. Sm. 163° (J. pr. [2] 66, 132 C. 1902 [2] 795; J. pr. [2] 68, 311 C. 1903 [2] 1115).
- 2)  $\alpha\beta$ -Di[2,5-Dimethylphenylsulfon]äthan. Sm. 174° (J. pr. [2] 66, 135 C. 1902 [2] 796).
- $C_{18}H_{22}O_6N_2$  C 62,4 — H 6,4 — O 23,1 — N 8,1 — M. G. 346.
- 1) Diphenylhydrazon d. Galaktose. Sm. 157° (A. 258, 246). — IV, 791.
- 2) Diphenylhydrazon d. d-Glykose. Sm. 161—162° (A. 258, 245). — IV, 791.
- 3) Diphenylhydrazon d. l-Glykose. Sm. 162—163° (B. 23, 2619). — IV, 791.
- 4) Diphenylhydrazon d. i-Glykose. Sm. 132—133° (B. 23, 2620). — IV, 791.
- 5) Diphenylhydrazon d. Mannose. Sm. 155° (A. 258, 246). — IV, 793.
- 6) 4-Biphenylhydrazon d. Galaktose. Sm. 157—158° u. Zers. (B. 27, 3108). — IV, 970.
- 7) 4-Biphenylhydrazon d. Glykose. Sm. 143—144° u. Zers. (B. 27, 3108). — IV, 970.
- 8) Diäthylester d. 5-Phenylhydrazon-2-Ketohexahydrobenzol-1,4-Dicarbonsäure. Sm. 159—160° (B. 17, 2054). — IV, 723; \*IV, 471.
- 9) Diäthylester d. 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-[Äthyl- $\alpha\beta$ -Dicarbonsäure]. Fl. (B. 23, 3758). — IV, 727.
- $C_{18}H_{22}O_6N_4$  C 57,7 — H 5,9 — O 21,4 — N 15,0 — M. G. 374.
- 1) Phenylsazon d. Methose. Sm. 205—206° (B. 22, 476). — I, 1040.
- $C_{18}H_{22}O_6S_2$  1) Di[ $\gamma$ -Phenylsulfonpropyl]äther. Sm. 85° (J. pr. [2] 51, 293; B. 24, 1834). — II, 784; \*II, 468.
- 2) Di[4-Methylphenylsulfonäthyl]äther (B. 26, 944). — II, 823.
- 3) polym. Di[4-Methylphenylsulfonäthyl]äther. Sm. 83—84° (J. pr. [2] 30, 358). — II, 823.
- $C_{18}H_{22}O_6N_2$  C 59,7 — H 6,1 — O 26,5 — N 7,7 — M. G. 362.
- 1) Dioxim d. Dicampherylsäure. Sm. bei etwa 250°. Acetat (Soc. 75, 183). — \*II, 1179.
- 2) Dioxim d. Säure  $C_{18}H_{20}O_6$  (B. 27 [2] 594).
- 3) Diäthylester d.  $\beta$ -[4-Äthoxyphenyl]azo- $\alpha$ -Oxy- $\alpha\gamma$ -Butadien- $\alpha\delta$ -Dicarbonsäure + H<sub>2</sub>O. Sm. 85—86° (A. 338, 386 C. 1905 [1] 1223).
- 4) Diäthylester d.  $\gamma$ -Phenylazo- $\beta\delta$ -Diketohexan- $\gamma\delta$ -Dicarbonsäure. Sm. 108° (B. 32, 2885). — \*IV, 1065.
- $C_{18}H_{22}O_6N_4$  C 55,4 — H 5,6 — O 24,6 — N 14,4 — M. G. 390.
- 1) Diäthyläther d. 3'-Dimethylamido-2,4-Dinitro-3,6-Dioxydiphenylamin. Sm. 106° (B. 24, 3830). — II, 949.
- 2) Diäthyläther d. 4'-Dimethylamido-2,4-Dinitro-3,6-Dioxydiphenylamin. Sm. 148° (B. 24, 3826). — II, 949.

- $C_{18}H_{22}O_6N_4$  3) Di[Phenylhydrazid] d. Alloschleimsäure. Sm. 213° u. Zers. (B. 24, 2139). — IV, 731.
- 4) Di[Phenylhydrazid] d. Schleimsäure. Sm. 238—240° u. Zers. (A. 236, 196; B. 48, 722). — IV, 731.
- 5) Di[Phenylhydrazid] d. d-Zuckersäure. Sm. 211° (B. 33, 3321; 34, 493).
- 6) Di[Phenylhydrazid] d. d-Mannozuckersäure. Sm. 212° u. Zers. (B. 24, 544). — IV, 730.
- 7) Di[Phenylhydrazid] d. l-Mannozuckersäure. Sm. 212—214° u. Zers. (B. 20, 2714; B. 48, 721). — IV, 731.
- 8) Di[Phenylhydrazid] d. i-Mannozuckersäure. Sm. 220—225° (B. 24, 545). — IV, 731.
- 9) Verbindung (d. 2-Amidobenzol-1-Carbonsäureamid u. Oxalsäuredimethylester). Sm. 80—90° (J. pr. [2] 43, 231). — II, 1246.  
C 57,1 — H 5,8 — O 29,6 — N 7,4 — M. G. 378.
- $C_{18}H_{22}O_7N_2$  1) Hexamethyläther d. 2,4,6,2',4',6'-Hexaoxydiphenylnitrosamin. Sm. 193° (Ar. 242, 510 C. 1904 [2] 1386).  
C 54,8 — H 5,6 — O 32,5 — N 7,1 — M. G. 394.
- $C_{18}H_{22}O_8N_2$  1) Tetraäthylester d. 1,4-Diimido-1,4-Dihydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 161° (Am. 11, 5). — II, 2074.  
C 48,0 — H 4,9 — O 28,4 — N 18,7 — M. G. 450.
- $C_{18}H_{22}O_8N_6$  1) Di[2-Nitrophenylhydrazon] d. Sorbose. Sm. 211—212° (B. 42, 1424 C. 1909 [1] 1545).
- $C_{18}H_{22}NBr$  1) Methylallylbenzyl-4-Methylphenylammoniumbromid. Sm. 146 bis 147° u. Zers. (B. 37, 2723 C. 1904 [2] 592).
- $C_{18}H_{22}NJ$  1) Äthylallylphenylbenzylammoniumjodid. Zers. bei 110—112° (A. 318, 97).
- 2) Methylallylbenzyl-2-Methylphenylammoniumjodid. Sm. 154—155° (B. 37, 3897 C. 1904 [2] 1612).
- 3) isom. Methylallylbenzyl-2-Methylphenylammoniumjodid (B. 37, 3898 C. 1904 [2] 1612).
- 4) l-Methylallylbenzyl-4-Methylphenylammoniumjodid. Sm. 144—145° (Soc. 93, 1791 C. 1909 [1] 159).
- 5) r-Methylallylbenzyl-4-Methylphenylammoniumjodid. Zers. bei 144 bis 146° (Ph. Ch. 45, 238 C. 1903 [2] 979; B. 37, 2720 C. 1904 [2] 592).
- 6) Jodmethylat d. 2-Methyl-1-Benzyl-1,2,3,4-Tetrahydroisochinolin. Sm. 239—242° (B. 42, 1764 C. 1909 [2] 37).
- 7) Jodäthylat d.  $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Äthyl-2-Pyridyl]äthen. Sm. 233° (B. 38, 3705 C. 1906 [1] 52).
- 8) Jodäthylat d. l-Benzyl-1,2,3,4-Tetrahydrochinolin. Sm. 105—106° (Soc. 83, 1417 C. 1904 [1] 439).
- 9) Jodäthylat d. 2-Benzyl-1,2,3,4-Tetrahydroisochinolin. Sm. 133° u. Zers. (B. 34, 3991 C. 1902 [1] 211). — \*IV, 145.
- $C_{18}H_{22}N_2Cl_2$  1) Ammoniumbase (aus Nikotin u. 1,2-Di[Chlormethyl]benzol). + PtCl<sub>4</sub>, + 2AuCl<sub>3</sub> (C. 1899 [1] 1246). — \*IV, 574.
- $C_{18}H_{22}N_2Br_2$  1) p-Dibrom-4,4'-Di[Dimethylamido]-3,3'-Dimethylbiphenyl. Sm. 117° (B. 14, 2174). — IV, 981.
- 2) Ammoniumbase (aus Nikotin u. 1,2-Di[Brommethyl]benzol). Sm. 158 bis 159° (C. 1899 [1] 1246). — \*IV, 574.
- $C_{18}H_{22}N_2S$  1)  $\alpha$ -Äthyl- $\beta$ -Propyl- $\alpha$ - $\beta$ -Diphenylthioharnstoff. Sm. 66,3° (B. 21, 103). — II, 397.
- 2)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[4-Isobutylphenyl]thioharnstoff. Sm. 137° (B. 16, 2023). — II, 558.
- 3)  $\alpha\alpha$ -Diäthyl- $\beta$ -Diphenylmethyithioharnstoff. Sm. 112—113° (Am. 26, 355).
- 4) Benzylimidobenzylamidomethylpropylsulfid (B. 19, 2349). — II, 529.
- $C_{18}H_{22}N_4S_2$  1) Verbindung (aus Formaldehyd, Methylanilin u. Rubeanwasserstoff). Sm. 139° (C. 1899 [2] 1025). — \*II, 233.
- $C_{18}H_{22}N_4S_4$  1) Äthylenäther d.  $\alpha$ -Dimerkaptomethylen- $\beta$ -Phenylhydrazinmonomethyläther. Sm. 113—114° (J. pr. [2] 61, 339). — \*IV, 439.
- $C_{18}H_{22}ClJ$  1) Di[4-Propylphenyl]jodoniumchlorid. Sm. 143°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (A. 327, 310 C. 1903 [2] 353).
- 2) 4,4'-Dimethyl-2,2'-Diäthylidiphenyljodoniumchlorid. Sm. 120°. + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (J. pr. [2] 69, 441 C. 1904 [2] 589).

- C<sub>18</sub>H<sub>22</sub>ClJ** 3) Di[2,4,6-Trimethylphenyl]jodoniumchlorid. Sm. 122°. 2 + HgCl<sub>2</sub>, 2 + PtCl<sub>4</sub> (*J. pr.* [2] 61, 426). — \*II, 43.
- C<sub>18</sub>H<sub>22</sub>ClP** 1) Di[2,4,5-Trimethylphenyl]chlorphosphin. Sd. 305° (*A.* 315, 71).
- C<sub>18</sub>H<sub>22</sub>BrJ** 1) Di[4-Propylphenyl]jodoniumbromid. Sm. 158° (*A.* 327, 311 *C.* 1903 [2] 353).
- 2) 4,4'-Dimethyl-2,2'-Diäthyljodoniumbromid. Sm. 162° (*J. pr.* [2] 69, 440 *C.* 1904 [2] 589).
- 3) Di[2,4,6-Trimethylphenyl]jodoniumbromid. Sm. 139° (*J. pr.* [2] 61, 426). — \*II, 43.
- C<sub>18</sub>H<sub>23</sub>ON** C 80,3 — H 8,6 — O 5,9 — N 5,2 — M. G. 269.
- 1) β-Diäthylamido-α-Oxy-αα-Diphenyläthan. Sm. 47—49°; Sd. 197°. HCl, (2HCl, PCl<sub>5</sub>), (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 39, 812 *C.* 1906 [1] 1151; *B.* 39, 1754 *C.* 1906 [2] 53).
- 2) l-Methylallylbenzyl-4-Methylphenylammoniumhydroxyd. Jodid, saures Tartrat (*Soc.* 93, 1790 *C.* 1909 [1] 159).
- 3) r-Methylallylbenzyl-4-Methylphenylammoniumhydroxyd. Salze, siehe (*B.* 37, 2720 *C.* 1904 [2] 592).
- 4) d-Methylphenylamidomethylenecampher. Sm. 124° (*A.* 281, 360; *C. r.* 136, 1223 *C.* 1903 [2] 116; *Soc.* 95, 179 *C.* 1909 [1] 1331). — III, 116.
- 5) d-4-Methylphenylamidomethylenecampher. Sm. 188—189° (*A.* 281, 359; *Soc.* 95, 177 *C.* 1909 [1] 1331). — III, 116.
- 6) Methylphenylcamphoformenamin. Sm. 126° (*Am.* 39, 118 *C.* 1908 [1] 842).
- 7) 4-Methylphenylcamphoformenamin. Sm. 178° (*Am.* 34, 243 *C.* 1905 [2] 1490).
- 8) Äthylhydroxyd d. l-Benzyl-1,2,3,4-Tetrahydrochinolin. d-Campher-sulfonat (*Soc.* 83, 1418 *C.* 1904 [1] 439).
- 9) l-Naphtylamid d. Heptan-α-Carbonsäure. Sm. 95° (*Soc.* 93, 1037 *C.* 1908 [2] 504).
- C<sub>18</sub>H<sub>23</sub>CN<sub>3</sub>** C 72,7 — H 7,7 — O 5,4 — N 14,1 — M. G. 297.
- 1) 4-[4-Isopropylbenzyl]nitrosamido-l-Dimethylamidobenzol. Sm. 87° (*A.* 245, 302). — IV, 587.
- 2) β-Isoamylphenylamido-α-Phenylharnstoff. Sm. 220°. — IV, 674.
- 3) Benzylidenpinylpseudosemicarbazon. Sm. 180° (*C.* 1906 [2] 430; *Soc.* 91, 22 *C.* 1907 [1] 1041).
- 4) 10-Methylhydroxyd d. 2,8-Di[Dimethylamido]akridin. Nitrat (*B.* 34, 4315 *C.* 1902 [1] 323). — \*IV, 840.
- C<sub>18</sub>H<sub>23</sub>OJ** 1) Di[4-Propylphenyl]jodoniumhydroxyd. Salze, siehe (*A.* 327, 310 *C.* 1903 [2] 353).
- 2) 4,4'-Dimethyl-2,2'-Diäthyl-diphenyljodoniumhydroxyd. Salze, siehe (*J. pr.* [2] 69, 440 *C.* 1904 [2] 589).
- 3) Di[2,4,6-Trimethylphenyl]jodoniumhydroxyd. Salze, siehe (*J. pr.* [2] 61, 425). — \*II, 43.
- C<sub>18</sub>H<sub>23</sub>O<sub>2</sub>N** C 75,8 — H 8,1 — O 11,2 — N 4,9 — M. G. 285.
- 1) 2-Methyläther d. Methylallylbenzyl-2-Oxyphenylammoniumhydroxyd. d-Camphersulfonat (*B.* 40, 1008 *C.* 1907 [1] 1252).
- 2) 4-Methyläther d. Methylallylbenzyl-4-Oxyphenylammoniumhydroxyd. d-Camphersulfonat, d-Bromcamphersulfonat (*B.* 40, 1012 *C.* 1907 [1] 1253).
- 3) Di[β-Oxy-β-Phenylpropyl]amin. Sd. 258°. HCl, HBr, HJ (D.R.P. 189481 *C.* 1907 [2] 2004; D.R.P. 194051 *C.* 1908 [1] 1222).
- 4) Diphenyläther d. Di[γ-Oxypropyl]amin. Sd. oberhalb 300°. HCl (*B.* 24, 2637). — II, 653.
- 5) Di[4-Methylphenyläther] d. Di[β-Oxyäthyl]amin. Sm. 49—50°. HCl (*B.* 24, 195). — II, 748.
- 6) Äthyläther d. 4-Oxyphenylimidocampher. Sm. 112° (*Soc.* 95, 952 *C.* 1909 [2] 360).
- 7) Desoxydihydrocodein + 1/2 H<sub>2</sub>O. Sm. 132°. HCl + C<sub>2</sub>H<sub>5</sub>O, Benzoat (*B.* 40, 3867 *C.* 1907 [2] 1633).
- 8) Lobelin (*J.* 1878, 957). — III, 890.
- 9) Benzylester d. Cyancampholsäure. Sm. 70—71° (*A. ch.* [6] 30, 515; [7] 2, 386). — II, 1052.
- 10) Benzoat d. 1-Oximido-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 138—140° (*A.* 288, 338).



- $C_{18}H_{23}O_2N$  11) Benzoat d. Methylpinonoxim. Sm. 118° (Soc. 87, 838 C. 1905 [2] 484).
- 12) 1-Naphtylamidoformiat d.  $\alpha$ -Oxyheptan. Sm. 62° (C. 1909 [2] 1380).  
 $C_{18}H_{23}O_2N_3$  C 69,0 — H 7,3 — O 10,2 — N 13,4 — M. G. 313.
- 1)  $\beta$ -Nitro- $\alpha\beta$ -Di[2,4-Dimethylphenylamido]äthan. Sm. 152—154° (Soc. 79, 256).
- 2) Semicarbazon d. 2-Keto-6-Benzoyl-4-Isopropenyl-1-Methylhexahydrobenzol. Sm. 170—173°. + Aceton (Soc. 91, 702 C. 1907 [2] 65).
- 3) Benzylidencamphorylpseudosemicarbazon. Sm. 223° u. Zers. (Soc. 87, 728 C. 1905 [2] 242).
- 4) 2-Oxybenzylidenpinylpseudosemicarbazon. Sm. 252° (Soc. 91, 22 C. 1907 [1] 1041).
- 5)  $\alpha$ -Amido- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]essigsäure. Sm. 171° u. Zers. (B. 27, 3296; Bl. [4] 1, 942 C. 1907 [2] 1738). — II, 1465.
- 6) Amid d.  $\alpha$ -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]essigsäure. Sm. 140 bis 142° (B. 27, 3297). — II, 1697.
- $C_{18}H_{23}O_2P$  1) Di[4-Isopropylphenyl]phosphinsäure. Cu (A. 294, 52). — IV, 1677.
- 2) Di[2,4,5-Trimethylphenyl]phosphinsäure. Sm. 202—203°.  $NH_4 + 2H_2O$ , K +  $H_2O$ , Ba +  $6H_2O$ , Pb, Co, Ni +  $10H_2O$ , Cu +  $10H_2O$ , Ag (A. 294, 25). — IV, 1679.
- $C_{18}H_{23}O_3N$  C 71,8 — H 7,6 — O 16,0 — N 4,6 — M. G. 301.
- 1) Benzylcamphoformenamin. Sm. 96,5° (Am. 34, 245 C. 1905 [2] 1490).
- 2) Thebainol. Sm. 54—55° (B. 38, 3167 C. 1905 [2] 1442).
- 3) Propylphenyltetrahydroazindoncarbonsäure. Sm. 85°. Pb +  $H_2O$  (B. 29, 818). — IV, 367.
- 4) Säure (aus Dimethylketenchinaldin). Sm. 137—138° (B. 40, 1151 C. 1907 [1] 1260).
- 5) Methylester d. Säure  $C_{17}H_{21}O_3N$  (aus Dimethylketenchinolin). Sm. 58 bis 59° (B. 40, 1150 C. 1907 [1] 1260).
- 6) Äthylester d. 2-Keto-6-Methyl-4-[4-Isopropylphenyl]-1,2,3,4-Tetrahydropyridin-5-Carbonsäure. Sm. 182—183° (B. 35, 2174 C. 1902 [2] 373). — \*IV, 217.
- 7) 4-Äthoxyphenylimid d. Camphersäure. Sm. 112° (C. 1901 [1] 1375).  
 $C_{18}H_{23}O_3N_8$  C 65,6 — H 7,0 — O 14,6 — N 12,8 — M. G. 329.
- 1) 2-Oxybenzylidencamphorylpseudosemicarbazon +  $\frac{1}{2}H_2O$ . Sm. 212° u. Zers. (276,8° wasserfrei) (Soc. 87, 729 C. 1905 [2] 242).
- $C_{18}H_{23}O_3N_5$  C 60,5 — H 6,4 — O 13,4 — N 19,6 — M. G. 357.
- 1) Verbindung (aus Acetylcyanessigsäuremethylester u. Phenylhydrazin). Sm. 87° (C. 1895 [2] 83).
- $C_{18}H_{23}O_4N$  C 68,2 — H 7,2 — O 20,2 — N 4,4 — M. G. 317.
- 1) Tetramethyläther d. Di[3,4-Dioxybenzyl]amin. Sd. oberhalb 250°, (B. 41, 18 C. 1908 [1] 631).
- 2) Morphinmethylhydroxyd +  $5H_2O$ . Salze, siehe (A. 88, 338; 222, 208; B. 13, 96; 30, 354). — III, 898; \*III, 669.
- 3)  $\alpha$ -Cocäthylin. Fl. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 29, 2227). — III, 873.
- 4) 4-Oxyphenylcamphoformolamincarbonsäure. p-Amidophenolsalz (Am. 39, 283 C. 1908 [1] 1182).
- 5) Methylester d. Phenylacetylcgonin. Fl. (2HCl, PtCl<sub>4</sub>) (B. 21, 3337; D.R.P. 47713). — III, 869; \*III, 646.
- 6) Äthylester d. d-Benzoylcgonin. Sm. 57°. HCl +  $H_2O$  (B. 23, 986). — III, 867.
- 7) Äthylester d. l-Benzoylcgonin. Sm. 108—109°. (2HCl, PtCl<sub>4</sub>) (B. 18, 2954; 21, 48). — III, 867.
- 8) Äthylester d. isom. Benzoylcgonin. Sm. 110—111° (C. 1899 [1] 848). — \*III, 645.
- 9) Propylester d. Cocaylbenzoxylessigsäure. Sm. 56—58°. HCl, HBr (B. 21, 3443). — III, 863.
- $C_{18}H_{23}O_4N_3$  C 62,6 — H 6,6 — O 18,6 — N 12,2 — M. G. 345.
- 1) Diphenylhydrazon d. Glykosamin. Sm. 162° u. Zers. (B. 31, 2199). — \*IV, 522.

- $C_{18}H_{23}O_4N_5$  C 57,9 — H 6,1 — O 17,2 — N 18,8 — M. G. 373.  
 1) 3-Nitrobenzylidencamphorylsemicarbazidoxim. Sm. 215° u. Zers. (Soc. 91, 873 C. 1907 [2] 250).  
 2) Äthylester d. Antipyrilsemicarbazonacetessigsäure. Sm. 167° (Bl. [3] 33, 505 C. 1905 [1] 1650).
- $C_{18}H_{23}O_4P$  1) Di[2-Isopropylphenyl]phosphorsäure. Ba + 6H<sub>2</sub>O (G. 16, 130). — II, 761.
- $C_{18}H_{23}O_6N$  C 64,9 — H 6,9 — O 24,0 — N 4,2 — M. G. 333.  
 1) Anisylcocain. Fl. (HCl, AuCl<sub>3</sub>) (B. 22, 132). — III, 870.  
 2) Anhydrocotarninacetylaceton. Sm. 147—149°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 37, 2746 C. 1904 [2] 545).  
 C 59,8 — H 6,4 — O 22,2 — N 11,6 — M. G. 361.  
 1) d-Cocainharnstoff. Sm. 72°. HCl (B. 27, 1884). — III, 868.
- $C_{18}H_{23}O_5N_3$  C 61,9 — H 6,6 — O 27,5 — N 4,0 — M. G. 349.
- $C_{18}H_{23}O_6N$  1) Hexamethyläther d. 2,4,6,2',4',6'-Hexaoxydiphenylamin. Sm. 142° (Ar. 242, 509 C. 1904 [2] 1386).  
 2) Äthylester d. Acetylhydrocotarninessigsäure. Sm. 113° (B. 20, 2432; B. 38, 2877 C. 1905 [2] 1103). — III, 917.  
 3) Äthylester d. Anhydrocotarninacetylaceton. Sm. 59—60°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 37, 2746 C. 1904 [2] 545).  
 4) Diäthylester d. Anhydrohydrastininmalonsäure. Sm. 55—57° (B. 37, 2742 C. 1904 [2] 544).
- $C_{18}H_{23}O_7N$  C 59,2 — H 6,3 — O 30,7 — N 3,8 — M. G. 365.  
 1) Verbindung (aus d. Trimethyläther d. 5-Amido-1,2,3-Trioxylbenzol) (G. 27 [2] 356).
- $C_{18}H_{23}O_7N_3$  C 54,9 — H 5,9 — O 28,5 — N 10,7 — M. G. 393.  
 1) 4-Nitrophenylhydrazon d. trim. Diacetyl. Sm. 200° (B. 35, 3296 C. 1902 [2] 1247). — \*IV, 508.
- $C_{18}H_{23}N_2J$  1) p-Jod- $\alpha\beta$ -Di[4-Dimethylamidophenyl]äthan. (2HCl, PtCl<sub>4</sub>), (HJ, J<sub>2</sub>) (B. 13, 2198). — IV, 978.  
 2) Jodäthylat d. 1,4-Diphenylhexahydro-1,4-Diazin. Sm. 100° (J. 1858, 353). — II, 344.
- $C_{18}H_{23}N_3S$  1)  $\beta$ -Isoamylphenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 160° (A. 252, 285). — IV, 680.  
 1) Dimethyldiäthylindaminsulfid. (2HCl, ZnCl<sub>2</sub> + 3H<sub>2</sub>O) (A. 251, 84; D. R. P. 43374). — II, 801; \*II, 475.
- $C_{18}H_{23}N_3S_2$  1) Di[4-Dimethylamidophenyl]methylamidodithioameisensäure. Leukauraminsalz (Sm. 162°) (B. 35, 380 C. 1902 [1] 589). — \*IV, 825.
- $C_{18}H_{24}ON_2$  C 76,1 — H 8,4 — O 5,6 — N 9,9 — M. G. 284.  
 1)  $\alpha$ -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]äthan. Sm. 152° (Bl. [3] 23, 20; B. 40, 3902 C. 1907 [2] 1516).  
 2) Methyläther d.  $\alpha$ -Oxydi[4-Dimethylamidophenyl]methan. Sm. 71 bis 72° (C. 1902 [1] 471).
- $C_{18}H_{24}ON_4$  C 69,2 — H 7,7 — O 5,1 — N 18,0 — M. G. 312.  
 1) Amid d.  $\alpha$ -Amido- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]essigsäure. Sm. 170° (B. 27, 3295). — II, 1465.  
 2) 4-Dimethylamidophenylamid d. 4-Dimethylamidophenylamidoessigsäure. Sm. 173° (B. 41, 1370 C. 1908 [1] 2101).
- $C_{18}H_{24}OS$  1) tert. Butyldibenzylsulfhydroxyd. Ferrocyanid (B. 40, 4935 C. 1908 [1] 460).
- $C_{18}H_{24}O_2N_2$  C 72,0 — H 8,0 — O 10,7 — N 9,3 — M. G. 300.  
 1)  $\alpha\alpha$ -Di[4-Dimethylamido-2-Oxyphenyl]äthan. Sm. 167° (140°) (B. 27, 2895, 3304; J. pr. [2] 54, 228). — \*II, 604.  
 2) Diäthyläther d.  $\alpha\beta$ -Di[4-Oxyphenylamido]äthan. Sm. 98° (B. 23, 1979). — II, 717.  
 3)  $\delta\epsilon$ -Dioxy- $\delta\epsilon$ -Di[2-Pyridyl]oktan. Sm. 146° (B. 24, 2538). — IV, 985.  
 4) Menispermin. Sm. 120°. H<sub>2</sub>SO<sub>4</sub> (A. 10, 198). — III, 893.  
 5) Paramenispermin. Sm. 250° (A. 10, 200). — III, 894.  
 6) Nupharin. Erweicht bei 65° (J. 1882, 1156; B. 16, 969). — III, 894.  
 7) 1-[ $\alpha$ -Phenylhydrazonamyl]-1,2,3,4-Tetrahydrobenzol-6-Carbonsäure (Phenylhydrazon d. Sedanonsäure). Sm. 130—131° (B. 30, 500, 1423).  
 8) Dipiperidid d. Benzol-1,2-Dicarbonsäure (Phtalylpiperidin). Fl. (A. 227, 197). — IV, 16.

- $C_{18}H_{24}O_2N_2$  9) Verbindung (aus Aceton u. 3,3'-Dihydrazido-4,4'-Dioxybiphenyl). Sm. 200° (B. 20, 3333). — II, 989.
- $C_{18}H_{24}O_2N_4$  1) C 65,8 — H 7,3 — O 9,7 — N 17,1 — M. G. 328.  
 1) 4 - Semicarbazon - 6 - [Acetyl-4-Methylphenylamido]-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 216° (u. 221°) (Soc. 89, 197 C. 1906 [1] 1420).  
 2) Benzylidencamphorylsemicarbazidoxim. Sm. 205° u. Zers. +  $C_2H_6O$  (Soc. 91, 872 C. 1907 [2] 249).  
 3) Di[2-Amidophenylamid] d. Butan- $\alpha\delta$ -Dicarbonsäure. 2HCl (A. 347, 50 C. 1906 [2] 507).  
 $C_{18}H_{24}O_2N_6$  C 60,7 — H 6,7 — O 9,0 — N 23,6 — M. G. 356.  
 1) Diacetylhexaamidobitolyl. Sm. 196°. 2HCl + 2H<sub>2</sub>O, Pikrat (B. 21, 2409). — IV, 1332.
- $C_{18}H_{24}O_3N_2$  C 68,4 — H 7,6 — O 15,2 — N 8,8 — M. G. 316.
- $C_{18}H_{24}O_4N_2$  1) Verbindung (aus Blut) (B. 25 [2] 476).  
 C 65,0 — H 7,2 — O 19,3 — N 8,4 — M. G. 332.  
 1) Tetramethyläther d.  $\alpha\beta$ -Di[2-Dioxymethylphenyl]hydrazin. Sm. 115° (C. r. 138, 289 C. 1904 [1] 722; Bl. [3] 31, 871 C. 1904 [2] 661).  
 2) Säure (aus Phenylhydrazin u. Campheroxalsäure). Sm. 120° (Am. 36, 276 C. 1906 [2] 1426).  
 3) 4 - Acetylamidophenylmonamid d. Camphersäure. Sm. 233—234° (Soc. 91, 1897 C. 1908 [1] 256).  
 4) Dipiperidid d. Resorcindikohlensäure. Sm. 122° (A. 300, 153). — \*IV, 11.
- $C_{18}H_{24}O_4N_4$  5) Farbstoff (aus Hämopyrrolcarbonsäure) (A. 366, 260 C. 1909 [2] 217).  
 C 60,0 — H 6,7 — O 17,8 — N 15,5 — M. G. 360.  
 1) Verbindung (aus Hexamethylenamin u. 1,2-Dioxybenzol). Zers. bei 140° (A. 272, 281). — II, 909.
- $C_{18}H_{24}O_4Br_2$  1) Dibromid d. Phtalsäuremonocitronellolester. Al (Bl. [3] 19, 87). — \*III, 332.
- $C_{18}H_{24}O_5N_2$  C 62,1 — H 6,9 — O 23,0 — N 8,0 — M. G. 348.  
 1) 2,6 - Di[Acetylamido]-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 216 bis 220° (G. 20, 425). — II, 773.
- $C_{18}H_{24}O_6N_2$  C 59,3 — H 6,6 — O 26,4 — N 7,7 — M. G. 364.  
 1) Hydrobenzursäure (A. 134, 303, 310). — II, 1189.  
 2) Diäthylester d. 1,4-Phenylendiisuccinaminsäure. Sm. 180—181° (A. 347, 37 C. 1906 [2] 506).
- $C_{18}H_{24}O_6N_4$  C 55,1 — H 6,1 — O 24,5 — N 14,3 — M. G. 392.  
 1)  $\alpha$  - [ $\alpha$  - Benzoylamidoacetylamidobisamidopropionyl]amidopropion-säure. Sm. 230° (J. pr. [2] 70, 127 C. 1904 [2] 1038).
- $C_{18}H_{24}O_8N_2$  C 54,5 — H 6,1 — O 32,3 — N 7,1 — M. G. 396.  
 1) Tetraäthylester d. 3,6-Diamidobenzol-1,2,4,5-Tetracarbonsäure. Sm. 134° (A. 237, 25; Soc. 53, 444). — II, 2074.
- $C_{18}H_{24}O_{10}N_2$  C 50,4 — H 5,6 — O 37,4 — N 6,6 — M. G. 428.  
 1) Dimethylester d.  $\delta\epsilon$ -Diacetoximido- $\gamma\zeta$ -Diketo- $\beta\eta$ -Dimethyloktan- $\beta\eta$ -Dicarbonsäure (Soc. 83, 1261 C. 1903 [2] 1423).
- $C_{18}H_{24}NBr$  1) i-Methylbutylphenylbenzylammoniumbromid. Zers. bei 157—158° (B. 40, 1648 C. 1907 [1] 1740).  
 2) r-Methylisobutylphenylbenzylammoniumbromid. Zers. bei 167° (B. 38, 3935 C. 1906 [1] 231).
- $C_{18}H_{24}NJ$  1) Diäthylidibenzylammoniumjodid (B. 10, 314; C. 1902 [2] 1800). — II, 520.  
 2) l-Methylbutylphenylbenzylammoniumjodid (B. 40, 1650 C. 1907 [1] 1740).  
 3) i-Methylbutylphenylbenzylammoniumjodid. Zers. bei 140—141° (B. 40, 1648 C. 1907 [1] 1740).  
 4) l-Methylisobutylphenylbenzylammoniumjodid (B. 38, 3937 C. 1906 [1] 231; Soc. 89, 294 C. 1906 [1] 1543).  
 5) r-Methylisobutylphenylbenzylammoniumjodid. Zers. bei 130—131° (148°) (B. 38, 3935 C. 1906 [1] 231; Soc. 89, 292 C. 1906 [1] 1543).
- $C_{18}H_{24}N_2S_2$  1) Di[4-Dimethylamidobenzyl]disulfid. Sm. 83°. 2HCl (A. 345, 324 C. 1906 [1] 1696).
- $C_{18}H_{24}N_2As_2$  1) 3,3'-Di[Dimethylamido]-4,4'-Dimethylarsenobenzol. Sm. 75° (A. 320, 320 C. 1902 [1] 921). — \*IV, 1192.



- $C_{18}H_{24}N_2Hg$  1) Quecksilberdi[6-Dimethylamido-3-Methylphenyl]. Sm. 60° (*G.* 28 [2] 105). — *IV*, 1711.
- $C_{18}H_{24}N_3J$  1) Jodmethylat d. Auramin. Sm. 235–240° (*B.* 35, 2618 *C.* 1902 [2] 593). — \**IV*, 830.
- $C_{18}H_{24}ClP$  1) Diäthylidibenzylphosphoniumchlorid. 2 +  $PtCl_4$  (*Soc.* 53, 724). — *IV*, 1664.
- 2) Methyläthylphenyl-2, 4, 5 - Trimethylphenylphosphoniumchlorid. 2 +  $PtCl_4$  (*A.* 315, 75). — \**IV*, 1183.
- $C_{18}H_{24}JP$  1) Methyläthylphenyl-2, 4, 5 - Trimethylphenylphosphoniumjodid (*A.* 315, 75). — \**IV*, 1183.
- $C_{18}H_{25}ON$  1) C 79,7 — H 9,2 — O 5,9 — N 5,2 — M. G. 271.
- 1) l-Methylbutylphenylbenzylammoniumhydroxyd (*B.* 40, 1649 *C.* 1907 [1] 1740).
- 2) i-Methylbutylphenylbenzylammoniumhydroxyd. Bromid, Jodid, d-Campfersulfonat (*B.* 40, 1648 *C.* 1907 [1] 1740).
- 3) l-Methylisobutylphenylbenzylammoniumhydroxyd. Salze, siehe (*B.* 38, 3936 *C.* 1906 [1] 231; *Soc.* 89, 293 *C.* 1906 [1] 1543).
- 4) r-Methylisobutylphenylbenzylammoniumhydroxyd. Salze, siehe (*B.* 38, 3935 *C.* 1906 [1] 231; *Soc.* 89, 293 *C.* 1906 [1] 1543).
- 5) Methyläther d. l-2-Oxybenzylidenfenchylamin. Sm. 56° (*A.* 276, 321). — *IV*, 59.
- 6) Methyläther d. l-4-Oxybenzylidenfenchylamin. Sm. 54–55° (*A.* 276, 321). — *IV*, 59.
- 7) Acetylphenylfenchylamin. Sd. 190–193°<sub>24</sub> (*Soc.* 73, 277).
- 8) Benzoylmethylbornylamin. Sm. 127° (*Soc.* 75, 943). — \**IV*, 60.
- $C_{18}H_{25}ON_8$  C 72,2 — H 8,4 — O 5,3 — N 14,0 — M. G. 299.
- 1) Semicarbazon d. Benzyltanacetone. Sm. 195° (*B.* 36, 4370 *C.* 1904 [1] 455).
- 2) 2-Keto-3, 3-Di[1-Piperidyl]-2, 3-Dihydroindol (Dipiperidylisatin) (*B.* 24, 1367). — *IV*, 16.
- $C_{18}H_{25}ON_5$  C 66,1 — H 7,6 — O 4,9 — N 21,4 — M. G. 327.
- 1) Di[4-Dimethylamidophenyl]methyamidoharnstoff. Sm. 185–187° u. Zers. (*C. r.* 146, 1279 *C.* 1908 [2] 326).
- $C_{18}H_{25}O_2N$  C 75,3 — H 8,7 — O 11,1 — N 4,9 — M. G. 287.
- 1) Äthyläther d. 4-Oxyphenylamidocampher. Fl. HCl (*Soc.* 95, 953 *C.* 1909 [2] 360).
- $C_{18}H_{25}O_2N_5$  C 63,0 — H 7,3 — O 9,3 — N 20,4 — M. G. 343.
- 1) 4-Methylbenzoldiazopseudosemicarbazidocampher. Sm. 103° (*Soc.* 89, 235 *C.* 1906 [1] 1431).
- $C_{18}H_{25}O_3N$  C 71,3 — H 8,2 — O 15,8 — N 4,6 — M. G. 303.
- 1) Äthylester d. l-Acetyl- $\alpha$ -2-Methylcamphenpyrrol-3-Carbonsäure. Sm. 63–64° (*A.* 313, 49). — \**IV*, 154.
- 2) d- $\alpha$ -Phenyläthylmonamid d. d-Campfersäure. Sm. 161–162° (*C.* 1908 [2] 1104).
- 3) l- $\alpha$ -Phenyläthylmonamid d. l-Campfersäure. Sm. 161–162° (*C.* 1908 [2] 1104).
- $C_{18}H_{25}O_3N_8$  C 65,3 — H 7,5 — O 14,5 — N 12,7 — M. G. 331.
- 1) Semicarbazon d. Benzoylcampfersäure. Sm. 210° u. Zers. (*C. r.* 144, 299 *C.* 1907 [1] 1126).
- 2) o-Toluolazooxycampfercarbamidsäure. Na, Ag. — *IV*, 1473.
- 3) Äthylester d. 3-Semicarbazon-4-Benzyl-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 169° (*A.* 348, 102 *C.* 1906 [2] 782).
- $C_{18}H_{25}O_3N_5$  C 60,2 — H 6,9 — O 13,4 — N 19,5 — M. G. 359.
- 1) Methyläther d. 4-Oxybenzoldiazopseudosemicarbazidocampher. Sm. 166° u. Zers. (*Soc.* 89, 237 *C.* 1906 [1] 1431).
- $C_{18}H_{25}O_3Br$  1) Verbindung (aus Cholsäure). Sm. 130° u. Zers. (*C.* 1903 [2] 728).
- $C_{18}H_{25}O_4N$  C 67,7 — H 7,8 — O 20,1 — N 4,4 — M. G. 319.
- 1) Hydroxylaminderivat d. l-Piperonylidenmenthon. Sm. 173–174° (*C.* 1904 [2] 1046).
- 2) l-Camphyl-2, 5-Dimethylpyrrol-3, 4-Dicarbonsäure. Sm. 204° u. Zers.  $NH_3$  (*B.* 38, 190 *C.* 1905 [1] 528).
- 3) 4-Benzoxyl-1, 2, 2, 6, 6-Pentamethylhexahydropyridin-4-Carbonsäure. HCl (*D. R. P.* 92588). — \**IV*, 42.

- $C_{18}H_{25}O_4N$  4) Methylester d. 4-Benzoxyl-1,2,2,6-Tetramethylhexahydropyridin-4-Carbonsäure. Sm. 101–101,5° (D.R.P. 90245; C. 1897 [1] 1217). — \*IV, 42.
- $C_{18}H_{25}O_5N$  5) Methylester d. 4-Benzoxyl-2,2,6,6-Tetramethylhexahydropyridin-4-Carbonsäure. Sm. 91–92° (D.R.P. 90245). — \*IV, 42.  
C 64,5 — H 7,4 — O 23,9 — N 4,2 — M. G. 335.
- 1) 4-Methylphenylmonamid d.  $\gamma$ -Acetoxyl- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 157–159° (C. 1898 [2] 885). — \*II, 281.  
C 59,5 — H 6,9 — O 22,0 — N 11,6 — M. G. 363.
- $C_{18}H_{25}O_5N_3$  1)  $\alpha$ -[ $\alpha$ -Benzoylamidoisocapronyl]amidopropionylamidoessigsäure +  $H_2O$ . Sm. 194,5° (corr.) (A. 340, 136 C. 1905 [2] 223).  
2) isom.  $\alpha$ -[ $\alpha$ -Benzoylamidoisocapronyl]amidopropionylamidoessigsäure. Sm. 209–210° (A. 340, 137 C. 1905 [2] 223).
- $C_{18}H_{25}O_6N$  C 61,6 — H 7,1 — O 27,3 — N 4,0 — M. G. 351.
- 1) Triäthylester d.  $\beta$ -Phenylamidopropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Fl. HCl (J. pr. [2] 58, 414). — \*II, 232.
- $C_{18}H_{25}O_7N$  C 58,9 — H 6,8 — O 30,5 — N 3,8 — M. G. 367.
- 1) Senecifolidin. Sm. 212°. (HCl,  $AlCl_3$ ,  $HNO_3$  +  $\frac{1}{2}C_2H_6O$  (Soc. 95, 475 C. 1909 [1] 1768).
- $C_{18}H_{25}O_8N$  C 56,4 — H 6,5 — O 33,4 — N 3,7 — M. G. 383.
- 1) Tetraäthylester d. Pyrrol-2,4-Dicarbonsäure-3,5-Di[Methylcarbon-säure]. Sm. 113–113,5° (B. 35, 1556 C. 1902 [1] 1228). — \*IV, 80.
- $C_{18}H_{25}N_3S$  1) Verbindung (aus Tetrahydrodesoxyecytisin u. Phenylsenföl). Sm. 108° (B. 39, 821 C. 1906 [1] 1172).
- $C_{18}H_{26}ON_2$  C 75,5 — H 9,1 — O 5,6 — N 9,8 — M. G. 286.
- 1)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Bornylharnstoff. Sm. 198° (Soc. 85, 1192 C. 1904 [2] 1125).  
2)  $\alpha$ -[4-Methylphenyl]- $\beta$ -Camphylharnstoff. Sm. 135° (Soc. 87, 737 C. 1905 [2] 243).
- $C_{18}H_{26}OCl_4$  1) Tetrachlorhydrocarotin (A. 117, 211). — III, 626.
- $C_{18}H_{26}O_2N_2$  C 71,5 — H 8,6 — O 10,6 — N 9,3 — M. G. 302.  
2) 2,5-Dimethylhexahydro-1,4-Diazin + 2 Molec. Phenol. Sm. 86° (Bl. [3] 19, 619).  
2) Äthylester d.  $\zeta$ -Phenylhydrazon- $\beta$ -Methyl- $\beta$ -Okten- $\beta$ -Carbonsäure. Sm. 93°; Sd. 235–240°<sub>15</sub> (Bl. [3] 17, 751). — \*I, 260.
- $C_{18}H_{26}O_2Cl_4$  1)  $\alpha\beta$ -Di[3-Keto-4-Dichlormethyl-4-Methylhexahydrophenyl]äthan. Sm. 215–225° (B. 41, 1815 C. 1908 [2] 166).
- $C_{18}H_{26}O_2Br_2$  1) Benzoat d.  $\alpha\beta$ [oder  $\beta\gamma$ ]-Dibrom- $\beta$ -Oxyundekan. Fl. (Soc. 81, 150 C. 1903 [1] 436).
- $C_{18}H_{26}O_3N_2$  C 67,9 — H 8,2 — O 15,1 — N 8,8 — M. G. 318.
- 1) Piperidylmethyamid d. Oxyessig[2-Methoxyl-4-Allylphenyl]äthersäure. Sm. 58–61° (D.R.P. 208255 C. 1909 [1] 1281).  
2) Piperidylmethyamid d. Oxyessig[2-Methoxyl-4-Propenylphenyl]-äthersäure. Sm. 58–61°. HCl (D.R.P. 208255 C. 1909 [1] 1281).  
3) Verbindung (aus d. Äthyläther d. 4-Oxyphenylimidocampher). Sm. 63° (Soc. 95, 953 C. 1909 [2] 360).
- $C_{18}H_{26}O_5N_2$  C 61,7 — H 7,4 — O 22,9 — N 8,0 — M. G. 350.
- 1)  $\alpha$ -[ $\alpha$ -Carbäthoxyamidoisocapronyl]amido- $\beta$ -Phenylpropionsäure. Sm. 140–141,5° (B. 37, 3310 C. 1904 [2] 1306).
- $C_{18}H_{26}O_6N$  1) Senecionin =  $(C_{18}H_{26}O_6N)_x$  (Bl. [3] 13, 942). — III, 931.
- $C_{18}H_{26}O_6N_3$  C 59,0 — H 7,1 — O 26,2 — N 7,6 — M. G. 366.
- 1)  $\beta$ -Amid d.  $\beta$ -[4-Äthoxylphenyl]amidopropan- $\alpha\beta\gamma$ -Tricarbonsäure- $\alpha\gamma$ -Diäthylester. Sm. 77° (B. 38, 3187 C. 1905 [2] 1322).  
C 48,0 — H 5,8 — O 21,3 — N 24,9 — M. G. 450.
- $C_{18}H_{26}O_3N_8$  1) Tetraacetylderivat d. Verb.  $C_{10}H_{18}O_2N_8$ . Sm. 178° u. Zers. (B. 36, 1300 C. 1903 [1] 1256).
- $C_{18}H_{26}O_8N_2$  C 54,2 — H 6,6 — O 32,2 — N 7,0 — M. G. 398.
- 1) Diäthylester d. Bisnitroso- $\beta$ -Keto-hexamethylencarbonsäure. Sm. 110° u. Zers. (B. 33, 594). — \*II, 882.  
2) Diäthylester d. Bisnitroso-Methyl- $\beta$ -Keto-R-Pentamethylencarbonsäure. Sm. 94° u. Zers. (B. 33, 604).  
3) Tetraäthylester d. 3,6-Diamido-P-Dihydrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 213° (A. 258, 274). — II, 2070.

- $C_{18}H_{26}O_8Cl_2$  1) Diacetat d. Dichlorhexaoxydihydrobenzoltetraäthyläther (Dichlor-diäthoxychinondiäthylidiacetylacetal). Sm. 120—121° (*Am.* 20, 422). — \*III, 264.
- $C_{18}H_{26}O_8S_2$  1) Diäthylester d. 1,3-Phenylendi[ $\alpha$ -Sulfonbuttersäure]. Sm. 96° (*J. pr.* [2] 68, 328 *C.* 1903 [2] 1171).
- $C_{18}H_{26}O_9Hg_2$  1) Verbindung (aus Acetessigsäureäthylester) (*B.* 38, 2091 *C.* 1905 [2] 397).
- $C_{18}H_{26}O_{10}S$  1) Thiophenollaktosid. Sm. 221° (corr.) (*B.* 42, 1480 *C.* 1909 [1] 1986).
- $C_{18}H_{28}NJ$  1) Jodmethylat d. d-Benzylidenbornylamin. Sm. 215° u. Zers. (*Soc.* 75, 1152). — \*IV, 60.
- $C_{18}H_{26}N_2Cl_2$  1) Äthylendiäthylidiphenyldiammoniumchlorid. 2 +  $PtCl_4$  (*J.* 1859, 389). — II, 344.  
2) Tetramethyläthylendiphenyldiammoniumchlorid. 2 + 3  $HgCl_2$ , +  $PtCl_4$  (*A.* 224, 348). — II, 343.
- $C_{18}H_{26}N_2Br_2$  1) Tetramethyläthylendiphenyldiammoniumbromid (*A.* 224, 346). — II, 344.
- $C_{18}H_{26}N_2J_2$  1) Äthylendiäthylidiphenyldiammoniumjodid. Sm. 70° (*J.* 1859, 389). — II, 344.  
2) Tetramethyläthylendiphenyldiammoniumjodid (*A.* 224, 350). — II, 344.  
3) Bisjodmethylat d.  $\alpha\beta$ -Di[Methylphenylamido]äthan. Sm. 219° (*Soc.* 95, 418 *C.* 1909 [1] 1648).  
4) Bisjodmethylat d. 2,4'-Di[Dimethylamido]biphenyl. Sm. 196° (*B.* 22, 3017). — IV, 959.
- $C_{18}H_{26}N_2S_8$  1) Dithio-4-Dimethylamidobenzaldehydsulfhydrat. Sm. 162° (*A.* 345, 325 *C.* 1906 [1] 1696).
- $C_{18}H_{28}N_4J_2$  1) Di[Jodmethylat] d. 3,3'-Di[Dimethylamido]azobenzol. Sm. 230° u. Zers. (*B.* 30, 2939). — IV, 1361.
- $C_{18}H_{26}Br_2P_2$  1) Tetramethyläthylendiphenyldiphosphoniumbromid. Sm. oberhalb 300° (*B.* 15, 199). — IV, 1656.
- $C_{18}H_{26}Br_6P_2$  1) Tetramethyläthylendiphenyldiphosphoniumhexabromid. Sm. 171° (*B.* 15, 200). — IV, 1656.
- $C_{18}H_{27}ON$  C 79,1 — H 9,9 — O 5,9 — N 5,1 — M. G. 273.  
1)  $\lambda$ -Benzoylamido- $\alpha$ -Undeken. Sm. 41—42° (*B.* 33, 3582). — \*II, 729.
- $C_{18}H_{27}OCl$  1) Chlormethylpentaäthylphenylketon. Sm. 104° (*B.* 30, 579). — \*III, 127.
- $C_{18}H_{27}OBr$  1) Brommethylpentaäthylphenylketon. Sm. 86° (*B.* 30, 1714). — \*III, 127.
- $C_{18}H_{27}OBr_3$  1) Tribromhydrocarotin (*A.* 117, 212). — III, 626.
- $C_{18}H_{27}O_2N$  C 74,7 — H 9,3 — O 11,1 — N 4,8 — M. G. 289.  
1) Äthylester d.  $\beta$ -Benzylamido- $\alpha$ -Okten- $\alpha$ -Carbonsäure. Fl. (*Bl.* [3] 35, 1194 *C.* 1907 [1] 562).  
2) Benzylester d. 1-Menthylamidoameisensäure. Sd. 235°<sub>25</sub> (*Soc.* 89, 96 *C.* 1906 [1] 1019).  
3) Mentylester d. 2-Methylphenylamidoameisensäure (*Ph. Ch.* 14, 397). — III, 467.  
4) Mentylester d. 3-Methylphenylamidoameisensäure (*Ph. Ch.* 14, 397). — III, 467.  
5) Mentylester d. 4-Methylphenylamidoameisensäure (*Ph. Ch.* 14, 397). — III, 467.  
6) 2-Methylphenylester d. 1-Menthylamidoameisensäure. Sm. 148° (*Soc.* 91, 303 *C.* 1907 [1] 1330).  
7) 3-Methylphenylester d. 1-Menthylamidoameisensäure. Sm. 100° (*Soc.* 91, 303 *C.* 1907 [1] 1330).  
8) 4-Methylphenylester d. 1-Menthylamidoameisensäure. Sm. 119° (*Soc.* 91, 303 *C.* 1907 [1] 1330).  
9) Benzoat d. stab. 4-Oxy-2,2-Dimethyl-6-Isobutylhexahydropyridin. Sm. 65—66° (D.R.P. 97009). — \*IV, 37.
- 10) Phenylamidoformiat d.  $\lambda$ -Oxy- $\alpha$ -Undeken. Sm. 55° (*Bl.* [3] 31, 1210 *C.* 1905 [1] 25).
- 11) Phenylamidoformiat d. 1-3-Oxy-4-Isobutyl-1-Methylhexahydrobenzol. Sm. 77° (*C. r.* 140, 478 *C.* 1905 [1] 872).
- 12) Cinnamylat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta\delta$ -Dimethylpentan. HCl (D.R.P. 169787 *C.* 1906 [1] 1683).  
C 70,8 — H 8,8 — O 15,7 — N 4,6 — M. G. 305.  
1) Hydroxylaminderivat d. 1-p-Anisylidenmenthon. Sm. 165—166° (*C.* 1904 [2] 1046).



- C<sub>18</sub>H<sub>27</sub>O<sub>3</sub>N** 2) Phenylglykolat d. lab. 4-Oxy-2,2,6-Trimethyl-1-Äthylhexahydro-pyridin. Sm. 88—91° (D.R.P. 95620 C. 1898 [1] 968). — \*IV, 33.  
3) Phenylmonamid d. cis-β<sub>η</sub>-Dimethyloktan-δ<sub>ε</sub>-Dicarbonsäure. Fl. (Soc. 77, 1301).  
4) Phenylmonamid d. trans-β<sub>η</sub>-Dimethyloktan-δ<sub>ε</sub>-Dicarbonsäure. Sm. 134—135° (Soc. 77, 1301).  
5) 4-Methylphenylmonamid d. cis-β<sub>ζ</sub>-Dimethylheptan-γ<sub>δ</sub>-Dicarbonsäure. Sm. 156—157° (Am. 30, 238 C. 1903 [2] 934).  
**C<sub>18</sub>H<sub>27</sub>O<sub>4</sub>N** C 67,3 — H 8,4 — O 19,9 — N 4,4 — M. G. 321.  
1) Methylhydroxyd d. Atropin. Nitrat, Sulfat (D.R.P. 138443 C. 1903 [1] 427).  
2) Isoamylester d. β-Dimethylamido-α-Benzoxylisobuttersäure. Sd. 213°<sub>27</sub>. HCl (D.R.P. 198306 C. 1908 [1] 1957; D.R.P. 202167 C. 1908 [2] 1219).  
3) 2-Nitrophenylester d. Laurinsäure. Sm. 35—36° (A. 332, 205 C. 1904 [2] 211).  
**C<sub>18</sub>H<sub>27</sub>O<sub>6</sub>N<sub>3</sub>** 4) Verbindung (Säure aus Cholesterin). K, Cu, Ag (M. 15, 110). — II, 1074.  
C 56,7 — H 7,1 — O 25,2 — N 11,0 — M. G. 381.  
1) Triisobutylester d. Cyanurtricarbonsäure (Tr. d. Paracyanameisensäure). Sm. 158° (J. pr. [2] 10, 215; B. 38, 1010). — I, 1217.  
**C<sub>18</sub>H<sub>27</sub>O<sub>7</sub>Br** 1) Hexaglycerinbromhydrin (A. 101, 73). — I, 315.  
**C<sub>18</sub>H<sub>27</sub>O<sub>8</sub>N** C 56,1 — H 7,0 — O 33,2 — N 3,6 — M. G. 385.  
1) Senecifolin. Sm. 194—195°. HCl, (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (Soc. 95, 469 C. 1909 [1] 1768).  
**C<sub>18</sub>H<sub>27</sub>O<sub>8</sub>Br** 1) Tetraäthylester d. 1,1-Dimethyl-R-Trimethylen-2,3-Dicarbonsäure-2-Brommethyldicarbonsäure. Fl. (Soc. 79, 769).  
**C<sub>18</sub>H<sub>27</sub>O<sub>10</sub>Cl** 1) Pentaäthylester d. α-Chlorpropan-ααβγ-Pentacarbonsäure (B. 21, 2115). — I, 870.  
**C<sub>18</sub>H<sub>27</sub>O<sub>11</sub>N** C 49,9 — H 6,2 — O 40,7 — N 3,2 — M. G. 433.  
1) Pentaacetat d. ζ-Acetylamido-αβγδ<sub>ε</sub>-Pentaoxyhexan (P. d. Acetyl-glykamin). Sm. 70° (C. r. 134, 292 C. 1902 [1] 565).  
**C<sub>18</sub>H<sub>27</sub>O<sub>14</sub>N** C 44,9 — H 5,6 — O 46,6 — N 2,9 — M. G. 481.  
1) Chondroitin (B. 25 [2] 473; H. 37, 411 C. 1903 [1] 1146; A. 351, 350 C. 1907 [1] 1590). — IV, 1628.  
**C<sub>18</sub>H<sub>28</sub>ON<sub>2</sub>** C 75,0 — H 9,7 — O 5,5 — N 9,7 — M. G. 288.  
1) Benzylamid d. l-Menthylamidoameisensäure. Sm. 158—159° (Soc. 91, 305 C. 1907 [1] 1331).  
2) 2-Methylphenylamid d. l-Menthylamidoameisensäure. Sm. 201° (Soc. 91, 305 C. 1907 [1] 1331).  
3) 3-Methylphenylamid d. l-Menthylamidoameisensäure. Sm. 197° (Soc. 91, 305 C. 1907 [1] 1331).  
4) 4-Methylphenylamid d. l-Menthylamidoameisensäure. Sm. 179 bis 180° (Soc. 91, 305 C. 1907 [1] 1331).  
**C<sub>18</sub>H<sub>28</sub>OCl<sub>2</sub>** 1) Verbindung (aus d. Nopinonverb. C<sub>18</sub>H<sub>29</sub>OCl<sub>3</sub>). Sm. 125—126° (C. 1907 [2] 933; A. 356, 234 C. 1907 [2] 1792).  
**C<sub>18</sub>H<sub>28</sub>O<sub>2</sub>N<sub>2</sub>** C 71,1 — H 9,2 — O 10,5 — N 9,2 — M. G. 304.  
1) Tetramethyläthylendiphenyldiammoniumhydroxyd. Salze, siehe (A. 224, 346). — II, 343.  
2) β-Phenylakrylat d. α-Dimethylamido-β-Oxy-β-Dimethylamidomethylbutan. Fl. HCl (D.R.P. 173631 C. 1906 [2] 933).  
3) Phenylamidoformiat d. β-Oximidooundekan. Sm. 39—41° (C. 1901 [1] 524).  
**C<sub>18</sub>H<sub>29</sub>O<sub>2</sub>N<sub>6</sub>** C 60,0 — H 7,8 — O 8,9 — N 23,3 — M. G. 360.  
1) 5,5'-Disemicarbazon-3,3',3'-Tetramethyl-2,3,4,5,2',3',4',5'-Oktohydrobiphenyl. Sm. 273° (Soc. 91, 71 C. 1907 [1] 1038).  
**C<sub>18</sub>H<sub>28</sub>O<sub>2</sub>Br<sub>8</sub>** 1) Oktobromarachidinsäure (C. 1909 [2] 921).  
**C<sub>18</sub>H<sub>28</sub>O<sub>3</sub>N** 1) Capsaicin. Sm. 63—63,5° (C. 1899 [1] 293). — \*III, 461.  
**C<sub>18</sub>H<sub>28</sub>O<sub>4</sub>N<sub>2</sub>** C 64,3 — H 8,3 — O 19,1 — N 8,3 — M. G. 336.  
1) 4,6-Dibutyläther d. 4,6-Dioxy-1,3-Di[α-Oximidoäthyl]benzol. Sm. 169° (C. 1905 [1] 815).  
2) 4,6-Diisobutyläther d. 4,6-Dioxy-1,3-Di[α-Oximidoäthyl]benzol. Sm. 207° (C. 1905 [1] 815).  
3) 4-Butyläther-6-Isobutyläther d. 4,6-Dioxy-1,3-Di[α-Oximidoäthyl]-benzol. Sm. 187° (C. 1905 [1] 815).

- $C_{18}H_{25}O_6N_2$  C 58,7 — H 7,6 — O 26,1 — N 7,6 — M. G. 368.  
 1) Diäthylester d. meso- $\alpha\beta$ -Di[Acetylacetonamido]bernsteinsäure. Sm. 138—139° (B. 38, 1592 C. 1905 [1] 1535).
- $C_{18}H_{28}O_8N_2$  C 54,0 — H 7,0 — O 32,0 — N 7,0 — M. G. 400.  
 1) Tetraäthylester d.  $\alpha\beta$ -Äthylendi[amidoäthen- $\alpha\alpha$ -Dicarbonsäure]. Sm. 126° (B. 28, 823). — \*I, 670.
- $C_{18}H_{28}O_8N_4$  C 50,4 — H 6,5 — O 29,9 — N 13,1 — M. G. 428.  
 1) Orylsäure. Zn, Cu,  $Ag_3 + 3H_2O$  (H. 22, 260). — IV, 1641.
- $C_{18}H_{28}O_{10}N_2$  C 50,0 — H 6,5 — O 37,0 — N 6,5 — M. G. 432.  
 1) 1,2-Diglykodiamidobenzol +  $2H_2O$  (B. 20, 2206). — IV, 565.  
 2) Phenylhydrazon d. Cellobiose. Zers. bei 90° (M. 22, 1031 C. 1902 [1] 183). — \*IV, 523.  
 3) Phenylhydrazon d. Maltose. Sm. 130° u. Zers. (C. r. 142, 582 C. 1906 [1] 1235).  
 4) Phenylhydrazon d. Melibiose. Sm. 145° (B. 23, 1439). — IV, 794.  
 5) Phenylhydrazon d. Milchzucker (B. 20, 2575). — IV, 794.
- $C_{18}H_{28}NJ$  1) Jodmethylat d. Benzylbornylamin. (A. 269, 352). — IV, 56.  
 $C_{18}H_{28}N_2S$  1)  $\lambda$ -[ $\beta$ -Phenylthioureido]- $\alpha$ -Undeken. Sm. 48° (B. 33, 3582). — \*II, 196.  
 $C_{18}H_{28}N_3J$  1) Jodmethylat d.  $\alpha$ -Phenylecyanamido- $s$ -[1-Piperidyl]pentan. Sm. 101° (B. 40, 3921 C. 1907 [2] 1524).
- $C_{18}H_{28}N_4J_2$  1) Di[Jodmethylat] d. 4,4'-Diamido-2,2'-Di[Dimethylamido]biphenyl (B. 30, 2942). — IV, 1275.
- $C_{18}H_{29}ON$  C 78,5 — H 10,5 — O 5,8 — N 5,1 — M. G. 275.  
 1) 3-Methyl-6-Isopropylphenyläther d. 1- $[\gamma$ -Oxypropyl]hexahydro-pyridin. Sd. 197°. HCl (D.R.P. 184968 C. 1907 [2] 862).  
 2) Methylderivat d. Thymotin- $\alpha$ -Methylpiperidid. Sm. 116°. (2HCl,  $PtCl_4$ ) (H. 44, 284 C. 1905 [1] 1110).  
 3) Phenylamid d. Laurinsäure. Sm. 76,5° (68°) (J. pr. [2] 52, 60; Am. 27, 306 C. 1902 [1] 1303; Soc. 93, 1037 C. 1908 [2] 503).  
 4) 4-Methylphenylamid d. Dekan- $\alpha$ -Carbonsäure. Sm. 75° (67°) (Bl. [4] 1, 354 C. 1907 [2] 34; Soc. 93, 1037 C. 1908 [2] 503).  
 5) Undekylamid d. Benzolcarbonsäure. Sm. 60° (Am. 22, 36). — \*II, 728.  
 6) Isoundekylamid d. Benzolcarbonsäure. Sm. 84° (G. 24 [2] 279). — II, 1161.  
 7)  $\beta$ -Benzoylamidoundekan. Sm. 84° (G. 24 [2] 279).
- $C_{18}H_{29}OCl_3$  1) 1,3-Dichlor-4-Keto-3-[4-Chlor-4-Isopropylhexahydrophenyl]-1-Isopropylhexahydrobenzol. Sm. 124° (A. 359, 276 C. 1908 [1] 2154).  
 2) Verbindung (aus Nopinon). Sm. 148° u. Zers. (C. 1907 [2] 983; A. 356, 233 C. 1907 [2] 1792).
- $C_{18}H_{29}OJ$  1) Jodhydrocarotin (A. 117, 213).  
 $C_{18}H_{29}O_2N$  C 74,2 — H 9,9 — O 11,0 — N 4,8 — M. G. 291.  
 1) Phenylamidoformiat d.  $\alpha$ -Oxyundekan. Sm. 55—55,5° (62°) (Bl. [3] 31, 51 C. 1904 [1] 507; Am. 22, 38). — \*II, 179.  
 2) Phenylamidoformiat d.  $\beta$ -Oxyundekan. Sm. 36,5—37° (B. 35, 2144 C. 1902 [2] 260).  
 3) Phenylamid d.  $\alpha$ -Oxyundekan- $\alpha$ -Carbonsäure. Sm. 83° (Bl. [3] 29, 1127 C. 1904 [1] 261).  
 4) Phenylamid d. Oxylaurinsäure. Sm. 155—157° (C. 1908 [2] 888).  
 5) 4-Methylphenylamid d.  $\alpha$ -Oxydekan- $\alpha$ -Carbonsäure. Sm. 92° (Bl. [4] 1, 356 C. 1907 [2] 34).  
 6) 2-Oxyphenylamid d. Laurinsäure. Sm. 68—69° (A. 332, 206 C. 1904 [2] 211).
- $C_{18}H_{29}O_3N$  C 70,3 — H 9,4 — O 15,6 — N 4,6 — M. G. 307.  
 1) Diäthyläther d. N-Benzoyl- $\beta\beta$ -Dioxyäthyl-1-Amylamin. Fl. (Ar. 246, 314 C. 1908 [2] 229).
- $C_{18}H_{29}O_4N_3$  C 61,6 — H 8,3 — O 18,2 — N 11,9 — M. G. 351.  
 1) 1-Äthyläther d. 4- $[\alpha$ -Oxypropionyl]amido- $p$ -Diäthylamidoacetyl-amidomethylbenzol. Sm. 131—132° (A. 343, 303 C. 1906 [1] 928).  
 2) 4-Nitrobenzoat d.  $\alpha\gamma$ -Di[Diäthylamido]- $\beta$ -Oxypropan. Sm. 41° (D.R.P. 179627 C. 1907 [1] 1365).
- $C_{18}H_{29}O_{11}N_3$  C 46,6 — H 6,3 — O 38,0 — N 9,1 — M. G. 463.  
 1) Monosemicarbazon d. Methylenbisoxaleessigsäureäthylester. Sd. 167° u. Zers. (Bl. [4] 1, 27 C. 1907 [1] 825).

- $C_{18}H_{29}N_3S$  1) Verbindung (aus Benzylaminrhodanid). Sm.  $164^\circ$  ( $161-162^\circ$ ) (Soc. 59, 552; B. 24, 2727). — II, 527.
- $C_{18}H_{29}ClS$  1) Diisoamylphenacylsulfinchlorid.  $2 + PtCl_4$  (C. 1905 [1] 1218).
- $C_{18}H_{29}BrS$  1) Diisoamylphenacylsulfinbromid. Sm.  $60-61^\circ$  (C. 1905 [1] 1218).
- $C_{18}H_{30}ON_2$  1) Phenylhydrazid d. Laurinsäure. Sm.  $105^\circ$  (Bl. [3] 29, 1122 C. 1904 [1] 259).
- $C_{18}H_{30}O_2N_2$  1) Benzoat d.  $\beta\gamma$ -Di[Diäthylamido]- $\alpha$ -Oxypropan. ( $2HCl$ ,  $PtCl_4$ ) (B. 17, 511). — II, 1140.
- 2) Benzoat d.  $\alpha\gamma$ -Di[Diäthylamido]- $\beta$ -Oxypropan. ( $2HCl$ ,  $PtCl_4$ ) (B. 17, 511). — II, 1140.
- $C_{18}H_{30}O_2Br_4$  1)  $\beta$ -Linolensäuretetraabromid. Fl. (B. 42, 1333 C. 1909 [1] 1698).
- $C_{18}H_{30}O_2Br_6$  1) Hexabromstearinsäure (Linolensäurehexabromid). Sm.  $177^\circ$  (180 bis  $181^\circ$ ). K, Ba (M. 8, 268; C. 1899 [1] 382; B. 42, 1329 C. 1909 [1] 1698). — I, 537; \*I, 218.
- $C_{18}H_{30}O_4N_2$  1) Verbindung (aus Nitrosodihydrolauroilaktam). Sm.  $327-328^\circ$  (Am. 32, 1223 C. 1904 [2] 1223).
- $C_{18}H_{30}O_6Cl_2$  1) Diäthyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinontetraäthylacetal. Sm.  $101-102^\circ$  (Am. 17, 633). — III, 351.
- $C_{18}H_{30}O_{12}N_2$  1) Colloïdin (Bl. 22, 100). — IV, 1631.
- $C_{18}H_{30}O_{16}S$  1) Stärkeschwefelsäure (A. 55, 13). — I, 1087.
- $C_{18}H_{30}NCl$  1) Tripropyl- $\gamma$ -Phenylallylammoniumchlorid.  $2 + PtCl_4$ ,  $+ AuCl_3$  (Ar. 247, 345 C. 1909 [2] 1439; Ar. 247, 371 C. 1909 [2] 1441).
- $C_{18}H_{30}NJ$  1)  $\alpha$ -Jodbenzylat d. d-1,2-Dipropylhexahydropyridin. Sm.  $159^\circ$  (B. 38, 598 C. 1905 [1] 751).
- 2)  $\beta$ -Jodbenzylat d. d-1,2-Dipropylhexahydropyridin. Sm.  $196^\circ$  (B. 38, 599 C. 1905 [1] 751).
- $C_{18}H_{30}J_2As_2$  1) Hexaallyldiarsoniumdijodid.  $+ 2HgCl_2$ ,  $+ 2HgJ_2$  (C. 1899 [1] 889; A. 341, 223 C. 1905 [2] 814). — \*I, 852.
- $C_{18}H_{31}O_2N$  1) Hydroxylaminderivat d. Desoxyphoron. Sm.  $133-134^\circ$  (A. 296, 322). — \*I, 530.
- 2) 2-Hexylpyrrol-5-[Heptyl- $\eta$ -Carbonsäure] (D.R.P. 180926 C. 1907 [1] 916).
- $C_{18}H_{31}O_2N_3$  1) C 67,3 — H 9,6 — O 10,0 — N 13,1 — M. G. 321.
- 4) 4-Amidobenzoat d.  $\alpha\gamma$ -Di[Diäthylamido]- $\alpha$ -Oxypropan. Sm.  $49^\circ$  (D.R.P. 179627 C. 1907 [1] 1365).
- $C_{18}H_{31}O_2N_5$  1) C 62,0 — H 8,9 — O 9,1 — N 20,0 — M. G. 349.
- 8) 8-Diisoamyl-2,6-Diketo-1,3,7-Trimethylpurin (Diisoamylamidokaffein). Sm.  $99,5^\circ$  (B. 31, 1140). — \*III, 706.
- $C_{18}H_{31}O_5N_5$  1) C 54,4 — H 7,8 — O 20,1 — N 17,6 — M. G. 397.
- 1) Amid d. Oxyhexinsäure. Sm.  $214-215^\circ$  (A. ch. [5] 20, 490).
- 2) Amid d. Isooxyhexinsäure. Sm.  $240^\circ$  u. Zers. (A. ch. [5] 20, 492).
- $C_{18}H_{31}O_8N_7$  1) C 45,7 — H 6,5 — O 27,1 — N 20,7 — M. G. 473.
- 1)  $\alpha$ -Amidoisocapronylpenta[Amidoacetyl]amidoessigsäure. Zers. bei  $270^\circ$  (B. 39, 461 C. 1906 [1] 1001).
- $C_{18}H_{31}N_3S$  1)  $\alpha$ -Phenylamido- $\beta$ -Isoundekylthioharnstoff.  $\alpha$ -Modif. Sm.  $80^\circ$ ;  $\beta$ -Modif. Sm.  $109^\circ$  (G. 24 [2] 287). — IV, 678.
- $C_{18}H_{32}ON_2$  1) C 74,0 — H 10,9 — O 5,5 — N 9,6 — M. G. 292.
- 1) 6-Oxy-5-Isobutyl-2,4-Diisoamyl-1,3-Diazin. ( $2HCl$ ,  $PtCl_4$ ) (J. pr. [2] 37, 410). — \*IV, 1135.
- $C_{18}H_{32}O_2N_2$  1) C 70,1 — H 10,4 — O 10,4 — N 9,1 — M. G. 308.
- 1) Pinakon (aus N-Methylgranatonin). Sm.  $248^\circ$ . ( $2HCl$ ,  $AuCl_3$ ), 2 Pikrat (G. 31 [1] 568). — \*IV, 55.
- $C_{18}H_{32}O_2Cl_4$  1) Tetrachlorstearinsäure. Sm.  $124,5-125^\circ$  (C. 1896 [1] 953).
- $C_{18}H_{32}O_2Br_2$  1) Dibromölsäure (A. 140, 56). — I, 526.
- 2) Taririnsäuredibromid. Sm.  $32^\circ$ . K (Bl. [3] 7, 233). — I, 536.
- $C_{18}H_{32}O_2Br_4$  1) Tetrabromstearinsäure. Sm.  $70^\circ$  (A. 140, 56). — I, 489.
- 2) Tetrabromstearinsäure (aus Leinölsäure). Fl. (J. r. 21, 214). — I, 489.
- 3) Tetrabromstearinsäure. Fl. (B. 42, 3346 C. 1909 [2] 1634).
- 4) Tetrabromtetrahydrotelfairiasäure. Sm.  $57-58^\circ$  (C. 1900 [1] 588).



- $C_{18}H_{32}O_2Br_4$  5) Elaeomargarinsäuretetra-bromid. Sm. 114° (Soc. 83, 1044 C. 1903 [2] 657).
- 6) Hanfölsäuretetra-bromid. Sm. 114–115° (113,4°) (M. 8, 149, 263; C. 1899 [1] 547). — I, 535; \*I, 217.
- 7) Taririnsäuretetra-bromid. Sm. 125° (138°) (Bl. [3] 7, 233; B. 27 [2] 20). — I, 536.
- 8) Bromverbindung (d. Säure  $C_{18}H_{32}O_2$  aus Ricinelaïdinsäure). Sm. 80 bis 81° (M. 15, 311). — \*I, 217.
- $C_{18}H_{32}O_3J_2$  1)  $\epsilon$ -Dijod- $\epsilon$ -Heptadeken- $\alpha$ -Carbonsäure. Sm. 48,5° (C. r. 149, 221 C. 1909 [2] 1317).
- 2)  $\theta$ -Dijod- $\theta$ -Heptadeken- $\alpha$ -Carbonsäure (Dijodstearolsäure). Sm. 51° (C. r. 149, 221 C. 1909 [2] 1317).
- 3) Stearolsäuredijodid. Sm. 50–51°. Ag (B. 24, 4116). — I, 527.
- $C_{18}H_{32}O_3Br_2$  1)  $\kappa\lambda$ -Dibrom- $\theta$ -Ketoheptadekan- $\alpha$ -Carbonsäure (Dibromketostearinsäure). Fl. (B. 28, 2249). — \*I, 252.
- 2) Dibromricinolsäure. Fl. (Z. 1867, 549). — I, 613.
- $C_{18}H_{32}O_4Br_4$  1) Ricinestearolsäuretetra-bromid (Z. 1867, 549). — I, 580.
- $C_{18}H_{32}O_4N_2$  C 63,5 — H 9,4 — O 18,8 — N 8,2 — M. G. 340.
- 1) Diäthylester d. Äthylendi[ $\beta$ -Amido- $\alpha$ -Äthylcrotonsäure]. Sm. 106 bis 107° (Soc. 63, 1310). — \*I, 664.
- $C_{18}H_{32}O_5N_6$  C 50,5 — H 7,5 — O 22,4 — N 19,6 — M. G. 428.
- 1) Di[ $\beta$ -Semicarbazonpropylester]d.  $\beta$ -Methylheptan- $\gamma$ - $\zeta$ -Dicarbonsäure. Sm. 162° u. Zers. (C. r. 146, 139 C. 1908 [1] 1169).
- $C_{18}H_{32}O_5S$  1)  $\theta$ -Heptadekin- $\alpha$ -Carbonsäure- $\lambda$ -Schwefelsäure. Fl. Ba (C. 1909 [1] 1751).
- $C_{18}H_{32}O_5N_2$  C 53,5 — H 7,9 — O 31,7 — N 6,9 — M. G. 404.
- 1) Rhamnodiäzin. Sm. 186° (B. 22, 304, 3247). — I, 290.
- $C_{18}H_{33}ON$  C 77,4 — H 11,8 — O 5,7 — N 5,0 — M. G. 279.
- 1) Amid d.  $\alpha$ -Heptadeken- $\alpha$ -Carbonsäure. Sm. 107–108° (G. 34 [2] 85 C. 1904 [2] 694).
- 2) Amid d. Chaulmoograsäure. Sm. 106° (Soc. 85, 855 C. 1904 [2] 348, 604).
- $C_{18}H_{33}OCl$  1) Chlorid d. Elaïdinsäure. Sm. 0°; Sd. 216°<sub>13</sub> (B. 33, 3582).
- 2) Chlorid d. Ölsäure. Sd. 213°<sub>13,5</sub> (B. 33, 3584).
- $C_{18}H_{33}O_2Cl$  1) Chlorölsäure. Sm. 12° (C. 1896 [1] 953).
- 2) Chlorelaïdinsäure. Sm. 26–27° (C. 1896 [1] 953).
- $C_{18}H_{33}O_2Br$  1) Bromölsäure (A. 140, 47; J. pr. [2] 67, 308 C. 1903 [1] 1404). — I, 526.
- 2) Bromdihydrochaulmoograsäure. Sm. 36–38° (Soc. 85, 856 C. 1904 [2] 348, 856).
- 3) Säure (aus Ricinoleïnsäure) (J. pr. [2] 62, 364).
- $C_{18}H_{33}O_2Br_3$  1) Tribromstearinsäure. Fl. (A. 140, 59). — I, 489.
- $C_{18}H_{33}O_2J$  1) Jodstearidensäure (B. 9, 1917). — I, 527.
- $C_{18}H_{33}O_3N$  C 69,4 — H 10,6 — O 15,4 — N 4,5 — M. G. 311.
- 1)  $\alpha$ -Propylamylmonamid d. Camphersäure. Sm. 177–178° (C. 1908 [2] 1436).
- $C_{18}H_{33}O_3N_3$  C 63,7 — H 9,7 — O 14,2 — N 12,4 — M. G. 339.
- 1) Triisoamylester d. norm. Cyanursäure. Sd. oberhalb 360° (J. pr. [2] 33, 131). — I, 1271.
- 2) Triisoamylester d. Isocyanursäure (B. 12, 1330).
- $C_{18}H_{33}O_3Cl$  1)  $\lambda$ -Chlor- $\theta$ -Ketoheptadekan- $\alpha$ -Carbonsäure (Chlorketostearinsäure). Sm. 64° (B. 28, 2248; 29, 806). — \*I, 252.
- $C_{18}H_{33}O_3Br$  1) Bromricinolsäure. Fl.  $NH_4$ , K (Z. 1867, 546). — I, 613.
- 2) Bromricinelaïdinsäure. Fl. (Z. 1867, 549). — I, 613.
- 3)  $\lambda$ -Brom- $\theta$ -Ketoheptadekan- $\alpha$ -Carbonsäure (Bromketostearinsäure). Sm. 55° (B. 29, 806). — \*I, 252.
- $C_{18}H_{33}O_3Br_3$  1) Bromricinolsäuredibromid (Z. 1866, 545). — I, 580.
- $C_{18}H_{33}O_4N$  C 66,0 — H 10,1 — O 19,6 — N 4,3 — M. G. 327.
- 1)  $\theta$ [oder  $\iota$ ]-Oximido- $\iota$ [oder  $\theta$ ]-Ketoheptadekan- $\alpha$ -Carbonsäure (Oximidoketostearinsäure). Sm. 76–81° (B. 29, 812). — \*I, 320.
- 2) Pelargylmonoamid d. Azelaïnsäure (Pelargylamidazelaïnsäure) (B. 29, 813). — \*I, 775.
- $C_{18}H_{33}O_5N$  C 63,0 — H 9,6 — O 23,3 — N 4,1 — M. G. 343.
- 1)  $\gamma$ -Oximido- $\beta$ -Methylpentadekan- $\alpha\alpha$ -Dicarbonsäure. Sm. 67–68° (Soc. 91, 577 C. 1907 [2] 72).

- $C_{18}H_{33}O_6N_5$  C 52,1 — H 7,9 — O 23,1 — N 16,9 — M. G. 415.  
 1) 1- $\alpha$ -[1- $\alpha$ -Amidoisocapronyl]trisamidoacetylamidoisocaprinsäure. Zers. bei 229° (A. 365, 179 C. 1909 [1] 1805).
- $C_{18}H_{33}O_{10}N_3$  C 47,3 — H 7,2 — O 35,0 — N 10,5 — M. G. 457.  
 1) Verbindung (aus Blut) (B. 25 [2] 476).
- $C_{18}H_{33}O_{12}N_{13}$  C 34,7 — H 5,3 — O 30,8 — N 29,2 — M. G. 623.  
 1) Verbindung (aus  $\alpha\beta$ -Di[Oxymethyl]harnstoff). Sm. noch nicht bei 250° (A. 361, 133 C. 1908 [2] 397).
- $C_{18}H_{33}N_3S_3$  1) Triisoamylester d. Trithiocyanursäure. Fl. (J. pr. [2] 33, 120). — I, 1285.
- $C_{18}H_{34}O_2N_6$  C 59,0 — H 9,3 — O 8,7 — N 22,9 — M. G. 366.  
 1) Di[Heptylamid] d. 1,2-Dihydro-1,2,4,5-Tetrazin-3,6-Dicarbonsäure. Sm. 240° (B. 42, 3279 C. 1909 [2] 1573).
- $C_{18}H_{34}O_2Cl_2$  1) Dichlorstearinsäure (aus Ölsäure). Sm. 36—37° (C. 1896 [1] 953).  
 2) Dichlorstearinsäure (aus Elaidinsäure). Sm. 49—49,5° (C. 1896 [1] 953).  
 3) Dichlorstearinsäure. Sm. 32° (B. 23, 2531). — I, 476.
- $C_{18}H_{34}O_2Br_2$  1)  $\alpha\beta$ -Dibromstearinsäure. Sm. 72° (G. 34 [2] 85 C. 1904 [2] 694; G. 35 [2] 569 C. 1906 [1] 819).  
 2) Dibromstearinsäure (aus Elaidinsäure). Sm. 27°. Ba (J. 1864, 341; A. 140, 61; J. pr. [2] 67, 291 C. 1903 [1] 1404). — I, 489.  
 3) Dibromstearinsäure (aus Ölsäure) (A. 140, 42). — I, 488.  
 4) Dibromstearinsäure (aus Isoölsäure). Fl. (J. pr. [2] 37, 275; [2] 50, 64). — I, 488.  
 5) Säure (aus Ricinoleinsäure) (J. pr. [2] 62, 366).
- $C_{18}H_{34}O_2J_2$  1) Dijodstearinsäure. Fl. (B. 42, 3342 C. 1909 [2] 1634).
- $C_{18}H_{34}O_2Hg$  1) Lakton d.  $\alpha$ -Quecksilberhydroxydstearinsäure (D.R.P. 208634 C. 1909 [1] 1520).
- $C_{18}H_{34}O_3Br_2$  1) Ricinölsäurebromid. Fl. (Z. 1867, 545). — I, 580.  
 1) Ricinelaidinsäurebromid. Fl. (Z. 1867, 548). — I, 580.  
 2) Derivat d. Säure  $C_{18}H_{34}O_3$  (aus Quittensamenöl). Sm. 108° (C. 1899 [2] 444). — \*I, 234.
- $C_{18}H_{34}O_4N_2$  C 63,2 — H 9,9 — O 8,2 — N 18,7 — M. G. 342.  
 1)  $\epsilon\zeta$ -Dioximidoheptadekan- $\alpha$ -Carbonsäure. Sm. 166—167° (C. r. 134, 548 C. 1902 [1] 858).  
 2)  $\nu$ -Dioximidoheptadekan- $\alpha$ -Carbonsäure. Sm. 153—154° (B. 28, 277). — \*I, 186.  
 3)  $\lambda$ -Dioximidoheptadekan- $\alpha$ -Carbonsäure. Sm. 113—114° (D. R. P. 180926 C. 1907 [1] 916).
- $C_{18}H_{34}O_6S$  1) Ricinoschwefelsäure. Fl. (Bl. [3] 11, 281).
- $C_{18}H_{34}O_6N_2$  C 57,7 — H 9,1 — O 25,7 — N 7,5 — M. G. 374.  
 1) Nitrit d. Nitrooxystearinsäure. Sm. 85—87° (C. 1904 [1] 260).
- $C_{18}H_{34}O_6S$  1)  $\delta$ -Heptadeken- $\alpha$ -Carbonsäure- $\lambda$ -Schwefelsäure. Fl. Ba (C. 1909 [1] 1750).  
 2) Ricinelaidinschwefelsäure. Fl. (C. 1909 [2] 1422).  
 3) Ricinolschwefelsäure (C. 1909 [1] 67).
- $C_{18}H_{34}N_2J_2$  1) Jodmethylat-Jodäthylat d. Spartein. Sm. 239° (Ar. 242, 516 C. 1904 [2] 1412).  
 2) isom. Jodmethylat-Jodäthylat d. Spartein. Sm. 246° (Ar. 242, 516 C. 1904 [2] 1412).
- $C_{18}H_{35}ON$  C 76,8 — H 12,4 — O 5,7 — N 5,0 — M. G. 281.  
 1) norm. Heptadekylisocyanat. Sd. 208—209°<sub>17</sub> (B. 42, 3359 C. 1909 [2] 1429).  
 2) Anhydroamidostearinsäure. — IV, 1587.  
 3) Nitrid d.  $\alpha$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Sm. 61,5—62,5° (Soc. 85, 834 C. 1904 [2] 509).  
 4) Amid d. Ölsäure. Sm. 75° (78—81°) (J. 1855, 532; 1859, 368; B. 31, 2349). — I, 1250; \*I, 707.  
 5) Amid d. Elaidinsäure. Sm. 92—94° (J. 1855, 532; J. pr. [2] 61, 102; B. 31, 2349; C. 1899 [1] 1070). — I, 1250; \*I, 707.  
 6) Amid d. Petroselininsäure. Sm. 76° (B. 42, 1638 C. 1909 [2] 12).
- $C_{18}H_{35}OCl$  1) Chlorid d. Stearinsäure. Sm. 23°; Sd. 215°<sub>15</sub> u. Zers. (B. 17, 1380). — I, 460.  
 2) Chlorid d.  $\lambda$ -Isostearinsäure. Fl. (Ar. 241, 18 C. 1903 [1] 698).

- C<sub>18</sub>H<sub>35</sub>O<sub>2</sub>N** C 72,7 — H 11,8 — O 10,8 — N 4,7 — M. G. 297.  
 1)  $\beta$ -Oximido- $\gamma$ -Ketooktadekan. Sm. 79–80° (*G.* 29 [1] 472). — \*I, 513.  
 2) Oleinhydroxamsäure. Sm. 61° (*C.* 1908 [2] 1019).  
 3) Heptylester d. l-Menthylamidoameisensäure. Sm. 22–25°; Sd. 215°<sub>22</sub> (*Soc.* 89, 96 *C.* 1906 [1] 1019).  
 4) Amid d. Ricinölsäure. Sm. 66° (*A. ch.* [3] 44, 96). — I, 1356.  
 5) Amid d. Ricinelaidsäure. Sm. 91–92° (*J.* 1855, 533). — I, 1356.
- C<sub>18</sub>H<sub>35</sub>O<sub>2</sub>Cl** 1) Chlorstearinsäure. Sm. 38° (38–41°) (*B.* 23, 2532; *C.* 1899 [1] 1070; *J. pr.* [2] 61, 95). — I, 476; \*I, 171.  
 2) isom. Chlorstearinsäure. Sm. 20–22° (*C.* 1899 [1] 1070).  
 3)  $\beta$ -Chloräthylester d. Palmitinsäure. Sm. 44°; Sd. 138° (*B.* 36, 4340 *C.* 1904 [1] 433).
- C<sub>18</sub>H<sub>35</sub>O<sub>2</sub>Cl<sub>3</sub>** 1) Cetyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha$ -Dioxyäthan (Chloralcetylalkoholat) (*A.* 157, 244). — I, 933.
- C<sub>18</sub>H<sub>35</sub>O<sub>2</sub>Br** 1)  $\alpha$ -Bromstearinsäure. Sm. 60° (41°; 57–58°) (*J.* 1863, 334; *B.* 23, 2523; 24, 2390; 25, 482; *G.* 34 [2] 79 *C.* 1904 [2] 693). — I, 488.  
 2)  $\beta$ -Bromstearinsäure. Sm. 54° (*G.* 35 [2] 570 *C.* 1906 [1] 819).  
 3) Äthylester d.  $\alpha$ -Brompalmitinsäure. Sd. 241,5°<sub>88</sub> (*B.* 24, 939). — I, 488.  
 4)  $\beta$ -Bromäthylester d. Palmitinsäure. Sm. 62°; Sd. 144° (*B.* 36, 4340 *C.* 1904 [1] 433).
- C<sub>18</sub>H<sub>35</sub>O<sub>2</sub>J** 1)  $\alpha$ -Jodstearinsäure. Sm. 66° (*J. pr.* [2] 37, 276; *G.* 34 [2] 80 *C.* 1904 [2] 693). — I, 491.  
 2)  $\beta$ -Jodstearinsäure. Fl. (*J. pr.* [2] 34, 308; [2] 35, 384; *J. r.* 18, 45; *M.* 17, 310). — I, 492.  
 3) isom. Jodstearinsäure (aus Ölsäure) (D.R.P. 187822 *C.* 1907 [2] 1131).  
 4) isom. Jodstearinsäure (*J. r.* 21, 212). — I, 492.  
 5) isom. Jodstearinsäure. Fl. (D.R.P. 180087 *C.* 1907 [1] 434).
- C<sub>18</sub>H<sub>35</sub>O<sub>3</sub>N** C 69,0 — H 11,2 — O 15,3 — N 4,4 — M. G. 313.  
 1)  $\epsilon$ -[ $\alpha$ -Dodekanoyl]amidopentan- $\alpha$ -Carbonsäure (*C. r.* 134, 842 *C.* 1902 [1] 1155).  
 2)  $\gamma$ -Oximidoheptadekan- $\alpha$ -Carbonsäure. Sm. 85° (*C.* 1903 [1] 826; *J. pr.* [2] 67, 418 *C.* 1903 [1] 1405).  
 3)  $\zeta$ -Oximidoheptadekan- $\alpha$ -Carbonsäure. Fl. (*C. r.* 134, 549 *C.* 1902 [1] 858).  
 4)  $\delta$ -Oximidoheptadekan- $\alpha$ -Carbonsäure (Oximidostearinsäure). Sm. 75 bis 85° (*B.* 29, 808).  
 5)  $\iota$ -Oximidoheptadekan- $\alpha$ -Carbonsäure (*B.* 27, 174; *J. pr.* [2] 71, 425 *C.* 1905 [2] 33).  
 6) Undekylamid d. Pentan- $\alpha\epsilon$ -Dicarbonsäure (*C. r.* 134, 842 *C.* 1902 [1] 1155).  
 7) Tetradekylmonamid d. Bernsteinsäure. Sm. 123° (*C.* 1903 [1] 826; *J. pr.* [2] 67, 419 *C.* 1903 [1] 1405).
- C<sub>18</sub>H<sub>35</sub>O<sub>3</sub>N<sub>3</sub>** C 63,3 — H 10,3 — O 14,1 — N 12,3 — M. G. 341.  
 1) Myristat d.  $\beta$ -Semicarbazon- $\alpha$ -Oxypropan. Sm. 111–112° (*C. r.* 138, 1275 *C.* 1904 [2] 94).
- C<sub>18</sub>H<sub>35</sub>O<sub>3</sub>Cl** 1) Chloroxystearinsäure (aus Elaidsäure). Sm. 44–55° (*J. pr.* [2] 61, 68).  
 2) Chloroxystearinsäure (aus Ölsäure). Fl. (*J. pr.* [2] 61, 68).
- C<sub>18</sub>H<sub>35</sub>O<sub>3</sub>Br** 1) Bromoxystearinsäure (aus Elaidsäure) (*J. pr.* [2] 61, 68).  
 2) Bromoxystearinsäure (aus Ölsäure) (*J. pr.* [2] 61, 84).
- C<sub>18</sub>H<sub>35</sub>O<sub>4</sub>N** C 65,7 — H 10,6 — O 19,5 — N 4,2 — M. G. 329.  
 1)  $\delta$ -Oximido- $\lambda$ -Oxyheptadekan- $\alpha$ -Carbonsäure (Ketoximoxystearinsäure). Fl. (*B.* 27, 3125). — \*I, 315.  
 2) Nitrostearinsäure. Na<sub>2</sub>, K<sub>2</sub>, Sr, Cu (*J. pr.* [2] 43, 161; siehe auch *Bl.* 24, 449; *J. pr.* [2] 20, 161). — I, 498.  
 3) Monamid d. Säure C<sub>18</sub>H<sub>31</sub>O<sub>5</sub> (aus Diqystearinsäure). Sm. 136°. Ag (*Soc.* 79, 1322 *C.* 1902 [1] 179).
- C<sub>18</sub>H<sub>35</sub>O<sub>4</sub>Br** 1)  $\lambda$ -Brom- $\delta$ -Dioxyheptadekan- $\alpha$ -Carbonsäure. Fl. (*B.* 39, 4407 *C.* 1907 [1] 538).
- C<sub>18</sub>H<sub>35</sub>O<sub>5</sub>N** C 62,6 — H 10,1 — O 23,2 — N 4,1 — M. G. 345.  
 1)  $\rho$ -Nitroxystearinsäure. Fl. (*C.* 1904 [1] 260).
- C<sub>18</sub>H<sub>35</sub>O<sub>5</sub>N<sub>7</sub>** C 50,3 — H 8,2 — O 18,6 — N 22,8 — M. G. 429.  
 1) Verbindung (aus Trypsin). 4HNO<sub>3</sub> + 2AgNO<sub>3</sub> (*H.* 25, 190). — \*III, 689.



- $C_{18}H_{35}O_6P$  1) Diacetat d. Dioxydionanthylunterphosphorige Säure. Sm. 94° (A. ch. [6] 23, 312). — I, 1505.
- $C_{18}H_{35}O_{15}N_5$  C 38,5 — H 6,2 — O 42,8 — N 12,5 — M. G. 561.
- $C_{18}H_{35}O_{17}N_3$  1) Bos-Osteoplasamid. Ba<sub>2</sub> (C. r. 132, 1184). — \*IV, 1169.  
C 38,2 — H 6,2 — O 48,1 — N 7,4 — M. G. 565.  
1) Cheirinin. Sm. 73–74° (C. 1899 [2] 917). — \*III, 623.
- $C_{18}H_{35}NS$  1) Heptadekylsenfö. Sm. 32° (B. 21, 2490). — I, 1282.
- $C_{18}H_{36}O_2N_2$  C 69,2 — H 11,5 — O 10,3 — N 9,0 — M. G. 312.  
1) sym. Oktylnonoxylharnstoff. Sm. 97° (B. 15, 760). — I, 1304.  
2)  $\beta\gamma$ -Dioximidooktadekan. Sm. 147–148° (G. 29 [1] 472). — \*I, 559.  
3) Sebacindi[imidoisobutyläther]. 2HCl (Sm. 153° u. Zers.) (B. 26, 2841). — \*I, 843.  
4) s-Acetylpalmitylhydrazin (Acetylhydrazid d. Palmitinsäure). Sm. 129° (J. pr. [2] 64, 427 C. 1902 [2] 24).  
5) Pinakon d. Methylgranatonin. (2HCl, PtCl<sub>4</sub>), 2(HCl, AuCl<sub>3</sub>), Pikrat (G. 31 [1] 568).
- $C_{18}H_{36}O_2S_2$  1) Äthylester d.  $\beta\beta$ -Dimerkapto- $\alpha$ -Äthylbutterdiisoamyläthersäure. Fl. (B. 34, 2667).
- $C_{18}H_{36}O_3N_2$  C 65,9 — H 11,0 — O 14,6 — N 8,5 — M. G. 328.  
1) Cetylester d. Harnstoffcarbonsäure (C. d. Allophansäure). Sm. 70° (A. 244, 41). — I, 1306.  
2) Diamid d. Säure  $C_{18}H_{34}O_5$  (aus Dioxystearinsäure). Sm. 141° (Soc. 79, 1320 C. 1902 [1] 179).  
3) Di[norm. Heptylamid] d.  $\alpha$ -Oxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 130,5 bis 131° (Soc. 89, 1866 C. 1907 [1] 711).  
C 62,8 — H 10,5 — O 18,6 — N 8,1 — M. G. 344.
- $C_{18}H_{36}O_4N_2$  1) Di[Heptylamid] d. d-Weinsäure. Sm. 183° (Soc. 89, 1858 C. 1907 [1] 712).
- $C_{18}H_{36}O_5S$  1) Oxystearoschwefelsäure (Bl. [3] 11, 285).
- $C_{18}H_{36}O_6S$  1) Heptadekan- $\alpha$ -Carbonsäure- $\lambda$ -Schwefelsäure. Sm. 71–73° (C. 1909 [1] 1751).  
2) p-Oxyheptadekan- $\alpha$ -Carbonsäure- $\alpha$ -Sulfonsäure (Sulfooxystearinsäure). Na<sub>2</sub>, K<sub>2</sub>, Ba, Cu (J. pr. [2] 37, 74; M. 8, 212; J. r. 18, 90). — I, 904.
- $C_{18}H_{36}O_6S_2$  1) Äthylester d.  $\beta\beta$ -Di[Isoamylsulfon]- $\alpha$ -Äthylbuttersäure. Fl. (B. 34, 2667).
- $C_{18}H_{36}O_7S$  1) Dioxystearoschwefelsäure. Fl. (Bl. [3] 11, 282).
- $C_{18}H_{36}O_9N_6$  C 45,0 — H 7,5 — O 30,0 — N 17,5 — M. G. 480.  
1) polym. Anhydrid d.  $\beta$ -Amido- $\alpha$ -Oxypropionsäurealdehyd. Zers. bei 125° (B. 40, 100 C. 1907 [1] 533).
- $C_{18}H_{36}O_{10}S_2$  1)  $\beta\lambda$ -Dioxyheptadekan- $\alpha$ -Carbonsäure- $\beta\lambda$ -Dischwefelsäure (C. 1909 [2] 1422).
- $C_{18}H_{36}O_{14}S_3$  1)  $\beta\lambda\lambda$ -Trioxyheptadekan- $\alpha$ -Carbonsäure- $\beta\lambda\lambda$ -Trischwefelsäure. Fl. (C. 1909 [2] 1423).
- $C_{18}H_{37}ON$  C 76,3 — H 13,1 — O 5,6 — N 4,9 — M. G. 283.  
1)  $\gamma$ -Oximidooktadekan. Sm. 44° (Bl. [3] 15, 766). — \*I, 551.  
2) Myristinimidoisobutyläther. HCl (Sm. 69–70°) (B. 26, 2841). — \*I, 841.  
3) Amid d. Stearinsäure. Sm. 108,5–109° (107,5°); Sd. 250–251°<sub>12</sub> (168 bis 169°) (J. 1859, 367; B. 15, 984, 1730; 21, 2186; 24, 2781; 26, 2840; 29, 1324; 31, 2349; D.R.P. 189477 C. 1908 [1] 320). — I, 1249; \*I, 706.  
C 69,4 — H 11,9 — O 5,1 — N 13,5 — M. G. 311.
- $C_{18}H_{37}ON_3$  1)  $\alpha$ -Semicarbazonheptadekan. Sm. 107–108° (Soc. 85, 833 C. 1904 [1] 638 C. 1904 [2] 509).
- $C_{18}H_{37}O_2N$  C 72,2 — H 12,4 — O 10,7 — N 4,7 — M. G. 299.  
1)  $\alpha$ -Oximido- $\alpha$ -Oxyoktadekan (Stearinhydroxamsäure). Sm. 104° (C. 1908 [2] 1019).  
2)  $\alpha$ -Amidostearinsäure. Sm. 221–222° (B. 24, 2395). — I, 1205.  
3) isom. Amidostearinsäure. Sm. 63°. — IV, 1587.  
4) Äthylester d. Pentadekylamidoameisensäure. Sm. 54° (51°); Sd. 225°<sub>14</sub> (Am. 22, 28, 41; J. pr. [2] 64, 432 C. 1902 [1] 24). — \*I, 713.  
5) Amid d.  $\alpha$ -Oxyheptadekan- $\alpha$ -Carbonsäure. Sm. 148–149° (Soc. 85, 831 C. 1904 [2] 509).
- $C_{18}H_{37}O_3N$  C 68,6 — H 11,7 — O 15,2 — N 4,4 — M. G. 315.  
1) p-Amidooxystearinsäure. HCl (C. 1904 [1] 260).

- $C_{18}H_{37}NS_2$  1) Hexadekylamidodithioameisensäure. Septedekylaminsalz (*B.* 21, 2489). — I, 1262.
- $C_{18}H_{37}N_2Cl$  1) 1-Chlormethylat d. 1,4,6,6,4',6',6'-Heptamethyl-3,3'-Bipiperidin. +  $PtCl_4$  (*C.* 1908 [2] 1444).
- $C_{18}H_{37}N_2J$  1) 1-Jodmethylat d. 1,4,6,6,4',6',6'-Heptamethyl-3,3'-Bipiperidin. Fl. (*C.* 1908 [2] 1444).
- $C_{18}H_{38}ON_2$  C 72,5 — H 12,7 — O 5,4 — N 9,4 — M. G. 298.
- 1) Heptadekylharnstoff. Sm. 109° (*B.* 21, 2491). — I, 1300.
- 2) Stearinamidoxim. Sm. 106–106,5° (*B.* 26, 2845). — \*I, 838.
- $C_{18}H_{38}O_4N_{12}$  C 42,4 — H 7,4 — O 12,6 — N 37,6 — M. G. 510.
- 1) Diarginylarginin. 2 Pikrat + 2H<sub>2</sub>O (*C. r.* 148, 237 *C.* 1909 [1] 925).
- $C_{18}H_{38}N_2S$  1) Heptadekylthioharnstoff. Sm. 110–111° (*B.* 21, 2490). — I, 1321.
- $C_{18}H_{38}N_2S_2$  1) Verbindung (aus Schwefelkohlenstoff u. Tetraisobutyldiamidomethan). Sm. 58° (*J. pr.* [2] 36, 124). — I, 1151.
- $C_{18}H_{38}N_3P$  1) Diisobutylamidodi[1-Piperidyl]phosphin. Fl. (*A.* 326, 171 *C.* 1903 [1] 762).
- $C_{18}H_{39}O_6N$  C 59,2 — H 10,7 — O 26,3 — N 3,8 — M. G. 365.
- 1) Hexaäthyläther d. Tri[ $\beta\beta$ -Dioxyäthyl]amin. Sd. 302–304°<sub>745</sub>. (2HCl,  $PtCl_4$ ) (*A.* 363, 182 *C.* 1909 [1] 141).
- $C_{18}H_{40}O_{11}N_6$  C 40,9 — H 7,6 — O 33,3 — N 18,2 — M. G. 528.
- 1) Calycanthin (*Am.* 11, 561). — III, 621.
- $C_{18}H_{42}OSi_2$  1) Siliciumtripropoxyd. Sd. 280–290° (*A.* 222, 369). — I, 1520.
- $C_{18}H_{42}O_7Si_2$  1) Hexapropylester d. Dikieselsäure. Sd. 195°<sub>20</sub> (*G.* 27 [2] 445; *Ph. Ch.* 25, 358). — I, 127.
- $C_{18}H_{42}N_3P$  1) Tri[Dipropylamido]phosphin. Sd. 310–315° (*A.* 326, 170 *C.* 1903 [1] 762).
- $C_{18}H_{42}N_4Cl_4$  1) Pentaäthylentetraäthyltetrammoniumchlorid. 2 +  $PtCl_4$  (*J.* 1861, 521). — I, 1166.
- $C_{18}H_{42}N_4Br_4$  1) Pentaäthylentetraäthyltetrammoniumbromid (*J.* 1861, 521). — I, 1166.
- $C_{18}H_{42}Cl_2As_2$  1) Hexapropyl-diarsoniumdichlorid. + 2HgCl<sub>2</sub>, +  $PtCl_4$  (*B.* 31, 597). — \*I, 852.
- 2) Hexaisopropyl-diarsoniumdichlorid. + 2HgCl<sub>2</sub>, +  $PtCl_4$  (*B.* 31, 597). — \*I, 852.
- $C_{18}H_{42}J_2As_2$  1) Hexapropyl-diarsoniumdijodid. Sm. 150° u. Zers. + 2HgCl<sub>2</sub>, + 2HgJ<sub>2</sub> (*B.* 31, 597). — \*I, 852.
- 2) Hexaisopropyl-diarsoniumdijodid. Sm. 150° u. Zers. + 2HgJ<sub>2</sub> (*B.* 31, 597). — \*I, 852.
- $C_{18}H_{44}O_2As_2$  1) Hexapropyl-diarsoniumhydroxyd. Salze, siehe (*B.* 31, 597). — \*I, 852.
- 2) Hexaisopropyl-diarsoniumhydroxyd. Salze, siehe (*B.* 31, 597). — \*I, 852.
- $C_{18}H_{44}N_2S$  1) Tripropylammoniumsulfid (*B.* 40, 1481 *C.* 1907 [1] 1314).

### $C_{18}$ -Gruppe mit vier Elementen.

- $C_{18}HNC_6S_2$  1) Verbindung (aus Akridin). Sm. 306° (*J. pr.* [2] 64, 195).
- $C_{18}H_2O_{12}N_6Br_{10}$  1) 1, 2, 3, 5-Tetrabrom-4, 6-Dinitrobenzol + 2 Molec. s-Tribromdinitrobenzol. Sm. 165° (*B.* 21, 1707). — II, 89.
- $C_{18}H_4O_6Cl_3Br_{11}$  1) Trichlorxanthogallol. Sm. 104° (*A.* 245, 343). — II, 1014.
- $C_{18}H_6O_4NCl_4$  1) 3, 4, 5, 6-Tetrachlor-1-[4-Diäthylamido-3-Oxybenzoyl]benzol-2-Carbonsäure. Sm. 198° (*Bl.* [3] 25, 746).
- $C_{18}H_6O_{12}N_6J_5$  1) 2 Molec. 2, 4[oder 4, 6]-Dijod-1, 3-Dinitrobenzol + 2, 4, 6-Trijod-1, 3-Dinitrobenzol. Sm. 182° (*Am.* 32, 306 *C.* 1904 [2] 1385).
- $C_{18}H_6O_4N_4Br_6$  1) Hexabromdinitrodiphenylazophenylen (*M.* 8, 481). — II, 338.
- $C_{18}H_6O_6N_4Cl_2$  1) Dichlordinitrophthaloperinon. Zers. bei 213–215° (*A.* 365, 128 *C.* 1909 [1] 1414).
- $C_{18}H_6O_6N_2Cl_4$  1) Tetrachlorbisdioxymethylenindigo (*B.* 36, 2934 *C.* 1903 [2] 888).
- $C_{18}H_7O_4N_2Br_3$  1) Tribromdinitrochrysen (*B.* 12, 1894). — II, 292.
- $C_{18}H_7O_4Cl_4Br$  1) 3', 4', 5', 6'-Tetrachlor-4-Brom-1-Oxyphenyl-2-Naphtylketon-2'-Carbonsäure. Sm. 216° (*Soc.* 95, 287 *C.* 1909 [1] 1482).
- $C_{18}H_8ON_2Cl_2$  1) p-Dichlorphthaloperinon. Sm. 235–237° (*A.* 365, 127 *C.* 1909 [1] 1414).
- $C_{18}H_8ON_2Br_2$  1) Dibromphthaloperinon. Zers. bei 240° (*A.* 365, 119 *C.* 1909 [1] 1413).

- $C_{18}H_8O_2N_2Cl_4$  1) Phenylhydrazon d.  $\beta$ -Tetrachlornaphtalin-1,8-Dicarbonsäureanhydrid. Sm. 269—270° (*G.* 32 [2] 84 *C.* 1902 [2] 900). — \*IV, 464.
- $C_{18}H_8O_2ClBr$  1) 6-Chlor- $\beta$ -Brom-5,12-Diketo-5,12-Dihydroacenaphten (*Soc.* 89, 120 *C.* 1906 [1] 1024).
- $C_{18}H_8O_5Cl_3S$  1) Dichlornaphtanthrachinonsulfonsäure (*A.* 340, 265 *C.* 1905 [2] 486).
- $C_{18}H_8O_6Cl_4S$  1) 3,4,5,6-Tetrachlor-2-[1-Naphtoyl]benzol-1-Carbonsäure- $\beta$ -Sulfonsäure (*A.* 340, 262 *C.* 1905 [2] 486).
- $C_{18}H_8O_7N_3Br_{11}$  1) Bromdichromazin (*B.* 10, 1138). — II, 725.
- $C_{18}H_8O_9N_9Cl$  1) 2-Nitro-1-[4-Chlor- $\beta$ -Nitrophenylazo]-4-[2,4,6-Nitrosodinitrophenylazo]benzol? Sm. 189—190° (*J. pr.* [2] 43, 495; [2] 55, 397). — IV, 1371; \*IV, 1017.
- $C_{18}H_8O_{10}N_9Cl$  1) 2-Nitro-1-[3-Chlor- $\beta$ -Nitrophenylazo]-4-[2,4,6-Trinitrophenylazo]benzol? Zers. bei 157° (*J. pr.* [2] 44, 464). — IV, 1371.
- $C_{18}H_9ON_5Cl_2$  1) 4,5-Azin d. 6,6-Dichlor-4,5,7-Triketo-1-Phenyl-4,5,6,7-Tetrahydro-1,2,3-Benzotriazol. Sm. 238° u. Zers. (*A.* 313, 287). — \*IV, 989.
- $C_{18}H_9O_2N_2J_3$  1) Phenylhydrazon d.  $\beta$ -Trijodnaphtalin-1,8-Dicarbonsäureanhydrid. Sm. 305—310° u. Zers. (*G.* 32 [2] 93 *C.* 1902 [2] 901). — \*IV, 464.
- $C_{18}H_9O_3NCl_2$  1) 1,4-Dichlor-6-Amido-11-Oxy-5,12-Naphtacenchinon (*Soc.* 95, 285 *C.* 1909 [1] 1481).
- $C_{18}H_9O_4N_2Cl_3$  1) Monacetat d. Verb.  $C_{18}H_7O_3N_2Cl_3$  (*A.* 286, 55). — IV, 1059.
- $C_{18}H_9O_4Cl_2Br$  1) 3',6'-Dichlor-4-Brom-1-Oxyphenyl-2-Naphtylketon-2'-Carbonsäure. Sm. 221° u. Zers. (*Soc.* 95, 283 *C.* 1909 [1] 1481).
- $C_{18}H_9O_4Cl_6P$  1) Tri[ $\beta$ -Dichlorphenylester] d. Phosphorsäure. Sm. 96° (*D.R.P.* 142832 *C.* 1903 [2] 171).
- $C_{18}H_9O_5N_8Cl$  1) 2-Nitroso-1-[4-Chlorphenylazo]-4-[2,4,6-Dinitrosonitrophenylazo]benzol? Zers. bei 146—147° (*J. pr.* [2] 43, 494; [2] 55, 397). — IV, 1371; \*IV, 1016.
- $C_{18}H_9O_6N_8Cl$  1) 2-Nitroso-1-[3-Chlorphenylazo]-1-[2,4,6-Nitrosodinitrophenylazo]benzol? Zers. bei 225—226° (*J. pr.* [2] 44, 464; [2] 55, 398). — IV, 1371; \*IV, 1016.
- $C_{18}H_9O_7N_8Cl$  1) 2-Nitroso-1-[4-Chlorphenylazo]-4-[2,4,6-Trinitrophenylazo]benzol? Sm. 202—203° u. Zers. (*J. pr.* [2] 43, 493; [2] 55, 396). — IV, 1371; \*IV, 1016.
- 2) 2-Nitro-1-[4-Chlorphenylazo]-4-[2,4,6-Nitrosodinitrophenylazo]benzol? Sm. 217—218° u. Zers. (*J. pr.* [2] 43, 494; [2] 55, 396). — IV, 1371; \*IV, 1016.
- $C_{18}H_9O_8N_8Cl$  1) 2-Nitro-1-[3-Chlorphenylazo]-4-[2,4,6-Trinitrophenylazo]benzol? Zers. bei 91° (*J. pr.* [2] 44, 464). — IV, 1371.
- $C_{18}H_{10}ON_2Br_4$  1) Tetrabromdihydro- $\beta$ -Chinophtalin. Sm. 78° (*B.* 37, 3022 *C.* 1904 [2] 1410).
- $C_{18}H_{10}ON_5Cl$  1) Eurhodol (aus 6-Chlor-5-Oxy-4,7-Diketo-1-Phenyl-4,7-Dihydro-1,2,3-Benzotriazol). Zers. oberhalb 200° (*A.* 313, 282). — \*IV, 989.
- $C_{18}H_{10}O_2NCl$  1) Nitril d. 3-Chlor-1,4-Naphtochinon-2-Phenylessigsäure. Sm. 184° (*B.* 33, 2403). — \*II, 1106.
- 2) Verbindung (aus d. Nitril d. Diphenylketipinsäure). Sm. 161—162° (*A.* 282, 59). — II, 2032.
- 3) Verbindung (aus 2-Chlor-1-Oxynaphtalin u. Isatinchlorid) (*M.* 29, 380 *C.* 1908 [2] 516).
- $C_{18}H_{10}O_2NBr$  1) Bromchinophtalon. Sm. 174° (179°). (*HBr, Br\_2*) (*A.* 315, 339; *B.* 35, 1656, 1661 *C.* 1902 [1] 1369). — \*IV, 197.
- 2) Bromisochinophtalon. Sm. 275° (*B.* 37, 3020 *C.* 1904 [2] 1410).
- $C_{18}H_{10}O_2N_2Cl_2$  1) 2-[ $\beta$ -Dichlorphenyl]-peri-Naphtimidazol-2'-Carbonsäure (*A.* 365, 128 *C.* 1909 [1] 1414).
- $C_{18}H_{10}O_3ClBr$  1) 1-Chlor- $\beta$ -Brom-2-Benzoylnaphtalin-2'-Carbonsäure. Sm. 180° (*Soc.* 89, 119 *C.* 1906 [1] 1024).
- $C_{18}H_{10}O_4N_3Br_3$  1) Acetat d. 4-Nitro-2-[2,4,6-Tribromphenyl]azo-1-Oxynaphtalin. Sm. 189° (*Soc.* 95, 1436 *C.* 1909 [1] 1248).
- $C_{18}H_{10}O_4Cl_4Br_2$  1) Diacetat d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 212° (*A.* 338, 247 *C.* 1905 [1] 1150).
- $C_{18}H_{10}O_4Cl_6Br$  1) Diacetat d.  $\alpha$ -Chlor- $\beta$ -Brom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 191° (*A.* 338, 254 *C.* 1905 [1] 1150).
- $C_{18}H_{10}O_5NCl$  1) Benzoat d. Pyridylchlordioxy-1,4-Benzochinon (*C. r.* 133, 235).



- $C_{18}H_{10}O_6Cl_7J$  1) Heptachlorjodtribrenzkatechin. Sm. 252° (*Am.* 35, 528 *C.* 1906 [2] 328).
- $C_{18}H_{10}O_8N_2Br_6$  1) Diacetat d.  $\alpha\alpha$ -Di[2,5,6-Tribrom-3-Nitro-4-Oxyphenyl]äthan. Sm. 252—254° (*A.* 363, 261 *C.* 1909 [1] 175).
- $C_{18}H_{10}N_2Br_2S_2$  1) Di[5-Brom-8-Chinoly]disulfid. Sm. 193° (*B.* 41, 943 *C.* 1908 [1] 1705).
- $C_{18}H_{11}ON_2Cl$  1) Chloraposafranon (*B.* 31, 302). — *IV*, 1001.
- $C_{18}H_{11}ON_2Br$  1) 3-Brom-7[oder 8]-Phenylhydrazon-8[oder 7]-Ketoacenaphten. Sm. 153° (*A.* 327, 89 *C.* 1903 [1] 1228). — *\*IV*, 525.
- 2) Brom- $\alpha$ -Chinophthalin. Sm. 50—100° (*A.* 315, 349). — *\*IV*, 197.
- 3) Brom- $\beta$ -Chinophthalin. Sm. 56—59° (*A.* 315, 352). — *\*IV*, 198.
- $C_{18}H_{11}ON_2Br_3$  1) Tribromdihydro- $\beta$ -Chinophthalin. Sm. 170° u. Zers. (*A.* 315, 352). — *\*IV*, 198.
- $C_{18}H_{11}O_2NBr_2$  1) Chinophthalondibromid. Zers. oberhalb 150° (*A.* 315, 339). — *\*IV*, 197.
- 2) Isochinophthalondibromid. Sm. bei 200° (*B.* 35, 2300 *C.* 1902 [2] 375). — *\*IV*, 198.
- $C_{18}H_{11}O_2NBr_4$  1) Chinophthalontetrabromid. Sm. 235° u. Zers. (*A.* 315, 340; *B.* 35, 1657 *C.* 1902 [1] 1369).
- $C_{18}H_{11}O_2NBr_6$  1) Chinophthalonhexabromid (*B.* 35, 1661 *C.* 1902 [1] 1369). — *\*IV*, 197.
- $C_{18}H_{11}O_2NS_2$  1) 2-Thiocarbonyl-4-Keto-3-[2-Naphtyl]-5-[2-Furyliden]tetrahydrothiazol. Sm. 208° (*M.* 27, 1241 *C.* 1907 [1] 971).
- $C_{18}H_{11}O_2N_2Cl$  1) Chloroxyphenylphenazon. Sm. 270—272° u. Zers. (*B.* 24, 589). — *IV*, 1004.
- $C_{18}H_{11}O_2N_2Br$  1) Acetat d. 6-Brom-5-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 221° (*B.* 34, 1054). — *\*IV*, 711.
- 2) Phenylhydrazon d.  $\beta$ -Bromnaphtalin-1,8-Dicarbonsäureanhydrid. Sm. 222—223° (*G.* 32 [2] 89 *C.* 1902 [2] 900). — *\*IV*, 464.
- $C_{18}H_{11}O_2N_4Cl$  1) 6-Chlor-7-Phenylimido-5-Oxy-4-Keto-1-Phenyl-4,7-Dihydro-1,2,3-Benzotriazol. Anilinsalz (*A.* 313, 275). — *\*IV*, 793.
- $C_{18}H_{11}O_4NBr_2$  1) 2,4-Dibrom-1-Diacetylamido-9,10-Anthrachinon (*D.R.P.* 191111 *C.* 1908 [1] 569).
- 2) 1,3-Dibrom-2-Diacetylamido-9,10-Anthrachinon. Sm. 202° (*B.* 40, 1701 *C.* 1907 [1] 1799).
- $C_{18}H_{11}O_4Cl_4Br$  1) Diacetat d.  $\alpha$ -Brom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthen. Sm. 136—137° (*A.* 338, 257 *C.* 1905 [1] 1151).
- $C_{18}H_{11}O_5NS$  1) 1-[1,2-Phtalyl]amidonaphtalin-4-Sulfonsäure.  $K + 3H_2O$  (*A.* 248, 157). — *II*, 1806.
- $C_{18}H_{11}O_6N_2Br$  1) Diphenyläther d.  $\beta$ -Brom-4,6-Dinitro-1,3-Dioxybenzol. Sm. 165° (*Am.* 13, 178). — *II*, 927.
- $C_{18}H_{11}O_7N_8Cl$  1) 3'-[3-Chlorphenyl]hydrazido-2,4,6,4'-Nitrosotrinitro-*s*-Diphenylhydrazin? Zers. bei 169—170° (*J. pr.* [2] 44, 462; [2] 55, 396). — *IV*, 1500; *\*IV*, 1091.
- 2) 4-[4-Chlorphenyl]hydrazido-2,2',4',6'-Nitrosotrinitroazobenzol. Sm. 110—112° u. Zers. (*J. pr.* [2] 43, 493; [2] 55, 396). — *IV*, 1359; *\*IV*, 1013.
- $C_{18}H_{11}O_8N_8Cl$  1) 3'-[3-Chlorphenyl]hydrazido-2,4,6,4'-Tetranitro-*s*-Diphenylhydrazin. Zers. bei 205—206° (*J. pr.* [2] 44, 463). — *IV*, 1500.
- 2) 4-[4-Chlorphenyl]hydrazido-2,2',4',6'-Tetranitroazobenzol. Zers. bei 117—119° (*J. pr.* [2] 43, 493). — *IV*, 1359.
- $C_{18}H_{11}O_{12}N_6S$  1) 2,4-Dinitrophenyläther d. 2',4'-Dinitro-4-Oxydiphenylamin-3-Sulfonsäure. Sm. 166° (*C.* 1900 [2] 610). — *\*II*, 491.
- $C_{18}H_{12}ON_2Cl_2$  1) 10-Phenylhydroxyd d. 2,8-Dichlor-5,10-Naphtdiazin (Dichlorphenylphenazoniumhydrat). Chlorid +  $AuCl_3$ , Nitrat (*B.* 31, 301). — *IV*, 1001.
- $C_{18}H_{12}ON_2S$  1) Carbonylphenyl- $\beta$ -Naphtylpseudothioharnstoff. Sm. 117° (*B.* 25, 1467). — *II*, 619.
- 2) 2-Thiocarbonyl-5-Phenyl-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Ox-diazol. Sm. 164° (*B.* 24, 4186). — *IV*, 927.
- 3) Benzoyl-1-Naphtylthiocarbizin. Sm. 175—176° (*B.* 24, 4188). — *IV*, 928.
- $C_{18}H_{12}ON_3Cl$  1) 5-Chlor-6-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 292° (*B.* 31, 2407). — *\*IV*, 865.
- $C_{18}H_{12}ON_4Br_2$  1)  $\beta$ -Di[2-Bromphenylazo]-1-Oxybenzol. Sm. 160° (*B.* 36, 3864 *C.* 1904 [1] 91).

- $C_{18}H_{12}ON_4Br_2$  2)  $\beta$ -Di[3-Bromphenylazo]-1-Oxybenzol. Sm. 162—163° (B. 36, 3867 C. 1904 [1] 92).
- $C_{18}H_{12}ON_4S$  1) 4-Benzoylamido-1-Diazonaphtalinrhodanid. Sm. 103° (Soc. 91, 1319 C. 1907 [2] 1076).
- $C_{18}H_{12}ON_4S_3$  1) 4-[2-Oxy-1-Naphtyl]azophenyläther d. 2,5-Dimerkapto-1,3,4-Thiodiazol. Sm. 222° (J. pr. [2] 60, 51). — IV, 1048.
- $C_{18}H_{12}O_2N_2Cl_2$  1)  $\beta$ -Dichlor- $\beta$ -Di[Phenylamido]-1,2-Benzochinon. Sm. 194—195°. +  $C_6H_6O$ , + Anilin (B. 38, 4103 C. 1906 [1] 463).
- 2) 3,6-Dichlor-2,5-Di[Phenylamido]-1,4-Benzochinon. Sm. 287 bis 290° (J. 1863, 415; A. 114, 306; 210, 187; 228, 333; J. pr. [2] 24, 431; [2] 28, 423, 427; Am. 17, 597). — III, 343.
- $C_{18}H_{12}O_2N_2Br_2$  1) 3,6-Dibrom-4,5-Di[Phenylamido]-1,2-Benzochinon. Sm. 160°. +  $CH_4O$ , +  $C_6H_6O$ , + Anilin (B. 35, 3852 C. 1903 [1] 26; Am. 30, 526 C. 1904 [1] 366).
- 2) 3,6-Dibrom-2,5-Di[Phenylamido]-1,4-Benzochinon (A. Spl. 8, 22). — III, 353.
- $C_{18}H_{12}O_2N_2S$  1) 2-Phenylsulfon-5,10-Naphtdiazin (2-Phenylsulfonphenazin). Sm. 244° (B. 29, 2021). — IV, 1001.
- $C_{18}H_{12}O_3NCl$  1) Säure (aus s-Diphenylketipinsäurenitril). Ba +  $10H_2O$  (A. 282, 61). — II, 2032.
- $C_{18}H_{12}O_3N_2S$  1) 2,3'-Bichinoly- $\beta$ -Sulfonsäure.  $K_2$ , Cu (M. 7, 323). — IV, 1067.
- 2) 2,3'-Bichinoly- $\beta$ -Sulfonsäure. K +  $2H_2O$ , Cu +  $2H_2O$  (M. 7, 309). — IV, 1067.
- 3) 2,5'-Bichinoly- $\beta$ -Sulfonsäure (M. 8, 143). — IV, 1068.
- 4) 2-Phenyl-1,7-Naphtisodiazin-6-Sulfonsäure. Ba (B. 33, 2934). — \*IV, 721.
- 5) 3-Phenyl-4,7-Naphtisodiazin-6-Sulfonsäure. Sm. oberhalb 350°. Ba (B. 33, 2925). — \*IV, 721.
- $C_{18}H_{12}O_3N_2S_2$  1) Anhydrid d. 3-Sulfanilidophenazthioniumhydroxyd (A. 322, 42 C. 1902 [2] 223).
- 2) Anhydrid d. 4-Sulfanilidophenazthioniumhydroxyd (D. R. P. 126410 C. 1902 [1] 87).
- $C_{18}H_{12}O_3N_4S$  1) Homofluorindin-2-Sulfonsäure (B. 36, 4034 C. 1904 [1] 295).
- $C_{18}H_{12}O_3Cl_3P$  1) Phosphorsäuretri-4-Chlorphenylester. Sm. 49°; Sd. 290—297°<sub>15</sub> (B. 31, 1053). — \*II, 369.
- $C_{18}H_{12}O_4N_2Cl_2$  1) 1,4-Di[Chloracetylamido]-9,10-Anthrachinon (D. R. P. 213960 C. 1909 [2] 1287).
- 2) 4,8-Dichlor-1,5-Di[Acetylamido]-9,10-Anthrachinon. Sm. oberhalb 300° (D. R. P. 199758 C. 1908 [2] 461).
- $C_{18}H_{12}O_4N_2Br_2$  1) Äthylbromisatoid. Sm. 244—245° u. Zers. (B. 15, 2095). — II, 1606.
- 2) Diacetat d. 2,7-Dibrom-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 250° u. Zers. (B. 40, 4564 C. 1908 [1] 135).
- $C_{18}H_{12}O_4N_6S_2$  1) Di[4-Diazophenylamid] d. Benzol-1,3-Disulfonsäure (Soc. 87, 1309 C. 1905 [2] 1334).
- $C_{18}H_{12}O_4Cl_3P$  1) Tri[4-Chlorphenylester] d. Phosphorsäure. Sm. 99—100° (B. 30, 2375; H. 25, 446). — \*II, 369.
- 2) Tri[ $\beta$ -Chlorphenylester] d. Phosphorsäure. Sm. 118° (D. R. P. 142832 C. 1903 [2] 171).
- $C_{18}H_{12}O_4Cl_4Br_2$  1) Diacetat d.  $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]äthan. Sm. 218° (A. 325, 66 C. 1903 [1] 463).
- $C_{18}H_{12}O_4Br_2S$  1) Dibromderivat d. Säure  $C_{18}H_{14}O_4S$  (B. 18, 3244). — II, 1638.
- $C_{18}H_{12}O_4Br_3P$  1) Tri[4-Bromphenyl]phosphorsäure (A. 143, 194). — II, 672.
- $C_{18}H_{12}O_5N_2J_2$  1) 2,4-Dinitrophenyläther d. 4-Oxydiphenyljodoniumjodid. Sm. 159° (B. 42, 3766 C. 1909 [2] 1743).
- $C_{18}H_{12}O_5N_2S$  1) Phenosafran-4-Sulfonsäure (N-4-Sulfophenylsafran) (B. 31, 1185). — IV, 1003.
- $C_{18}H_{12}O_5N_2Cl_2$  1) 4,8-Di[Chloracetylamido]-1,5-Dioxy-9,10-Anthrachinon (D. R. P. 213960 C. 1909 [2] 1287).
- $C_{18}H_{12}O_5N_2S$  1) 6-Oxy-2-Phenyl- $\alpha$ [oder  $\beta$ ]-Naphtimidazol-2'-Carbonsäure-8-Sulfonsäure (D. R. P. 172319 C. 1906 [2] 644).
- $C_{18}H_{12}O_5N_2S_2$  1) 2,3'-Bichinoly- $\alpha$ -Disulfonsäure. K +  $5H_2O$ , Cu +  $6H_2O$  (M. 2, 504; 7, 317). — IV, 1067.
- 2) 2,7'-Bichinoly- $\beta$ -Disulfonsäure.  $K_2$  +  $3H_2O$  (B. 19, 2473). — IV, 1069.

- $C_{18}H_{12}O_6N_2S_2$  3) 6,6'-Bichinoly-*p*-Disulfonsäure.  $Na_2 + 5H_2O$  (B. 17, 1818). — IV, 1070.
- 4) 6,6'-Bichinoly-*p*-Disulfonsäure.  $K + H_2O$  (B. 17, 2449). — IV, 1070.
- 5) 6,7'-Bichinoly-*p*-Disulfonsäure. Sm. noch nicht bei 300°.  $Ba + 3H_2O$  (M. 6, 554). — IV, 1070.
- $C_{18}H_{12}O_6N_3As$  1) Tri[*p*-Nitrophenyl]arsin. Sm. 250° (A. 321, 180 C. 1902 [2] 45). — \*IV, 1190.
- $C_{18}H_{12}O_6N_4Cl_4$  1) Verbindung (aus Tetrachlor-1,4-Benzochinon u. 2 Molec. 3-Nitro-1-Amidobenzol) (A. 228, 326). — III, 336.
- $C_{18}H_{12}O_6N_7Cl$  1) 2,4-Dinitrobenzolo-3-Chlornitrodiphenylhydrazin. Zers. bei 127–128° (J. pr. [2] 44, 465). — IV, 1499.
- $C_{18}H_{12}O_7N_3P$  1) Tri[2-Nitrophenyl]phosphinoxyd. Sm. 66–68° (A. 229, 326). — IV, 1659.
- 2) Tri[4-Nitrophenyl]phosphinoxyd. Sm. 242° (A. 229, 325). — IV, 1659.
- $C_{18}H_{12}O_7N_3As$  1) Tri[*p*-Nitrophenyl]arsinoxyd. Sm. 254° (B. 19, 1033; A. 321, 180). — IV, 1689; \*IV, 1190.
- $C_{18}H_{12}O_8N_2Br_4$  1) Diacetat d.  $\alpha\alpha$ -Di[2,5-Dibrom-3-Nitro-4-Oxyphenyl]äthan. Sm. 123° (A. 363, 259 C. 1909 [1] 175).
- $C_{18}H_{12}O_8N_2S$  1) 1-Phenylazo-4-Oxynaphtalin-1<sup>3</sup>,3-Dicarbonsäure-1<sup>4</sup>-Sulfonsäure (B. 11, 2199). — IV, 1473.
- $C_{18}H_{12}O_8N_2S_2$  1) 7[oder 8]-Oxy-7,8'[oder 8,8']-Dichinolyläther-5,5'-Disulfonsäure.  $Ba + 9H_2O$ , bas.  $Ba + xH_2O$  (J. pr. [2] 55, 476). — IV, 299.
- $C_{18}H_{12}O_8N_4Br_2$  1) Verbindung (aus Benzol u. 2 Molec. *p*-Brom-1,3-Dinitrobenzol). Sm. 65° (A. 197, 259).
- $C_{18}H_{12}O_8N_6S$  1) 4-[2,4,6-Trinitrophenyl]amidoazobenzol-4'-Sulfonsäure.  $K + H_2O$ ,  $Na + H_2O$  (Bl. [3] 33, 993 C. 1905 [2] 1176).
- 2) 2-Nitro-4-[2,4-Dinitrophenyl]amidoazobenzol-4'-Sulfonsäure +  $2H_2O$ .  $K + 2H_2O$ ,  $Na + 3H_2O$  (Bl. [3] 33, 991 C. 1905 [2] 1176).
- $C_{18}H_{12}O_{10}N_2S_2$  1) Dibenzolsulfonat d. 2,4-Dinitro-1,3-Dioxybenzol. Sm. 146° (C. 1900 [1] 543).
- $C_{18}H_{12}O_{10}N_3P$  1) Tri[2-Nitrophenylester] d. Phosphorsäure. Sm. 126° (Z. 1870, 230). — II, 680.
- 2) Tri[4-Nitrophenylester] d. Phosphorsäure. Sm. 155° (148°) (Z. 1870, 230; A. 224, 162). — II, 683.
- $C_{18}H_{12}O_{10}N_4S$  1) 2',4'-Dinitro-4-[2-Nitro-4-Sulfophenoxy]diphenylamin (C. 1900 [2] 610).
- $C_{18}H_{12}N_2ClBr$  1) 10-Bromphenylat d. 2-Chlor-5,10-Naphtdiazin (B. 33, 1488). — \*IV, 670.
- $C_{18}H_{12}N_2Br_4S_2$  1) Thiochinanthrentetrabromid. 2HBr (J. pr. [2] 66, 224 C. 1902 [2] 1131).
- 2) isom. Thiochinanthrentetrabromid. 2HBr (J. pr. [2] 66, 224 C. 1902 [2] 1131).
- $C_{18}H_{13}ONBr_2$  1) Dibromoxycein. Fl. (2HCl, PtCl<sub>4</sub>) (B. 18, 124). — IV, 37.
- $C_{18}H_{13}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-Cinnamylidentetrahydrothiazol. Sm. 217° (M. 24, 513 C. 1903 [2] 837).
- $C_{18}H_{13}ON_2Cl$  1) 1-Chlor-2-[ $\alpha$ -Cyan-2-Oxybenzyl]amidonaphtalin. Sm. 148° (Soc. 77, 1218).
- 2) 1-Chlor-2-[ $\alpha$ -Cyan-4-Oxybenzyl]amidonaphtalin. Sm. 151–152° (Soc. 77, 1218).
- 3) 3-Phenylamidophenoxazoniumchlorid (B. 34, 1625; A. 322, 13 C. 1902 [2] 221). — \*IV, 673.
- 4) 5-Chlorphenylat d. 2-Oxy-5,10-Naphtdiazin. 2 + PtCl<sub>4</sub> (B. 41, 476 C. 1908 [1] 1070).
- $C_{18}H_{13}ON_2Br$  1) 1-Brom-2-[ $\alpha$ -Cyan-2-Oxybenzyl]amidonaphtalin. Sm. 152° (Soc. 77, 1216).
- 2) 1-Brom-2-[ $\alpha$ -Cyan-4-Oxybenzyl]amidonaphtalin. Sm. 143–144° u. Zers. (Soc. 77, 1216).
- 3) Äthyläther d. 6-Brom-5-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 173° (B. 34, 1054). — \*IV, 711.
- $C_{18}H_{13}ON_3S$  1) 1-Phenylamido-2-Keto-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Thio-diazol. Sm. 219° (224°) (B. 24, 4191; 32, 1087). — IV, 927; \*IV, 613.



- $C_{18}H_{13}ON_3S$  2) 5-Phenylamido-2-Keto-3-[2-Naphtyl]-2,3-Dihydro-1,3,4-Thio-diazol. Sm. 198—199° (B. 24, 4181). — IV, 929.
- 3) 5-[1-Naphtyl]amido-2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Thio-diazol. Sm. 160° (B. 32, 1086). — \*IV, 448.
- $C_{18}H_{13}ON_4Br$  1) 3-Phenylazo-4-[4-Bromphenyl]azo-1-Oxybenzol. Sm. 115° (B. 36, 4116 C. 1904 [1] 272).
- $C_{18}H_{13}O_2NCl_2$  1) Acetat d. 2,4-Dichlor-1-Phenylamido-3-Oxynaphtalin. Sm. 164° (B. 21, 3546). — III, 171.
- $C_{18}H_{13}O_2NCl_4$  1) 5,6,7,8-Tetrachlor-2-Diäthylamido-9,10-Anthrachinon. Sm. 144° (Bl. [3] 25, 748). — \*III, 298.
- $C_{18}H_{13}O_2NBr_2$  1) Dibromdihydromonophtalidylehinaldin. Sm. 108° (A. 315, 346). — \*IV, 269.
- $C_{18}H_{13}O_2NS$  1) 2,4-Diketo-3-Phenyl-5-[β-Phenyläthyliden]tetrahydrothiazol. Sm. 214° (Soc. 95, 120 C. 1909 [1] 1340).
- $C_{18}H_{13}O_2N_2Cl$  1) 6-Chlor-5-Phenylamido-2-Oxy-1,4-Benzochinonphenylimid. Sm. bei 240° u. Zers. (B. 23, 900). — III, 348.
- 2) 3-Chlor-2,5-Di[Phenylamido]-1,4-Benzochinon. Sm. 262° (A. 228, 336; B. 23, 899). — III, 341.
- 3) p-Chlor-p-Di[Phenylamido]-1,4-Benzochinon (J. pr. [2] 28, 431). — III, 341.
- 4) p-Chlor-p-Di[Phenylamido]-1,4-Benzochinon (B. 10, 1793; A. 210, 181). — III, 340.
- 5) Oxoniumchlorid + H<sub>2</sub>O (aus d. Base  $C_{18}H_{14}O_3N_2$ ) (B. 40, 2086 C. 1907 [2] 152).
- 6) Acetat d. 2-Oxy-1-[4-Chlorphenylazo]naphtalin. Sm. 133° (Soc. 63, 933). — IV, 1429.
- $C_{18}H_{13}O_2N_2Br$  1) Acetat d. 2-Oxy-1-[2-Bromphenylazo]naphtalin. Sm. 157° (Soc. 81, 1206 C. 1902 [2] 894). — \*IV, 1044.
- 2) Acetat d. 2-Oxy-1-[3-Bromphenylazo]naphtalin. Sm. 88° (Soc. 81, 1206 C. 1902 [2] 894). — \*IV, 1044.
- 3) Acetat d. 2-Oxy-1-[4-Bromphenylazo]naphtalin. Sm. 136° (Soc. 81, 1206 C. 1902 [2] 894). — \*IV, 1043.
- 4) Acetat d. 4-Oxy-1-[2-Bromphenylazo]naphtalin. Sm. 123° (Soc. 81, 176 C. 1902 [1] 354). — \*IV, 1043.
- 5) Acetat d. 4-Oxy-1-[3-Bromphenylazo]naphtalin. Sm. 112° (Soc. 81, 176 C. 1902 [1] 354). — \*IV, 1042.
- 6) Acetat d. 4-Oxy-1-[4-Bromphenylazo]naphtalin. Sm. 141° (Soc. 81, 176 C. 1902 [1] 354). — \*IV, 1043.
- 7) Acetat d. p-Brom-4-Oxy-1-Phenylazonaphtalin. Sm. 146° (Soc. 81, 175 C. 1902 [1] 354). — \*IV, 1044.
- $C_{18}H_{13}O_2N_3S$  1) 4,4'-Anhydrid d. 4-Phenylsulfonamido-4'-Diazobiphenyl + 2H<sub>2</sub>O (Soc. 91, 1509 C. 1907 [2] 1518).
- $C_{18}H_{13}O_3NCl_4$  1) 5,6,7,8-Tetrachlor-3-Diäthylamido-1-Oxy-9,10-Anthrachinon. Sm. 192° (Bl. [3] 25, 749). — \*III, 301.
- $C_{18}H_{13}O_3NS$  1) 10-Methyl-α-Phenakridin-p-Sulfonsäure (B. 33, 911). — \*IV, 280.
- $C_{18}H_{13}O_3NS_2$  1) Methylenäther d. 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 190° (M. 26, 1211 C. 1905 [2] 1675).
- 2) Methylenäther d. 2-Thiocarbonyl-4-Keto-3-[3-Methylphenyl]-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 178° (M. 29, 405 C. 1908 [2] 1039).
- 3) Methylenäther d. 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 197° (M. 26, 1214 C. 1905 [2] 1676).
- 4) Acetat d. 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-Phenyl-tetrahydrothiazol. Sm. 202° (M. 25, 166 C. 1904 [1] 894).
- $C_{18}H_{13}O_3N_3S$  1) Resorcinazothiodiphenylaminsulfoxyd (A. 322, 66 C. 1902 [2] 225). — \*IV, 1077.
- 2) β-Phenylenpyridinketonphenylhydrazonsulfonsäure. Zers. bei 295° (B. 22, 410). — IV, 388.
- $C_{18}H_{13}O_4NCl_4$  1) Gem. Anhydrid d. Essigsäure u. 3,4,5,6-Tetrachlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 196° (C. 1899 [2] 372; Bl. [3] 25, 600). — \*II, 1001.

- C<sub>18</sub>H<sub>13</sub>O<sub>4</sub>N<sub>4</sub>Br** 1) 6-Brom-2,4-Dinitro-1,3-Di[Phenylamido]benzol. Sm. 191—192° (B. 28, 191; *Am.* 18, 242). — IV, 572.
- C<sub>18</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>Hg** 1) Verbindung (aus 4-Nitro-2-Phenylazo-1-Oxynaphtalin). Sm. 221 bis 222° (*Soc.* 95, 1435 C. 1909 [2] 1248).
- 2) Verbindung (aus 2-Nitro-4-Phenylazo-1-Oxynaphtalin). Zers. bei 220° (*Soc.* 95, 1433 C. 1909 [2] 1248).
- C<sub>18</sub>H<sub>13</sub>O<sub>5</sub>N<sub>4</sub>Cl** 1) 1-Acetylamido-2-[5-Chlor-2,4-Dinitrophenyl]amidonaphtalin (B. 37, 3888 C. 1904 [2] 1654).
- C<sub>18</sub>H<sub>13</sub>O<sub>6</sub>N<sub>2</sub>Cl** 1)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha,\alpha^2,\gamma^2$ -Tricarbon-säure. Sm. bei 250—253° u. Zers. NH<sub>4</sub> (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- 2)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha,\alpha^3,\gamma^3$ -Tricarbon-säure. Sm. 165—185°. Na<sub>3</sub> (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- 3)  $\beta$ -Chlor- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha,\alpha^4,\gamma^4$ -Tricarbon-säure. Sm. 245—250° u. Zers. (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- C<sub>18</sub>H<sub>13</sub>O<sub>6</sub>N<sub>2</sub>Br** 1)  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha,\alpha^2,\gamma^2$ -Tricarbon-säure. Sm. 241—243° u. Zers. (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- 2)  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha,\alpha^3,\gamma^3$ -Tricarbon-säure. Sm. 250—263° u. Zers. (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- 3)  $\beta$ -Brom- $\gamma$ -Phenylimido- $\alpha$ -Phenylamidopropen- $\alpha,\alpha^4,\gamma^4$ -Tricarbon-säure. Zers. bei 205° (L. TOCHTERMANN, Dissert. Freiburg [Schweiz] 1902).
- C<sub>18</sub>H<sub>13</sub>O<sub>6</sub>N<sub>2</sub>J** 1) 2,4-Dinitrophenyläther d. 4-Oxydiphenyljodoniumhydroxyd. Salze, siehe (B. 42, 3765 C. 1909 [2] 1743).
- C<sub>18</sub>H<sub>13</sub>O<sub>6</sub>N<sub>3</sub>S** 1) S-[*p*-Oxyphenyl]hydroxyd d. 3,9-Dinitrophenthiazin ( $\alpha$ -Hydroxyd). Sm. 218—220°. Chlorid, Pikrat (*Soc.* 93, 1693 C. 1908 [2] 2015).
- 2) isom. S-[*p*-Oxyphenyl]hydroxyd d. 3,9-Dinitrophenthiazin ( $\beta$ -Hydroxyd). Chlorid, Sulfat (*Soc.* 93, 1693 C. 1908 [2] 2015).
- 3) S-[*p*-Oxyphenyl]hydroxyd d. *p*-Dinitrophenthiazin. Sm. 195 bis 197°. Chlorid, Pikrat (*Soc.* 93, 1697 C. 1908 [2] 2016).
- C<sub>18</sub>H<sub>13</sub>O<sub>6</sub>N<sub>4</sub>Cl** 1) 4-Chlor-2,6-Dinitro-1,3-Di[4-Oxyphenylamido]benzol. Zers. bei 215° (C. 1902 [1] 288). — \*IV, 372.
- C<sub>18</sub>H<sub>13</sub>O<sub>6</sub>N<sub>4</sub>Cl<sub>3</sub>** 1) Verbindung (aus 2,3,5-Trichlor-1,4-Benzochinon u. 2 Molec. 3-Nitro-1-Amidobenzol) (A. 228, 325). — III, 334.
- C<sub>18</sub>H<sub>13</sub>O<sub>7</sub>NBr<sub>2</sub>** 1)  $\alpha$ -[3,5-Dibromphenyl]äthan- $\beta$ - $\beta$ -Dicarbonsäure- $\beta$ -Phtalaminsäure. Zers. bei 110° (*Am.* 40, 342 C. 1908 [2] 1865).
- C<sub>18</sub>H<sub>13</sub>O<sub>7</sub>N<sub>5</sub>S** 1) 4-[2,4-Dinitrophenyl]amidoazobenzol-4'-Sulfonsäure + H<sub>2</sub>O. K + H<sub>2</sub>O, Na + 3H<sub>2</sub>O, Ba + 7H<sub>2</sub>O (Bl. [3] 33, 989 C. 1905 [2] 1175).
- 2) 2-Nitro-4-[2-Nitrophenyl]amidoazobenzol-4'-Sulfonsäure. K + 2H<sub>2</sub>O, Na + 3H<sub>2</sub>O (Bl. [3] 33, 987 C. 1905 [2] 1175).
- 3) 2-Nitro-4-[4-Nitrophenyl]amidoazobenzol-4'-Sulfonsäure. K + H<sub>2</sub>O, Na + H<sub>2</sub>O (Bl. [3] 33, 983 C. 1905 [2] 1175).
- C<sub>18</sub>H<sub>13</sub>O<sub>8</sub>N<sub>2</sub>Cl<sub>3</sub>** 1) Diacetat d.  $\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Nitro-4-Oxyphenyl]äthan. Sm. 197° (*J. pr.* [2] 47, 62). — II, 995.
- C<sub>18</sub>H<sub>13</sub>O<sub>8</sub>N<sub>6</sub>S** 1) Dinitrophenolazodiphenylaminsulfonsäure. Na (C. 1899 [2] 961). — \*IV, 1037.
- C<sub>18</sub>H<sub>13</sub>N<sub>2</sub>ClS** 1) 3-Phenylamidophenazthioniumchlorid (A. 322, 39 C. 1902 [2] 223; D. R. P. 126410 C. 1902 [1] 87; B. 39, 920 C. 1906 [1] 1259).
- C<sub>18</sub>H<sub>14</sub>ONCl** 1) Methyläther d. 1-Chlor-2-[4-Oxybenzyliden]amidonaphtalin. Sm. 116—117° (*Soc.* 77, 1218).
- 2) Chlormethylat d. 7-Oxy-1,2-Naphtakridin (B. 37, 3081 C. 1904 [2] 1474).
- C<sub>18</sub>H<sub>14</sub>ONBr** 1) 3-Brom-4-Oxy-1-[4-Methylphenyl]imidomethylnaphtalin. Sm. 168° (A. 357, 332 C. 1908 [1] 354).
- 2) Methyläther d. 1-Brom-2-[4-Oxybenzyliden]amidonaphtalin. Sm. 107° (*Soc.* 77, 1216).
- C<sub>18</sub>H<sub>14</sub>ON<sub>2</sub>Cl<sub>2</sub>** 1) 3,4-Dichlor-5-[4-Methylphenyl]imido-2-Keto-1-[4-Methylphenyl]-2,5-Dihydropyrrol (Dichlormaleindi-p-Toluil). Sm. 161° (A. 295, 52). — \*II, 280.

- $C_{18}H_{14}ON_2S$  1)  $\alpha$ -[1-Naphtyl]- $\beta$ -Benzoylthioharnstoff. Sm. 172—173° (*A. ch.* [5] 11, 326). — II, 1172.
- $C_{18}H_{14}ON_3Cl$  1) 5-Chlorphenylat d. 3-Amido-2-Oxy-5,10-Naphtdiazin (*B.* 41, 474 *C.* 1908 [1] 1070).  
2) 5-Chlorphenylat d. 1[oder 3]-Amido-3[oder 1]-Oxy-5,10-Naphtdiazin (*B.* 33, 3076). — \*IV, 836.
- $C_{18}H_{14}ON_3Br$  1) 4-Bromphenylazodiphenylamidoxyd. Sm. 119—120° (*B.* 32, 3560). — \*IV, 1142.
- $C_{18}H_{14}O_2NBr$  1)  $\beta$ -Bromäthylimid d. Diphenylmaleinsäure. Sm. 94° (*B.* 40, 4407 *C.* 1908 [1] 41).
- $C_{18}H_{14}O_2N_2Cl_2$  1)  $\beta$ -Dichlor- $\beta$ -Di[Phenylamido]-1,4-Dioxybenzol (*A.* 210, 181). — II, 949.  
2) 3,6-Dichlor-2,5-Diketo-1,4-Di[2-Methylphenyl]-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 201° (*J. pr.* [2] 38, 310). — II, 471.  
3) 3,6-Dichlor-2,5-Diketo-1-[2-Methylphenyl]-4-[4-Methylphenyl]-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 146° (*J. pr.* [2] 41, 86). — II, 506.
- $C_{18}H_{14}O_2N_2Br_2$  1)  $\alpha\beta$ -Dibrom- $\alpha$ -[4-Methylphenyl]- $\beta$ -[5-Nitro-2-Chinoly]äthan (*B.* 38, 3721 *C.* 1906 [1] 54).  
2) 2-[ $\alpha\beta$ -Dibrom- $\beta$ -3-Nitrophenyläthyl]-6-Methylchinolin. Sm. 209° (*B.* 38, 3702 *C.* 1906 [1] 51).
- $C_{18}H_{14}O_2N_2Br_4$  1) 2,5-Diketo-1,4-Di[ $\beta$ -Dibrom-2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 277° (*J. pr.* [2] 38, 296). — II, 471.
- $C_{18}H_{14}O_2N_2S$  1) Dimethylamidooxyphenonaphtothiazon (*D. R. P.* 83046, 84232, 84849, 96690). — \*IV, 698.  
2) Verbindung (aus p-Dioxythiodiphenylamin u. Hydrochinon) (*C.* 1900 [1] 744).
- $C_{18}H_{14}O_2N_4S_2$  1) 4-Phenylthiosulfondiazoazobenzol. Sm. 120° u. Zers. (*J. pr.* [2] 62, 425). — \*IV, 1108.
- $C_{18}H_{14}O_2N_4S_6$  1) Disulfid d. 5-Merkapto-2-Thiocarbonyl-3-[2-Methoxyphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 174—175° (*J. pr.* [2] 60, 216). — \*IV, 548.
- $C_{18}H_{14}O_3N_3S$  1) Benzolsulfonat d. 4-Oxyazobenzol. Sm. 109° (*J. pr.* [2] 78, 386 *C.* 1909 [1] 361).
- $C_{18}H_{14}O_3N_2S_2$  1) 2-Thiocarbonyl-4-Keto-3-[2,4-Dimethylphenyl]-5-[3-Nitrobenzyliden]tetrahydrothiazol (*M.* 26, 1198 *C.* 1905 [2] 1674).  
2)  $\beta$ -[1,2-Phtalyl]amidoäthylester d. Benzoylamidodithioameisensäure. Sm. 178—182° (*Am.* 26, 201).
- $C_{18}H_{14}O_3N_2Hg$  1)  $\beta$ -Benzolazo- $\alpha$ -Naphtolmerkuriacetat. Sm. 208° u. Zers. (*Soc.* 95, 1434 *C.* 1909 [2] 1248).
- $C_{18}H_{14}O_4N_2Cl_2$  1) Diacetat d. anti- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[2-Chlorphenyl]äthan. Sm. 157° (*B.* 32, 1984). — \*III, 223.  
2) Diacetat d. syn- $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[2-Chlorphenyl]äthan. Sm. 129° (*B.* 32, 1983). — \*III, 223.
- $C_{18}H_{14}O_4N_2S$  1) 4-Nitro-4'-Phenylsulfonamidobiphenyl. Sm. 174° (*Soc.* 91, 1507 *C.* 1907 [2] 1518).  
2) 4-[4-Oxyphenyl]azobiphenylsulfonsäure. Na, Ba (*Soc.* 49, 381). — IV, 1415.
- $C_{18}H_{14}O_4N_3Br$  1) Äthylester d. 5-Benzoxyl-1-[4-Bromphenyl]-1,2,3-Triazol-4-Carbonsäure. Sm. 137° (*A.* 338, 170 *C.* 1905 [1] 1165).
- $C_{18}H_{14}O_4N_3As$  1)  $\beta$ -Dinitro- $\beta$ -Amidotriphenylarsin. Sm. 205° (*A.* 321, 185 *C.* 1902 [2] 45). — \*IV, 1190.
- $C_{18}H_{14}O_5N_2S$  1) 4-[2,4-Dioxyphenyl]azobiphenyl- $\beta$ -Sulfonsäure. Na, Ba (*Soc.* 49, 382). — IV, 1446.  
2) 2',5'-Dioxy-4-Phenylazobenzol- $\beta$ -Sulfonsäure (*Soc.* 49, 382). — IV, 1447.  
3) 6-Oxy-2-[6-Oxy-3-Methylphenyl]- $\alpha$ -Naphtimidazol-8-Sulfonsäure (*D. R. P.* 181178 *C.* 1907 [1] 1084).
- $C_{18}H_{14}O_5N_4S$  1) 2-Nitro-4-Phenylamidoazobenzol-4'-Sulfonsäure. K (*Bl.* [3] 33, 976 *C.* 1905 [2] 1175).  
2) 4-[2-Nitrophenyl]amidoazobenzol-4'-Sulfonsäure. K (*Bl.* [3] 33, 976 *C.* 1905 [2] 1175).  
3) 4-[4-Nitrophenyl]amidoazobenzol-4'-Sulfonsäure. K, Na + 2H<sub>2</sub>O (*Bl.* [3] 33, 976 *C.* 1905 [2] 1175).



- $C_{15}H_{14}O_6N_2S$  1) Sulfonsäure d. s-Diphenylketipinsäuremononitrilmonamid. Na +  $2H_2O$ , Ba +  $3H_2O$  (A. 282, 47). — II, 2032.
- $C_{18}H_{14}O_6N_2S_2$  1) 4-Phenylazobenzol-?-Disulfonsäure.  $K_2 + 1\frac{1}{2}H_2O$ , Ba (B. 21, 1565). — IV, 1402.
- $C_{18}H_{14}O_6N_4Cl_2$  1) Verbindung (aus 2,5-Dichlor-1,4-Benzochinon u. 2 Molec. 3-Nitro-1-Amidobenzol). Sm.  $110^\circ$  (A. 228, 325). — III, 333.  
2) Verbindung (aus 2,6-Dichlor-1,4-Benzochinon u. 2 Molec. 3-Nitro-1-Amidobenzol). Sm.  $112^\circ$  (A. 228, 325). — III, 334.
- $C_{15}H_{14}O_8N_4S$  1) Phenylamid d. 2,6-Dinitrodiphenylamin-4-Sulfonsäure. Sm.  $200^\circ$  (A. 368, 107 C. 1909 [2] 123).  
2) Azoverbindung (aus 4-Nitrodiazobenzol u. 1-Acetylamidonaphtalin-4-Sulfonsäure) (B. 39, 1568 C. 1906 [2] 36).  
3) Azoverbindung (aus 4-Nitrodiazobenzol u. 1-Acetylamidonaphtalin-5-Sulfonsäure) (B. 39, 1568 C. 1906 [2] 36).
- $C_{18}H_{14}O_7N_2S$  1)  $\beta$ -Naphtolsulfonazoanissäure. Ba +  $8H_2O$  (B. 14, 2039). — IV, 1471.
- $C_{18}H_{14}O_7N_4S_2$  1) Azoverbindung (aus 2-Nitrodiazobenzol u. 1-Phenylsulfonamidobenzol-4-Sulfonsäure) (B. 39, 1568 C. 1906 [2] 36).  
2) Azoverbindung (aus 3-Nitrodiazobenzol u. 1-Phenylsulfonamidobenzol-4-Sulfonsäure) (B. 39, 1569 C. 1906 [2] 36).  
3) Azoverbindung (aus 4-Nitrodiazobenzol u. 1-Phenylsulfonamidobenzol-4-Sulfonsäure) (B. 39, 1569 C. 1906 [2] 36).
- $C_{18}H_{14}O_8N_2Br_2$  1) Diacetat d.  $\alpha\alpha$ -Di[5-Brom-3-Nitro-4-Oxyphenyl]äthan. Sm. 174 bis  $175^\circ$  (A. 363, 257 C. 1909 [1] 175).
- $C_{18}H_{14}O_8N_2S_4$  1) Verbindung (aus 2,5,6-Trioxyphenylen-1,3-Disulfid u. m-Nitranilin) (Bl. [3] 15, 419).
- $C_{18}H_{14}O_8N_4S_2$  1) Di[4-Nitrophenylamid] d. Benzol-1,3-Disulfonsäure. Sm. 183 bis  $184^\circ$  (Soc. 87, 1308 C. 1905 [2] 1334).
- $C_{18}H_{14}O_{10}N_2S_2$  1) 2-Naphtol-3,6-Disulfonsäureazoanissäure +  $3H_2O$ .  $K_2 + 6H_2O$  (B. 14, 2040). — IV, 1471.
- $C_{18}H_{14}O_{12}N_4S_2$  1) 4,6-Dinitro-1,3-Di[4-Oxyphenylamido]benzol-1<sup>3</sup>,3<sup>3</sup>-Disulfonsäure (C. 1900 [2] 699; 1901 [1] 1395). — \*IV, 372.
- $C_{18}H_{14}N_2ClJ$  1) 4-Phenylazodiphenyljodoniumchlorid. Sm.  $205^\circ$ . +  $HgCl_2$ , 2 +  $PtCl_4$  (B. 37, 1313 C. 1904 [1] 1341).
- $C_{18}H_{14}N_2Cl_2Hg$  1) Quecksilberdichinolyldichlorid. +  $HgCl_2$ , +  $PtCl_4$  (G. 25 [1] 399).
- $C_{18}H_{14}N_2BrJ$  1) 4-Phenylazodiphenyljodoniumbromid. Sm.  $135^\circ$  (B. 37, 1314 C. 1904 [1] 1341).
- $C_{18}H_{14}N_3ClS$  1) Phenylthioninchlorid +  $H_2O$ . 2 +  $PtCl_4$  (B. 33, 3293).
- $C_{18}H_{14}N_3BrS$  1) Phenylthioninbromid +  $H_2O$  (B. 33, 3293).
- $C_{18}H_{15}ONBr_2$  1) 2-[ $\alpha\beta$ -Dibrom- $\beta$ -4-Oxyphenyläthyl]-6-Methylechinolin. Sm. 265 bis  $266^\circ$  (B. 38, 3703 C. 1906 [1] 51).
- $C_{18}H_{15}ONS$  1) Phenylamid d. 2-Oxynaphtalinmethyläther-1-Thiocarbonsäure. Sm.  $141^\circ$  (J. pr. [2] 59, 582). — \*II, 989.  
2) Phenylamid d. 4-Oxynaphtalinmethyläther-1-Thiocarbonsäure. Sm.  $179^\circ$  (J. pr. [2] 59, 582). — \*II, 988.  
3) 1-Naphtylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbonsäure. Sm.  $147-148^\circ$  (J. pr. [2] 59, 591). — \*II, 914.  
4) 2-Naphtylamid d. 4-Oxybenzolzomethyläther-1-Thiocarbonsäure. Sm.  $158-159^\circ$  (J. pr. [2] 59, 592). — \*II, 914.
- $C_{18}H_{15}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-[2,4-Dimethylphenyl]-5-Benzyliden-tetrahydrothiazol. Sm.  $171^\circ$  (M. 26, 1197 C. 1905 [2] 1674).
- $C_{18}H_{15}ON_2Cl_3$  1) Verbindung (aus d. Di[4-Methylphenylamid] d. Weinsäure). Sm.  $192-192,5^\circ$  (A. 279, 145). — \*II, 281.
- $C_{18}H_{15}ON_2Br$  1) Äthyläther d. ?-Brom-4-Oxy-1-Phenylazonaphtalin. Sm.  $220^\circ$  (Soc. 81, 175 C. 1902 [1] 354). — \*IV, 1044.
- $C_{18}H_{15}ON_4J$  1) 4-Phenylazodiphenyljodoniumhydroxyd. Salze, siehe (B. 37, 1313 C. 1904 [1] 1341).
- $C_{18}H_{15}ON_3S$  1) Phenylthionin. Salze, siehe (B. 33, 3293).  
2) Verbindung (aus p-Amidooxythiodiphenylamin u. Hydrochinon) (C. 1900 [1] 744).  
3) Verbindung (aus p-Dioxythiodiphenylamin u. p-Amidophenol) (C. 1900 [1] 744).
- $C_{18}H_{15}ON_4Cl$  1) Verbindung (aus  $\alpha$ -?-Pentachlor-2-Keto-1-Methyl-?-Dihydro-R-Penten). Sm.  $202^\circ$  (A. 296, 170, 191). — IV, 770; \*I, 523.

- $C_{18}H_{15}OCl_2As$  1) Phenyläther d. Diphenyloxyarsendichlorid. Sm. 121—122° (A. 321, 144 C. 1902 [2] 42). — \*IV, 1189.
- $C_{18}H_{15}OBr_2As$  1) Phenyläther d. Diphenyloxyarsendibromid. Sm. 100° (A. 321, 145 C. 1902 [2] 42). — \*IV, 1189.
- $C_{18}H_{15}OSP$  1) Phenylester d. Diphenylthiophosphinsäure. Sm. 124° (B. 18, 2114). — IV, 1657.
- $C_{18}H_{15}OS_3P$  1) Triphenyläther d. Trimerkaptophosphinoxid (Triphenylester d. Trithiophosphorsäure). Sm. 114° (115°) (B. 33, 2111; J. pr. [2] 10, 232; B. 40, 3423 C. 1907 [2] 1405). — II, 661; \*II, 470.
- $C_{18}H_{15}OPSe$  1) Phenylester d. Diphenylselenophosphinsäure. Sm. 114—115° (B. 18, 2115). — IV, 1657.
- $C_{18}H_{15}O_2NCl_2$  1) 5,8-Dichlor-2-Diäthylamido-9,10-Anthrachinon. Sm. 175° (Bl. [3] 23, 693). — \*III, 298.
- $C_{18}H_{15}O_2NBr_2$  1) 5,8-Dibrom-2-Diäthylamido-9,10-Anthrachinon. Sm. 198° (C. 1907 [1] 1119).
- 2)  $\alpha\beta$ -Dibrom- $\alpha$ -[3-Methoxyl-4-Oxyphenyl]- $\beta$ -[2-Chinolyl]äthan (Vanilloäthylenchinolinbromid). Zers. bei 200° (B. 27, 1976). — IV, 455.
- $C_{18}H_{15}O_2NS$  1) Diphenylamid d. Benzolsulfonsäure. Sm. 122—123° (124°) (A. 214, 220; B. 36, 2706 C. 1903 [2] 829). — II, 425.
- $C_{18}H_{15}O_2NS_2$  1) Methyläther d. 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-[4-Oxybenzyliden]tetrahydrothiazol. Sm. 208—212° (M. 26, 1210 C. 1905 [2] 1675).
- 2) Methyläther d. 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-[4-Oxybenzyliden]tetrahydrothiazol. Sm. 170° (M. 26, 1213 C. 1905 [2] 1676).
- 3) Äthyläther d. 2-Thiocarbonyl-4-Keto-3-[4-Oxyphenyl]-5-Benzylidentetrahydrothiazol. Sm. 212—214° (M. 27, 1244 C. 1907 [1] 972).
- $C_{18}H_{15}O_2N_2Cl$  1) 2-Chlor-3,6-Di[Phenylamido]-1,4-Dioxybenzol. Zers. bei 220 bis 225° (A. 210, 182). — II, 948.
- 2) Muskarin (B. 25, 3003; D.R.P. 79122). — IV, 1060; \*IV, 714.
- 3) 4-Methylphenylimid d. Chlor[4-Methylphenyl]amidofumarsäure. Sm. 198—199° (A. 279, 145). — \*II, 281.
- $C_{18}H_{15}O_2N_2Br$  1) 4,5-Diketo-2-Brommethylen-1,3-Di[4-Methylphenyl]tetrahydroimidazol. Sm. 160° (B. 33, 619). — \*II, 276.
- 2) Methyläther d. 5-Keto-4-[4-Oxybenzyliden]-3-Methyl-1-[4-Bromphenyl]-4,5-Dihydropyrazol. Sm. 147° (B. 33, 2608).
- $C_{18}H_{15}O_2N_2J$  1) Jodmethylat d.  $\alpha$ -[2-Nitrophenyl]- $\beta$ -[4-Chinolyl]äthen. Sm. 237° (B. 36, 1670 C. 1903 [2] 49).
- $C_{18}H_{15}O_2N_3S$  1) 4-Phenylamido-1-Phenylsulfondiazobenzol. Sm. 82° (B. 35, 895 C. 1902 [1] 867).
- 2) 4-Phenylsulfonamidoazobenzol. Sm. 133° (A. 272, 230). — IV, 1359.
- 3) S-[ $\beta$ -Oxyphenyl]thioninhydroxyd (Soc. 93, 1697 C. 1908 [2] 2016).
- 4) S-[ $\beta$ -Oxyphenyl]isothioninhydroxyd (Soc. 93, 1699 C. 1908 [2] 2016).
- $C_{18}H_{15}O_2N_4Cl$  1) N-Äthylderivat d. 4-Nitro-1-[1-Chlor-2-Naphtyl]amidodiazobenzol. Sm. 193—194° (Soc. 81, 99 C. 1902 [1] 186, 416). — \*IV, 1136.
- $C_{18}H_{15}O_2SP$  1) Diphenylester d. Phenylthiophosphinsäure. Fl. (B. 9, 1054). — IV, 1653.
- $C_{18}H_{15}O_3NCl_4$  1) 3,4,5,6-Tetrachlor-4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 222° (C. 1899 [2] 372; Bl. [3] 25, 601). — \*II, 1001.
- 2) Äthylester d. 3,4,5,6-Tetrachlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 143° (163°) (C. 1899 [2] 372; Bl. [3] 25, 600). — \*II, 1001.
- $C_{18}H_{15}O_3NBr_4$  1) Acetat d. N-Acetyl-2,3,5,6-Tetrabrom-4-Oxydibenzylamin. Sm. 146—147° (A. 344, 168 C. 1906 [1] 1158).
- $C_{18}H_{15}O_3NS_2$  1) 5<sup>3</sup>-Methyläther d. 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 168° (M. 26, 1211 C. 1905 [2] 1675).
- 2) 5<sup>3</sup>-Methyläther d. 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-[3,4-Dioxybenzyliden]tetrahydrothiazol. Sm. 202° (M. 26, 1214 C. 1905 [2] 1676).

- $C_{18}H_{15}O_3N_3S$  1) 4-Phenylsulfonamido-4'-Diazobiphenyl. Salze, siehe (*Soc.* 91, 1509 C. 1907 [2] 1518).  
 2) 4-Phenylamidoozobenzol-4'-Sulfonsäure. K, Anilinsalz (*B.* 12, 262; *Soc.* 51, 192). — IV, 1369.
- $C_{18}H_{15}O_3ClS$  1) Tri[4-Oxyphenyl]sulfinchlorid.  $2 + PCl_4$  (*Soc.* 89, 705 C. 1906 [2] 112).
- $C_{18}H_{15}O_3Cl_2P$  1) Dichlorid d. Triphenylphosphorsäure. Fl. (*A.* 253, 112; *B.* 41, 151 C. 1908 [1] 723). — II, 660.
- $C_{18}H_{15}O_3Br_3P$  1) Triphenylphosphitbromid (*A.* 218, 105). — II, 659.
- $C_{18}H_{15}O_3SP$  1) Triphenylester d. Thiophosphorsäure. Sm.  $53^\circ$  ( $49^\circ$ ); Sd.  $245^\circ_{11}$  (*J. pr.* [2] 10, 233; *B.* 18, 1718; 31, 1100; *A.* 253, 118). — II, 661; \*II, 359.
- $C_{18}H_{15}O_4NCl_2$  1) Gem. Anhydrid d. Essigsäure u. 3,6-Dichlor-4'-Dimethylamido-diphenylketon-2-Carbonsäure. Sm.  $170^\circ$  (*Bl.* [3] 23, 377; [3] 25, 504). — \*II, 1001.
- $C_{18}H_{15}O_4NCl_4$  1) 3,4,5,6-Tetrachlor-4'-Diäthylamido-2'-Oxydiphenylketon-2-Carbonsäure (D.R.P. 118077 C. 1901 [1] 602). — \*II, 1094.
- $C_{18}H_{15}O_4NBr_2$  1) Gem. Anhydrid d. Essigsäure u. 3,6-Dibrom-4'-Dimethylamido-diphenylketon-2-Carbonsäure. Sm.  $195^\circ$  (*C. r.* 142, 1274 C. 1906 [2] 274).  
 2) Methylester d.  $\gamma\delta$ -Dibrom- $\alpha$ -[4-Nitrophenyl]- $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha$ -Carbonsäure. Sm.  $135$ – $136^\circ$  (*A.* 336, 220 C. 1904 [2] 1733; *A.* 336, 335 C. 1905 [1] 89).
- $C_{18}H_{15}O_4NS_2$  1) Phenylamid d. Diphenylsulfon-3-Sulfonsäure. Sm.  $130$ – $131^\circ$  (*B.* 19, 2420). — II, 814.  
 2) Phenylimid d. Benzolsulfonsäure. Sm.  $128$ – $129^\circ$  ( $143$ – $144^\circ$ ) (*C.* 1899 [2] 868; *C. r.* 137, 714 C. 1903 [2] 1428). — \*II, 223.
- $C_{18}H_{15}O_4N_3S$  1) Phenylamid d. 2-Nitrodiphenylamin-4-Sulfonsäure. Sm.  $157^\circ$  (*B.* 24, 3794). — II, 576.  
 2) Phenylamid d. 4-Nitrodiphenylamin-2-Sulfonsäure. Sm.  $164^\circ$  (*B.* 24, 3799). — II, 577.
- $C_{18}H_{15}O_5NS$  1) 2-Amidophenyl-2-Methoxyl-1-Naphtylketon- $\beta$ -Sulfonsäure (*B.* 39, 4339 C. 1907 [1] 348).  
 2) Diacetat d. N-Acetyldioxythiodiphenylamin. Sm.  $155$ – $156^\circ$  (*A.* 230, 194). — II, 812.  
 3) 4-Methylbenzolsulfonat d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylsäure-methylester. Sm.  $97$ – $98^\circ$  (*Bl.* [3] 31, 339 C. 1904 [1] 1135).
- $C_{18}H_{15}O_5NS_2$  1)  $\beta$ -Diphenylsulfon-2-Amido-1-Oxybenzol. Sm.  $115^\circ$  (*B.* 29, 2029). — \*II, 614.  
 2) Benzolsulfonat d. 2-Phenylsulfonamido-1-Oxybenzol. Sm.  $134^\circ$  ( $81$ – $83^\circ$ ) (*C.* 1900 [1] 544; *Am.* 37, 62 C. 1907 [1] 806). — \*II, 393.  
 3) Benzolsulfonat d. 4-Phenylsulfonamido-1-Oxybenzol. Sm.  $150$  bis  $152^\circ$  (*C.* 1900 [1] 544). — \*II, 411.
- $C_{18}H_{15}O_5N_3S$  1) 1-Nitro-2,4-Di[Phenylamido]benzol-5-Sulfonsäure (D.R.P. 205358 C. 1909 [1] 883).
- $C_{18}H_{15}O_6NBr_2$  1) Äthylester d.  $\alpha\beta$ -Dibrom- $\beta$ -[3-Nitrobenzoxyl]- $\alpha$ -Phenylpropion-säure (*A.* 312, 50).
- $C_{18}H_{15}O_6NS_4$  1) Verbindung (aus 2,5,6-Trioxyphenylen-1,3-Disulfid u. Anilin) (*Bl.* [3] 15, 420).
- $C_{18}H_{15}O_6N_2Bi$  1) Phenylidi[ $\beta$ -Nitrophenyl]wismutdihydroxyd. Chlorid, Nitrat (*B.* 30, 2845).
- $C_{18}H_{15}O_6N_3S$  1) 2-Oxy-1-[5-Nitro-2,4-Dimethylphenylazo]naphtalin-1 $\beta$ -Sulfon-säure +  $5H_2O$  (*B.* 35, 3766 C. 1902 [2] 1453). — \*IV, 1046.
- $C_{18}H_{15}O_6N_3S_2$  1) 4-Sulfobenzolazodiphenylaminsulfonsäure.  $Na_2$  (*C.* 1899 [2] 961). — \*IV, 1015.
- $C_{18}H_{15}O_6N_4Cl$  1) 2-Chlor-1,3,5-Trinitrobenzol + 1-Dimethylamidonaphtalin. Sm.  $42^\circ$  (*Soc.* 89, 589 C. 1906 [2] 31).  
 2) 2-Chlor-1,3,5-Trinitrobenzol + 1-Äthylamidonaphtalin. Sm.  $85^\circ$  (*Soc.* 89, 589 C. 1906 [2] 31).  
 3) Verbindung (aus 2-Chlor-1,4-Benzochinon u. 2 Molec. 3-Nitro-1-Amido-benzol) (*A.* 228, 324). — III, 332.
- $C_{18}H_{15}O_7NS_3$  1) Tribenzsulfhydroxylamin. Sm.  $99^\circ$  (*A.* 141, 371; *B.* 11, 618, 1590; 29, 1563). — II, 109; \*II, 66.



- $C_{18}H_{15}O_8N_8S_2$  1) 1-Nitro-2,4-Di[Phenylamido]benzol-2,4,5-Disulfonsäure (D. R. P. 212472 C. 1909 [2] 773).
- $C_{18}H_{15}O_9NS_3$  1) Triphenylamin- $\beta$ -Trisulfonsäure.  $Na_3$  (B. 23, 2541). — II, 577.
- $C_{18}H_{15}O_{10}S_3As$  1) Triphenylarsinoxyd- $\beta$ -Trisulfonsäure.  $Ba_3$  (A. 321, 186 C. 1902 [2] 45). — \*IV, 1191.
- $C_{18}H_{16}O_{13}N_7S$  1) O-Amyläther-S-2,4,6-Trinitrophenyläther d. 2,4,6-Trinitrophenylimidomerkaptooxymethan. Sm. 138,5° (Soc. 85, 649 C. 1904 [2] 310).
- $C_{18}H_{15}N_4ClS$  1) 3,5-Diamido-9-Phenylamidophenazthioniumchlorid (A. 322, 61 C. 1902 [2] 225). — \*IV, 954.
- $C_{18}H_{15}Br_2J_2As$  1) Triphenylarsendibromiddijodid. Sm. 120—121° (A. 321, 164 C. 1902 [2] 44). — \*IV, 1190.
- $C_{18}H_{15}S_3PSe$  1) Triphenyläther d. Trimerkaptophosphinselenid. Sm. 95° (B. 40, 3424 C. 1907 [2] 1405).
- $C_{18}H_{16}ONCl$  1) 1-Oximido-2-[ $\alpha$ -Chlor- $\gamma$ -Phenylpropenyl]-2,3-Dihydroinden. Sm. 163—164° u. Zers. (Soc. 65, 488). — III, 253.
- $C_{18}H_{16}ONBr_3$  1) 3,6-Dibrom-5-Oxy-2,4-Dimethylbrombenzylat d. Chinolin. Sm. 226° (B. 29, 1122; A. 344, 221 C. 1906 [1] 1162). — IV, 250.
- 2) 2,6-Dibrom-4-Oxy-3,5-Dimethylbrombenzylat d. Chinolin. Sm. 266—267° (A. 344, 247 C. 1906 [1] 1163).
- $C_{18}H_{16}ONJ$  1) Jodmethylat d. 6-Benzoyl-2-Methylchinolin. Sm. 220° (A. 242, 325). — IV, 375.
- $C_{18}H_{16}ON_2Cl_2$  2) 4,4-Dichlor-5-Phenylimido-2-Keto-3,3-Dimethyl-1-Phenyltetrahydropyrrrol (uns-Dimethyldichlorsuccindianil). Sm. 129° (A. 295, 71). — \*II, 212.
- $C_{18}H_{16}ON_2S$  1) Benzyläther d.  $\alpha$ -Oxy- $\beta$ -[1-Naphtyl]thioharnstoff. Sm. 132—133° (B. 24, 384). — II, 610.
- 2) Methyläther d. 5-Merkapto-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 78° (A. 361, 287 C. 1908 [2] 521; B. 41, 2674 C. 1908 [2] 1364).
- 3) 3-Thiocarbonyl-4-Benzoyl-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 217° (B. 41, 2673 C. 1908 [2] 1364).
- 4) 2-Phenylimido-4-Keto-3-Äthyl-5-Benzylidentetrahydrothiazol (Benzylidenäthylphenylthiohydantoïn). Sm. 97° (B. 31, 137; C. 1899 [2] 805). — \*II, 954.
- 5) Benzoat d. 5-Merkapto-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 114° (A. 361, 295 C. 1908 [2] 522).
- 6) Verbindung (aus Thionylamidobenzol u. Diphenylamin) (A. 274, 208). — II, 355.
- $C_{18}H_{16}ON_2S_2$  1) 2-Thiocarbonyl-4-Keto-3-Phenyl-5-[4-Dimethylamidobenzyliden]tetrahydrothiazol. Sm. 235° (M. 26, 1205 C. 1905 [2] 1675).
- $C_{18}H_{16}OClAs$  1) Triphenylarsenoxydchlorid. Sm. 171°. 3 +  $PtCl_4$  (A. 201, 243; A. 321, 162 C. 1902 [2] 44). — \*IV, 1190.
- $C_{18}H_{16}O_2NCl$  1) Benzoat d. 4-Oxy-2-Methylchinolin-1-Chlormethylat. Sm. 160 bis 161° (u. 112°) (B. 30, 927). — IV, 311.
- $C_{18}H_{16}O_2NBr$  1) Äthylester d.  $\alpha$ -Brom- $\alpha$ -Cyan- $\beta\beta$ -Diphenylpropionsäure. Sm. 97° (Am. 33, 342 C. 1905 [1] 1391).
- $C_{18}H_{16}O_2NJ$  1) Jodmethylat d. 2-Phenylchinolin-4-Carbonsäuremethylbetaïn. Sm. 160—165° u. Zers. (A. 276, 286). — IV, 445.
- $C_{18}H_{16}O_2NP$  1) Phenylmonamid d. Phenylphosphinsäuremonophenylester. Sm. 83°; Sd. 235°<sub>25</sub> (A. 293, 218). — IV, 1651.
- $C_{18}H_{16}O_2N_2Br_2$  1) 4,8-Dibrom-1,5-Di[Dimethylamido]-9,10-Anthrachinon. Sm. 236° (D. R. P. 146691 C. 1903 [2] 1352).
- 2) Dibrommethylphenylaminfumarid. Sm. 206—207° u. Zers. (G. 16, 25). — II, 416.
- $C_{18}H_{16}O_2N_2S$  1) 4-Amido-4'-Phenylsulfonamidobiphenyl. Sm. 160—161° (165°) (A. 272, 231; Soc. 91, 1508 C. 1907 [2] 1518). — IV, 966.
- 2) Phenylsulfonhydrazobenzol. Sm. 107° (B. 30, 2555). — IV, 1348.
- $C_{18}H_{16}O_2N_2S_2$  1) 2,4-Dimethyl-1-[1-Naphtylthiosulfon]diazobenzol. Sm. 98—99° u. Zers. (J. pr. [2] 62, 394). — \*IV, 1115.
- 2) 2,4-Dimethyl-1-[2-Naphtylthiosulfon]diazobenzol. Sm. 87—88° u. Zers. (J. pr. [2] 62, 394). — \*IV, 1115.
- $C_{18}H_{16}O_2N_2Hg$  1) Quecksilberdichinolyhydroxyd. Salze, siehe diese u.  $HNO_3$ ,  $H_2SO_4$ , Oxalat (G. 25 [1] 394).

- $C_{18}H_{16}O_2N_2Hg_2$  1) 3-Quecksilberdi-1-Toluylen-4-Tetramethylmerkuridiammoniumhydroxyd. Sm. 117°. Chlorid, Bromid, Jodid, Nitrat, Acetat (C. 1898 [2] 546).
- $C_{18}H_{16}O_2N_3Br$  1) Methyläther d. 4-[4-Oxybenzylidenamido]-3-Keto-5-Methyl-1-[4-Bromphenyl]-2,3-Dihydropyrazol. Sm. 303° (A. 358, 138 C. 1908 [1] 853).
- $C_{18}H_{16}O_2N_4Br_2$  1) Äthylester d.  $\gamma$ -[4-Bromphenyl]azo- $\gamma$ -[4-Bromphenyl]hydrazoncrotonsäure. Sm. 150–151° (A. 338, 379 C. 1905 [1] 1223).
- $C_{18}H_{16}O_2N_4S$  1) 4-Phenylazo-3-Methyl-1-Phenylpyrazol-5-Merkaptoessigsäure. Sm. 166°. Ag (A. 338, 202 C. 1905 [1] 1157).
- $C_{18}H_{16}O_2N_6S_2$  1) Disulfidd. 3-Merkapto-5-Keto-1-Phenyl-1,4,5,6-Tetrahydro-1,2,4-Triazin. Sm. 159° (B. 40, 1024 C. 1907 [1] 1191).
- $C_{18}H_{16}O_3NCl$  1) Chlormethylat d. 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure. Sm. 195° (A. 282, 86). — IV, 447.
- $C_{18}H_{16}O_3NBr$  1) Brombenzylat d. Chininsäure. Sm. 148° u. Zers. (A. 276, 278). — IV, 362.
- $C_{18}H_{16}O_3NJ$  1) Jodmethylat d. 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure. Sm. 216° (A. 282, 85). — IV, 447.
- $C_{18}H_{16}O_3NP$  1) Phenylamid d. Phosphorsäurediphenylester. Sm. 129° (B. 8, 1236; 27, 2573, 2575; 29, 720; B. 41, 152 C. 1908 [1] 723). — II, 660; \*II, 358.
- $C_{18}H_{16}O_3N_2Cl_2$  1) 6-Acetat d. 2',4'-Dichlor-5,6-Dioxy-3-Allylazobenzol-5-Methyläther. Sm. 156° (G. 36 [2] 47 C. 1906 [2] 1193).
- $C_{18}H_{16}O_3N_2S$  1) 5-Methylsulfon-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 167° (A. 361, 288 C. 1908 [2] 521).
- 2) 2-Phenylimido-4-Keto-3-Phenyltetrahydrothiazol-5-[Äthyl- $\alpha$ -Carbonsäure] (Diphenylthiohydantoïn- $\alpha$ -Propionsäure). Sm. 124° (M. 18, 75). — \*II, 220.
- 3) Phenylamid d. 1-Acetylamidonaphtalin-4-Sulfonsäure. Sm. 231° (B. 39, 1565 C. 1906 [2] 36).
- 4) 1-Naphtylamid d. 1-Acetylamidobenzol-4-Sulfonsäure. Sm. 215° (J. pr. [2] 77, 380 C. 1908 [1] 2151).
- 5) 2-Naphtylamid d. 1-Acetylamidobenzol-4-Sulfonsäure. Sm. 212° (J. pr. [2] 77, 381 C. 1908 [1] 2151).
- $C_{18}H_{16}O_3N_2S_2$  1) Äthyläther d. 4-Oxy-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 121–122° (J. pr. [2] 62, 424). — \*IV, 1122.
- 2) Äthyläther d. 4-Oxy-1-[2-Naphtylthiosulfon]diazobenzol. Zers. bei 108° (J. pr. [2] 62, 424). — \*IV, 1122.
- $C_{18}H_{16}O_3N_4S$  1) 2-[4-Dimethylamidophenyl]imido-4-Keto-5-[4-Nitrobenzyliden]-tetrahydrothiazol. Sm. 250–252° (C. 1903 [1] 125S). — \*IV, 620.
- $C_{18}H_{16}O_3N_6S$  1) m-Phenylendiamindisazobenzol-p-Benzolsulfonsäure. K (B. 16, 2032; D. R. P. 22714). — IV, 1372; \*IV, 1017.
- 2) Benzoldisazo-m-Phenylendiamin-p-Benzolsulfonsäure. K + 2H<sub>2</sub>O (B. 16, 2035). — IV, 1372.
- $C_{18}H_{16}O_3ClBr$  1)  $\delta$ -Acetat d. isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten ( $\alpha$ -Acetylchlorbromdiphenacyl). Sm. 122° (B. 34, 1611; B. 36, 2398 C. 1903 [2] 498). — \*III, 228.
- 2)  $\delta$ -Acetat d. isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten ( $\beta$ -Acetylchlorbromdiphenacyl). Sm. 91° (B. 34, 1611; B. 36, 2397 C. 1903 [2] 498). — \*III, 228.
- 3)  $\delta$ -Acetat d. isom.  $\gamma$ -Chlor- $\gamma$ -Brom- $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 104° (114°) (B. 36, 2396 C. 1903 [2] 498).
- $C_{18}H_{16}O_4NCl$  1) Acetat d. 5'-Chlor-2'-Acetylamido-2-Oxy-4-Methyldiphenylketon. Sm. 151° (B. 39, 1937 C. 1906 [2] 114).
- $C_{18}H_{16}O_4N_2Cl_2$  1) Di[2-Chlorphenylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbon-säure. Sm. 165–172° (Bl. [3] 19, 765). — \*II, 369.
- $C_{18}H_{16}O_4N_2Br_2$  1) 3,6-Dibrom-2'[oder 3']-Nitroso-4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 155° (C. 1907 [1] 1119).
- 2) Acetat d.  $\alpha$ -Formyl- $\beta$ -Acetyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin (B. 42, 272 C. 1909 [1] 646).
- $C_{18}H_{16}O_4N_2S$  1) 2-[4-Acetylamidophenyl]amidonaphtalin-6-Sulfonsäure. Na (J. pr. [2] 75, 267 C. 1907 [2] 408).
- 2) 2-Oxy-1-[2,4-Dimethylphenylazo]naphtalin-1'-Sulfonsäure. Ba (B. 19, 139). — IV, 1437.

- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>S** 3) 2-Oxy-1-[2,4-Dimethylphenylazo]naphtalin-1<sup>6</sup>-Sulfonsäure. Na + 3 H<sub>2</sub>O (*B.* 35, 3765 *C.* 1902 [2] 1453). — \*IV, 1045.  
 4) 2-Oxy-1-[2,5-Dimethylphenylazo]naphtalin-1<sup>3</sup>-Sulfonsäure? Na, Ag. — IV, 1437.  
 5) 3-Oxy-1-[*p*-Dimethylphenylazo]naphtalin-4-Sulfonsäure? (*B.* 17, 461). — IV, 1437.  
 6) 4-Oxy-1-[*p*-Dimethylphenylazo]naphtalin-*p*-Sulfonsäure (*J.* 1881, 490). — IV, 1437.
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2,5-Diphenylsulfon-1,4-Diamidobenzol. Sm. 115° (*B.* 29, 2027). — \*II, 575.  
 2) 1,2-Di[Phenylsulfonamido]benzol (1,2-Phenylenamid d. Benzolsulfonsäure). Sm. 186° (*A.* 287, 223). — IV, 561.  
 3) 1,3-Di[Phenylsulfonamido]benzol. Sm. 194° (*A.* 287, 229). — IV, 577.  
 4) 1,4-Di[Phenylsulfonamido]benzol. Sm. 247° (*A.* 265, 188). — IV, 594.  
 5) Di[Phenylamid] d. Benzol-1,2-Disulfonsäure. Sm. 241° (*C.* 1900 [2] 371). — \*II, 223.  
 6) Di[Phenylamid] d. Benzol-1,3-Disulfonsäure. Sm. 143° (146 bis 147°; 150°) (*B.* 35, 1396 *C.* 1902 [1] 1096; *B.* 35, 1959 *C.* 1902 [2] 111; *Soc.* 85, 1187 *C.* 1904 [2] 1115).  
 7) Di[Phenylamid] d. Benzol-1,4-Disulfonsäure. Sm. 249° (*B.* 39, 3347 *C.* 1906 [2] 1642; *B.* 42, 2728 *C.* 1909 [2] 909).  
 8) Verbindung (aus Benzoldiazosulfon u. Benzolsulfinsäure). Sm. 175 bis 176° (*B.* 31, 640). — \*IV, 1103.
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>S<sub>3</sub>** 1) Diacetylderivat d. Farbstoffs C<sub>14</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>S<sub>3</sub> (*J. pr.* [2] 69, 170 *C.* 1904 [1] 1268).
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>ClJ** 1) Verbindung (aus  $\alpha$ -Jod- $\beta$ -Oxy- $\beta$ -Phenylpropionsäure u. Zimtsäure). Sm. 110—115° u. Zers. (*B.* 19, 2464; *A.* 289, 282). — II, 1573; \*II, 931.
- C<sub>18</sub>H<sub>16</sub>O<sub>4</sub>Cl<sub>2</sub>S<sub>2</sub>** 1) Chlorid d. Retendisulfonsäure. Sm. 175° (*A.* 185, 91). — II, 277.
- C<sub>18</sub>H<sub>16</sub>O<sub>5</sub>N<sub>3</sub>Br** 1) 3-Brom-*p*-Dinitro-4'-[1-Piperidyl]diphenylketon. Sm. 76° u. Zers. (*B.* 37, 3486 *C.* 1904 [2] 1131).
- C<sub>18</sub>H<sub>16</sub>O<sub>5</sub>N<sub>4</sub>S** 1) 2-Amido-1-[3-Nitro-2,4-Dimethylphenylazo]naphtalin-1<sup>5</sup>-Sulfonsäure. 2-Naphtylaminsalz (*A.* 339, 218 *C.* 1905 [1] 1382).
- C<sub>18</sub>H<sub>16</sub>O<sub>6</sub>N<sub>2</sub>As<sub>2</sub>** 1) 4,4'-Di[Acetylamido]arsenobenzol-3,3'-Dicarbonsäure (D.R.P. 212205 *C.* 1909 [2] 486).
- C<sub>18</sub>H<sub>16</sub>O<sub>7</sub>NBr** 1)  $\alpha$ -[5-Brom-2-Oxyphenyl]- $\beta$ -[2-Nitro-3,4-Dioxyphenyl]akryltrimethyläthersäure. NH<sub>4</sub> (*B.* 42, 3501 *C.* 1909 [2] 1459).
- C<sub>18</sub>H<sub>16</sub>O<sub>8</sub>N<sub>4</sub>S<sub>2</sub>** 1) 1-Nitro-2-Phenylamido-4-[4-Amidophenyl]amidobenzol-2<sup>4</sup>,5-Disulfonsäure (D.R.P. 212472 *C.* 1909 [2] 773).
- C<sub>18</sub>H<sub>16</sub>O<sub>9</sub>N<sub>4</sub>S<sub>2</sub>** 1) 3-Äthylester d. 5-Keto-4-Phenylhydrazon-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure-1<sup>4</sup>,4<sup>4</sup>-Disulfonsäure (3-Ä. d. Tartrazinsäure). Na<sub>2</sub>, Ba (*A.* 294, 236). — IV, 730.
- C<sub>18</sub>H<sub>16</sub>O<sub>9</sub>Cl<sub>2</sub>S<sub>2</sub>** 1) Säure (aus  $\alpha$ -[4-Chlorphenyl]sulfon- $\alpha$ -Oxypropionsäure). Sm. 153° (*H.* 16, 549).
- C<sub>18</sub>H<sub>16</sub>O<sub>10</sub>N<sub>3</sub>Cl** 1) Isoapiol + 2-Chlor-1,3,5-Trinitrobenzol. Sm. 55—56° (*C.* 1905 [1] 1147).  
 2) Dillisoapiol + 2-Chlor-1,3,5-Trinitrobenzol. Sm. 43—44° (*C.* 1905 [1] 1147).
- C<sub>18</sub>H<sub>16</sub>O<sub>10</sub>S<sub>3</sub>Si** 1) Siliciumtriphenylhydroxyd-*p*-Trisulfonsäure. Ba<sub>3</sub> (*B.* 40, 2276 *C.* 1907 [2] 322; *B.* 41, 966 *C.* 1908 [1] 1621; *Soc.* 95, 491 *C.* 1909 [1] 1649).
- C<sub>18</sub>H<sub>16</sub>N<sub>3</sub>BrSi** 1) Verbindung (aus Silikotetraphenylamid) (*Soc.* 87, 1873 *C.* 1906 [1] 232, 666).
- C<sub>18</sub>H<sub>17</sub>ON<sub>2</sub>J** 1) Jodmethylat d. 2-Benzoyl-1-Methyl-5-Phenylimidazol. Sm. 216° (*B.* 38, 1534 *C.* 1905 [1] 1560).
- C<sub>18</sub>H<sub>17</sub>ON<sub>2</sub>P** 1) Di[Phenylamid] d. Phenylphosphinsäure. Sm. 211° (*A.* 293, 215). — IV, 1651.
- C<sub>18</sub>H<sub>17</sub>ON<sub>3</sub>S** 1) 1-Phenylidenamido-2-Thiocarbonyl-4-Keto-5-Dimethyl-3-Phenyltetrahydroimidazol. Sm. 135° (*C.* 1904 [2] 1027).
- C<sub>18</sub>H<sub>17</sub>ON<sub>3</sub>S<sub>2</sub>** 1) 3-Phenylamido-2-Thiocarbonyl-4-Keto-5-[4-Dimethylamido-benzyliden]tetrahydrothiazol. Sm. 219° (*M.* 27, 1217 *C.* 1907 [1] 971).



- $C_{13}H_{17}ON_4Cl$  1) Äthyläther d. 5-Chlor-4-[4-Oxyphenyl]-3-Methyl-1-Phenylpyrazol. Sm. 123° (D.R.P. 153861 C. 1904 [2] 680).  
 2) Verbindung (aus Pentachlorketomethylidihydro-R-Penten). Sm. 200° (A. 296, 170). — IV, 770.
- $C_{18}H_{17}O_2NCl_4$  1) 3,4,5,6-Tetrachlor-4'-Diäthylamidodiphenylmethan-2-Carbonsäure. Sm. 148° (Bl. [3] 25, 603).
- $C_{13}H_{17}O_2NBr_2$  1) Acetat d. 1-[3,5-Dibrom-2-Oxybenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 105° (A. 332, 224 C. 1904 [2] 203).
- $C_{13}H_{17}O_2NS$  1) Dimethylamidophenyl-1-Naphtylsulfon. Sm. 91° (B. 12, 1789). — II, 867.  
 2) Dimethylamidophenyl-2-Naphtylsulfon (B. 12, 1790). — II, 887.  
 3) Äthyl-1-Naphtylamid d. Benzolsulfonsäure. Sm. 112—113° (Soc. 91, 1516 C. 1907 [2] 1610).
- $C_{13}H_{17}O_2N_2Cl$  1) Chlormethylat d. 5[oder 6]-Methyl-2-Furanyl-1-Furylbenzimidazol. 2 +  $PtCl_4$  (B. 11, 1659). — IV, 620.  
 2) Chloräthylat d. Phenylfurfuraldehydin. 2 +  $PtCl_4$  (B. 11, 1656). — IV, 564.  
 3) Laktone d.  $\epsilon$ -Chlor- $\alpha$ -Phenylhydrazon- $\delta$ -Oxy- $\alpha$ -Phenylpentan- $\beta$ -Carbonsäure. Sm. 148—150° (C. 1901 [2] 268). — \*II, 463.  
 4) Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Chlormethylat (Antipyrinchlorbenzoylat). Sm. 129—130° (A. 293, 42). — IV, 513.
- $C_{18}H_{17}O_2N_2Cl_3$  1)  $\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Acetylphenylamido]äthan. Sm. 162° (C. 1909 [2] 1419).  
 2)  $\beta\beta$ -Trichloräthylidenamid d. Phenyllessigsäure (B. 10, 1651). — II, 1312.
- $C_{18}H_{17}O_2N_2Br$  1)  $\beta$ -Brom- $\gamma$ -[4-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]amidopropen- $\alpha$ -Carbonsäure (p-Tolilmuko-p-Toluidopropionsäure). Zers. bei 165—168° (B. 34, 516).
- $C_{18}H_{17}O_2N_2J$  1) Jodmethylat d. 5[oder 6]-Methyl-2-Furanyl-1-Furylbenzimidazol. Sm. 195,5° u. Zers. +  $J_2$  (Sm. 126—128°); +  $J_4$  (Sm. 109°) (B. 11, 1658). — IV, 620.  
 2) Jodäthylat d. Phenylfurfuraldehydin (B. 11, 1656). — IV, 564.  
 3) Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Jodmethylat. Sm. 188° u. Zers. (J. pr. [2] 55, 151). — IV, 513.
- $C_{18}H_{17}O_2N_2P$  1) Di[Phenylamid] d. Phosphorsäuremonophenylester. Sm. 179,5° (169°) (B. 29, 720; A. 326, 247 C. 1903 [1] 868). — \*II, 358.
- $C_{18}H_{17}O_2N_3S$  1) Äthylacetat d. 3-Merkapto-1,5-Diphenyl-1,2,4-Triazol. Sm. 67° (Am. 27, 266 C. 1902 [1] 1299). — \*IV, 807.  
 2) Phenylamid d. 4-Amidodiphenylamin-2-Sulfonsäure. Sm. 171° (B. 24, 3801). — IV, 595.  
 3) Phenylamid d. 2-Amidodiphenylamin-4-Sulfonsäure. Sm. 157° (B. 24, 3794). — IV, 568.
- $C_{18}H_{17}O_2N_4Cl$  1)  $\epsilon$ -Chlor- $\alpha\delta$ -Di[Phenylhydrazon]- $\beta$ -Penten- $\alpha$ -Carbonsäure (B. 22, 1259). — IV, 709.
- $C_{18}H_{17}O_2N_5S$  1) 2-Acetyl-3-Thiocarbonyl-5-[4-Acetylamidophenyl]imido-1-Phenyltetrahydro-1,2,4-Triazol. Sm. 106° (A. 361, 335 C. 1908 [2] 882).
- $C_{18}H_{17}O_3NCl_2$  1) 3,6-Dichlor-4'-Diäthylamidophenylketon-2-Carbonsäure. Sm. 185° (Bl. [3] 23, 687). — \*II, 1001.  
 2) Äthylester d. 3,6-Dichlor-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 156° (Bl. [3] 23, 380). — \*II, 1001.
- $C_{18}H_{17}O_3NCl_4$  1) 3,4,5,6-Tetrachlor-4'-Diäthylamido-2'-Oxydiphenylmethan-2-Carbonsäure. Sm. 205° (Bl. [3] 25, 748).
- $C_{18}H_{17}O_3NBr_2$  1) 3,6-Dibrom-4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 221° (C. r. 142, 1276 C. 1906 [2] 248).  
 2) Äthylester d. 3,6-Dibrom-4'-Dimethylamidodiphenylketon-2-Carbonsäure. Sm. 173° (C. r. 142, 1275 C. 1906 [2] 247).
- $C_{18}H_{17}O_3NS$  1) 2-[2,4-Dimethylphenyl]amidonaphtalin-6-Sulfonsäure (C. 1904 [1] 1013).  
 2) Phenylamid d. 1-Oxynaphtalinäthyläther-4-Sulfonsäure. Sm. 178° (B. 34, 3182). — \*II, 511.  
 3) Phenylamid d. 2-Oxynaphtalinäthyläther-1-Sulfonsäure. Sm. 178° (C. 1895 [1] 1064). — \*II, 532.  
 4) Phenylamid d. 2-Oxynaphtalinäthyläther-6-Sulfonsäure. Sm. 152 bis 153° (C. 1895 [1] 1064). — \*II, 532.

- $C_{18}H_{17}O_3NS$  5) Phenylamid d. 2-Oxynaphtalinäthyläther-7-Sulfonsäure. Sm. 153° (B. 29 [2] 665). — \*II, 532.
- 6) Phenylamid d. 2-Oxynaphtalinäthyläther-8-Sulfonsäure. Sm. 158° (C. 1895 [1] 1064). — \*II, 532.
- $C_{18}H_{17}O_3NS_2$  1) Phenylessigsäureäthylesterderivat d. Benzoylamidodithioameisensäure. Sm. 150—154° (Am. 26, 353).
- $C_{18}H_{17}O_3N_2Cl$  1) 6-Acetat d. 4'-Chlor-5,6-Dioxy-3-Allylazobenzol-5-Methyläther. Sm. 113° (G. 36 [2] 44 C. 1906 [2] 1193).
- $C_{18}H_{17}O_3N_2Br$  1) Hydrobrombilirubidbilirubin (A. 181, 253). — III, 662.
- 2) 6-Acetat d. 3'-Brom-5,6-Dioxy-3-Allylazobenzol-5-Methyläther. Sm. 92—93° (G. 35 [1] 71 C. 1905 [1] 1239).
- 3) 6-Acetat d. 4'-Brom-5,6-Dioxy-3-Allylazobenzol-5-Methyläther. Sm. 123° (G. 36 [2] 46 C. 1906 [2] 1193).
- $C_{18}H_{17}O_3N_3S$  1) Amidosulfophenyl-4, 4'-Diamidobiphenyl (D. R. P. 97105). — \*IV, 641.
- 2) 2, 4-Di[Phenylamido]-1-Amidobenzol-5-Sulfonsäure (D. R. P. 205358 C. 1909 [1] 883; D. R. P. 212472 C. 1909 [2] 773).
- 3) 2-Äthylamido-1-Phenylazonaphtalin-1<sup>4</sup>-Sulfonsäure. K (B. 26, 193). — IV, 1399.
- 4) 4-Äthylamido-1-Phenylazonaphtalin-1<sup>4</sup>-Sulfonsäure. Na (B. 24, 2470). — IV, 1399.
- 5) 4-Dimethylamido-1-Phenylazonaphtalin-1<sup>4</sup>-Sulfonsäure. Na, Ba (B. 21, 3125; B. 41, 2057 C. 1908 [2] 405). — IV, 1399.
- $C_{18}H_{17}O_3N_4P$  1) Di[Phenylamid]-3-Nitrophenylamid d. Phosphorsäure. Sm. 177° (A. 326, 237 C. 1903 [1] 867).
- 2) Di[Phenylamid]-4-Nitrophenylamid d. Phosphorsäure. Sm. 242° (A. 326, 237 C. 1903 [1] 867).
- $C_{18}H_{17}O_4NCl_2$  1) 3, 6-Dichlor-4'-Diäthylamido-2'-Oxydiphenylketon-2-Carbonsäure (D. R. P. 118077 C. 1901 [1] 602). — \*II, 1094.
- $C_{18}H_{17}O_4NBr_2$  1) 2-Phenylamidoformiat-5-Acetat d. 4, 6-Dibrom-2-Oxy-5-Oxy-methyl-1, 3-Dimethylbenzol. Sm. 163—164° (B. 32, 3308). — \*II, 693.
- $C_{18}H_{17}O_4NS$  1) 6-[3,4-Dimethylphenyl]amido-1-Oxynaphtalin-3-Sulfonsäure (C. 1901 [2] 670).
- 2) 2-[4-Äthoxyphenyl]amidonaphtalin-6-Sulfonsäure. NH<sub>4</sub> (C. 1904 [1] 1013).
- 3) 2-[4-Äthoxyphenyl]amidonaphtalin-8-Sulfonsäure (C. 1904 [1] 1013).
- 4) 2-Methyl-4-[2-Äthoxyphenyl]chinolin-2-Sulfonsäure (B. 27, 3037; D. R. P. 79173). — IV, 435; \*IV, 259.
- $C_{18}H_{17}O_4N_2Cl$  1) β-Chlor-γ-[4-Methoxyphenyl]imido-α-[4-Methoxyphenyl]amidocrotonsäure. Zers. bei 157°. p-Anisidinsalz (O. LANGHAMMER, Dissert. Berlin 1905).
- 2) Diazochlorid d. α-[2-Methylphenyl]-β-[2-Amido-3,4-Dioxyphenyl]-akryl-3,4-Dimethyläthersäure. Zers. bei 101—102° (B. 39, 3109 C. 1906 [2] 1328).
- $C_{18}H_{17}O_4N_2Br$  1) β-Brom-γ-[4-Methoxyphenyl]imido-α-[4-Methoxyphenyl]amidocrotonsäure. Zers. bei 156°. p-Anisidinsalz (O. LANGHAMMER, Dissert. Berlin 1905).
- $C_{18}H_{17}O_4N_3Br_2$  1) β-[3-Brom-4-Diazoamidophenyl]propionsäure (B. 15, 2294). — II, 1366.
- $C_{18}H_{17}O_4N_3S_2$  1) Verbindung (aus Phenylthiohydantoinsäure). Sm. 112—115° (A. 207, 129). — II, 402.
- $C_{18}H_{17}O_5NS$  1) 7-[4-Äthoxyphenyl]amido-1-Oxynaphtalin-3-Sulfonsäure (C. 1904 [1] 1013).
- 2) ?-Diäthylamido-9,10-Anthrachinon-1-Sulfonsäure (D. R. P. 136777 C. 1902 [2] 1373).
- 3) β-Benzylsulfonpropenylmonamid d. Benzol-1,2-Dicarbonsäure (β-Benzylsulfonallylphtalaminsäure). Sm. 193—194° (B. 32, 2764). — \*II, 1049.
- $C_{18}H_{17}O_5N_3S$  1) 1-Diäthylamidoozo-9,10-Anthrachinon-2-Sulfonsäure. Na (B. 35, 2600 C. 1902 [2] 595). — \*IV, 1139.
- $C_{18}H_{17}O_6NS$  1) 3-Diäthylamido-1-Oxy-9,10-Anthrachinon-4-Sulfonsäure? Ca, Ba (Bl. [3] 25, 209). — \*III, 301.

- $C_{18}H_{17}O_6N_3S_2$  1) 2,4-Di[Phenylamido]-1-Amidobenzol-2<sup>4</sup>,5-Disulfonsäure (D. R. P. 212472 C. 1909 [2] 773).
- $C_{18}H_{17}O_8N_2Cl_3$  1) Tetramethyläther d.  $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Nitro-2,4-Dioxyphenyl]äthan. Sm. 181—182° (B. 40, 4004 C. 1907 [2] 1839).
- $C_{18}H_{17}N_4ClS$  1) Äthyläther d. 3-Chlor-5-Merkapto-4-[4-Methylphenyl]azo-1-Phenylpyrazol. Sm. 112° (A. 338, 226 C. 1905 [1] 1159).
- $C_{18}H_{18}ONCl$  1) Chlorbenzylat d. 6-Oxychinolin-6-Äthyläther + 3H<sub>2</sub>O. Sm. 96° (J. pr. [2] 56, 444). — \*IV, 184.
- $C_{18}H_{18}ONJ$  1) Jodmethylat d. 4-[4-Oxybenzyl]isochinolin-4-Methyläther. Sm. 219° u. Zers. (A. 326, 296 C. 1903 [1] 929). — \*IV, 260.
- $C_{18}H_{18}ON_2S$  1) 3,5-Dimethyl-1-[4-Acetylamido-3-Methylphenyl]benzthiazol. Sm. 227° (B. 22, 584). — II, 827.  
2) 3,5-Dimethyl-1-[6-Acetylamido-3-Methylphenyl]benzthiazol. Sm. 198° (J. pr. [2] 65, 151 C. 1902 [1] 991).  
3) 4[oder 6]-Acetylamido-3,5-Dimethyl-1-[3-Methylphenyl]benzthiazol. Sm. 244° (J. pr. [2] 65, 155 C. 1902 [1] 991).  
4) Acetylderivat d. Verb.  $C_{16}H_{18}N_2S$  (aus 2-Amido-1,4-Dimethylbenzol). Sm. 212° (B. 22, 585). — II, 827.
- $C_{18}H_{18}ON_3P$  1) Tri[4-Amidophenyl]phosphinoxid. Sm. 258° (A. 229, 327). — IV, 1660.  
2) Tri[Phenylamid] d. Phosphorsäure. Sm. 208° (212—215°). + Anilin (Sm. 100°) (A. 101, 302; 229, 335; B. 27, 2575; 29, 722; 33, 2103; G. 29 [2] 341; C. r. 139, 206 C. 1904 [2] 647). — II, 357; \*II, 164.
- $C_{18}H_{18}ON_3As$  1) Tri[4-Amidophenyl]arsinoxid. Zers. bei 108° (Soc. 95, 1474 C. 1909 [2] 1427).
- $C_{18}H_{18}ON_4S$  1) Inn. Anhydrid d.  $\alpha$ -Acetylamido- $\alpha$ -Phenylimido- $\alpha$ -[ $\beta$ -4-Äthoxyphenylthioureido]methan. Sm. 187° (A. 356, 187 C. 1907 [2] 1798).  
2) Inn. Anhydrid d.  $\alpha$ -Acetylamido- $\alpha$ -[4-Äthoxyphenyl]imido- $\alpha$ -[ $\beta$ -Phenylthioureido]methan. Sm. 204° (A. 356, 187 C. 1907 [2] 1798).  
3) 4-[ $\beta$ -Phenylthioureido]-3-Keto-5-Methyl-1-[4-Methylphenyl]-2,3-Dihydropyrazol. Sm. 220° (A. 350, 317 C. 1907 [1] 736).  
4) 4-[ $\beta$ -Phenylthioureido]-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 210° (A. 352, 207 C. 1907 [1] 1051).  
5) Acetylderivat d. 3,5-Diimido-2,4-Di[2-Methylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 221° (B. 23, 367). — IV, 1236.  
6) Acetylderivat d. 3,5-Diimido-2,4-Di[4-Methylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 166° (B. 23, 365). — IV, 1236.
- $C_{18}H_{18}ON_4S_2$  1) 1-Phenylthioureido-2-Thiocarbonyl-4-Keto-5,5-Dimethyl-3-Phenyltetrahydroimidazol. Zers. bei 233° (C. 1904 [2] 1027).
- $C_{18}H_{18}O_2NCl$  1)  $\alpha$ -[3-Chlorphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 93 bis 94° (Soc. 85, 1175 C. 1904 [2] 1215).  
2)  $\alpha$ -[4-Chlorphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 99° (Soc. 85, 1175 C. 1904 [2] 1215).
- $C_{18}H_{18}O_2N_2Cl_2$  1)  $\alpha\beta$ -Di[Chloracetylphenylamido]äthan. Sm. 152—154° (B. 25, 3253). — II, 368.  
2)  $\alpha\beta$ -Di[Phenacylchloramido]äthan. Sm. 65° (Soc. 87, 384 C. 1905 [1] 1587).  
3)  $p$ -Dichlor-4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Sm. bei 290° (C. 1898 [2] 522). — \*IV, 655.  
4)  $\alpha\beta$ -Diacetyl- $\alpha\beta$ -Di[2-Chlorbenzyl]hydrazin. Sm. 102° (B. 34, 850). — \*IV, 540.  
5) Dichlorid d.  $\alpha\beta$ -Di[2-Methylphenylamido]äthan- $NN$ -Dicarbonsäure. Sm. 163° (B. 34, 1512).
- $C_{18}H_{18}O_2N_2Br_2$  1)  $\alpha\beta$ -Di[Bromacetylphenylamido]äthan. Sm. 136° (B. 25, 3254). — II, 368.  
2)  $\alpha\beta$ -Di[Phenacylbromamido]äthan. Sm. 128° (Soc. 87, 384 C. 1905 [1] 1587).  
3) Diäthyläther d. Di[ $\alpha$ -Oxy-4-Brombenzyliden]hydrazin. Sm. 111° (J. pr. [2] 74, 8 C. 1906 [2] 790).  
4) Di[ $\beta$ -Bromäthyläther]d. Di[4-Oxybenzyliden]hydrazin. Sm. 176,5° (A. 357, 353 C. 1908 [1] 356).



- $C_{18}H_{18}O_2N_2Br_2$  5) Di[2-Methylphenylamid] d. Dibrombernsteinsäure. Zers. bei  $200^\circ$  (*G.* 23, 183). — II, 468.
- 6) Di[4-Methylphenylamid] d. Dibrombernsteinsäure. Sm.  $168^\circ$  u. Zers. (*G.* 23, 182). — II, 502.
- $C_{18}H_{18}O_3N_2Br_4$  1) 1,4-Di[3,5-Dibrom-2-Oxybenzyl]hexahydro-1,4-Diazin. Sm. 240 bis  $242^\circ$  (*A.* 332, 222 *C.* 1904 [2] 203).
- $C_{18}H_{18}O_2N_2S$  1) Äthyläther d.  $\alpha$ -Benzoyl- $\beta$ -[ $\alpha$ -Oxy- $\beta$ -Phenyläthyliden]thioharnstoff. Sm.  $140$ – $141^\circ$  (*C.* 1900 [2] 531). — \*II, 815.
- 2) 2-Acetat d. 2-Merkapto-6-Oxy-1-[4-Methylphenyl]benzimidazol-6-Äthyläther. Sm.  $145^\circ$  (*B.* 36, 3851 *C.* 1904 [1] 89).
- $C_{18}H_{18}O_2N_3Cl$  1) Acetylderivat d. Verb.  $C_{18}H_{16}ON_3Cl$  (*B.* 31, 1414). — \*IV, 480.
- $C_{18}H_{18}O_2N_4S_2$  1) Di[ $\beta$ -Phenylthioureid] d. Bernsteinsäure. Sm.  $210$ – $210,5^\circ$  (*Soc.* 67, 566). — \*II, 200.
- $C_{18}H_{18}O_2Cl_2Se$  1) Di[ $\beta$ -Benzoyläthyl]selenidchlorid (Dichlorselenopropiophenon). Sm.  $124^\circ$  (*A.* 314, 289). — \*III, 115.
- 2) Di[4-Methylbenzoylmethyl]selenidchlorid (Dichlorselenomethyl-p-Tolyketon). Sm.  $132^\circ$  (*A.* 314, 290). — \*III, 117.
- $C_{18}H_{18}O_2Cl_2Te$  1) Dichlortelluro-4-Tolylmethylketon. Sm.  $200^\circ$  (*B.* 30, 2834). — \*III, 118.
- $C_{18}H_{18}O_2Br_2Se$  1) Di[4-Methylbenzoylmethyl]selenidbromid (Dibromselenomethyl-p-Tolyketon). Sm.  $112^\circ$  (*A.* 314, 292). — \*III, 118.
- $C_{18}H_{18}O_2Br_4S$  1) Di[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]sulfid. Sm.  $243^\circ$  (245 bis  $246^\circ$ ) (*B.* 29, 2346; *B.* 34, 4277 *C.* 1902 [1] 309). — \*II, 691.
- $C_{18}H_{18}O_2S_3Te$  1) Diäthyläther d. Ditellurodi[4-Oxyphenyl]trisulfid. Sm.  $114^\circ$  (*A.* 315, 14).
- $C_{18}H_{18}O_2S_5Te$  1) Diäthyläther d. Ditellurodi[4-Oxyphenyl]pentasulfid. Sm.  $92^\circ$  (*A.* 315, 15).
- $C_{18}H_{18}O_3NBr$  1) Bromcodeinon. Sm.  $156$ – $157^\circ$  u. Zers.  $HCl + H_2O$ ,  $HBr + H_2O$  (*B.* 39, 848 *C.* 1906 [1] 1173).
- 2)  $\alpha$ -[ $\alpha$ -Brom- $\beta$ -Phenylpropionyl]amido- $\beta$ -Phenylpropionsäure. Sm.  $174$ – $175^\circ$  (*B.* 37, 3068 *C.* 1904 [2] 1208).
- $C_{18}H_{18}O_3NBr_3$  1) Tribromcodein. ( $2HCl$ ,  $PtCl_4$ ),  $HBr$  (*A.* 77, 365). — III, 903.
- $C_{18}H_{18}O_3N_2Br_2$  1) Acetat d.  $\alpha$ -Propionyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm.  $173$ – $174^\circ$  (*B.* 42, 275 *C.* 1909 [1] 647).
- 2) Propionat d.  $\alpha$ -Acetyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm.  $188$ – $189^\circ$  (*A.* 364, 182 *C.* 1909 [1] 919).
- 3) Phenylmonamid d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylamidoäthan- $\alpha\alpha$ -Dicarbonsäuremonäthylester. Sm.  $179$ – $185^\circ$  (*A.* 285, 131).
- $C_{18}H_{18}O_3N_2S$  1) Benzolsulfonat d. 3-Oxy-5-Methyl-4-Äthyl-1-Phenylpyrazol. Sm.  $74^\circ$  (*A.* 350, 327 *C.* 1907 [1] 737).
- 2) Methylphenylhydrastylthioharnstoff. Sm.  $126^\circ$  (*A.* 271, 390). — III, 106.
- $C_{18}H_{18}O_3N_4S$  1) Nitrocytisinphenylthioharnstoff. Sm.  $252$ – $253^\circ$  u. Zers. (*B.* 34, 613). — \*III, 654.
- $C_{18}H_{18}O_4NCl$  1) Chloräthylat d. Papaverolin. Sm.  $215^\circ$  (*J. pr.* [2] 56, 344). — \*IV, 264.
- $C_{18}H_{18}O_4N_2S$  1) Trimethyläther d.  $\alpha$ -[4-Oxybenzoyl]amido- $\alpha$ -[4-Oxybenzoyl]-imido- $\alpha$ -Merkaptomethan. Sm.  $159$ – $160^\circ$  (*Am.* 35, 308 *C.* 1906 [1] 1545).
- $C_{18}H_{18}O_4N_4Cl_2$  1) 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinon + 2 Molec. Phenylhydrazin (*Bl.* [3] 21, 91). — \*IV, 421.
- $C_{18}H_{18}O_4N_4Br_2$  1) 3,6-Dibrom-2,5-Dioxy-1,4-Benzochinon + 2 Molec. Phenylhydrazin (*Bl.* [3] 21, 366). — \*IV, 421.
- $C_{18}H_{18}O_4N_4S$  1) Sulfid d.  $\alpha$ -[4-Merkaptophenyl]hydrazonpropionsäure (*A.* 270, 152). — IV, 816.
- $C_{18}H_{18}O_4N_4S_2$  1) Di[4-Amidophenylamid] d. Benzol-1,3-Disulfonsäure. Sm. 212 bis  $213^\circ$  (*Soc.* 87, 1308 *C.* 1905 [2] 1335).
- $C_{18}H_{18}O_4Cl_2Se$  1) Dimethyläther d. Di[4-Oxybenzoylmethyl]selenidchlorid (Dichlorselenomethylanisylketon). Sm.  $122^\circ$  (*A.* 314, 289). — \*III, 111.
- $C_{18}H_{18}O_4Cl_2Te$  1) Dimethyläther d. Dichlortelluro-4-Oxyphenylmethylketon. Sm.  $190^\circ$  (*B.* 30, 2833). — \*III, 111.
- $C_{18}H_{18}O_5NBr$  1)  $\alpha$ -[5-Brom-2-Oxyphenyl]- $\beta$ -[2-Amido-3,4-Dioxyphenyl]akryltrimethyläthersäure (*B.* 42, 3502 *C.* 1909 [2] 1459).

- $C_{18}H_{18}O_5N_2S$  1) 1,5-Di[Äthylamido]-9,10-Anthrachinon-5-Sulfonsäure. K(D.R.P. 205 096 C. 1909 [1] 483).
- $C_{18}H_{18}O_7N_2S_2$  1) Disulfonsäure (aus 8-Oxy-1,2,3,4-Tetrahydrochinolin-5-Sulfonsäure). Sm. noch nicht bei 360°.  $K_2$  (J. pr. [2] 54, 386). — IV, 297.
- $C_{18}H_{18}O_6N_2S_2$  1) Äsorceindisulfonsäure.  $Na_2$ ,  $Na_3$  (B. 34, 2612). — \*III, 429.
- $C_{18}H_{18}N_2ClJ$  1) Jodmethylat d. 5-Chlor-3-Methyl-1-Phenyl-4-Benzylpyrazol. Sm. 167° (B. 34, 1308).
- $C_{18}H_{18}N_3SP$  1) Triphenylamid d. Thiophosphorsäure. Sm. 153° (Z. 1868, 539; B. 20, 3353; 33, 2113). — II, 357; \*II, 166.  
2) Triphenylamid d. isom. Thiophosphorsäure? Sm. 78° (Z. 1868, 539). — II, 357; \*II, 166.
- $C_{18}H_{19}ON_2Br$  1) Phenyläther d.  $\epsilon$ -[4-Bromphenyl]cyanamido- $\alpha$ -Oxypentan. Sm. 60°; Sd. 270—280°<sub>10</sub> (B. 40, 3927 C. 1907 [2] 1525).  
2) 4-Bromphenyläther d.  $\alpha$ -Phenylimido- $\alpha$ -Oxy- $\alpha$ -[1-Piperidyl]-methan (4-Bromdiphenylpiperidylisoharnstoff). Sm. 91° (B. 28, 984). — IV, 13.  
3)  $p$ -Brom-3-[2,4-Dimethylphenyl]amido-2-Keto-5,7-Dimethyl-2,3-Dihydroindol. Sm. 215° (A. 358, 366 C. 1908 [1] 1172).
- $C_{18}H_{19}ON_2J$  1) Jodäthylat d.  $\alpha$ -Imido- $\alpha$ -[4-Methylbenzoyl]methylenamido- $\alpha$ -Phenylmethan. Sm. 218° (B. 34, 3027). — \*IV, 569.  
2) Jodmethylat d. 2-Acetylamido-3,7-Dimethylakridin (Soc. 85, 532 C. 1904 [1] 1525).
- $C_{18}H_{19}ON_3S$  1) Cytisinphenylthioharnstoff. Sm. 254° (C. 1900 [1] 1164). — \*III, 654.  
2) Verbindung (aus Amidobenzol u. Thionylamidobenzol) (A. 274, 205). — II, 355.
- $C_{18}H_{19}ON_3S_2$  1) Verbindung (aus 5-Dimethylamido-2,4'-Dithiocarbonimid). Sm. 170° (A. 303, 359). — \*IV, 822.
- $C_{18}H_{19}ON_4P$  1) Di[Phenylhydrazid] d. Phenylphosphinsäure. Sm. 175° (A. 293, 219). — IV, 1651.
- $C_{18}H_{19}ON_5S$  1) Nitrosoderivat d. 3,5-Diimido-2,4-Di[2,4-Dimethylphenyl]tetrahydro-1,2,4-Thiodiazol. Sm. 146° (B. 23, 370). — IV, 1237.
- $C_{18}H_{19}OSP$  1) Äthylester d. Di[4-Methylphenyl]thiophosphinsäure. Sm. 41 bis 42° (A. 315, 69).
- $C_{18}H_{19}O_2NCl_2$  1) Base (aus Codein). Sm. 196—197°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 210, 110). — III, 907.  
2) 3,6-Dichlor-4'-Diäthylamidodiphenylmethan-2-Carbonsäure. Sm. 237° (Bl. [3] 23, 689). — \*II, 870.
- $C_{18}H_{19}O_2NBr_2$  1) 3,6-Dibrom-4'-Diäthylamidodiphenylmethan-2-Carbonsäure. Sm. 247° (C. 1907 [1] 1119).  
2) N-Acetyl-2,4,5-Trimethylphenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 120—121° (A. 332, 198 C. 1904 [2] 210).  
3) N-Acetyl-2,4,5-Trimethylphenyl-3,5-Dibrom-4-Oxybenzylamin. Sm. 205° (B. 41, 1057 C. 1908 [1] 1775).  
4) Acetat d. Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 102—103° (A. 334, 305 C. 1904 [2] 986).
- $C_{18}H_{19}O_2NS_2$  1) Äthylxanthogenacetbenzylanilid. Sm. 65—66° (Ar. 244, 83 C. 1906 [1] 1875).
- $C_{18}H_{19}O_2N_2Cl$  1) 5-Methyläther-6-Äthyläther d. 4'-Chlor-5,6-Dioxy-3-Allylazo-benzol. Sm. 65° (G. 36 [2] 44 C. 1906 [2] 1193).  
2) Cinchoteninchlorid. (2HCl, PtCl<sub>4</sub>) (M. 16, 63). — III, 842.  
3) 4-Methylphenylamid d. Chlorbernsteinsäure. Zers. oberhalb 250° (A. 279, 136). — \*II, 276.  
4) 4-Methylphenylamid d. Chloracetyl-[4-Methylphenyl]amido-essigsäure. Sm. 158° (B. 25, 2290). — II, 505.
- $C_{18}H_{19}O_2N_2Br$  1) 5-Methyläther-6-Äthyläther d. 3'-Brom-5,6-Dioxy-3-Allylazo-benzol. Sm. 100—101° (G. 36 [2] 42 C. 1906 [2] 1193).  
2) 5-Methyläther-6-Äthyläther d. 4'-Brom-5,6-Dioxy-3-Allylazo-benzol. Sm. 64° (G. 36 [2] 46 C. 1906 [2] 1193; B. 41, 413 C. 1908 [1] 1048).  
3) 1-[4-Bromphenyl]-4,5-Camphylpyrazol-3-Carbonsäure. Sm. 215° (Am. 36, 285 C. 1906 [2] 1426).
- $C_{18}H_{19}O_2N_3S$  1) 2,5-Phenylsulfonimido-2,3-Dimethyl-1-Phenyl-2,5-Dihydro-pyrazol. Sm. 173° (A. 339, 155 C. 1905 [1] 1401).

- $C_{18}H_{19}O_2N_3S_3$  1) Verbindung (aus 4-Nitrobenzoylchlorid u. Methyläthylphenylthiuram-sulfid). Sm. 138° (B. 36, 2284 C. 1903 [2] 561).
- $C_{18}H_{19}O_3N_3J_3$  1) Dijodecin. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (A. 92, 325, 326). — III, 903.
- $C_{18}H_{19}O_3NS$  1) 4-[4-Methylphenyl]merkpto-2-Methylphenylamid d. Oxalsäure-monoäthylester. Sm. 113—114° (J. pr. [2] 68, 283 C. 1903 [2] 994).  
2) 4-[4-Methylphenyl]merkpto-3-Methylphenylamid d. Oxalsäure-monoäthylester. Sm. 113° (J. pr. [2] 68, 292 C. 1903 [2] 995).  
3) Verbindung (aus 2-Methylchinolin u. 1-Methylbenzol-4-Sulfonsäure-methylester). Sm. 134° (C. 1906 [1] 1857).  
4) Verbindung (aus 2-Methylchinolin u. Benzolsulfonsäureäthylester). Sm. 105° (C. 1906 [1] 1857).
- $C_{18}H_{19}O_3N_2Cl$  1) 6-Acetat d.  $\alpha$ -[4-Chlorphenyl]- $\beta$ -[5,6-Dioxy-3-Allylphenyl]hydrazin-5-Methyläther. Sm. 152—154° (B. 41, 413 C. 1908 [1] 1048).
- $C_{18}H_{19}O_3N_2Br$  1) 6-Methyläther-4,5-Methylenäther d. 3-Brom-4,5,6-Trioxy-2-[ $\beta$ -Methylamidoäthyl]-1-Phenylimidomethylbenzol(Bromcotarninanal). Sm. 127° (B. 36, 1335 C. 1903 [2] 52).
- $C_{18}H_{19}O_3N_3S$  1) Äthylester d. 3-[ $\beta$ -Phenylthioureido]-4-Methylphenyloxamin-säure. Sm. 154—155° (A. 268, 310). — IV, 605.  
2)  $\alpha$ -Phenylamidothioformyl- $\beta$ -Phenylhydrazid d. Malonsäuremono-äthylester. Sm. 141° (B. 24, 1801). — IV, 702.
- $C_{18}H_{19}O_4N_4Cl$  1) 2-Chlor-1,2-Di[4-Äthoxyphenyl]-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure (Di-p-Phenyltetrazoliumchloridcarbonsäure). Sm. 194 bis 195° (B. 28, 1691). — IV, 1240.
- $C_{18}H_{19}N_3JS$  1) Jodmethylat d. 5-Merkpto-1,3-Diphenylpyrazol-3-Äthyläther. Sm. 167° (A. 358, 174 C. 1908 [1] 857).  
2) Jodmethylat d. 3-Merkpto-1,5-Diphenylpyrazol-3-Äthyläther. Sm. 188° (A. 358, 164 C. 1908 [1] 856).  
3) Jodmethylat d. 3-Merkpto-5-Methyl-1-Phenylpyrazol-3-Benzyl-äther. Sm. 146° (A. 338, 295 C. 1905 [1] 1161).  
4) 2-Jodmethylat d. 5-Merkpto-3-Methyl-1-Phenylpyrazol-5-Benzyläther. Sm. 174—175° (A. 331, 203 C. 1904 [1] 1218).
- $C_{18}H_{20}ONBr$  1) Phenylbenzylamid d.  $\alpha$ -Bromisovaleriansäure. Sm. 95—96° (B. 31, 2677). — \*II, 296.
- $C_{18}H_{20}ON_2S$  1) Propyläther d. Benzoylimido-4-Methylphenylamidomerkpto-methan (Benzoyl-p-Tolylthiolpropylpseudothioharnstoff). Sm. 81 bis 81,5° (Am. 26, 415).  
2) Isovaleryldiphenylisothioharnstoff. Sm. 83° (B. 32, 3658). — \*II, 198.  
3) Propionyl-di[2-Methylphenyl]isothioharnstoff. Sm. 97,5° (B. 32, 3657). — \*II, 255.  
4) Propionyl-di[4-Methylphenyl]isothioharnstoff. Sm. 105° (B. 32, 3657). — \*II, 273.  
5) Isobutyläther d.  $\alpha$ -Phenyl- $\beta$ -[ $\alpha$ -Oxybenzyliden]thioharnstoff (Phenylthiocarbamidimidoisobutylbenzoat). Sm. 125° (C. 1900 [2] 530). — \*II, 761.
- $C_{18}H_{20}ON_2S_2$  1) 5-Methyläther-2-Äthyläther d. 5-Merkpto-2-Oxy-2-Phenyl-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 83° (J. pr. [2] 67, 260 C. 1903 [1] 1266). — \*IV, 590.  
2) Oxyd d. Äthylphenylamidothioameisensäure. Sm. 143—143,5° (B. 20, 1630).
- $C_{18}H_{20}ON_3Cl$  1) Äthyläther d. Verb.  $C_{18}H_{19}ON_3Cl$  (B. 31, 1414). — \*IV, 480.
- $C_{18}H_{20}ON_4S$  1) Acetylderivat d.  $\alpha$ -Imido- $\alpha$ -[4-Methylphenyl]amido- $\alpha'$ -Merkpto- $\alpha'$ -[4-Methylphenyl]imidodimethylamin. Sm. 194° (A. 361, 314 C. 1908 [2] 881).
- $C_{18}H_{20}O_2NCl$  1) Dimethyl-di[Benzoylmethyl]ammoniumchlorid. 2+PtCl<sub>4</sub>, +AuCl<sub>3</sub> (C. 1899 [1] 1285). — \*III, 97.  
2)  $\alpha$ -Chlorocodid. Sm. 147—148° (152—153°). HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (A. Spl. 7, 366; A. 210, 107; 297, 215; Soc. 91, 1411 C. 1907 [2] 1250; B. 41, 972 C. 1908 [1] 1708). — III, 906; \*III, 673.  
3)  $\beta$ -Chlorocodid. Sm. 152—153° (B. 40, 4885 C. 1908 [1] 387; B. 41, 974 C. 1908 [1] 1708).  
4) Chlormethylat d. Apomorphin. Sm. 205—210° (D.R.P. 158620 C. 1905 [1] 702; D.R.P. 167879 C. 1906 [1] 1067).
- $C_{18}H_{20}O_2NBr$  1) Dimethyl-di[Benzoylmethyl]ammoniumbromid. Sm. 156° (C. 1899 [1] 1285). — \*III, 97.



- $C_{18}H_{20}O_2NBr$  2) Bromocodid.  $HBr$  (*J.* 1871, 777). — III, 907.  
3) isom. Bromocodid. Sm.  $162^\circ$  (*Soc.* 79, 575; *Soc.* 91, 1412 *C.* 1907 [2] 1250; *A.* 368, 318 *C.* 1909 [2] 1662). — \*III, 673.  
4) Brommethylat d. Apomorphin (Eupoplin). Sm.  $180^\circ$  (*C.* 1904 [1] 1581; D.R.P. 158620 *C.* 1905 [1] 703; D.R.P. 167879 *C.* 1906 [1] 1067).
- $C_{18}H_{20}O_2N_2S$  1) 2<sup>2</sup>,3<sup>2</sup>-Dimethyläther d. 2-[2-Oxyphenyl]imido-3-[2-Oxyphenyl]-tetrahydro-1,3-Thiazin. Sm.  $113-114^\circ$  (*B.* 21, 1872). — II, 711.  
2) Di[2-Acetylamidobenzyl]sulfid. Sm.  $209^\circ$  (*B.* 27, 3522). — \*II, 645.  
3) Di[4-Acetylamidobenzyl]sulfid. Sm.  $188^\circ$  (*B.* 24, 726; 28, 880, 915, 1337). — \*II, 646.  
4) Di[6-Acetylamido-3-Methylphenyl]sulfid. Sm.  $211^\circ$  (*B.* 20, 667). — II, 821.  
5) Di[ $\beta$ -Benzoylamidoäthyl]sulfid. Sm.  $109-110^\circ$  (*B.* 24, 3102). — II, 1160.  
6) Di[Methylphenylamid] d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $115^\circ$  (*C.* 1900 [2] 1269). — \*II, 204.  
7) Di[2-Methylphenylamid] d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $190^\circ$  (*C.* 1900 [2] 1269; *J. pr.* [2] 74, 43 *C.* 1906 [2] 753). — \*II, 256.  
8) Di[3-Methylphenylamid] d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $135-136^\circ$  (*J. pr.* [2] 74, 46 *C.* 1906 [2] 754).  
9) Di[4-Methylphenylamid] d. Dimethylsulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $194^\circ$  (*C.* 1900 [2] 1269; *J. pr.* [2] 74, 754). — \*II, 274.
- $C_{18}H_{20}O_2N_2S_2$  1) Dimethyläther d. 4,4'-Di[Acetylamido]-3,3'-Dimerkaptobiphenyl. Sm.  $245-247^\circ$  (*B.* 42, 3468 *C.* 1909 [2] 1552).  
2) Phenylthiourethansulfid. Sm.  $102^\circ$  (*A.* 207, 159; *B.* 13, 1575; 19, 1076, 1813; 26, 2364). — II, 384.  
3) Di[4-Acetylamidobenzyl]disulfid. Sm.  $173-174^\circ$  (*A.* 305, 120).  
4) Di[6-Acetylamido-3-Methylphenyl]disulfid. Sm.  $204-206^\circ$  (*B.* 22, 908). — II, 822.  
5) Di[ $\beta$ -Benzoylamidoäthyl]disulfid. Sm.  $132^\circ$  (*B.* 24, 1123). — II, 1160.  
6) Di[Phenylamid] d. Merkptoessigäthylenäthersäure. Sm.  $158^\circ$  (*J. pr.* [2] 74, 27 *C.* 1906 [2] 752).  
7) Di[Phenylamid] d. Diäthylsulfid- $\alpha\alpha'$ -Dicarbonsäure (Di[Phenylamid] d.  $\alpha$ -Dithiomilchsäure). Sm.  $160^\circ$  (*J. pr.* [2] 66, 190 *C.* 1902 [2] 933).  
8) Di[2-Methylphenylamid] d. Dimethyldisulfid- $\alpha\alpha'$ -Dicarbonsäure (D. d. Dithiodiglykolsäure). Sm.  $164-165^\circ$  (*J. pr.* [2] 74, 39 *C.* 1906 [2] 753).  
9) Di[3-Methylphenylamid] d. Dimethyldisulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $162-163^\circ$  (*J. pr.* [2] 74, 43 *C.* 1906 [2] 753).  
10) Di[4-Methylphenylamid] d. Dimethyldisulfid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $180-182^\circ$  (*J. pr.* [2] 74, 47 *C.* 1906 [2] 754).
- $C_{18}H_{20}O_2N_2Se$  1) Di[3-Methylphenylamid] d. Dimethylselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $170-171^\circ$  (*A.* 360, 122 *C.* 1908 [1] 2146).  
2) Di[4-Methylphenylamid] d. Dimethylselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $217-218^\circ$  (*A.* 360, 121 *C.* 1908 [1] 2146).
- $C_{18}H_{20}O_2N_2Se_2$  1) Di[ $\beta$ -Benzoylamidoäthyl]diselenid (*B.* 25, 3048). — II, 1161.  
2) Di[Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $94-95^\circ$  (*Ar.* 241, 217 *C.* 1903 [2] 104).  
3) Di[2-Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $174-175^\circ$  (*Ar.* 241, 204 *C.* 1903 [2] 104).  
4) Di[3-Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $158^\circ$  (*Ar.* 241, 206 *C.* 1903 [2] 104).  
5) Di[4-Methylphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm.  $174^\circ$  (*Ar.* 241, 206 *C.* 1903 [2] 104).
- $C_{18}H_{20}O_2N_3P$  1) Tri[Phenylamido]phosphordihydroxyd. Sm.  $217^\circ$  (*B.* 29, 721). — \*II, 164.
- $C_{18}H_{20}O_2N_4S$  1) Äthyläther d.  $\alpha$ -Acetylamido- $\alpha$ -Phenylimido- $\alpha$ -[ $\beta$ -4-Oxyphenylthioureido]methan. Sm.  $172^\circ$  (*A.* 356, 187 *C.* 1907 [2] 1798).  
2) Äthyläther d.  $\alpha$ -Acetylamido- $\alpha$ -[4-Oxyphenyl]imido- $\alpha$ -[ $\beta$ -Phenylthioureido]methan. Sm.  $183^\circ$  (*A.* 356, 187 *C.* 1907 [2] 1798).

- $C_{18}H_{20}O_2N_6S_2$  1)  $\alpha\alpha'$ -Succinyldi[ $\beta$ -Phenylamidothioharnstoff]. Sm. 220° (Soc. 67, 571). — IV, 704.
- $C_{18}H_{20}O_2Br_2S$  1) Di[3-Brom-4-Oxy-2,5-Dimethylbenzyl]sulfid. Sm. 152° (A. 302, 124). — \*II, 691.
- $C_{18}H_{20}O_3NCl$  1) Chlorcodein +  $1\frac{1}{2}H_2O$ . Sm. 170°. (2HCl,  $PtCl_4$ ),  $H_2SO_4$  +  $4H_2O$  (A. 77, 368; 210, 114). — III, 903.
- $C_{18}H_{20}O_3NBr$  1) Chlorpseudocodein. Sm. 203—204° (A. 368, 312 C. 1909 [2] 1661).
- $C_{18}H_{20}O_3NBr$  1) Bromcodein +  $\frac{1}{2}(1\frac{1}{2})H_2O$ . Sm. 161—162°. (2HCl,  $PtCl_4$ ), HBr +  $H_2O$  (A. 77, 362; 210, 112; Soc. 79, 575). — III, 903.
- $C_{18}H_{20}O_3NBr$  2) Brompseudocodein. Sm. 190—192°. +  $C_2H_6O$  (A. 368, 313 C. 1909 [2] 1661).
- $C_{18}H_{20}O_3N_2S$  1) Di[4-Äthoxyphenylamid] d. Thiooxalsäure. Sm. 156—157° (A. 360, 114 C. 1908 [1] 2145).
- $C_{18}H_{20}O_3N_2Se$  1) Di[4-Äthoxyphenylamid] d. Selenoxalsäure. Sm. 160—161° (A. 360, 126 C. 1908 [1] 2146).
- $C_{18}H_{20}O_3N_4Br_2$  1) Di[4-Bromphenylhydrazon] d. Rhamnose. Sm. 215° u. Zers. (Soc. 83, 1287 C. 1904 [1] 86).
- $C_{18}H_{20}O_3N_4S$  1) Dimethyläther d. Acetyldi[2-Oxyphenyl]thiodicyandiamin. Sm. 205—206° (B. 36, 3324 C. 1903 [2] 1169).
- $C_{18}H_{20}O_4N_2S$  1) Di[Methylphenylamid] d. Dimethylsulfon- $\alpha\alpha'$ -Dicarbonsäure. Sm. 152° (C. 1900 [2] 1269). — \*II, 204.
- $C_{18}H_{20}O_4N_2S$  2) Di[2-Methylphenylamid] d. Dimethylsulfon- $\alpha\alpha'$ -Dicarbonsäure. Sm. 225—226° (C. 1900 [2] 1269). — \*II, 256.
- $C_{18}H_{20}O_4N_2S$  3) Di[4-Methylphenylamid] d. Dimethylsulfon- $\alpha\alpha'$ -Dicarbonsäure. Sm. 221° (C. 1900 [2] 1269). — \*II, 274.
- $C_{18}H_{20}O_4N_2As_2$  1) 3,3'-Dimethylarsenobenzol-4,4'-Di[Amidoessigsäure]. Sm. 220° u. Zers. (D.R.P. 212205 C. 1909 [2] 486).
- $C_{18}H_{20}O_4N_2Se_2$  1) Di[2-Methoxyphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 124° (Ar. 241, 214 C. 1903 [2] 104).
- $C_{18}H_{20}O_4N_2Se_2$  2) Di[4-Methoxyphenylamid] d. Dimethyldiselenid- $\alpha\alpha'$ -Dicarbonsäure. Sm. 172° (Ar. 241, 215 C. 1903 [2] 104).
- $C_{18}H_{20}O_4N_4Br_2$  1) Di[4-Bromphenylhydrazon] d.  $\beta$ -Akrose. Sm. 180—183° (B. 25, 1031; 33, 3109). — \*IV, 521.
- $C_{18}H_{20}O_4N_4Br_2$  2) Di[4-Bromphenylhydrazon] d. d-Glykose. Sm. 222° (B. 32, 3387 Anm.). — \*IV, 522.
- $C_{18}H_{20}O_4N_4Br_2$  3) Di[4-Bromphenylhydrazon] d. d-Gulose. Sm. 181° (B. Ph. P. 2, 210 Anm.). — \*IV, 522.
- $C_{18}H_{20}O_4Br_3S_2$  1) Verbindung (aus Sulfotoluylenäthylen). Sm. 95° (A. 143, 219). — II, 110.
- $C_{18}H_{20}O_5N_2S_2$  1) Monophenylhydrazon d. 1,3-Di[Acetonylsulfon]benzol. Sm. 152° u. Zers. (J. pr. [2] 68, 326 C. 1903 [2] 1171).
- $C_{18}H_{20}O_6NBr$  1) Diäthylester d.  $\alpha$ -Brom- $\delta$ -[1,2-Phtalylamido]butan- $\alpha\alpha$ -Dicarbonsäure. Sm. 51° (B. 34, 457). — \*II, 1057.
- $C_{18}H_{20}O_6NBr$  2) Diäthylester d.  $\delta$ -Brom- $\alpha$ -[1,2-Phtalylamido]butan- $\alpha\alpha$ -Dicarbonsäure. Fl. (C. 1905 [2] 399).
- $C_{18}H_{20}O_8N_2S_2$  1) 4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure.  $Na_2$  +  $3C_2H_6O$  (J. pr. [2] 66, 569 C. 1903 [1] 519). — \*IV, 655.
- $C_{18}H_{21}ONBr_2$  1) 2,4,5-Trimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 140—141,5° (A. 344, 297 C. 1906 [1] 1613).
- $C_{18}H_{21}ONS$  1) Phenylamid d. 5-Oxy-4-Isopropyl-1-Methylbenzolzomethyläther-2-Thiocarbonsäure. Sm. 132—133° (J. pr. [2] 59, 581). — \*II, 936.
- $C_{18}H_{21}ONS$  2) 2,4-Dimethylphenylamid d. 6-Oxy-1-Methylbenzolzomethyläther-3-Thiocarbonsäure. Sm. 132—133° (J. pr. [2] 59, 587). — \*II, 921.
- $C_{18}H_{21}ON_3S$  1) Acetylleukomethylenblau. Sm. 178—181° (C. 1899 [2] 442, 503; 1900 [2] 883; B. 33, 1568). — \*II, 477.
- $C_{18}H_{21}ON_6P$  1) Tri[Phenylhydrazid] d. Phosphorsäure. Sm. 204° (196°) (A. 270, 135; 272, 212). — IV, 662.
- $C_{18}H_{21}O_2NS$  1) 1-Phenylsulfon-2-Phenyl-R-Hexamethylenimin. Sm. 81—82° (B. 42, 1268 C. 1909 [1] 1697).
- $C_{18}H_{21}O_2NS$  2) 1-[2-Naphtylsulfon]-2-Methyl-5-Äthyl-2-Tetrahydropyridin. Sm. 71—72° (B. 40, 3210 C. 1907 [2] 820).

- $C_{18}H_{21}O_3N_3S$  1) Diäthyläther d.  $\alpha\beta$ -Diphenylsemicarbazomerkaptooxymethan. Sm. 111° (*Am.* 24, 441). — \*IV, 449.
- $C_{18}H_{21}O_3N_2Br$  2) Phenylthiosemicarbazid d.  $\beta$ -( $\alpha$ -Phenylhydrazido)propionsäure-äthylester. Sm. 71–74° (*B.* 29, 517). — IV, 740.
- $C_{18}H_{21}O_3N_3S_2$  1) Verbindung (aus d. Verb.  $C_{18}H_{23}O_4N_2Br$ ). Sm. 172° u. Zers. (*Am.* 36, 284 *C.* 1906 [2] 1426).
- $C_{18}H_{21}O_3N_3S_2$  1) 1-Methyl-1,2,3,4-Tetrahydrochinolindimethylanilinthiosulfonsäureindamin (*B.* 23, 1382). — IV, 197.
- $C_{18}H_{21}O_4NS$  1) Sulfochondroitinsäure (*C.* 1906 [2] 1862).
- $C_{18}H_{21}O_4N_2As$  1) Di[4-Acetylamido-3-Methylphenyl]arsinsäure. Sm. 242–244° (255°) (*Soc.* 93, 1183 *C.* 1908 [2] 782; *B.* 41, 2372 *C.* 1908 [2] 783).
- $C_{18}H_{21}O_5NS$  1) Sulfocodid + 5H<sub>2</sub>O. Zers. bei 246°. — III, 902.
- $C_{18}H_{21}O_6N_2P$  1) 2-Methylphenylamid d. Phosphorsäuredi[Oxyessigsäure]. Sm. 168–170° (*A.* 279, 61). — \*II, 256.
- 2) 4-Methylphenylamid d. Phosphorsäuredi[Oxyessigsäure]. Sm. 255–257° (*A.* 279, 66). — \*II, 274.
- $C_{18}H_{21}N_6SP$  1) Tri[Phenylhydrazid] d. Thiophosphorsäure. Sm. 154° (*A.* 270, 136). — IV, 662.
- $C_{18}H_{22}ONBr$  1) Methyläthyl-4-Methylphenylphenacylammoniumbromid. Sm. 116–117° (*B.* 35, 776 *C.* 1902 [1] 721). — \*III, 97.
- 2) Methyläther d. Methylallylbenzyl-2-Oxyphenylammoniumbromid. Sm. 106–107° (*B.* 40, 1008 *C.* 1907 [1] 1252).
- 3) Methyläther d. Methylallylbenzyl-4-Oxyphenylammoniumbromid. Sm. 147–148° (*B.* 40, 1011 *C.* 1907 [1] 1253).
- $C_{18}H_{22}ONJ$  1) Methyläther d. Methylallylbenzyl-2-Oxyphenylammoniumjodid. Zers. bei 120° (*B.* 39, 487 *C.* 1906 [1] 921).
- 2) Methyläther d. Methylallylbenzyl-4-Oxyphenylammoniumjodid. Sm. 132–133° (*B.* 40, 1011 *C.* 1907 [1] 1252).
- $C_{18}H_{22}ON_2S$  1) 4-Methylphenyläther d.  $\alpha$ -( $\beta$ -Oxybutyl)- $\beta$ -Phenylthioharnstoff. Sm. 107,5–109° (*B.* 32, 951). — \*II, 433.
- $C_{18}H_{22}ON_3J$  1) Jodmethylat d. 3-Keto-4,6-Dimethyl-1-Propyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol. Sm. 228° (*A.* 366, 393 *C.* 1909 [2] 289).
- 2) Jodpropylat d. 3-Keto-1,4,6-Trimethyl-2-Phenyl-2,3-Dihydro-1,2,5-Benzotriazol. Sm. 270° (*A.* 366, 390 *C.* 1909 [2] 289).
- $C_{18}H_{22}O_2NP$  1) Piperidid d. 4-Methylphenylphosphinsäuremonophenylester. Fl. (*A.* 293, 264). — IV, 1669.
- $C_{18}H_{22}O_2N_2S$  1) Propyläther d. 2-Methoxylphenylamido-2-Methoxylphenylimidomerkaptooxymethan. Sm. 58°. (2HCl, PtCl<sub>4</sub>) (*B.* 21, 1864). — II, 711.
- $C_{18}H_{22}O_3NCl$  1) Chlormethylat d. Morphin + 2H<sub>2</sub>O. (2 + PtCl<sub>4</sub> + H<sub>2</sub>O) (*A.* 222, 208). — III, 899.
- $C_{18}H_{22}O_3NBr$  1) Brommethylat d. Morphin. Sm. 265–266° (*D.R.P.* 165898 *C.* 1906 [1] 515; *D.R.P.* 191088 *C.* 1908 [1] 499).
- $C_{18}H_{22}O_3NJ$  1) Jodmethylat d. Morphin + H<sub>2</sub>O (*A.* 88, 338; *Soc.* 77, 1038). — III, 898; \*III, 669.
- 2) Jodmethylat d.  $\alpha$ -Isomorphin. Sm. 276° u. Zers. (*Soc.* 77, 1038; 79, 574). — \*III, 671.
- 3) Jodmethylat d.  $\beta$ -Isomorphin. Sm. 250° u. Zers. (*Soc.* 79, 572). — \*III, 671.
- 4) Jodmethylat d.  $\gamma$ -Isomorphin (*J. d. Neoisomorphin*). Sm. 297° (293°) (*Soc.* 91, 1414 *C.* 1907 [2] 1250; *B.* 41, 980 *C.* 1908 [1] 1709).
- $C_{18}H_{22}O_3N_2S$  1) Methyl-5-Acetylamido-2,4-Dimethylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 176° (*Soc.* 91, 364 *C.* 1907 [1] 1404).
- $C_{18}H_{22}O_4NBr$  1) Methylhydroxyd d. Brommorphin (*A.* 297, 212). — \*III, 669.
- 2)  $\beta$ -Bromäthylester d. 1-Benzoylcegonin. Fl. (*Am.* 10, 147). — III, 867.
- $C_{18}H_{22}O_4N_2S$  1) 4-Oxy-2,3,5-Trimethyl-5-Isopropylazobenzol-3-Sulfonsäure. Ba (*B.* 14, 2795). — IV, 1425.
- $C_{18}H_{22}O_4N_2S_2$  1) 1,2-Di[Phenylsulfonamido]hexahydrobenzol. Sm. 155° (*A.* 295, 215). — IV, 482.
- $C_{18}H_{22}O_4N_2Hg_2$  1) Diacetat d. Quecksilberammoniumbase  $C_{14}H_{15}O_2N_2Hg_2$ . Sm. 184° (*G.* 28 [2] 111). — IV, 1711.
- $C_{18}H_{22}O_4N_4Br_2$  1) Di[4-Bromphenylhydrazon] d. d-Gulose. Sm. 181° (*C.* 1902 [1] 1241).



- $C_{15}H_{22}O_6N_2S$  1)  $\alpha$ -dl-[2-Naphtylsulfonamidoacetyl]amido- $\gamma$ -Methylvaleriansäure. Sm. 124,3—125° (B. 36, 2601 C. 1903 [2] 619).  
 2)  $\alpha$ -l-[2-Naphtylsulfonamidoacetyl]amido- $\gamma$ -Methylvaleriansäure. Sm. 144—145° (B. 36, 2602 C. 1903 [2] 619).
- $C_{15}H_{22}O_6N_4S_2$  1) Amid d. s-Di[Acetyl-2-Methylphenyl]hydrazin-5,5'-Disulfonsäure (A. 270, 372). — IV, 1502.
- $C_{15}H_{22}O_8NCl$  1) Phenylamid d. Chlortriacetylgalaktonsäure. Sm. 187,5° (B. 35, 947 C. 1902 [1] 859).
- $C_{15}H_{22}N_3ClS$  1) Dimethyldiäthylthioninchlorid (A. 251, 86; B. 22, 2067; D.R.P. 43374). — II, 811; \*II, 478.
- $C_{15}H_{23}ON_2J$  1) Hydrojod- $\delta$ -Cinchonin. 2HJ (M. 22, 163). — \*III, 640.
- $C_{15}H_{23}ON_2P$  1) 2,4,5-Trimethylphenylimid-2,4,5-Trimethylphenylamid d. Phosphorsäure. Sm. 217° (B. 29, 727). — \*II, 317.  
 2) 2,4,6-Trimethylphenylimid-2,4,6-Trimethylphenylamid d. Phosphorsäure. Sm. 240° (B. 29, 726). — \*II, 317.
- $C_{15}H_{23}O_2NBr_2$  1) Methylhydroxyd d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 208°. Salze, siehe (B. 29, 1125; A. 334, 290 C. 1904 [2] 984). — \*II, 455.  
 2) Methylhydroxyd d. 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 188—189° (A. 334, 322 C. 1904 [2] 987).
- $C_{15}H_{23}O_2NS$  1) Phenylamid d. 1,3-Dimethyl-5-[tert.] Butylbenzol- $\beta$ -Sulfonsäure. Sm. 143,5—144,5° (B. 25, 791; 27, 1608). — II, 425; \*II, 224.  
 2) Phenylamid d. 1,4-Propylisopropylbenzol- $\alpha$ -Sulfonsäure. Sm. 107—109° (G. 21, 21). — II, 425.  
 3) Phenylamid d. 4-Isopropyl-2-Äthyl-1-Methylbenzol- $\beta$ -Sulfonsäure. Sm. 150—151° (B. 40, 2368 C. 1907 [2] 335).  
 4) Phenylamid d. 1,2,4-Triäthylbenzol- $\beta$ -Sulfonsäure. Sm. 108° (J. pr. [2] 65, 400 C. 1902 [1] 1324).  
 5) Phenylamid d. 1,3,5-Triäthylbenzol-2-Sulfonsäure. Sm. 128° (J. pr. [2] 65, 397 C. 1902 [1] 1324).  
 6) Benzylamid d.  $\beta$ -Phenylpentan- $\beta$ -Sulfonsäure. Sm. 62—64° (B. 36, 3690 C. 1903 [2] 1426).
- $C_{15}H_{23}O_3NS$  1) Phenyläther d.  $\xi$ -Phenylsulfonamido- $\alpha$ -Oxyhexan. Sm. 57—58° (B. 38, 3087 C. 1905 [2] 1262).
- $C_{15}H_{23}O_3N_3S$  1) 4-Dipropylamidoazobenzol-4'-Sulfonsäure + H<sub>2</sub>O. Ba + H<sub>2</sub>O (B. 35, 3536 C. 1902 [2] 1503). — \*IV, 1015.
- $C_{15}H_{23}O_3N_3S_2$  1) Dimethyldiäthylindaminthiosulfonat (A. 251, 83). — II, 802.
- $C_{15}H_{23}O_4NS$  1) 4-Acetylphenylamid d. Campher- $\beta$ -Sulfonsäure. Sm. 157° (Soc. 95, 339 C. 1909 [1] 1564).
- $C_{15}H_{23}O_4NS_2$  1) Di[4-Methylphenylsulfonäthyl]amin. Sm. 200—201° u. Zers. (HCl, AuCl<sub>3</sub>) (J. pr. [2] 30, 359). — II, 823.  
 2) Imid d. 1,2,4-Trimethylbenzol-5-Sulfonsäure. Sm. 177° (A. 184, 185). — II, 149.  
 3) Imid d. 1,3,5-Trimethylbenzol-2-Sulfonsäure. Sm. 124° (A. 184, 187). — II, 151.
- $C_{15}H_{23}O_4N_2Br$  1) 4-Brom-3-Acetylamidophenylmonamid d. Camphersäure. Sm. 217—219° (Soc. 91, 1897 C. 1908 [1] 256).  
 2) Verbindung (aus Campheroxalsäure u. 4-Bromphenylhydrazin). Sm. 149° u. Zers. (Am. 36, 279 C. 1906 [2] 1426).
- $C_{15}H_{23}NBrJ$  1) l-Methylbutyl-4-Bromphenylbenzylammoniumjodid. Sm. 137 bis 138° (Soc. 93, 1235 C. 1908 [2] 779).  
 2) i-Methylbutyl-4-Bromphenylbenzylammoniumjodid. Sm. 135 bis 136° (Soc. 93, 1234 C. 1908 [2] 779).
- $C_{15}H_{23}N_2JS$  1) Jodmethylat d. 4,4'-Di[Dimethylamido]diphenylthioketon. Zers. bei 108° (B. 20, 1736). — III, 192.
- $C_{15}H_{24}ONBr$  1) l-Methylbutyl-4-Bromphenylbenzylammoniumhydroxyd. Jodid, d-Camphersulfonat (Soc. 93, 1235 C. 1908 [2] 779).
- $C_{15}H_{24}ON_3Cl$  1) Dipiperidylchlorisatin (B. 40, 2510 C. 1907 [2] 705).
- $C_{15}H_{24}ON_3Br$  1) Dipiperidylbromisatin (B. 24, 2605). — IV, 16.
- $C_{15}H_{24}O_2NBr$  1) Brommethylat d. Cinnamoyltropein. Sm. 288—291° (Soc. 95, 1030 C. 1909 [2] 544).
- $C_{15}H_{24}O_2N_2Br_2$  1) Verbindung (aus Phtalylpiperidin) (A. 227, 200). — IV, 16.

- $C_{18}H_{24}O_3N_2S$  1) 4-Amido-4'-Sulfomethylamido-2,5,2',5'-Tetramethyldiphenylmethan. Sm. 170° (D.R.P. 148760 C. 1904 [1] 555).
- $C_{18}H_{24}O_4NCl$  1) Chlormethylat d. Atroscin +  $H_2O$ . +  $AuCl_3$  (J. pr. [2] 64, 376). — \*III, 618.  
2) Chlormethylat d. Cocaïn. Sm. 152,5° (B. 21, 3042). — III, 867.  
3) Chlormethylat d. l-Scopolamin +  $H_2O$  (Ch. d. Hyoscin). Sm. 189° (wasserfrei). +  $AuCl_3$  (J. pr. [2] 64, 367; B. 27 [2] 883). — III, 796; \*III, 621.
- $C_{18}H_{24}O_4NBr$  1) Brommethylat d. Atroscin +  $H_2O$ . Sm. 207° (wasserfrei) (J. pr. [2] 64, 376). — \*III, 618.  
2) Brommethylat d. l-Cocaïn (D.R.P. 48273). — \*III, 645.  
3) Brommethylat d. l-Scopolamin +  $H_2O$  (Br. d. Hyoscin). Sm. 214° (wasserfrei); (216—217°) (J. pr. [2] 64, 368; D.R.P. 145996 C. 1903 [2] 1226). — \*III, 621.
- $C_{18}H_{24}O_4NJ$  1) Jodmethylat d. Atroscin +  $H_2O$ . Sm. 202° (wasserfrei) (J. pr. [2] 64, 376). — \*III, 618.  
2) Jodmethylat d. l-Cocaïn. Sm. 164° (B. 21, 3041; D.R.P. 48273). — III, 866; \*III, 645.  
3) Jodmethylat d.  $\alpha$ -Cocaïn +  $H_2O$ . Sm. 202° (B. 29, 2227). — III, 873.  
4) Jodmethylat d. l-Scopolamin (J. d. Hyoscin). Sm. 208° (215°) (J. pr. [2] 64, 367; B. 27 [2] 883). — \*III, 621.
- $C_{18}H_{24}O_4N_2S_2$  1)  $\alpha\zeta$ -Di[Phenylsulfonamido]hexan. Sm. 153,5° (154°) (J. r. 28, 562; B. 38, 2205 C. 1905 [2] 238).  
2)  $\alpha\beta$ -Di[N-Äthylphenylsulfonamido]äthan. Sm. 152,5° (A. 287, 222; B. 28, 3076). — \*II, 71.
- $C_{18}H_{24}O_6N_4S_{13}$  1) Verbindung (aus Chloralhydrat) (J. 1875, 474). — I, 932.
- $C_{18}H_{24}NSP$  1) Diäthylamid d. Di[4-Methylphenyl]thiophosphinsäure. Sm. 177 bis 178° (A. 315, 68). — \*IV, 1178.
- $C_{18}H_{24}N_2Cl_2Hg_2$  1) Chlorid d. Quecksilberammoniumbase  $C_{18}H_{26}O_2N_2Hg_2$ . Sm. 159 bis 159,5° (G. 28 [2] 103). — IV, 1711.
- $C_{18}H_{24}N_2Br_2Hg_2$  1) Bromid d. Quecksilberammoniumbase  $C_{18}H_{26}O_2N_2Hg_2$ . Sm. 149 bis 150° (G. 28 [2] 104). — IV, 1711.
- $C_{18}H_{24}N_2J_2Hg_2$  1) Jodid d. Quecksilberammoniumbase  $C_{18}H_{26}O_2N_2Hg_2$ . Sm. 126° (G. 28 [2] 104). — IV, 1711.
- $C_{18}H_{25}ON_2Br_3$  1) 2,5,6-Tribrom-4-Oxy-1,3-Di[1-Piperidylmethyl]benzol. Sm. 115 bis 117° (B. 32, 3014). — \*IV, 15.
- $C_{18}H_{25}O_2NS$  1) Phenylamid d. 5-Pseudobutyl-1,3-Dimethylbenzol-p-Sulfonsäure. Sm. 143—144° (B. 27, 1608).
- $C_{18}H_{25}O_3NS$  1) 4-Äthylphenylamid d. Campher- $\beta$ -Sulfonsäure. Sm. 117° (Soc. 95, 339 C. 1909 [1] 1563).
- $C_{18}H_{25}O_4N_2J$  1) Jodmethylat d. m-Amido- $\alpha$ -Cocaïn. Sm. 197—198° (B. 27, 1882). — III, 868.
- $C_{18}H_{25}N_2S_4P$  1) Phenyl-di[1-Piperidyl]phosphin + 2 Molec. Schwefelkohlenstoff. Sm. 144° (B. 31, 1042). — IV, 1682.
- $C_{18}H_{26}ON_3P$  1) Dipropylmonamid-Di[Phenylamid] d. Phosphorsäure. Sm. 220° (A. 326, 185 C. 1903 [1] 820).
- $C_{18}H_{26}ON_4J_2$  1) Di[Jodmethylat] d. 3,3'-Di[Dimethylamido]azoxybenzol. Sm. 190° u. Zers. (B. 30, 2935). — IV, 1338.
- $C_{18}H_{26}O_2N_2Hg_2$  1) Quecksilberdi[6-Dimethylamido-3-Methylphenyl]quecksilberdiammoniumhydroxyd. Sm. 117°. Chlorid, Bromid, Jodid, Nitrat, Acetat (G. 28 [2] 102). — IV, 1711.
- $C_{18}H_{26}O_2N_4S_2$  1)  $\alpha\alpha'$ -Phtalyldi[ $\beta$ -sec. Butylthioharnstoff]. Fl. (Soc. 67, 574).
- $C_{18}H_{26}O_3NBr$  1) Brommethylat d.  $\alpha$ -Oxy- $\beta$ -Phenylpropionyltropein. Sm. 213 bis 215° (Soc. 95, 1023 C. 1909 [2] 543).  
2) Brommethylat d. Atropin. Sm. 222—223° (D.R.P. 145996 C. 1903 [2] 1225).  
3) Brommethylat d. Hyoscyamin. Sm. 210—212° (D.R.P. 145996 C. 1903 [2] 1225).  
4) Bromäthylat d. Homoatropin. Sm. 209—210° (Soc. 91, 97 C. 1907 [1] 1137).
- $C_{18}H_{26}O_4NCl$  1) Chlormethylat d. 2,6-Dimethyl-4-Phenylhexahydropyridin-3,5-Dicarbonsäuredimethylester. (2 +  $PtCl_4$ ) (B. 25, 2791). — IV, 215.
- $C_{18}H_{26}O_4NBr$  1) Brommethylat d.  $\alpha\beta$ -Dioxy- $\alpha$ -Phenylpropionyltropein. Sm. 226 bis 227° (u. 218—219°) (Soc. 95, 1022 C. 1909 [2] 543).

- $C_{18}H_{26}O_4NJ$  1) Jodmethylat d. 2,6-Dimethyl-4-Phenylhexahydropyridin-3,5-Dicarbonensäuredimethylester. Fl. (B. 25, 2791). — IV, 215.
- $C_{18}H_{26}N_2J_2Hg$  1) Bisjodmethylat d. Quecksilberdi[4-Dimethylamidophenyl] (B. 35, 2043). — \*IV, 1212.
- $C_{18}H_{26}N_8SP$  1) Diäthylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 166–167° (A. 326, 212 C. 1903 [1] 822).  
2) Dipropylmonamid-Di[Phenylamid] d. Thiophosphorsäure. Sm. 145° (A. 326, 212 C. 1903 [1] 822).  
3) Isobutylmonamid - Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 152° (A. 326, 205 C. 1903 [1] 821).
- $C_{18}H_{27}O_6ClSi$  1) Tri[ $\gamma$ -Methylacetylacetonyl]siliciumchlorid. +  $FeCl_3$ , +  $ZnCl_2$ , +  $PtCl_4$ , +  $AuCl_3$  (A. 344, 316 C. 1906 [1] 1409).
- $C_{18}H_{27}O_6ClTi$  1) Tri[ $\gamma$ -Methylacetylacetonyl]titanchlorid. +  $FeCl_3$  (A. 344, 336 C. 1906 [1] 1410).
- $C_{18}H_{27}O_8ClTi$  1) Verbindung (aus Acetessigsäureäthylester). 2 +  $TiCl_4$  (B. 37, 591).
- $C_{18}H_{27}O_{17}NS$  1) Chondroitinschwefelsäure. K, Cu (B. 25 [2] 473; H. 37, 411 C. 1903 [1] 1146; A. 351, 344 C. 1907 [1] 1589). — IV, 1627.
- $C_{18}H_{28}ONBr_3$  1) Diisoamyl-2,5,6-Tribrom-4-Oxy-3-Methylbenzylamin. Sm. 99 bis 100° (A. 344, 180 C. 1906 [1] 159).  
2) Diisoamyl-2,5,6-Tribrom-3-Oxy-4-Methylbenzylamin. Sm. 81 bis 81,5° (A. 344, 188 C. 1906 [1] 1160).
- $C_{18}H_{28}ON_2S$  1) Äthyläther d. Benzoylimidodiisobutylamidomerkaptomethan (Benzoyldiisobutylthioläthylpseudothioharnstoff). Sd. 234–236°<sub>21</sub> (Am. 26, 413).
- $C_{18}H_{28}ON_5P$  1) Dipropylmonamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 164° (A. 326, 185 C. 1903 [1] 820). — \*IV, 424.
- $C_{18}H_{28}O_2NBr$  1) Aldehyd d. Diisoamyl-5-Brom-4-Oxybenzylamin-3-Carbonsäure. Sm. 72–74° (A. 344, 262 C. 1906 [1] 1609).
- $C_{18}H_{28}O_2NJ$  1) Jodbenzylat d. d-2-Propylhexahydro-1-Pyridylessigsäuremethylester. Sm. 103° (B. 37, 3637 C. 1904 [2] 1510).  
2) isom. Jodbenzylat d. d-2-Propylhexahydro-1-Pyridylessigsäuremethylester. Sm. 146° (B. 37, 3637 C. 1904 [2] 1510).
- $C_{18}H_{28}N_8SP$  1) Dipropylmonamid-Di[Phenylhydrazid] d. Thiophosphorsäure. Sm. 196° (A. 326, 213 C. 1903 [1] 822).
- $C_{18}H_{29}ON_2P$  1) Äthyläther d. 4-Oxyphenyldi[1-Piperidyl]phosphin. Sm. 84° (B. 31, 1047). — \*IV, 1185.
- $C_{18}H_{29}O_6NS_2$  1)  $\alpha\alpha$ -Di[Isoamylsulfon]- $\alpha$ -[3-Nitrophenyl]äthan. Sm. 130–133° (B. 35, 2350 C. 1902 [2] 517).
- $C_{18}H_{29}O_8N_6Br$  1)  $\alpha$ -Bromisocapronylpenta[Amidoacetyl]amidoessigsäure. Sm. 250° u. Zers. (B. 39, 461 C. 1906 [1] 1001).
- $C_{18}H_{30}ONCl$  1) Chlorbenzylat d. N-Propylconhydrin. 2 +  $PtCl_4$  (B. 38, 1292 C. 1905 [1] 1412).
- $C_{18}H_{30}ONJ$  1)  $\alpha$ -Jodbenzylat d. N-Propylconhydrin + 2  $H_2O$ . Sm. 161° (wasserfrei) (B. 38, 1292 C. 1905 [1] 1412).  
2)  $\beta$ -Jodbenzylat d. N-Propylconhydrin. Sm. 180° (B. 38, 1292 C. 1905 [1] 1412).
- $C_{18}H_{30}O_9N_2S$  1) Diäthyläther d.  $\alpha$ -[ $\beta\beta$ -Dioxyäthyl]- $\alpha$ -l-Amyl- $\beta$ -Phenylthioharnstoff. Sm. 38–42° (Ar. 246, 314 C. 1908 [2] 229).
- $C_{18}H_{30}N_2JP$  1) Äthylphenyldi[1-Piperidyl]phosphoniumjodid. Sm. 174° (B. 31, 1044). — IV, 1682; \*IV, 1185.  
2) Methyl-4-Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm. 186° (B. 31, 1046). — IV, 1682.
- $C_{18}H_{31}O_2N_2J$  1) Methylester d. Sparteinjodammoniumessigsäure. Sm. 230° (Ar. 242, 517 C. 1904 [2] 1412).
- $C_{18}H_{31}O_3NS$  1) Methylamid d.  $\epsilon$ -Oxy- $\epsilon$ -Phenyl- $\beta\beta$ -Dimethylnonan- $\epsilon^2$ -Sulfonsäure. Sm. 81–82° (B. 37, 3267 C. 1904 [2] 1031).
- $C_{18}H_{31}O_6N_4Br$  1) l- $\alpha$ -[d- $\alpha$ -Bromisocapronyl]triamidoacetylamidoisocapronsäure. Sm. 182° (A. 365, 177 C. 1909 [1] 1805).
- $C_{18}H_{32}O_2N_2Cl_2$  1) bim. Nitrosochlorid d. 5-Propyl-1,2,3,4-Tetrahydrobenzol. Sm. 104° (A. 360, 58 C. 1908 [1] 2161).  
2) bim. Nitrosochlorid d. Propylidenhexahydrobenzol. Sm. 119° (A. 360, 56 C. 1908 [1] 2161).  
3) bim. Nitrosochlorid d. 1-Methyl-3-Äthylidenhexahydrobenzol (A. 360, 52 C. 1908 [1] 2161).



- $C_{18}H_{32}O_2N_2Cl_2$  4) bim. Nitrosochlorid d. Kohlenw.  $C_9H_{16}$  (aus Fenchylamin). Sm. 115° (A. 369, 84 C. 1909 [2] 2003).
- $C_{18}H_{35}O_2BrJ$  1) Dibromjodstearinsäure (B. 9, 1917). — I, 492.
- $C_{18}H_{34}O_2NCl$  1) Chloräthylat d. Äthylcarpain. 2 +  $PtCl_4$ , +  $AuCl_3$ . — III, 804.
- $C_{18}H_{34}O_2NCl_3$  1)  $\beta\beta$ -Trichlor- $\alpha$ -Oxyäthylamid d. Palmitinsäure. Sm. 110° (D.R.P. 198715 C. 1908 [2] 120).
- $C_{18}H_{34}O_2NJ$  1) Jodäthylat d. Äthylcarpain. — III, 804.
- $C_{18}H_{34}O_3NCl$  1) Chloroximidostearinsäure (Nitrosylechlorid d. Elaidinsäure). Sm. 99 bis 100° (Soc. 65, 329). — \*I, 186.
- $C_{18}H_{34}O_6N_4S_2$  1)  $l\beta\beta'$ -Di[d- $\alpha$ -Amidoisocapronylamidoäthyl]disulfid- $\beta\beta'$ -Dicarbonsäure (B. 42, 1487 C. 1909 [1] 1983).
- 2)  $\beta\beta'$ -Di[ $\alpha$ -Amidoisocapronylamidoäthyl]disulfid- $\beta\beta'$ -Dicarbonsäure (Dileucyleystin). Zers. oberhalb 178° (B. 37, 4580 C. 1905 [1] 224).
- $C_{18}H_{34}O_6Br_2S$  1)  $\theta$ -Dibromheptadekan- $\alpha$ -Carbonsäure- $\lambda$ -Schwefelsäure. Fl. (C. 1909 [1] 1751).
- $C_{18}H_{38}ONCl$  1) Chloramid d. Stearinsäure (Am. 22, 30).
- $C_{18}H_{38}ON_2Cl_2$  1) Bischlormethylat d. Di[ $\gamma$ -1-Piperidylpropyl]äther. +  $PtCl_4$ , + 2  $AuCl_3$  (B. 39, 2885 C. 1906 [2] 1270).
- $C_{18}H_{38}ON_2J_2$  1) Bisjodmethylat d. Di[ $\gamma$ -1-Piperidylpropyl]äther. Sm. 165—168° (B. 39, 2885 C. 1906 [2] 1270).
- $C_{18}H_{35}O_9N_2S$  1) Stearinamidoximschwefligesäure (B. 26, 2845). — \*I, 838.
- $C_{18}H_{35}O_5N_2Cl_2$  1) Oblitin. +  $PtCl_4$ , + 2  $AuCl_3$  (C. 1905 [2] 1550; H. 48, 331 C. 1906 [2] 614; H. 55, 472 C. 1908 [2] 81; H. 56, 417 C. 1908 [2] 809).
- $C_{18}H_{40}O_6N_6Fe$  1) Imidoferrocyanwasserstoffäthyläther. 2HCl (B. 21, 932; siehe auch A. 91, 253). — I, 1488.
- $C_{18}H_{42}ON_3P$  1) Tri[Dipropylamid] d. Phosphorsäure. Fl. (A. 326, 200 C. 1903 [1] 821).
- $C_{18}H_{42}O_6N_3P_3$  1) trim. Phosphinodipropylamin. Sd. 204°<sub>10</sub> (A. 326, 192 C. 1903 [1] 820).
- $C_{18}H_{42}O_9Cl_3P$  1) Verbindung (aus Acetaldehyd). Fl. (B. 21, 330). — I, 921.
- $C_{18}H_{45}O_9Br_3P$  1) Verbindung (aus Acetaldehyd). Fl. (B. 21, 331). — I, 921.

### $C_{18}$ -Gruppe mit fünf Elementen.

- $C_{18}H_6ON_2Cl_2Br_2$  1) Dichlordibromphthaloperinon. Sm. 224° (A. 365, 128 C. 1909 [1] 1414).
- $C_{18}H_9O_2N_2Br_6S_2$  1) Verbindung (aus Oktobrom-p-Tetroliditoly) (B. 14, 936, 2093). — IV, 1035.
- $C_{18}H_9O_6N_3Cl_3As$  1) Tri[p-Chlor-p-Nitrophenyl]arsin. Sm. 252° (A. 321, 182 C. 1902 [2] 45). — \*IV, 1190.
- $C_{18}H_9O_6N_3Cl_3As$  1) Tri[p-Chlor-p-Nitrophenyl]arsindichlorid. Sm. 228° (A. 321, 181 C. 1902 [2] 45). — \*IV, 1190.
- $C_{18}H_9O_6N_3Cl_3As$  1) Tri[p-Chlor-p-Nitrophenyl]arsinoxyd. Sm. 257° (A. 321, 182 C. 1902 [2] 45). — \*IV, 1190.
- $C_{18}H_{11}O_2NBr_2J_2$  1) Dibromdijod-1,4-Benzochinon + Diphenylamin (B. 38, 556 C. 1905 [1] 735).
- $C_{18}H_{12}ON_3BrS$  1) 5-[2-Naphtyl]amido-2-Keto-3-[4-Bromphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 254° (B. 32, 1086). — \*IV, 448.
- 2) 3-Merkapto-5-Keto-4-[2-Naphtyl]-1-[4-Bromphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 278° (B. 32, 1086). — \*IV, 448.
- $C_{18}H_{12}ON_3Br_6P$  1) Tri[p-Dibrom-4-Amidophenyl]phosphinoxyd. Sm. 205—206° u. Zers. (A. 229, 333). — IV, 1660.
- 2) Orthophosphorsäurehexabromtrianilid. Sm. 252—253° (A. 229, 338). — II, 357.
- $C_{18}H_{12}O_3Cl_3SP$  1) Tri[4-Chlorphenylester] d. Thiophosphorsäure. Sm. 113—114° (B. 31, 1108). — \*II, 370.
- $C_{18}H_{12}O_3Cl_3PSe$  1) Tri[4-Chlorphenylester] d. Selenphosphorsäure. Sm. 88° (B. 31, 1055). — \*II, 370.
- $C_{18}H_{12}O_5N_2ClJ$  1) 2,4-Dinitrophenyläther d. 4-Oxydiphenyljodoniumchlorid. Sm. 178°. +  $HgCl_2$ , 2 +  $PtCl_4$  (B. 42, 3766 C. 1909 [2] 1743).

- $C_{18}H_{12}O_5N_2BrJ$  1) 2,4-Dinitrophenyläther d. 4-Oxydiphenyljodoniumbromid. Sm. 183° (B. 42, 3766 C. 1909 [2] 1743).
- $C_{18}H_{12}O_5N_2ClS$  1) S-[p-Oxychlorphenylat] d. 3,9-Dinitrophenothiazin ( $\alpha$ -Chlorid). 2 +  $PtCl_4$  (Soc. 93, 1693 C. 1908 [2] 2015).  
2) isom. S-[p-Oxychlorphenylat] d. 3,9-Dinitrophenothiazin ( $\beta$ -Chlorid) (Soc. 93, 1693 C. 1908 [2] 2015).  
3) S-[p-Oxyphenylat] d. p-Dinitrophenothiazin +  $H_2O$  (Soc. 93, 1698 C. 1908 [2] 2016).
- $C_{18}H_{12}O_6N_2Br_2As$  1) Tri[p-Nitrophenyl]arsindibromid. Sm. 204° (A. 321, 181 C. 1902 [2] 45). — \*IV, 1190.
- $C_{18}H_{12}O_7N_6Cl_3P$  1) Tri[4-Chlor-p-Nitrophenylamid] d. Phosphorsäure. Sm. 249° (B. 28, 620). — \*II, 165.
- $C_{18}H_{12}O_8N_2Cl_2S_2$  1) 3,6-Dichlor-2,5-Di[Phenylamido]-1,4-Benzochinon-2',5'-Disulfonsäure. K<sub>2</sub> (Bl. [3] 19, 576). — \*III, 261.
- $C_{18}H_{13}O_2N_2Cl_4P$  1) Di[2,4-Dichlorphenylamid] d. Phenylphosphorsäure. Sm. 227° (B. 29, 724). — \*II, 358.
- $C_{18}H_{13}O_3N_2ClS$  1) Benzolsulfonat d. 2-Chlor-4'-Oxyazobenzol. Sm. 74° (B. 28, 800). — IV, 1408.  
2) Benzolsulfonat d. 3-Chlor-4'-Oxyazobenzol. Sm. 97° (B. 28, 802). — IV, 1409.
- $C_{18}H_{13}O_3N_2BrS$  1) Benzolsulfonat d. 2-Brom-4'-Oxyazobenzol. Sm. 69° (B. 31, 2116). — IV, 1409.  
2) Benzolsulfonat d. 3-Brom-4'-Oxyazobenzol. Sm. 95° (B. 28, 803). — IV, 1409.  
3) Benzolsulfonat d. 4-Brom-4'-Oxyazobenzol. Sm. 136° (B. 31, 2117). — IV, 1410.
- $C_{18}H_{13}O_4N_2Cl_2Bi$  1) Phenylidi[p-Nitrophenyl]wismutdichlorid. Sm. 136° (B. 30, 2846).
- $C_{18}H_{13}O_{16}N_3S_3Si$  1) Siliciumtri[p-Nitrophenyl]hydroxyd-p-Trisulfonsäure. Ba<sub>3</sub> (B. 40, 2276 C. 1907 [2] 322).
- $C_{18}H_{14}ONClS$  1) 4-Chlorphenylamid d. 4-Oxynaphtalinmethyläther-1-Thio-carbonsäure. Sm. 205–206° (J. pr. [2] 59, 589). — \*II, 988.
- $C_{18}H_{14}ONBrS$  1) 3-Bromphenylamid d. 4-Oxynaphtalinmethyläther-1-Thio-carbonsäure. Sm. 149–150° (J. pr. [2] 59, 590). — \*II, 988.
- $C_{18}H_{14}ON_3ClS$  1) S-[p-Oxyphenyl]thioninchlorid (Soc. 93, 1696 C. 1908 [2] 2016).  
2) S-[p-Oxyphenyl]isothioninchlorid (Soc. 93, 1699 C. 1908 [2] 2016).
- $C_{18}H_{14}O_2N_3ClS$  1) 4-Phenylsulfonamidobiphenyl-4'-Diazochlorid. Sm. 121–122° u. Zers. (Soc. 91, 1509 C. 1907 [2] 1518).
- $C_{18}H_{14}O_2N_3BrS$  1) 4-Phenylsulfonamidobiphenyl-4'-Diazobromid. Sm. 124° u. Zers. (Soc. 91, 1509 C. 1907 [2] 1518).
- $C_{18}H_{14}O_3NCl_2P$  1) 2,4-Dichlorphenylmonamid d. Phosphorsäurediphenylester. Sm. 132° (A. 326, 229 C. 1903 [1] 867).
- $C_{18}H_{14}O_3NBr_2P$  1) 2,4-Dibromphenylmonamid d. Phosphorsäurediphenylester. Sm. 141° (A. 326, 236 C. 1903 [1] 867).
- $C_{18}H_{14}O_4N_2Cl_2S_2$  1) Di[Phenylchloramid] d. Benzol-1,3-Disulfonsäure. Sm. 124° (Soc. 85, 1187 C. 1904 [2] 1115).
- $C_{18}H_{14}O_5N_2ClBr$  1) Methyl ester d. Verb.  $C_{17}H_{12}O_5N_2ClBr$  (Bl. [3] 15, 407).
- $C_{18}H_{15}ON_2BrS$  1) Benzoat d. 4-Brom-5-Merkapto-3-Methyl-1-[4-Methylphenyl]-pyrazol. Sm. 104° (A. 361, 297 C. 1908 [2] 522).
- $C_{18}H_{15}ON_3Cl_3P$  1) Tri[4-Chlorphenylamid] d. Phosphorsäure. Sm. 230° (248 bis 250°) (B. 28, 620; 33, 2108). — \*II, 165.
- $C_{18}H_{15}O_3NClP$  1) 4-Chlorphenylmonamid d. Phosphorsäurediphenylester. Sm. 117° (B. 28, 618). — \*II, 358.
- $C_{18}H_{15}O_3NBrP$  1) 4-Bromphenylmonamid d. Phosphorsäurediphenylester. Sm. 112° (A. 326, 232 C. 1903 [1] 867).
- $C_{18}H_{15}O_4N_2BrS_2$  1) Di[Phenylamid] d. 4-Brombenzol-1,2-Disulfonsäure. Sm. 182° (C. 1900 [2] 371). — \*II, 223.
- $C_{18}H_{16}ON_2ClJ$  1) Jodmethylat d. 5-Chlor-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 166° (B. 41, 2673 C. 1908 [2] 1364).
- $C_{18}H_{16}ON_3Br_2P$  1) Phenylamiddi[3-Bromphenylamid] d. Phosphorsäure. Sm. 165° (B. 29, 723). — \*II, 165.  
2) Di[Phenylamid]-2,4-Dibromphenylamid d. Phosphorsäure. Sm. 228° (A. 326, 236 C. 1903 [1] 867).

- $C_{18}H_{16}O_2NSP$  1) Phenylmonamid d. Thiophosphorsäurediphenylester. Sm. 92° (B. 31, 1102). — \*II, 359.
- $C_{18}H_{16}O_2N_2ClP$  1) Di[Phenylamid] d. Phosphorsäuremono-4-Chlorphenylester. Sm. 167—168° (A. 326, 249 C. 1903 [1] 868).
- $C_{18}H_{16}O_{16}N_2Br_2S_2$  1) Dibromäscorcorinsulfonsäure. Na<sub>6</sub> (B. 34, 2614).
- $C_{18}H_{17}ON_2ClS$  1) Benzoat d. 3-Merkapto-3-Methyl-1-Phenylpyrazol-2-Chlor-methylat. Sm. 100° (A. 320, 16 C. 1902 [1] 665). — \*IV, 331.
- 2) Benzoat d. 3-Merkapto-5-Methyl-1-Phenylpyrazol-2-Chlor-methylat. Sm. 83° (A. 338, 296 C. 1905 [1] 1161).
- $C_{18}H_{17}ON_2JS$  1) Benzoat d. 3-Merkapto-5-Methyl-1-Phenylpyrazol-2-Jod-methylat. Sm. 163° (A. 338, 297 C. 1905 [1] 1161).
- $C_{18}H_{17}ON_2SP$  1) Di[Phenylamid] d. Thiophosphorsäuremonophenylester. Sm. 126° (B. 31, 1104). — \*II, 359.
- $C_{18}H_{17}ON_3ClP$  1) Di[Phenylamid]-4-Chlorphenylamid d. Phosphorsäure. Sm. 115° (B. 28, 620).
- $C_{18}H_{15}O_2N_2Br_2S_2$  1) 4-Bromphenylthiourethansulfid. Sm. 86—87° (B. 26, 2371). — II, 385.
- $C_{18}H_{18}O_3NBrS$  1) Äthylester d.  $\alpha$ -Benzoylamido- $\alpha$ -Merkaptopropion-4-Brom-phenyläthersäure. Sm. 104° (H. 20, 439). — \*II, 748.
- 2) Verbindung (aus 6-Bromchinolin u. 1-Methylbenzol-4-Sulfonsäure-äthylester). Fl. (C. 1906 [1] 1857).
- $C_{18}H_{19}ON_4SP$  1) Di[Phenylhydrazid] d. Thiophosphorsäuremonophenylester. Sm. 136° (B. 31, 1104). — \*IV, 424.
- $C_{18}H_{19}O_2NClBr$  1) Base (aus Bromcodein). Sm. 131°. HCl, (2HCl, PtCl<sub>4</sub>) (A. 210, 113). — III, 907.
- $C_{18}H_{21}ONBr_3J$  1) Jodmethylat d. 2,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 172—173° u. Zers. (A. 334, 325 C. 1904 [2] 988).
- $C_{18}H_{21}O_2NClJ$  1) Jodmethylat d.  $\alpha$ -Chloromorphid. Sm. 207° (B. 39, 3132 C. 1906 [2] 1334).
- 2) Jodmethylat d.  $\beta$ -Chloromorphid. Sm. 210° (B. 40, 4284 C. 1907 [2] 1851).
- $C_{18}H_{21}O_2NBrJ$  1) Jodmethylat d. Bromomorphid. Sm. 200° (B. 39, 3132 C. 1906 [2] 1334).
- $C_{18}H_{21}O_3NBrJ$  1) Jodmethylat d. Brommorphin + H<sub>2</sub>O. Sm. 252° (A. 297, 211). — \*III, 669.
- $C_{18}H_{22}ONClBr_2$  1) Chlormethylat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 225—226° (A. 334, 292 C. 1904 [2] 984).
- $C_{18}H_{22}ONBr_2J$  1) Jodmethylat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 190—191° (174—175°) (B. 29, 1124; A. 334, 292 C. 1904 [2] 984). — \*II, 455.
- 2) Jodmethylat d. 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 193—196° u. Zers. (A. 334, 321 C. 1904 [2] 987).
- $C_{18}H_{22}O_2N_2S_1As_2$  1) Verbindung (aus Thiolessigsäure) (G. 27 [2] 164).
- $C_{18}H_{28}O_7N_6ClBr$  1) Chlorid d.  $\alpha$ -Bromisocapronylpenta[Amidoacetyl]amidoessigsäure (B. 39, 2898 C. 1906 [2] 1398).
- $C_{18}H_{30}O_6N_2Br_2S_2$  1) 1- $\beta\beta'$ -Di[d- $\alpha$ -Bromisocapronylamidoäthyl]disulfid- $\beta\beta'$ -Dicarbonsäure. Sm. 121—123° u. Zers. (B. 42, 1486 C. 1909 [1] 1983).
- 2)  $\beta\beta'$ -Di[ $\alpha$ -Bromisocapronylamidoäthyl]disulfid- $\beta\beta'$ -Dicarbonsäure (Di- $\alpha$ -Bromisocapronylcystin). Sm. 120—135° (B. 37, 4580 C. 1905 [1] 224).
- $C_{18}H_{33}O_2NCl_3Br$  1)  $\beta\beta\beta$ -Trichlor- $\alpha$ -Oxyäthylamid d.  $\alpha$ -Brompalmitinsäure (D.R.P. 198715 C. 1908 [2] 120).
- $C_{18}H_{42}O_6N_6Cl_2Fe$  1) Verbindung (aus Ferrocyanwasserstoff, HCl u. Äthylalkohol) (B. 35, 1203 C. 1902 [1] 997).

### $C_{18}$ -Gruppe mit sechs Elementen.

- $C_{18}H_9O_6N_8Cl_3Br_2As$  1) Tri[p-Chlor-p-Nitrophenyl]arsindibromid. Sm. 209° (A. 321, 182 C. 1902 [2] 45). — \*IV, 1190.
- $C_{18}H_{12}ON_8Cl_3Br_3P$  1) Tri[4-Chlor-p-Bromphenylamid] d. Phosphorsäure. Sm. 236° (B. 28, 620). — \*II, 165.



**C<sub>19</sub>-Gruppe mit einem Element.**

- C<sub>19</sub>H<sub>14</sub>** C 94,2 — H 5,8 — M. G. 242.  
 1) **9-Phenylfluoren** (Biphenylenphenylmethan). Sm. 145,5° (146—148°) (A. 194, 258; B. 5, 910, 971; 7, 1208; 11, 202, 613, 837; 14, 1522; 25, 2121, 3586; J. r. 11, 259; B. 37, 74 C. 1904 [1] 518; B. 37, 2897 C. 1904 [2] 1310; B. 38, 287 C. 1905 [1] 616). — II, 293.  
 2) **Phenylendiphenylmethan**. Sm. 148,5° (Bl. [3] 1, 775). — II, 293.
- C<sub>19</sub>H<sub>16</sub>** C 93,4 — H 6,6 — M. G. 244.  
 1) **Triphenylmethan**. Sm. 92°; Sd. 358—359°<sub>754</sub>. + C<sub>6</sub>H<sub>6</sub> (Sm. 78,2°), + Anilin, + o-Toluidin. Lit. bedeutend. — II, 286; \*II, 127.  
 2) **2-Benzyl-1-Phenylbenzol**. Sm. 54°; Sd. 283—287°<sub>650</sub> (M. 2, 440). — II, 288.  
 3) **4-Benzyl-1-Phenylbenzol**. Sm. 85°; Sd. 285—286°<sub>650</sub> (M. 2, 435). — II, 288.  
 4) **2-Benzylacenaphten**. Sm. 112—113°; Sd. 340—345° (Bl. [3] 31, 375 C. 1904 [1] 1271; Bl. [3] 31, 924 C. 1904 [2] 778).
- C<sub>19</sub>H<sub>18</sub>** C 92,7 — H 7,3 — M. G. 246.  
 1) **αζ-Diphenyl-β-Methyl-αγε-Hexatriën**. Sm. 115—116° (B. 38, 691 C. 1905 [1] 725).  
 2) **γζ-Diphenyl-β-Methyl-αγε-Hexatriën**. Sm. 97—98°; Sd. 140—150°<sub>25</sub> (Am. 40, 443 C. 1909 [1] 73).  
 3) **Kohlenwasserstoff** (aus d. Verb. C<sub>19</sub>H<sub>14</sub>O). Sm. 92° (B. 14, 462; A. 212, 100; B. 41, 1426 C. 1908 [1] 2041). — II, 282.
- C<sub>19</sub>H<sub>20</sub>** C 91,9 — H 8,1 — M. G. 248.  
 1) **Diphenylmethylenhexahydrobenzol**. Sm. 84° (B. 40, 4166 C. 1907 [2] 1844).  
 2) **9-Isoamylanthracen**. Sm. 59° (Pikrat Sm. 115°) (B. 14, 796, 802; A. 212, 104). — II, 277.
- C<sub>19</sub>H<sub>22</sub>** C 91,2 — H 8,8 — M. G. 250.  
 1) **αα-Diphenyl-α-Hepten**. Fl. (B. 37, 1454 C. 1904 [1] 1353).  
 2) **9-Isoamyl-9,10-Dihydroanthracen**. Sd. 350° u. Zers. (B. 13, 1600; 14, 457; A. 212, 79). — II, 254.
- C<sub>19</sub>H<sub>24</sub>** C 90,5 — H 9,5 — M. G. 252.  
 1) **αα-Diphenylheptan**. Sm. 14°; Sd. 190—192°<sub>19</sub> (333—334°) (Bl. 47, 49; B. 37, 1454 C. 1904 [1] 1353). — II, 242.  
 2) **Di[2,4,6-Trimethylphenyl]methan**. Sm. 130° (B. 5, 1098). — II, 242.  
 3) **Kohlenwasserstoff** (aus Xylol u. Allylalkohol). Fl. (B. 24, 2749). — II, 242.
- C<sub>19</sub>H<sub>26</sub>** C 89,1 — H 10,9 — M. G. 256.  
 1) **Abiëtin**. Sd. 200—202°<sub>17</sub> (B. 32, 2953, 3614; B. 39, 3045 C. 1906 [2] 1326; B. 40, 3658 C. 1907 [2] 1621).  
 2) **Kohlenwasserstoff** (aus Cholesterylchlorid). Sd. 355—370° (M. 17, 43; M. 24, 661 C. 1903 [2] 1236). — \*II, 94.
- C<sub>19</sub>H<sub>30</sub>** C 88,4 — H 11,6 — M. G. 258.  
 1) **Colophen**. Sd. 210—211°<sub>26,5</sub> (B. 39, 3045 C. 1906 [2] 1326).
- C<sub>19</sub>H<sub>34</sub>** C 87,0 — H 13,0 — M. G. 262.  
 1) **Tri[Hexahydrophenyl]methan**. Sd. 140°<sub>20</sub> (C. r. 147, 1057 C. 1909 [1] 173).
- C<sub>19</sub>H<sub>36</sub>** C 86,4 — H 13,6 — M. G. 264.  
 1) **Kohlenwasserstoff** (aus Petroleum). Sd. 198—202°<sub>30</sub> (Am. 33, 258 C. 1905 [1] 1349).  
 2) **Kohlenwasserstoff** (aus Petroleum). Sd. 195—200°<sub>35</sub> (C. 1900 [2] 761).  
 3) **Kohlenwasserstoff** (aus Petroleum) (C. 1904 [1] 409).
- C<sub>19</sub>H<sub>38</sub>** C 85,7 — H 14,3 — M. G. 266.  
 1) **Kohlenwasserstoff** (aus Petroleum). Sd. 210—212°<sub>50</sub> (Am. 28, 182 C. 1902 [2] 1081).
- C<sub>19</sub>H<sub>40</sub>** C 85,1 — H 14,9 — M. G. 268.  
 1) **norm. Nonadekan**. Sm. 32° (33—34°); Sd. 330° (111°) (B. 15, 1704; 21, 2261; 29, 1323; B. 15, 57; C. 1900 [2] 452; Am. 28, 181 C. 1902 [2] 1081; B. 40, 4783 C. 1908 [1] 343; B. 40, 4787 C. 1908 [1] 451). — I, 106; \*I, 14.

**C<sub>19</sub>-Gruppe mit zwei Elementen.**

- C<sub>19</sub>H<sub>8</sub>O<sub>4</sub>** C 76,0 — H 2,7 — O 21,3 — M. G. 300.  
 1) Verbindung (aus Diphenylmethan- $\alpha$ ??-Tricarbonsäure). Sm. 260—261° (A. 242, 237). — II, 2025.
- C<sub>19</sub>H<sub>10</sub>O<sub>4</sub>** C 75,5 — H 3,3 — O 21,2 — M. G. 302.  
 1) 2,2'-Methenylbisindandion. Sm. 303° (G. 32 [2] 330 C. 1903 [1] 586; G. 33 [1] 421 C. 1903 [2] 421; J. pr. [2] 74, 441 C. 1907 [1] 229).  
 2) Anhydrid d. 3-Benzoylnaphtalin-1,8-Dicarbonsäure. Sm. 196° (Bl. [3] 31, 379 C. 1904 [1] 1271; Bl. [3] 31, 924 C. 1904 [2] 778; Bl. [3] 31, 929 C. 1904 [2] 779).  
 3) Anhydrid d. 4-Benzoylnaphtalin-1,8-Dicarbonsäure. Sm. 195° (A. 327, 98 C. 1903 [1] 1228).
- C<sub>19</sub>H<sub>10</sub>O<sub>5</sub>** C 71,7 — H 3,1 — O 25,2 — M. G. 318.  
 1) 3,3'-Di[1,2-Benzpyron]keton (Dicumarinketon). Sm. 236° (B. 37, 4493 C. 1905 [1] 250).  
 2) 1-Keto-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]inden-3-Carbonsäure. Sm. 242° (B. 35, 3959 C. 1903 [1] 32).  
 C 68,3 — H 3,0 — O 28,7 — M. G. 334.
- C<sub>19</sub>H<sub>10</sub>O<sub>6</sub>** 1) Verbindung (aus d. Säure C<sub>20</sub>H<sub>14</sub>O<sub>8</sub>). Sm. 162—163° (B. 21, 1616). — II, 2087.  
 2) Verbindung (aus d. Trilakton C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>). Sm. 261—263° (B. 40, 4239 C. 1907 [2] 1843).  
 C 59,7 — H 2,6 — O 37,7 — M. G. 382.
- C<sub>19</sub>H<sub>10</sub>O<sub>9</sub>** 1) Pentamethylgallotanninsäure? Sm. 95—98° (C. 1905 [2] 42).
- C<sub>19</sub>H<sub>11</sub>N** C 90,1 — H 4,3 — N 5,5 — M. G. 253.  
 1) Pyrenolin. Sm. 152—153°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> +  $\frac{1}{2}$ H<sub>2</sub>O, Pikrat (M. 8, 443). — IV, 472.  
 2) meso-Phenylcarbazokridin. Sm. 186,5° (G. 20, 407). — IV, 472.
- C<sub>19</sub>H<sub>11</sub>N<sub>3</sub>** C 81,1 — H 3,9 — N 14,9 — M. G. 281.  
 1) 6,6-N-CH-5,5-Dichinakridin. Sm. 303°. 2HNO<sub>3</sub>, Pikrat, Benzoat, Salicylat (Soc. 95, 1629 C. 1909 [2] 2178).
- C<sub>19</sub>H<sub>11</sub>Br<sub>3</sub>** 1) 2-Tribrom-9-Phenylfluoren (Tribrombiphenylenphenylmethan). Sm. 167 bis 171° (B. 5, 971). — II, 293.
- C<sub>19</sub>H<sub>12</sub>O** C 89,1 — H 4,7 — O 6,2 — M. G. 256.  
 1) 7-Keto-8-Benzylidenacenaphten. Sm. 107° (A. 290, 204). — III, 260.  
 C 83,8 — H 4,4 — O 11,8 — M. G. 272.
- C<sub>19</sub>H<sub>12</sub>O<sub>2</sub>** 1) 3-Benzoyldiphenylenoxyd. Sm. 167—168° (B. 41, 1944 C. 1908 [2] 173).  
 2) Phenylfluoron. Sm. 204° (B. 41, 3444 C. 1908 [2] 1779).  
 3) 2-Phenyl-1,4- $\alpha$ -Naphtopyron ( $\alpha$ -Naphtoflavon). Sm. 154—156° (B. 31, 707; B. 39, 1652 C. 1906 [2] 57). — \*III, 582.  
 4) 2-Phenyl-3,4- $\beta$ -Naphtopyron ( $\alpha$ -Phenyl- $\beta$ -Naphtocumarin). Sm. 142° (B. 36, 1971 C. 1903 [2] 377).  
 5) Lakton d. 1-[ $\alpha$ -Oxy- $\beta$ -[2-Naphtyl]äthenyl]benzol-2-Carbonsäure ( $\beta$ -Naphtylmethylenphtalid). Sm. 170—171° (B. 29, 2375). — \*II, 1019.  
 C 79,2 — H 4,1 — O 16,7 — M. G. 288.
- C<sub>19</sub>H<sub>12</sub>O<sub>3</sub>** 1) Methyläther d. Anhydrobisdiketodihydroinden. Sm. 196° (B. 34, 3271). — \*III, 214.  
 2) Oxyphenylfluoron (B. 41, 3445 C. 1908 [2] 1779).  
 3) Resorcinbenzein, siehe C<sub>18</sub>H<sub>10</sub>O<sub>9</sub>.  
 4) 2-[4-Oxyphenyl]-1,4- $\alpha$ -Naphtopyron. Sm. 315—316° (B. 32, 1036). — \*III, 582.  
 5) 3-Oxy-2-Phenyl-1,4- $\alpha$ -Naphtopyron (Naphtoflavanol). Sm. 210° (B. 39, 1652 C. 1906 [2] 56).  
 6) Anhydrid d. 2-Benzoylnaphtalin-4,5-Dicarbonsäure. Sm. 175° (Bl. [3] 31, 378 C. 1904 [1] 1271; Bl. [3] 31, 924 C. 1904 [2] 778).
- C<sub>19</sub>H<sub>12</sub>O<sub>4</sub>** C 75,0 — H 3,9 — O 21,1 — M. G. 304.  
 1) 2-Keto-1-[3,4-Dioxybenzyliden]- $\alpha$ -Naphtofuran. Sm. 240° u. Zers. (B. 30, 1469). — \*III, 537.  
 2) 2-Methyläther d. 2,6[oder 2,11]-Dioxy-5,12-Naphtacenchinon. Sm. 250° (Soc. 91, 423 C. 1907 [1] 1420).

- C<sub>19</sub>H<sub>12</sub>O<sub>4</sub>**
- 3) 10-Methyläther d. 6,10-Dioxy-5,12-Naphtacenchinon (*Soc.* 91, 425 *C.* 1907 [1] 1421).
  - 4) 3-Oxy-2-[3-Oxyphenyl]-1,4- $\alpha$ -Naphtopyron. Sm. 248° + C<sub>2</sub>H<sub>6</sub>O (*B.* 41, 786 *C.* 1908 [1] 1552).
  - 5) 3-Oxy-2-[4-Oxyphenyl]-1,4- $\alpha$ -Naphtopyron. Sm. 293° (*B.* 41, 784 *C.* 1908 [1] 1552).
  - 6)  $\alpha$ ,2- $\delta$ ,2'-Dilakton d.  $\alpha\delta$ -Dioxy- $\alpha\delta$ -Diphenyl- $\gamma$ -Methyl- $\alpha\gamma$ -Butadien-2,2'-Dicarbonsäure (Propindiphtalid). Sm. noch nicht bei 280° (*B.* 17, 2776). — II, 2035.
  - 7) Acetat d.  $\alpha$ -Oxy- $\alpha$ -Phenonaphtoxanthon. Sm. 216° (*B.* 25, 1646). — III, 256.
  - 8) Acetat d.  $\beta$ -Oxy- $\beta$ -Phenonaphtoxanthon. Sm. 206° (*B.* 25, 1647). — III, 256.
  - 9) Monopyromukat d. 9,10-Dioxyphenanthren. Sm. 193° (*C.* 1907 [1] 1587).
  - 10) Verbindung (aus 1,2,3-Trioxybenzol) (*B.* 26, 1140). — II, 1044.
  - 11) Verbindung (aus d. Verb. C<sub>19</sub>H<sub>14</sub>O aus Isoamyloxanthranol). Sm. 157° (*A.* 212, 98). — III, 244.
  - 12) Verbindung (aus Allo- $\alpha$ -Brom- $\beta$ -Phenylakrylsäure). Sm. oberhalb 260° (*B.* 15, 18). — II, 1412.
- C<sub>19</sub>H<sub>12</sub>O<sub>5</sub>**
- C 71,2 — H 3,7 — O 25,0 — M. G. 320.
  - 1) Methyläther d. 2-Oxy-2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm. bei 230°. Na +  $\frac{1}{2}$  H<sub>2</sub>O, Ag (*B.* 31, 1172). — \*III, 248.
  - 2) 3-Oxy-2-[3,4-Dioxyphenyl]-1,4- $\alpha$ -Naphtopyron. Sm. 286° (*B.* 39, 4036 *C.* 1907 [1] 266).
  - 3) 2,3,7-Trioxy-9-Phenylfluoron. Sm. noch nicht bei 300°. H<sub>2</sub>SO<sub>4</sub> (*B.* 37, 1173 *C.* 1904 [1] 1161).
  - 4) Acetat d. 3-Oxy-1-Methylbrasanchinon. Sm. 278° (*B.* 42, 823 *C.* 1909 [1] 1162).
  - 5) Verbindung (aus 1,2,3-Trioxybenzol u. Benzaldehyd) (*B.* 26, 1144). — II, 1044.
- C<sub>19</sub>H<sub>12</sub>O<sub>6</sub>**
- C 67,8 — H 3,6 — O 28,6 — M. G. 336.
  - 1) Monomethyläther d. 9,10-Dioxy-5,12-Naphtacenchinon. Sm. 260° (*Soc.* 91, 1592 *C.* 1907 [2] 1628).
  - 2) Di[4-Oxy-1,2-Benzpyron-3]-methan (Methylenbis- $\beta$ -Oxycumarin). Sm. 260° u. Zers. (*B.* 36, 465 *C.* 1903 [1] 636; *A.* 367, 212 *C.* 1909 [2] 705).
  - 3) 2,3,7-Trioxy-9-[2-Oxyphenyl]fluoron (*B.* 37, 2734 *C.* 1904 [2] 542).
  - 4) 2,3,7-Trioxy-9-[4-Oxyphenyl]fluoron (*B.* 37, 2733 *C.* 1904 [2] 542).
  - 5) Anhydrolinarphenol. Sm. 267—268° (*C. r.* 145, 333; *Bl.* [4] 3, 870 *C.* 1908 [2] 1048).
  - 6)  $\gamma$ -Keto- $\gamma$ -[3-Cumaryl]- $\alpha$ -[2-Oxyphenyl]propen- $\beta$ -Carbonsäure (Cumarinketocumarsäure). Sm. 259—260° (*B.* 37, 4494 *C.* 1905 [1] 250).
  - 7) Verbindung (aus Resorcin u. Oxalsäure) (*C.* 1899 [1] 254). — \*II, 571.
- C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>**
- C 64,8 — H 3,4 — O 31,8 — M. G. 352.
  - 1) 2,3,7-Trioxy-9-[3,4-Dioxyphenyl]fluoron. Sm. oberhalb 300°. H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (*B.* 37, 2732 *C.* 1904 [2] 541).
  - 2) Trilakton (aus d. Verb. C<sub>19</sub>H<sub>13</sub>O<sub>6</sub>N). Sm. 245° (*B.* 40, 4234 *C.* 1907 [2] 1842).
  - 3) Isotrilakton (aus d.  $\alpha$ -Laktonsäure C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>). Sm. 191—194° (*B.* 40, 4235 *C.* 1907 [2] 1842).
- C<sub>19</sub>H<sub>12</sub>O<sub>8</sub>**
- C 62,0 — H 3,2 — O 34,8 — M. G. 368.
  - 1) 2,5-Diacetoxyl-9,10-Anthrachinon-1-Carbonsäure (Diacetat d. Rhein). Sm. 236° (240°; 245°) (*C.* 1903 [1] 297; *Ar.* 240, 611 *C.* 1903 [1] 176; *C.* 1904 [1] 1077; *Soc.* 95, 1090 *C.* 1909 [2] 623).
- C<sub>19</sub>H<sub>12</sub>O<sub>10</sub>**
- C 57,0 — H 3,0 — O 40,0 — M. G. 400.
  - 1)  $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan- $\beta,\beta,2,2'$ -Tetracarbonsäure. K<sub>4</sub> (*B.* 20, 1012). — II, 2100.
  - 2) Diacetyllellagmethyläthersäure (*M.* 26, 1145 *C.* 1905 [2] 1589).
  - 3) Verbindung (aus Kosoextrakt) = (C<sub>19</sub>H<sub>12</sub>O<sub>10</sub>)<sub>x</sub> (*Ar.* 239, 695 *C.* 1902 [1] 269). — \*III, 466.
- C<sub>19</sub>H<sub>12</sub>Cl<sub>4</sub>**
- 1)  $\alpha,2,4,4''$ -Tetrachlortriphenylmethan. Sm. 153° (*B.* 39, 3280 *C.* 1906 [2] 1612).
  - 2)  $\alpha,4,4,4''$ -Tetrachlortriphenylmethan. Sm. 146—148° (112°). + SnCl<sub>4</sub> (*B.* 37, 1635 *C.* 1904 [1] 1649; *B.* 38, 587 *C.* 1905 [1] 823; *B.* 38, 1162 *C.* 1905 [1] 1247).



- C<sub>19</sub>H<sub>12</sub>Br<sub>2</sub>** 1) **9-Dibrom-9-Phenylfluoren** (Dibrombiphenylenphenylmethan). Sm. 181 bis 182° (*B.* 5, 971). — II, 293.
- C<sub>18</sub>H<sub>12</sub>Br<sub>4</sub>** 1) **9-Tetrabromtriphenylmethan** (*B.* 14, 1521). — II, 288.
- C<sub>19</sub>H<sub>13</sub>N** 1) **α-Di-o-Benzylenpyridin**. Sm. 205°. Pikrat (*G.* 33 [1] 426 *C.* 1903 [2] 951).
- 2) **2-[2-Naphtyl]chinolin**. Sm. 161° (*B.* 25, 1755). — IV, 467.
- 3) **5-Phenylakridin**. Sm. 181° (181–183°); Sd. 403–404°. HCl, (2HCl, PtCl<sub>4</sub>), Nitrat, Chromat, Pikrat +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub>, 2 + AgNO<sub>3</sub>, + C<sub>6</sub>H<sub>6</sub> (*A.* 192, 19; 224, 13, 28; 226, 184; 309, 378; *B.* 15, 3011; 17, 1596; 18, 2712; 20, 1552; 35, 3077; *J. pr.* [2] 48, 222; *B.* 37, 3200 *C.* 1904 [2] 1472; *B.* 39, 977 *C.* 1906 [1] 1357). — IV, 467; \*IV, 284.
- 4) **2-Phenyl-α-Naphtochinolin**. Sm. 68°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*A.* 249, 115). — IV, 466.
- 5) **2-Phenyl-β-Naphtochinolin** + 2H<sub>2</sub>O. Sm. 111° (*B.* 42, 4082 *C.* 1909 [2] 2176).
- 6) **3-Phenyl-β-Naphtochinolin**. Sm. 188° (189°); Sd. oberhalb 360°. HCl, (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat, 2-Trichloracetat (*A.* 249, 133; *C. r.* 139, 298 *C.* 1904 [2] 714; *C. r.* 143, 430 *C.* 1906 [2] 1505; *C. r.* 143, 467 *C.* 1906 [2] 1679; *C.* 1908 [1] 1465). — IV, 466.
- 7) **9-Phenylphenanthridin**. Sm. 109°; Sd. oberhalb 400°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Pikrat (*B.* 29, 1187). — IV, 468.
- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>** C 80,6 — H 4,6 — N 14,8 — M. G. 283.
- 1) **Laktim d. 2-[2-Acetylamidophenyl]-peri-Naphtimidazol**. Sm. 139 bis 141° (*B.* 42, 3681 *C.* 1909 [2] 1664).
- 2) **Nitril d. 2,6-Diphenyl-1,4-Dihydropyridin-3,5-Dicarbonsäure**. Sm. 228° (*J. pr.* [2] 78, 513 *C.* 1908 [2] 593).
- C<sub>19</sub>H<sub>15</sub>Cl** 1) **9-Chlor-9-Phenylfluoren**. Sm. 78–79° (*B.* 38, 292 *C.* 1905 [1] 616; *B.* 39, 2967 *C.* 1906 [2] 1499; *B.* 39, 3061 *C.* 1906 [2] 1500).
- C<sub>19</sub>H<sub>15</sub>Cl<sub>3</sub>** 1) **α,2,4'-Trichlortriphenylmethan**. Sm. 107–109° (*B.* 39, 1466 *C.* 1906 [1] 1743).
- 2) **α,4,4'-Trichlortriphenylmethan**. Sm. 87°. + FeCl<sub>3</sub> (*B.* 39, 1466 *C.* 1906 [1] 1743; *B.* 39, 3279 *C.* 1906 [2] 1612).
- 3) **2,4,4'-Trichlortriphenylmethan**. Sm. 106° (*B.* 39, 3282 *C.* 1906 [2] 1612).
- 4) **4,4,4''-Trichlortriphenylmethan**. Sm. 92° (88°; 112–113°); Sd. 240°<sub>15</sub> (*C.* 1903 [2] 1052; *R.* 24, 130 *C.* 1905 [1] 1325; *B.* 38, 337 *C.* 1905 [1] 530; *B.* 39, 3283 *C.* 1906 [2] 1613).
- C<sub>19</sub>H<sub>15</sub>Br** 1) **9-Brom-9-Phenylfluoren**. Sm. 99° (104°) (*B.* 38, 289 *C.* 1905 [1] 616; *B.* 39, 3061 *C.* 1906 [2] 1500).
- 2) **Bromphenylendiphenylmethan**. Sm. 110° (*Bl.* [3] 1, 775). — II, 294.
- C<sub>19</sub>H<sub>15</sub>Br<sub>3</sub>** 1) **4,4,4''-Tribromtriphenylmethan**. Sm. 112° (*B.* 38, 336 *C.* 1905 [1] 530; *C.* 1908 [1] 134).
- C<sub>19</sub>H<sub>15</sub>J<sub>3</sub>** 1) **4,4,4''-Trijodtriphenylmethan**. Sm. 131–132°. + C<sub>6</sub>H<sub>6</sub> (*B.* 38, 338 *C.* 1905 [1] 530; *C.* 1909 [1] 1704).
- C<sub>19</sub>H<sub>14</sub>O** C 88,4 — H 5,4 — O 6,2 — M. G. 258.
- 1) **9-Oxy-9-Phenylfluoren**. Sm. 106° (107–107,5°). +  $\frac{1}{2}$  SnCl<sub>4</sub> (*B.* 37, 73 *C.* 1904 [1] 518; *B.* 38, 288 *C.* 1905 [1] 616).
- 2) **4-Keto-1-Diphenylmethylen-1,4-Dihydrobenzol** (Diphenylchinomethan). Sm. 167–168° (*B.* 36, 2335 *C.* 1903 [2] 441; *B.* 36, 2792 *C.* 1903 [2] 882; *B.* 36, 3253 *C.* 1903 [2] 884; *B.* 41, 1359 *C.* 1908 [1] 1976).
- 3) **4-Benzoylbiphenyl** (4-Phenyldiphenylketon). Sm. 104° (102°); Sd. 419 bis 420°<sub>744</sub> (*M.* 2, 437; *R.* 27, 356 *C.* 1908 [2] 2013). — III, 257.
- 4) **9-Benzoylbiphenyl**. Sm. 106°. + AlCl<sub>3</sub> (*B.* 14, 2032; *Bl.* [3] 9, 1051). — III, 257.
- 5) **3-Benzoylacenaphten**. Sm. 101° (99°). + AlCl<sub>3</sub>, Pikrat (*A.* 327, 96 *C.* 1903 [1] 1228; *Bl.* [3] 31, 859 *C.* 1904 [2] 655).
- 6) **9-Phenylxanthen**. Sm. 145° (140–141°) (*B.* 25, 3588; *B.* 37, 2371 *C.* 1904 [2] 344; *B.* 38, 450 *C.* 1905 [1] 744; *A.* 354, 170 *C.* 1907 [2] 986). — II, 1984.
- 7) **Dimethylbenzanthron**. Sm. 165° (D.R.P. 200335 *C.* 1908 [2] 655).
- 8) **Verbindung** (aus Isoamyloxanthranol). Sm. 206° (*A.* 212, 97; *B.* 41, 1423 *C.* 1908 [1] 2040). — III, 244.

$C_{19}H_{14}O_2$ 

C 83,2 — H 5,1 — O 11,7 — M. G. 274.

- 1) Diphenylmethylenäther d. 1,2-Dioxybenzol. Sm. 93° (B. 37, 3331 C. 1904 [2] 1050).
- 2) 3-Oxy-4-Keto-1-Diphenylmethylen-1,4-Dihydrobenzol (chin. 2-Oxyfuchson). Sm. 123° (B. 37, 3330 C. 1904 [2] 1049).
- 3) 4-Keto-1-[2-Oxydiphenylmethylen]-1,4-Dihydrobenzol (2-Oxyfuchson). Sm. 204—205° (A. 354, 179 C. 1907 [2] 987).
- 4) 4-Keto-1-[3-Oxydiphenylmethylen]-1,4-Dihydrobenzol (3-Oxyfuchson). Sm. 183° (A. 354, 180 C. 1907 [2] 987).
- 5)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[1-Oxy-2-Naphtyl]propen. Sm. 125—126° (B. 31, 705). — \*III, 197.
- 6)  $\gamma$ -Keto- $\alpha$ -Phenyl- $\gamma$ -[4-Oxy-2-Naphtyl]propen. Na + 5H<sub>2</sub>O (A. 275, 292). — III, 257.
- 7) Phenyläther d. 4-Oxydiphenylketon. Sm. 71° (B. 38, 2492 C. 1905 [2] 619).
- 8) 9-Oxy-9-Phenylxanthen. Sm. 158° (B. 37, 2370 C. 1904 [2] 344; B. 37, 2933 C. 1904 [2] 1142).
- 9) 2-Phenyl-2,3-Dihydro-1,4- $\alpha$ -Naphtopyron ( $\alpha$ -Naphtoflavanon). Sm. 126° (B. 39, 1650 C. 1906 [2] 56).
- 10) Äthylester d. Pyrencarbonsäure (M. 4, 258).
- 11) 2-Naphtylester d.  $\beta$ -Phenylakrylsäure. Sm. 101—102° (B. 18, 1946). — II, 1406.
- 12) Benzoat d. 3-Oxybiphenyl. Sm. 60—61° (G. 35 [2] 553 C. 1906 [1] 851).
- 13) Benzoat d. 4-Oxybiphenyl. Sm. 152° (150°; 147—148° (J. r. 5, 52; A. 257, 101; J. pr. [2] 63, 455). — II, 1149.

 $C_{19}H_{14}O_3$ 

C 78,6 — H 4,8 — O 16,5 — M. G. 290.

- 1) Aurin (Anhydro- $\alpha$ -Oxytri[4-Oxytriphenyl]methan). Lit. bedeutend. — II, 1119; \*II, 700.
  - 2) 5-Benzoyl-6-Methyl-4-Phenyl-1,2-Pyron? Sm. 143—144°; Sd. 260 bis 270°<sub>12</sub> (Soc. 75, 416). — \*II, 1105.
  - 3) 2,7-Dioxy-9-Phenylxanthen. Sm. 259° u. Zers. (B. 41, 2454 C. 1908 [2] 786).
  - 4) 2,9-Dioxy-9-Phenylxanthen. Sm. 158—160° u. Zers. (B. 42, 582 C. 1909 [1] 1002).
  - 5) 3,6-Dioxy-9-Phenylxanthen. Sm. 170—171° (J. pr. [2] 78, 541 C. 1909 [1] 447).
  - 6)  $\beta$ -Oxy- $\beta$ -Phenylakryl-1-Naphtyläthersäure. Sm. 152—153° u. Zers. Ag (Soc. 77, 990). — \*II, 962.
  - 7) Lakton d. 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten-2-Methylcarbonsäure. Sm. 151—152° (Soc. 71, 148). — \*II, 1105.
  - 8) Lakton d.  $\alpha$ -Methoxyl- $\alpha$ -Phenyl- $\alpha$ -[2-Oxy-1-Naphtyl]essigsäure. Sm. 136° (B. 31, 2824). — \*II, 1104.
  - 9) Methylester d. 2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 117—120° (120°) (M. 25, 1172 C. 1905 [1] 363; A. 340, 252 C. 1905 [2] 485).
  - 10) Pseudomethylester d. 2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 134—137° (M. 25, 1174 C. 1905 [1] 363).
  - 11) Phenylester d. Diphenyläther-2-Carbonsäure. Sm. 109° (A. 257, 79; C. r. 136, 1075 C. 1903 [1] 1362; C. r. 139, 141 C. 1904 [2] 593). — II, 1495.
  - 12) Phenylester d. Diphenyläther-4-Carbonsäure. Sm. 73—78° (J. pr. [2] 28, 200). — II, 1527.
  - 13) Monobenzoat d. 7,8-Dioxyacenaphten. Sm. 189—190° (Soc. 55, 580). — II, 1144.
  - 14) Benzoat d. Methyl-1-Oxy-2-Naphtylketon. Sm. 96,5° (103,5°) (B. 30, 1467; B. 39, 3096 C. 1906 [2] 1410). — \*III, 142.
- $C_{19}H_{14}O_4$   
C 74,5 — H 4,6 — O 20,9 — M. G. 306.
- 1) Oxyaurin (B. 9, 801; II, 1436; 16, 2841). — III, 78.
  - 2)  $\alpha$ -Aurinoxid + 2H<sub>2</sub>O (M. 16, 371). — \*II, 701.
  - 3)  $\beta$ -Aurinoxid (M. 16, 372; A. 202, 198). — II, 1028; \*II, 701.
  - 4) Anhydrid d.  $\delta$ -[4-Methoxyphenyl]- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure. Sm. 144—147° (B. 39, 764 C. 1906 [1] 1017).
  - 5) Gem. Anhydrid d.  $\beta$ -Phenylakrylsäure u.  $\beta$ -Benzoylakrylsäure. Sm. 154° (C. r. 147, 250 C. 1908 [2] 868).

$C_{19}H_{14}O_4$ 

- 6)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\delta$ -Benzoxyl- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadien- $\gamma$ -Carbonsäure. Sm. 160–161° (B. 39, 1817 C. 1906 [2] 40).
- 7)  $\alpha\gamma$ -Lakton d.  $\beta$ -Acetoxyl- $\gamma$ -Oxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadien- $\alpha$ -Carbonsäure (Acetylulvinon). Sm. 137–139° (A. 284, 281). — II, 1899.
- 8) Dilakton d.  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenyl- $\beta$ -Penten- $\gamma\delta$ -Dicarbonsäure (Diphenylheptendilakton). Sm. 161° (A. 331, 176 C. 1904 [1] 1212).
- 9) Isodiphenylheptendilakton. Sm. 234°. Ca, Ba, Ag<sub>2</sub> (A. 331, 181 C. 1904 [1] 1212).
- 10) Methylester d. 2-[2-Oxy-1-Naphtoyl]benzol-1-Carbonsäure. Sm. 199° (B. 16, 301). — II, 1909.
- 11) Methylester d. 2-[1-Oxy-2-Naphtoyl]benzol-1-Carbonsäure. Sm. 108–109° (B. 36, 560 C. 1903 [1] 721).
- 12) Monomethylester d. 1-Phenylnaphtalin-2,3-Dicarbonsäure. Sm. 207° u. Zers. Ag (B. 35, 1408 C. 1902 [1] 1156).
- 13) 1-Methylester d. 2-Phenylnaphtalin-1,2<sup>3</sup>-Dicarbonsäure. Sm. 171,5° (A. 335, 117 C. 1904 [2] 1132).
- 14) 2<sup>2</sup>-Methylester d. 2-Phenylnaphtalin-1,2<sup>2</sup>-Dicarbonsäure. Sm. 124°. Ag (A. 334, 117 C. 1904 [2] 1132).
- 15) Phenylester d. 3-Acetoxylnaphtalin-2-Carbonsäure. Sm. 186,5° (B. 34, 4144 C. 1902 [1] 315).
- 16) 1-Naphtylester d. 2-Acetoxybenzol-1-Carbonsäure. Sm. 91° (B. 26, 1468). — II, 1496.
- 17) 2-Naphtylester d. 2-Acetoxybenzol-1-Carbonsäure. Sm. 136° (B. 26, 1468). — II, 1496.
- 18) Acetat d. 5-Oxy-1,3-Diketo-2,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 103–104°. K (A. 284, 264). — III, 320.
- 19) Acetat d.  $\gamma$ -Keto- $\gamma$ -[1-Oxy-2-Naphtyl]- $\alpha$ -Furanylpropen. Sm. 116 bis 117° (B. 32, 1039). — \*III, 522.
- 20) Verbindung (aus Isophenanthroxylacetessigsäureäthylester). Sm. 224 bis 226° (Soc. 59, 11). — II, 1908.

 $C_{19}H_{14}O_5$ 

- C 70,8 — H 4,3 — O 24,8 — M. G. 322.
- 1) 3,4,3',4'-Dimethylenäther d.  $\gamma$ -Keto- $\alpha\epsilon$ -Di[3,4-Dioxyphenyl]- $\alpha\delta$ -Pentadien (Dipiperonalaceton). Sm. 184–185°. Pikrat (G. 29 [2] 417; B. 24, 617; A. 341, 35 C. 1905 [2] 821). — III, 252; \*III, 192.
- 2) 2,3,6,7-Tetraoxy-9-Phenylxanthen (B. 37, 1174 C. 1904 [1] 1161).
- 3) Formononetin (oder  $C_{24}H_{20}O_6$ ). Sm. 265° (M. 23, 144 C. 1902 [1] 1104). — \*III, 445.
- 4) Resorcinsalicylein. Sm. 209° (D. R. P. 86319). — \*II, 889.
- 5) 1-Oxy-2-[3(oder 6)-Methoxybenzoyl]naphtalin-2<sup>2</sup>-Carbonsäure. Sm. 210–215° (Soc. 91, 420 C. 1907 [1] 1420).
- 6) Vulpinsäure (Monomethylester d. Pulvinsäure). Sm. 148°.  $NH_4 + H_2O$ ,  $K + H_2O$ ,  $Ba + 7H_2O$ , Piperidinsalz (A. 113, 56; 219, 1; 282, 1, 13; 284, 120, 173; 314, 110; B. 13, 1629, 1633; 14, 873; 15, 1546, 1550; J. 1864, 553, 554; J. pr. [2] 57, 244, 316; [2] 63, 340; C. 1903 [2] 121). — II, 2030; \*II, 1185.
- 7) Isovulpinsäure. Sm. 124° (A. 219, 15; B. 15, 1552). — II, 2030.
- 8) Dilakton d.  $\alpha\epsilon$ -Dioxy- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenylpentan-2,2'-Dicarbonsäure (Diphtaliddimethylketon). Sm. 156–157° (M. 19, 428). — \*II, 1206.
- 9) 2<sup>2</sup>-Acetat d. 5,6-Dioxy-1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden-5,6-Methylenäther. Sm. 199° (Soc. 91, 1097 C. 1907 [2] 604).
- 10) 4-Acetat d. 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden-3-Methyläther. Sm. 184–185° (B. 30, 1186). — \*III, 236.
- 11) Dibenzotat d.  $\alpha\epsilon$ -Dioxy- $\gamma$ -Keto- $\alpha\delta$ -Pentadien. Sm. 111,5–112° (B. 38, 1468 C. 1905 [1] 1500).

 $C_{19}H_{14}O_6$ 

- C 67,4 — H 4,1 — O 28,5 — M. G. 338.
- 1) Trimethyläther d. Trioxy- $\alpha$ -Brasanchinon. Sm. noch nicht bei 300° (Soc. 95, 394 C. 1909 [1] 1571).
- 2) Trimethyläther d. Trioxy- $\beta$ -Brasanchinon. Sm. 260° (261–262°) (B. 36, 2200 C. 1903 [2] 381; Soc. 95, 398 C. 1909 [1] 1571).
- 3) Trioxyaurin (Anhydro- $\alpha$ -Oxytri[o-Dioxyphenyl]methan) (B. 26, 255). — II, 1124.
- 4) Resaurin (Anhydro- $\alpha$ -Oxytri[m-Dioxyphenyl]methan) (J. pr. [2] 23, 547; [2] 25, 279). — II, 1124.
- 5) Oroxylin. Sm. 225° (Soc. 79, 954). — \*III, 469.



$C_{19}H_{14}O_6$ 

- 6) Lakton d.  $\beta$ -Oxy- $\gamma$ -Methoxyl- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\alpha^2$ -Carbonsäure- $\delta^2$ -Carbonsäurealdehyd. Zers. oberhalb  $240^\circ$  (B. 42, 469 C. 1909 [1] 757).
- 7) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]butan-3,4-Methylenäther- $\beta$ -Ketocarbonsäure. Sm.  $135^\circ$  (A. 333, 258 C. 1904 [2] 1391).
- 8) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]butan-3,4-Methylenäther- $\beta$ -Ketocarbonsäure. Sm.  $130^\circ$  (A. 333, 258 C. 1904 [2] 1391).
- 9)  $\alpha,3^2$ -Lakton d. 7,8-Dioxy-2-Methyl-4-Methylen-3-[ $\alpha\alpha$ -Dioxybenzyl]-1,4-Benzpyran-3 $^2$ -Carbonsäure. HCl +  $1\frac{1}{2}H_2O$ , Pikrat (B. 39, 3666 C. 1907 [1] 50).
- 10) Monomethylester d. Oxypulvinsäure (Chrysocetrarsäure; Pinastrinsäure). Sm.  $196$ — $198^\circ$ . K +  $3H_2O$ , Ca +  $4H_2O$ , Ba, Pb +  $2H_2O$  (A. 284, 107, 176; 314, 110; B. 30, 361; C. 1903 [2] 121; J. pr. [2] 57, 309, 314; [2] 62, 342; A. 324, 56 C. 1902 [2] 904; J. pr. [2] 73, 113 C. 1906 [1] 1100). — II, 2037; \*II, 1190.
- 11) Äthylester d. 7-Benzoxyl-1,2-Benzpyron-4-Carbonsäure. Sm.  $118^\circ$  (B. 34, 383). — \*II, 1170.
- 12) Diacetat d. 6,8-Dioxy-1-Methyl-9,10-Anthrachinon. Sm.  $195^\circ$  (Soc. 69, 71). — III, 449.
- 13) Diacetat d. 1,3-Dioxy-2-Methyl-9,10-Anthrachinon. Sm.  $217$ — $218^\circ$  (Soc. 65, 184). — III, 451.
- 14) Diacetat d. 1,4-Dioxy-2-Methyl-9,10-Anthrachinon. Sm.  $185^\circ$  (B. 10, 2013). — III, 451.
- 15) Diacetat d. 5,6[oder 7,8]-Dioxy-2-Methyl-9,10-Anthrachinon. Sm.  $176^\circ$  (B. 33, 1632). — \*III, 324.
- 16) Diacetat d. 5,7-Dioxy-2-Methyl-9,10-Anthrachinon. Sm.  $165$ — $167^\circ$  (Soc. 65, 863). — III, 451.
- 17) Diacetat d. 5,8-Dioxy-2-Methyl-9,10-Anthrachinon. Sm.  $204^\circ$  (B. 33, 1635). — \*III, 324.
- 18) Diacetat d. 6,7-Dioxy-2-Methyl-9,10-Anthrachinon. Sm.  $208^\circ$  (B. 33, 1634). — \*III, 324.
- 19) Diacetat d. Chrysophansäure. Sm.  $202$ — $204^\circ$  ( $208^\circ$ ) (J. 1861, 392; A. 183, 172; 212, 37; B. 11, 1607; Ar. 243, 438 C. 1905 [2] 897). — III, 452.
- 20) Diacetat d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm.  $201^\circ$  ( $198$ — $199^\circ$ ) (B. 29, 880, 1889). — III, 248; \*III, 532.
- 21) Diacetat d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyron. Sm.  $181^\circ$  ( $183^\circ$ ) (B. 26, 2907; 27, 423). — III, 248; \*II, 1145.
- 22) Diacetat d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron. Sm.  $195$ — $196^\circ$  (B. 37, 778 C. 1904 [1] 1156).
- 23) Diacetat d. 3,7-Dioxy-2-Phenyl-1,4-Benzpyron. Sm.  $157^\circ$  (B. 37, 1182 C. 1904 [1] 1275).
- 24) Diacetat d. 5,7-Dioxy-2-Phenyl-1,4-Benzpyron (D. d. Chrysin). Sm.  $185^\circ$  (B. 26, 2902). — III, 628.
- 25) Diacetat d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron (D. d.  $\beta$ -Phenyldaphnetin). Sm.  $133$ — $134^\circ$  ( $193^\circ$ ) (B. 26, 2907; B. 36, 4242 C. 1904 [1] 382). — III, 248.
- 26) Diacetat d. 3-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm.  $166^\circ$  (B. 38, 935 C. 1905 [1] 1026).
- 27) Diacetat d. 3-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm.  $158^\circ$  (B. 38, 1509 C. 1905 [1] 1405).
- 28) Diacetat d. 6-Oxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm.  $148$ — $149^\circ$  (B. 33, 2512). — \*III, 562.
- 29) Diacetat d. 6-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm.  $169$ — $170^\circ$  (B. 33, 1480). — \*III, 562.
- 30) Diacetat d. 6-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm.  $207^\circ$  (B. 32, 1929). — \*III, 562.
- 31) Diacetat d. 7-Oxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm.  $105^\circ$  (B. 32, 1034). — \*III, 563.
- 32) Diacetat d. 7-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm.  $152$ — $153^\circ$  (B. 33, 325). — \*III, 563.

- C<sub>19</sub>H<sub>14</sub>O<sub>6</sub>** 33) Diacetat d. 7-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 182—183° (B. 32, 325). — \*III, 563.
- 34) Diacetat d. 2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 171° (B. 38, 2180 C. 1905 [2] 258).  
C 64,4 — H 3,9 — O 31,6 — M. G. 354.
- C<sub>19</sub>H<sub>14</sub>O<sub>7</sub>** 1) Linarphenol. Sm. 277—279° (C. r. 145, 333 C. 1907 [2] 1245; Bl. [4] 3, 867 C. 1908 [2] 1048).
- 2) Dianhydrid d. Essigsäure u. Diphenylketon-2,4'-Dicarbonsäure. Sm. 177° (182°) (A. 309, 103; B. 28, 1135). — II, 1976; \*II, 1147.
- 3) Diacetat d. Trioxymethylanthrachinon (aus Aloë). Sm. 177—178° (C. 1899 [1] 888). — \*III, 325.
- 4) Diacetat d. Emodin. Sm. 182—184° (B. 21 [2] 842).
- 5) Diacetat d. isom. 1,2,3-Triox-9,10-Anthrachinonmonomethyläther. Sm. 184° (M. 23, 1017 C. 1903 [1] 291).
- 6) Diacetat d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (D. d. Apigenin). Sm. 201° (G. 31 [1] 76). — \*III, 565.  
C 61,6 — H 3,8 — O 34,6 — M. G. 370.
- C<sub>19</sub>H<sub>14</sub>O<sub>8</sub>** 1) α-Laktonsäure (aus d. Trilakton C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>). Sm. 199—200°. NH<sub>4</sub> (B. 40, 4234 C. 1907 [2] 1842).
- 2) β-Laktonsäure (aus d. Trilakton C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>). Sm. 190° (B. 40, 4235 C. 1907 [2] 1842).
- 3) γ-Laktonsäure + 1½ H<sub>2</sub>O (aus d. Trilakton C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>). Sm. 190—195° (B. 40, 4236 C. 1907 [2] 1842).
- 4) Diacetat d. Rhein. Sm. 236° (247—248°) (B. 28 [2] 1058; A. 309, 43; C. 1905 [2] 145; Ar. 241, 605 C. 1904 [1] 169; J. pr. [2] 77, 388 C. 1908 [1] 2046).
- 5) Diacetat d. Pigments C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>. Sm. 125° (B. 36, 3960 C. 1904 [1] 39).
- 6) Triacetat d. 1,3,7-Trioxyxanthon (Tr. d. Gentisein). Sm. 226° (M. 12, 209). — III, 210.  
C 59,1 — H 3,6 — O 37,3 — M. G. 386.
- C<sub>19</sub>H<sub>14</sub>O<sub>9</sub>** 1) Hexaoxyaurin (Eupittonschwarz; Noreupiton). HCl + C<sub>2</sub>H<sub>6</sub>O (B. 34, 1033). — \*II, 1230.
- 2) Pyrogallaurin (B. 25, 2675). — II, 2100.
- 3) Stictasäure + x H<sub>2</sub>O. Sm. 264°. K, Ba (J. pr. [2] 70, 492 C. 1905 [1] 260; J. pr. [2] 70, 561 C. 1905 [1] 260).
- 4) Diacetylquercetinsäure (A. 119, 213). — II, 2055.  
C 56,7 — H 3,5 — O 39,8 — M. G. 402.
- C<sub>19</sub>H<sub>14</sub>O<sub>10</sub>** 1) Salazinsäure. Zers. bei 260° (A. 352, 5 C. 1907 [1] 1425).  
C 84,4 — H 5,2 — N 10,4 — M. G. 270.
- C<sub>19</sub>H<sub>14</sub>N<sub>2</sub>** 1) 9-Phenylhydrazonfluoren. Sm. 151—151,5° (M. 16, 808; B. 35, 761 C. 1902 [1] 814). — IV, 778; \*IV, 505.
- 2) 2,5-Diphenylbenzimidazol. Sm. 197—198°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (A. 209, 347). — IV, 1072.
- 3) 2-[β-Phenyläthenyl]-peri-Naphtimidazol. Sm. 136° (B. 42, 3677 C. 1909 [2] 1663).
- 4) 3-Benzylidenamidocarbazol. Sm. 209—210° (G. 21 [2] 383). — IV, 992.
- 5) 3-Amido-5-Phenylakridin. Sm. 200° (204°). HCl, (2HCl, PtCl<sub>4</sub>) (B. 18, 692; B. 39, 301 C. 1906 [1] 682; B. 41, 4136 C. 1909 [1] 191). — IV, 1072.
- 6) 2-Phenylamidoakridin. Sm. 175—176° (B. 24, 2042). — IV, 1012.
- 7) 4-Methyl-2,6'-Bichinolyl (Flavochinolin). Sm. 138° (B. 19, 1036). — IV, 1072.
- 8) 5-Methyl-8,8'-Bichinolyl. Sm. 211,5—212°. 2HCl + 5H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub> + 3H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 3H<sub>2</sub>O (B. 42, 644 C. 1909 [1] 1011).
- 9) Base (aus Isochinolinrot). Sm. 231° (B. 20, 14). — IV, 1072.
- 10) Nitril d. 2-Methyl-4,6-Diphenylpyridin-3-Carbonsäure. Sm. 116°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 78, 527 C. 1908 [2] 594).  
C 76,5 — H 4,7 — N 18,8 — M. G. 298.
- C<sub>19</sub>H<sub>14</sub>N<sub>4</sub>** 1) 2,3'-Anhydrid d. 3-[2-Oxy-1-Naphtyl]azo-5,7-Dimethylindazol. Sm. 267° (B. 32, 1801). — \*IV, 1082.
- 2) 4-Methyl-6,7-Diphenyl-1,3,5,8-Benzotetrazin. Sm. 180—184° (B. 34, 1250). — \*IV, 972.
- 3) Methylphenofluorindin. 2HCl (B. 29, 1253). — IV, 1300.

- C<sub>19</sub>H<sub>14</sub>N<sub>4</sub>** 4) **C-N-Dimethyl-5,6-Imidazolonnaphthophenazin**. Sm. 264° (B. 31, 2409). — IV, 1301.
- C<sub>19</sub>H<sub>14</sub>Cl<sub>2</sub>** 1) **α,2-Dichlortriphenylmethan**. Sm. 133° (B. 39, 1466 C. 1906 [1] 1743).  
 2) **α,4-Dichlortriphenylmethan**. Sm. 87° (90°) (B. 37, 1633 C. 1904 [1] 1649; B. 39, 3278 C. 1906 [2] 1611; B. 40, 1862 C. 1907 [2] 59).  
 3) **2,5-Dichlortriphenylmethan**. Sm. 87° (A. 299, 354). — \*II, 127.
- C<sub>19</sub>H<sub>14</sub>Br<sub>2</sub>** 1) **4,4'-Dibromtriphenylmethan**. Sm. 100°; Sd. 260°<sub>15</sub> (Am. 30, 463 C. 1904 [1] 377).  
 2) **Phenylendiphenylmethandibromid**. Sm. 187° (Bl. [3] 1, 775). — II, 294.
- C<sub>19</sub>H<sub>15</sub>N** C 88,7 — H 5,8 — N 5,4 — M. G. 257.  
 1) **α-Phenylimidodiphenylmethan (Diphenylmethylenanilin)**. Sm. 112 bis 113° (109°; 98—100°; 116°); Sd. oberhalb 360° (356—358°). HCl, HJ (A. 187, 201; Bl. [3] 21, 785; Soc. 79, 1212; B. 25, 2056; 32, 1680; B. 35, 991 C. 1902 [1] 870; B. 35, 2616 C. 1902 [2] 593; C. r. 142, 712 C. 1906 [1] 1431). — III, 188; \*III, 150.  
 2) **4-Phenylimidomethylbiphenyl**. Sm. 150—151° (A. 347, 382 C. 1906 [2] 606).  
 3) **γ-[1-Naphtyl]imido-α-Phenylpropen**. Sm. 65° (A. 239, 384). — III, 61.  
 4) **γ-[2-Naphtyl]imido-α-Phenylpropen**. Sm. 95—96° (125°) (A. 239, 384; Ar. 245, 366 C. 1907 [2] 1513). — III, 61.  
 5) **Inn. Anhydrid d. α-Oxy-4-Amidotriphenylmethan**. Sm. bei 300° u. Zers. (B. 36, 2794 C. 1903 [2] 883).  
 6) **2-[β-Phenyläthenyl]-6-Phenylpyridin**. Sm. 79°. HCl + 4H<sub>2</sub>O, (2HCl, ZnCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 33, 3495). — \*IV, 281.  
 7) **α-Phenyl-δ-[2-Chinolyl]-αγ-Butadien**. Sm. 117° (B. 36, 4330 C. 1904 [1] 449).  
 8) **5-Phenyl-5,10-Dihydroakridin**. Sm. 163—164° (A. 224, 25). — IV, 465.  
 9) **10-Phenyl-5,10-Dihydroakridin**. Sm. 119° (B. 40, 2518 C. 1907 [2] 254).  
 10) **8,11-Dimethyl-α-Phenakridin**. Sm. 122,5°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (Soc. 91, 1937 C. 1908 [1] 385).  
 11) **9,11-α-Phenakridin**. Sm. 155°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (Soc. 91, 1935 C. 1908 [1] 385).  
 12) **8,10-Dimethyl-β-Phenakridin**. Sm. 152° (D.R.P. 123260 C. 1901 [2] 568; Soc. 91, 1936 C. 1908 [1] 385). — \*IV, 282.  
 13) **8,11-Dimethyl-β-Phenakridin**. Sm. 154°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (Soc. 91, 1937 C. 1908 [1] 385).  
 14) **9,10-Dimethylpheno-[α-N-CH-β]-Naphtakridin**. Sm. 171—172°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Salicylat (Soc. 95, 1627 C. 1909 [2] 2178).  
 15) **9,10-Dimethylpheno-[β-N-CH-α]-Naphtakridin**. Sm. 187°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>), Salicylat (Soc. 95, 1628 C. 1909 [2] 2178). C 80,0 — H 5,3 — N 14,7 — M. G. 285.
- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>** 1) **Methyl-di[β-Cyan-β-Phenyläthenyl]amin**. Sm. 88—89° (J. pr. [2] 55, 338). — \*II, 849.  
 2) **9-Phenylhydrazon-2-Amidofluoren**. Sm. 148° (B. 34, 1765). — \*IV, 505.  
 3) **Triphenylmethylazid**. Sm. 64° (B. 42, 3026 C. 1909 [2] 1337).  
 4) **4-Phenylimidomethylazobenzol**. Sm. 125—130° (Am. 28, 47 C. 1902 [2] 701). — \*IV, 1069.  
 5) **4-Benzylidenamidoazobenzol**. Sm. 127° (A. 329, 221 C. 1903 [2] 1428).  
 6) **5-Methyl-1-Phenyl-3-[4-Chinolyl]pyrazol**. Sm. 120° (M. 17, 408). — IV, 1183.  
 7) **2-[4-Methylphenyl]-5-[2-Naphtyl]-1,3,4-Triazol**. Sm. 190° (B. 30, 1884; A. 298, 42). — IV, 1211.  
 8) **1-Phenyl-2-[4-Amidophenyl]benzimidazol**. Sm. 198—199°. HCl + 1¼H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + ½H<sub>2</sub>O (Bl. [3] 19, 28; A. ch. [7] 14, 424). — IV, 1181.  
 9) **5-Amido-1,2-Diphenylbenzimidazol**. Sm. 191°. + H<sub>2</sub>O (Sm. 172 bis 173°) (Bl. [3] 17, 870; J. pr. [2] 74, 247 C. 1906 [2] 1437). — IV, 1180.  
 10) **2-Amido-5-[4-Amidophenyl]akridin (Chrysanilin)**. Sm. 267—270°. + C<sub>6</sub>H<sub>6</sub>, HCl, 2HCl + H<sub>2</sub>O, HNO<sub>3</sub>, 2HNO<sub>3</sub>, H<sub>2</sub>CrO<sub>4</sub>, 2Pikrat + H<sub>2</sub>O (B. 2, 378; 12, 2241; 17, 436; 25 [2] 503; J. 1862, 346; A. 226, 178, 188; Soc. 89, 482 C. 1906 [1] 1832). — IV, 1211.



- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>** 11) **2,8-Diamido-5-Phenylakridin.** (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*B.* **39**, 976 *C.* **1906** [1] 1357).  
 12) **3,7-Diamido-5-Phenylakridin.** Pikrat (*B.* **39**, 306 *C.* **1906** [1] 683).  
 13) **Homoaposafranin.** HCl (*Bl.* [4] **1**, 473 *C.* **1907** [2] 257).  
 14) **Isohomoaposafranin.** (*Bl.* [4] **1**, 473 *C.* **1907** [2] 258).  
 15) Nitril d.  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[1-Naphtyl]amidoessigsäure. Sm. 97° (D.R.P. 153418 *C.* **1904** [2] 679).  
 16) Nitril d.  $\alpha$ -[2-Methylphenyl]imido- $\alpha$ -[2-Naphtyl]amidoessigsäure. Sm. 106° (D.R.P. 153418 *C.* **1904** [2] 679).  
 17) Nitril d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[1-Naphtyl]amidoessigsäure. Sm. 151° (D.R.P. 153418 *C.* **1904** [2] 679).  
 18) Nitril d.  $\alpha$ -[4-Methylphenyl]imido- $\alpha$ -[2-Naphtyl]amidoessigsäure. Sm. 129° (D.R.P. 153418 *C.* **1904** [2] 679).
- C<sub>19</sub>H<sub>15</sub>Cl** 1)  $\alpha$ -Chlortriphenylmethan. Sm. 108–112°. 6HCl, 2 + Al<sub>2</sub>Cl<sub>6</sub>, + SnCl<sub>4</sub>, + SbCl<sub>5</sub>, + Pyridin. Lit. bedeutend. — **II**, 287; \***II**, 127.
- C<sub>19</sub>H<sub>15</sub>Br** 1)  $\alpha$ -Bromtriphenylmethan. Sm. 152°; Sd. 230°<sub>15</sub>. 6HBr, + Br<sub>5</sub>, + J<sub>4</sub>, + J<sub>5</sub> (*B.* **14**, 1520; **16**, 1276; **17**, 700; *A.* **227**, 110; **309**, 168; *J.* **1884**, 462; *C.* **1898** [2] 1131, 1132; *B.* **37**, 3543 *C.* **1904** [2] 1738; *B.* **41**, 2576 *C.* **1908** [2] 866). — **II**, 287; \***II**, 127.
- C<sub>19</sub>H<sub>15</sub>Br<sub>5</sub>** 1)  $\alpha$ -Bromtriphenylmethanpentabromid (*C.* **1898** [2] 1131; *B.* **35**, 1831 *C.* **1902** [2] 212; *B.* **42**, 3024 *C.* **1909** [2] 1336). — \***II**, 127.
- C<sub>19</sub>H<sub>15</sub>J** 1)  $\alpha$ -Jodtriphenylmethan. Sm. 135° u. Zers. (132°) (*B.* **33**, 3158; *B.* **35**, 1835 *C.* **1902** [2] 212). — \***II**, 127.
- C<sub>19</sub>H<sub>15</sub>J<sub>5</sub>** 1)  $\alpha$ -Jodtriphenylmethanpentajodid. Sm. 90° (*B.* **35**, 1832 *C.* **1902** [2] 212; *B.* **42**, 3024 *C.* **1909** [2] 1336).  
 C 87,7 — H 6,1 — O 6,1 — M. G. 260.
- C<sub>19</sub>H<sub>15</sub>O** 1)  $\alpha$ -Oxytriphenylmethan (Triphenylcarbinol). Sm. 162,5° (158–159°); Sd. oberhalb 360°. Chromat, + Chinolin, + Phenylhydrazin. Lit. bedeutend. — **II**, 1083; \***II**, 663.  
 2) **2-Oxytriphenylmethan.** Sm. 118° (124°) (*A.* **241**, 367; *A.* **354**, 169 *C.* **1907** [2] 986; *J. pr.* [2] **76**, 276 *C.* **1907** [2] 1519; *A.* **360**, 217 *C.* **1908** [1] 2173). — **II**, 903.  
 3) **3-Oxytriphenylmethan.** Sm. 106° (*A.* **354**, 171 *C.* **1907** [2] 986).  
 4) **4-Oxytriphenylmethan.** Sm. 110° (*B.* **35**, 3137 *C.* **1902** [2] 1210).  
 5)  $\alpha$ -Oxy-4-Phenyldiphenylmethan. Sm. 96° (*R.* **27**, 358 *C.* **1908** [2] 2013).  
 6)  $\epsilon$ -Keto- $\alpha\gamma$ -Diphenyl- $\alpha\gamma\zeta$ -Heptatriën. Sm. 106° (109–110°). 2HCl, (HCl, SbCl<sub>5</sub>), (HCl, SnCl<sub>4</sub>) (*B.* **29**, 614; *C.* **1904** [2] 507; *B.* **37**, 3671 *C.* **1904** [2] 1569; *G.* **38** [2] 76, 87 *C.* **1908** [2] 1101). — **III**, 257.  
 7) **2-Keto-1,3-Dibenzyliden-R-Pentamethylen.** Sm. 189°. 2HBr (*B.* **29**, 1837; *B.* **37**, 1653 *C.* **1904** [1] 1603; *B.* **41**, 3726 *C.* **1908** [2] 1920). — \***III**, 195.  
 8) **Diphenylketen + Cyklopentadiën.** Sm. 89–90° (*B.* **40**, 1146 *C.* **1907** [1] 1259; *A.* **356**, 94 *C.* **1907** [2] 1701).  
 9) **Verbindung** (aus Isoamyloxanthranolchlorid). Sm. 170° (*A.* **212**, 91). — **III**, 244.  
 C 82,6 — H 5,8 — O 11,6 — M. G. 276.
- C<sub>19</sub>H<sub>16</sub>O<sub>2</sub>** 1)  $\alpha$ ,2-Dioxytriphenylmethan. Sm. 140,5° (*A.* **354**, 167 *C.* **1907** [2] 986).  
 2)  $\alpha$ ,3-Dioxytriphenylmethan. Sm. 147–148° (*A.* **354**, 170 *C.* **1907** [2] 986).  
 3)  $\alpha$ ,4-Dioxytriphenylmethan +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 143–144° (165° wasserfrei). + C<sub>6</sub>H<sub>6</sub>, Na (*B.* **34**, 3073; *B.* **35**, 3134 *C.* **1902** [2] 1209; *B.* **36**, 2337 *C.* **1903** [2] 441; *B.* **36**, 2791 *C.* **1903** [2] 882; *B.* **36**, 3247 *C.* **1903** [2] 884; *B.* **36**, 3571 *C.* **1903** [2] 1375).  
 4) **4,4'-Dioxytriphenylmethan.** Sm. 161° (*A.* **206**, 153; **217**, 230; *J. pr.* [2] **57**, 334; *B.* **12**, 1464; **22**, 1944; *A.* **363**, 268 *C.* **1909** [1] 175). — **II**, 1003; \***II**, 609.  
 5)  $\epsilon$ -Keto- $\eta$ -[2-Oxyphenyl]- $\alpha$ -Phenyl- $\alpha\gamma\zeta$ -Heptatriën. Sm. 163° (*G.* **38** [2] 77 *C.* **1908** [2] 1101).  
 6) **Äthyläther d. Phenyl- $\beta$ -Oxy-1-Naphtylketon.** Sm. 74–75° (*B.* **23**, 1209). — **III**, 254.  
 7) **3,5-Diketo-4-Benzyliden-1-Phenylhexahydrobenzol** (Benzalphenylhydroresorcin). Sm. 232° (*A.* **294**, 310; **309**, 381). — \***III**, 236.

- C<sub>19</sub>H<sub>16</sub>O<sub>2</sub>**
- 8) Acetat d. 2-Oxy-1-Benzylnaphtalin. Sm. 40° (*G.* 33 [2] 490 *C.* 1904 [1] 656).
  - 9) Acetat d. 4-Oxy-1-Benzylnaphtalin. Sm. 87—88° (*G.* 33 [2] 473 *C.* 1904 [1] 654).
  - 10) Benzoat d. 2-Oxy-1,4-Dimethylnaphtalin. Sm. 124—125° (*B.* 31, 1679). — \*II, 719.
  - 11) Verbindung (aus d. Verb. C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>). Sm. 144,5° (*Soc.* 83, 304 *C.* 1903 [1] 879).
  - 12) Verbindung (aus 2-Keto-1,4,5-Triox-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen). Sm. 175° (*Soc.* 83, 303 *C.* 1903 [1] 878).  
C 78,1 — H 5,5 — O 16,4 — M. G. 292.
- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>**
- 1) α,3,4-Trioxotriphenylmethan (*B.* 37, 3329 *C.* 1904 [2] 1049).
  - 2) α,2,4'-Trioxotriphenylmethan. Sm. 143° (*A.* 354, 178 *C.* 1907 [2] 987).
  - 3) α,3,3'-Trioxotriphenylmethan. + C<sub>3</sub>H<sub>6</sub>O (*A.* 354, 182 *C.* 1907 [2] 987).
  - 4) α,3,4'-Trioxotriphenylmethan. Sm. 155—160° (*A.* 354, 179 *C.* 1907 [2] 987).
  - 5) α,4,4'-Trioxotriphenylmethan (Benzaurin) (*A.* 217, 227; *B.* 18, 988; *B.* 36, 2791 *C.* 1903 [2] 882). — II, 1115.
  - 6) 4,4',4'-Trioxotriphenylmethan (Leukaurin) (*A.* 166, 286; 194, 136; 202, 197). — II, 1028.
  - 7) Triphenyläther d. Trioxymethan (Orthoameisensäuretriphenyläther). Sm. 76—77°; Sd. 260—270°<sub>50—55</sub> (*B.* 15, 2685; 18, 2657). — II, 655.
  - 8) 2-Keto-1,3-Di[2-Oxybenzyliden]-R-Pentamethylen. Sm. 190° u. Zers. (*B.* 36, 1502 *C.* 1903 [1] 1351).
  - 9) 2-Keto-1,3-Di[4-Oxybenzyliden]-R-Pentamethylen. Sm. oberhalb 300° (*B.* 36, 1503 *C.* 1903 [1] 1352).
  - 10) Methylenäther d. ε-Keto-α-[3,4-Dioxyphenyl]-ε-[4-Methylphenyl]-αγ-Pentadien. Sm. 122° (*B.* 37, 1700 *C.* 1904 [1] 1497).
  - 11) Methylenäther d. ε-Keto-ε-[4-Methylphenyl]-α-[3,4-Dioxyphenyl]-αγ-Pentadien. Sm. 118—119° (*B.* 35, 1071 *C.* 1902 [1] 930). — \*III, 193.
  - 12) Methyläther d. 5-Oxy-1,3-Diketo-2-Methyl-2,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 79° (*A.* 284, 270). — III, 321.
  - 13) Dimethyläther d. p-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 66—68° (*A.* 257, 91). — III, 256.
  - 14) Dimethyläther d. p-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 64—66° (*A.* 257, 93). — III, 255.
  - 15) 2-Keto-4,5-Diphenyl-2,3-Dihydro-R-Penten-1-Methylcarbonsäure. Sm. 126—127°. Ag (*Soc.* 71, 150). — \*II, 1018.
  - 16) γ-Keto-αε-Diphenyl-αδ-Pentadien-β-Methylcarbonsäure (βδ-Dibenzalävilinsäure). Sm. 145—146° (*A.* 258, 133; 319, 191).
  - 17) isom. Dibenzalävilinsäure. Sm. 175—178° (*A.* 319, 190 *C.* 1902 [1] 106). — \*II, 1019.
  - 18) Äthylester d. 2,5-Diphenylfuran-3-Carbonsäure. Sm. 82° (81°) (*B.* 21, 1490; *A.* 306, 175). — III, 713.
  - 19) Äthylester d. 1-Keto-3-Phenylinden-2-Carbonsäure. Sm. 77° (u. 81,5°) (*B.* 35, 1730 *C.* 1902 [2] 55).
  - 20) 3-Methylphenylester d. Oxyessig-2-Naphtyläthersäure. Sm. 91 bis 92° (*D.R.P.* 85490). — \*II, 522.
  - 21) Acetat d. γ-Keto-ε-Phenyl-α-[2-Oxyphenyl]-αδ-Pentadien. Sm. 72 bis 73° (*B.* 31, 729). — \*III, 191.
  - 22) Acetat d. Verb. C<sub>17</sub>H<sub>14</sub>O<sub>3</sub>. Sm. 145° (*B.* 36, 1494 *C.* 1903 [1] 1350).  
C 74,0 — H 5,2 — O 20,8 — M. G. 308.
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>**
- 1) 2,4,2',4'-Tetraoxytriphenylmethan. Sm. 171° (*B.* 13, 611; *A.* 217, 235). — II, 1038.
  - 2) 2,5,2',5'-Tetraoxytriphenylmethan (*C.* 1908 [1] 823).
  - 3) Trimethyläther d. Triox-ββ-Phenylennaphtylenoxyd (Tr. d. Trioxybrasan). Sm. 244—246° (*B.* 36, 2199 *C.* 1903 [2] 381; *B.* 41, 1333 *Ann. C.* 1908 [1] 1980).
  - 4) Trimethyläther d. 3,1',4'-Trioxybrasan. Sm. 165° (*B.* 41, 2802 *C.* 1908 [2] 1442).
  - 5) Phenolsalicylein. Sm. 116—119° (*D.R.P.* 86319). — \*II, 887.
  - 6) 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten-2-Methylcarbon-säure. Ag (*Soc.* 71, 148). — \*II, 1105.

$C_{19}H_{16}O_4$ 

- 7) 3 - Oxy - 1 - Keto - 3,4 - Diphenyl - 2,3 - Dihydro-R-Penten-5-Methyl-carbonsäure (Anhydroacetonbenzillävulinsäure). Sm. 178—179°.  $NH_4$ , Na, K, Ba +  $5H_2O$  (Soc. 71, 147; 75, 1025). — \*II, 1104.
- 8) Anhydrid d.  $\alpha$  - Keto- $\alpha\gamma$ -Diphenylpentan- $\delta\epsilon$ -Dicarbonsäure. Sm. 119—121,5° (A. 314, 129). — \*II, 1152.
- 9) Anhydrid d.  $\gamma\delta$  - Diphenyl- $\beta$ -Methylbutan- $\gamma\delta$ -Oxyd- $\beta\delta$ -Dicarbonsäure. Sm. 158° (Soc. 83, 307 C. 1903 [1] 879).
- 10) Lakton d.  $\epsilon$ -Oxy- $\gamma$ -Keto- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Penten- $\delta$ -Ketocarbonsäure (Benzylidenacetylketophenylparakon). Sm. 220° u. Zers. +  $C_2H_6O$  (Soc. 89, 1240 C. 1906 [2] 1118).
- 11) Lakton d.  $\beta$  - Oxy- $\delta$ -Keto- $\alpha\gamma$ -Diphenylpentan- $\gamma$ -Carbonsäure. Sm. 91° (A. 333, 231 C. 1904 [2] 1389).
- 12)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Benzyl- $\beta$ -Buten- $\gamma\delta$ -Dicarbonsäure. Sm. 115—117°. Ca, Ag (A. 308, 181). — \*II, 1152.
- 13) Dilakton d.  $\alpha\epsilon$  - Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Dicarbonsäure (Diphenylheptodilakton). Sm. 149° (A. 331, 187 C. 1904 [1] 1212).
- 14)  $\alpha\gamma$ - $\beta\delta$ -Dilakton d.  $\alpha\beta$ -Dioxy- $\alpha$ -Phenyl- $\beta$ -Benzylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 202—203° (A. 308, 183). — \*II, 1183.
- 15) Äthylester d. 1,3 - Diketo - 2 - Phenyl-1,2-Dihydroinden-2-Methyl-carbonsäure. Sm. 104° (B. 26, 2579). — II, 1906.
- 16) 2<sup>3</sup>-Acetat d. 1-Keto-2-[2,4-Dioxybenzyliden]-2,3-Dihydroinden-2<sup>4</sup>-Methyläther. Sm. 155° (Soc. 91, 1091 C. 1907 [2] 603).
- 17) Acetat d. Thebenol. Sm. 102—103° (B. 30, 1381). — \*III, 677.
- 18) Diacetat d. 3,10-Dioxy-1-Methylantracen. Sm. 172—173° (B. 31, 2795). — \*II, 695.
- 19) Diacetat d. Methyloxanthranol. Sm. 217° (B. 21, 1172). — III, 245.
- 20) Benzoat d.  $\beta$  - Oxy- $\delta$ -Keto- $\gamma$ -Benzoyl- $\beta$ -Penten (2 isom. Formen). Sm. 102—103° u. 66—67° (A. 277, 69, 202; 291, 97, 106, 108). — III, 315. C 70,4 — H 4,9 — O 24,7 — M. G. 324.

 $C_{19}H_{16}O_5$ 

- 1) 2<sup>3</sup>,2<sup>4</sup>-Methylenäther-5,6-Dimethyläther d. 5,6-Dioxy-1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 245° (Soc. 91, 1102 C. 1907 [2] 604).
- 2) Dimethyläther d. Citrakonfluorescein (Soc. 63, 679). — II, 2026.
- 3)  $\alpha$ -Anhydrotrimethylbrasilon (Trimethyläther d. Dehydrobrasilin). Sm. 198°. K (M. 16, 913; C. 1899 [1] 750; B. 35, 1672 C. 1902 [1] 1354; Soc. 81, 1043 C. 1902 [2] 749; Soc. 95, 391 C. 1909 [1] 1568). — III, 655; \*III, 480.
- 4)  $\beta$ -Anhydrotrimethylbrasilon (Trimethyläther d. Tetraoxy- $\beta\beta$ -Phenylennaphtylenoxyd; Tr. d. Tetraoxybrasan). Sm. 220° (B. 36, 2198 Anm. C. 1903 [2] 381; Soc. 95, 391 C. 1909 [1] 1568).
- 5)  $\delta$ -[4-Methoxyphenyl]- $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\beta\gamma$ -Dicarbonsäure (B. 39, 764 C. 1906 [1] 1017).
- 6) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]butan-4-Methyläther- $\beta$ -Ketocarbonsäure. Sm. 116° (A. 333, 269 C. 1904 [2] 1392).
- 7) Monolakton d.  $\alpha\epsilon$  - Dioxy- $\alpha\epsilon$ -Diphenyl- $\beta$ -Penten- $\gamma\delta$ -Dicarbonsäure. Ba +  $H_2O$ , Ag (A. 331, 178 C. 1904 [1] 1212).
- 8) Monäthylester d.  $\gamma$  - Keto- $\beta\gamma$ -Diphenylpropen- $\alpha\alpha$ -Dicarbonsäure (M. d. Desylmalonsäure). Sm. 124° (Soc. 67, 134). — II, 1981.
- 9) Äthylester d. Methylacetylnaphtindenchinoncarbonsäure. Sm. 177° (B. 33, 2406). — \*II, 1153.
- 10) Diäthylester d. 9-Ketofluoren-1,7-Dicarbonsäure. Sm. 114,5° (A. 229, 154). — II, 1979.
- 11)  $\alpha$ -Acetat d.  $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten- $\beta$ -Methyläther. Sm. 95° (B. 27, 715). — III, 317.
- 12) 2<sup>3</sup>-Acetat d. 7-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron-7-Äthyläther. Sm. 126—127° (B. 33, 325). — \*III, 563.
- 13) 3-Acetat d. 3,6-Dioxy-2-Phenyl-1,4-Benzpyron-6-Äthyläther. Sm. 133—134° (B. 37, 777 C. 1904 [1] 1156).
- 14) Acetat d. 1,7-Dioxy-2,6-Dimethyl-9,10-Anthrachinonmonomethyläther. Sm. 195—196° (Soc. 83, 1332 C. 1904 [1] 100).
- 15) Diacetat d. Chrysarobin. Sm. 216° (A. 309, 65). — \*III, 324.
- 16) isom. Diacetat d. Chrysarobin. Sm. 265—270° (A. 309, 69). — \*III, 324.
- 17) isom. Diacetat d. Chrysarobin. Sm. 193° (Soc. 81, 1579 C. 1903 [1] 34, 167).



- $C_{19}H_{16}O_5$  18) Diacetat d. Chrysophanhydroanthron. Sm. 238—240° (A. 309, 61). — \*III, 323.
- 19) 4,6-Diacetat d. 3,4,6-Trioxypheanthren-3-Methyläther. Sm. 162 bis 163° (B. 36, 3081 C. 1903 [2] 955; B. 37, 3501 C. 1904 [2] 1320).
- 20) 4,9[oder 4,10]-Diacetat d. 3,4,9[oder 3,4,10]-Trioxypheanthren-3-Methyläther. Sm. 201° (202—204°) (B. 39, 1420 C. 1906 [1] 1664; B. 39, 3138 C. 1906 [2] 1335; B. 39, 3254 C. 1906 [2] 1336).
- 21) Diacetat d. ?-Trioxypheanthrenmethyläther. Sm. 155—156° (B. 40, 2039 C. 1907 [2] 161).
- 22) Diacetat d. 4,7-Dioxy-2-Phenyl-1,4-Benzpyran. Sm. 160° (B. 34, 3894 C. 1902 [1] 122). — \*III, 549.  
C 67,1 — H 4,7 — O 28,2 — M. G. 340.
- $C_{19}H_{16}O_6$  1) 3,4,5,3',4',5'-Hexaoxytriphenylmethan + 2H<sub>2</sub>O? (Hydropyrogallolbenzein) (A. 257, 65). — II, 1043.
- 2)  $\alpha\epsilon$ -Diketo- $\alpha\epsilon$ -Diphenylpentan- $\gamma\gamma$ -Dicarbonsäure (Diphenacylmalonsäure). Sm. 134°. + CHCl<sub>3</sub> (B. 19, 3144; C. 1904 [1] 1259). — II, 2034; \*II, 1188.
- 3) 4-Acetoxy-3,6-Dimethoxyphenanthren-9-Carbonsäure. Sm. 201 bis 203° (B. 35, 4409 C. 1903 [1] 343).
- 4) 6-Acetoxy-1,5-Dimethoxyphenanthren-10-Carbonsäure. Sm. 220 bis 227° (B. 33, 180). — \*II, 1149.
- 5) 2,6-Diphenyltetrahydro-1,4-Pyron-3,5-Dicarbonsäure. Fl. (C. 1899 [2] 187; B. 30, 2802). — \*III, 541.
- 6)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Acetoxy- $\beta$ -Phenyl- $\alpha$ -[3,4-Dioxyphenyl]propan-3,4-Methylenäther- $\gamma$ -Carbonsäure. Sm. 116—117° (A. 333, 261 C. 1904 [2] 1391).
- 7) Gem. Anhydrid d. Essigsäure u. Diphenylmethan-2,4'-Dicarbonsäure. Sm. 135° (A. 309, 118). — \*II, 1096.
- 8) Äthylester d. 2,5-Dioxy-9,10-Anthrachinon-2,5-Dimethyläther-1-Carbonsäure (Dimethylrheinäthylester). Sm. 185—187° (Soc. 95, 1093 C. 1909 [2] 623).
- 9)  $\gamma^2$ -Acetat- $\alpha^{3,4}$ -Methylenäther- $\gamma^4$ -Methyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 158—159° (B. 32, 313). — \*III, 183.
- 10) 3-Acetat d. 3-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron-2<sup>3</sup>,2<sup>4</sup>-Dimethyläther. Sm. 130—131° (B. 38, 2181 C. 1905 [2] 258).
- 11) 3-Acetat d. 3,6-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron-2<sup>2</sup>,6-Dimethyläther. Sm. 121—122° (B. 37, 2349 C. 1904 [2] 230).
- 12) 3-Acetat d. 3,6-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>,6-Dimethyläther. Sm. 134° (B. 37, 960 C. 1904 [1] 1160).
- 13) 3-Acetat d. 3,6-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>4</sup>,6-Dimethyläther. Sm. 131—132° (B. 37, 783 C. 1904 [1] 1159).
- 14) 3-Acetat d. 3,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron-2<sup>2</sup>,7-Dimethyläther. Sm. 138—139° (B. 37, 4158 C. 1904 [2] 1658).
- 15) 3-Acetat d. 3,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron-2<sup>3</sup>,7-Dimethyläther. Sm. 165° (B. 37, 4160 C. 1904 [2] 1658).
- 16) 3-Acetat d. 3,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>4</sup>,7-Dimethyläther. Sm. 193—194° (B. 37, 4162 C. 1904 [2] 1659).
- 17) 5-Acetat d. 5,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron-2<sup>2</sup>,7-Dimethyläther. Sm. 96—97° (B. 34, 1456). — \*III, 564.
- 18) 5-Acetat d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>4</sup>,7-Dimethyläther (Acetat d. Apigenindimethyläther). Sm. 195—196° (193 bis 194°) (Soc. 71, 812; B. 33, 1994). — \*III, 565.
- 19) 7-Acetat d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron-2<sup>4</sup>,5-Dimethyläther (A. d. Apigenindimethyläther). Sm. 204° (B. 33, 2909). — \*III, 564.
- 20) 3-Acetat d. 3,5,7-Trioxo-2-Phenyl-1,4-Benzpyron-5,7-Dimethyläther. Sm. 192—193° (B. 37, 2804 C. 1904 [2] 712).
- 21) 3-Acetat d. 3,7,8-Trioxo-2-Phenyl-1,4-Benzpyron-7,8-Dimethyläther. Sm. 185° (B. 37, 2808 C. 1904 [2] 713).
- 22) Triacetat d. Verb.  $C_{19}H_{16}O_3$ . Sm. oberhalb 300° (B. 37, 1179 C. 1904 [1] 1162).
- 23) Triacetat d. Verb.  $C_{19}H_{16}O_3$ . Sm. noch nicht bei 300° (B. 37, 2737 C. 1904 [2] 542).

- $C_{19}H_{16}O_6$  24) isom. Triacetat d. Verb.  $C_{13}H_{10}O_3$ . Sm. 270—275° (B. 37, 2737 C. 1904 [2] 542).
- 25) Verbindung (aus Pinastrinsäure)? Sm. 171—173° (A. 284, 110). — II, 2037.
- $C_{19}H_{16}O_7$  C 64,0 — H 4,5 — O 31,4 — M. G. 356.
- 1) Diäthylester d. 2,4,9-Triketo-2,3,4,9-Tetrahydro- $\beta\beta$ -Naphtinden-1,3-Dicarbonensäure. Sm. 159°. Ba (B. 33, 577; E. Hoyer, Dissert. Berlin 1901). — \*II, 1207.
- 2) Triacetat d. 2,3,4-Trioxydiphenylketon. Sm. 117° (A. 269, 300). — III, 202.
- 3) Verbindung (aus Excoëcarin). Sm. 190° u. Zers. (Soc. 81, 215 C. 1902 [1] 532, 821, 822). — \*III, 486.
- $C_{19}H_{16}O_8$  C 61,3 — H 4,3 — O 34,4 — M. G. 372.
- 1) Carbousninsäure. Sm. 195—196° (J. pr. [2] 68, 4 C. 1903 [2] 510).
- 2) Parellinsäure. Sm. 230° u. Zers. Ba + 6H<sub>2</sub>O (J. pr. [2] 58, 524). — \*II, 1074.
- 3) Diacetat d. Xanthomicrol. Sm. 116° (C. 1908 [1] 1292).
- 4) Triacetat d.  $\alpha$ -Rhamnocitrin. Sm. 199—200° (C. 1900 [2] 873). — \*III, 492.
- $C_{19}H_{16}O_9$  C 58,8 — H 4,1 — O 37,1 — M. G. 388.
- 1) Protocetrarsäure (Ar. 240, 553 C. 1902 [2] 1329).
- 2) Scopulorsäure. Sm. 260° (A. 352, 15 C. 1907 [1] 1425).
- 3) 2,6'-2',6-Dilakton d. 3,4,5,6,4',5',6'-Heptaoxybiphenylpentamethyläther-2,2'-Dicarbonensäure. Sm. 245° (M. 29, 289 C. 1908 [2] 313).
- 4) Diacetat d. Anhydro- $\alpha\alpha$ -Di[2,3,4(2)-Trioxyphenyl]propionsäure. Sm. 110° (B. 16, 2408). — II, 2078.
- 5) Tetraacetat d. Purpurogallin. Sm. 182—183° (184—186°) (C. 1902 [1] 1055; Soc. 85, 246 C. 1904 [1] 798, 1005). — \*III, 261.
- $C_{19}H_{16}O_{10}$  C 56,4 — H 3,9 — O 39,6 — M. G. 404.
- 1) Anhydroeuxanthinsäure. Sm. 157—159°. Ag (B. 33, 3360; A. 318, 354; H. 44, 119 C. 1905 [1] 1087).
- 2) Isoeuxanthinsäure (oder  $C_{19}H_{16}O_{11}$ ) (H. 44, 119 C. 1905 [1] 1087).
- 3) Ampelochroinsäure. 3 Modifik. (Bl. [3] 7, 825; B. 25 [2] 478). — III, 673.
- 4) Eichengerbsäure, siehe  $C_{17}H_{16}O_9$ . — III, 586.
- 5) Farbstoff (aus Weintrauben) oder  $C_{18}H_{16}O_9$ . K<sub>4</sub>, Cu<sub>4</sub>, Ag<sub>4</sub> (G. 27 [2] 479). — \*III, 493.
- $C_{19}H_{16}N_2$  C 83,8 — H 5,9 — N 10,3 — M. G. 272.
- 1) 4-Benzylidenamidodiphenylamin. Sm. 107—109°. HCl, 2HCl (A. 255, 189; C. 1908 [2] 688). — IV, 596.
- 2)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan (Diphenylbenzylamidin). Sm. 144° (145°). HCl, (2HCl, PtCl<sub>4</sub>), Pikrat (A. 108, 219; 135, 82; 184, 83, 354; 265, 155; Z. 1866, 165; C. 1900 [1] 1128; B. 15, 233; 18, 1476; 34, 122; Am. 31, 583 C. 1904 [2] 109; B. 40, 4297 C. 1907 [2] 1838). — IV, 842; \*IV, 566.
- 3)  $\alpha$ -Imido- $\alpha$ -Diphenylamido- $\alpha$ -Phenylmethan (Isodiphenylbenzylamidin). Sm. 111,5—112°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Rhodanid (A. 192, 4; 265, 157). — IV, 842.
- 4) 4-Imido-1-[4-Amidodiphenyl]methylen-1,4-Dihydrobenzol (p-Amidofuchsonimin). HCl, Pikrat (B. 37, 2863 C. 1904 [2] 776).
- 5) Anhydrid d.  $\alpha$ -Oxy-4,4'-Diamidotriphenylmethan. Sm. oberhalb 250° (B. 37, 2865 C. 1904 [2] 776).
- 6)  $\alpha$ -Benzyliden- $\beta\beta$ -Diphenylhydrazin. Sm. 122° (A. 190, 179). — IV, 750.
- 7) 4-Benzylidenhydrazidobiphenyl. Sm. 153° (B. 27, 3107). — IV, 970.
- 8)  $\alpha$ -Phenylhydrazondiphenylmethan (Benzophenonphenylhydrazon). Sm. 137° (B. 17, 576; 19, 1206; 26, 2168; 33, 1303; A. 232, 228). — IV, 775; \*IV, 504.
- 9) 2-Phenylhydrazonmethylbiphenyl. Sm. 115° (118—124°) (C. 1897 [1] 413; M. 19, 588). — \*IV, 489.
- 10) 4-Phenylhydrazonmethylbiphenyl. Sm. 188—189° (A. 347, 382 C. 1906 [2] 606).
- 11)  $\gamma$ -[2-Naphtyl]hydrazon- $\alpha$ -Phenylpropen. Sm. 188° (Ar. 245, 372 C. 1907 [2] 1513).

- C<sub>19</sub>H<sub>16</sub>N<sub>2</sub>** 12) **4-[4-Methylphenyl]azobenzol.** Sm. 137° (*C.* 1904 [1] 1491).  
 13) **3'-Dimethylamido-1,2-Naphtakridin.** Sm. 185,5°. HCl, HNO<sub>3</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (*B.* 34, 4319 *C.* 1902 [1] 324). — \*IV, 716.  
**C<sub>19</sub>H<sub>16</sub>N<sub>4</sub>** 1) **α-Phenylazo-α-Phenylimido-α-Phenylamidomethan.** Sm. 111° (*B.* 25, 3118). — IV, 1224.  
 2) **α-Phenylazo-α-Phenylhydrazon-α-Phenylmethan** (Phenylformazyl; Formazylbenzol). Sm. 174—175° (*B.* 25, 3456; 27, 158, 162, 322, 323, 1690; 31, 474 Anm.; 34, 527). — IV, 1260; \*IV, 934.  
 3) **4-Phenylhydrazonmethylazobenzol.** Sm. 165—166° (154°) (*C. r.* 134, 1360 *C.* 1902 [2] 195; *Am.* 28, 47 *C.* 1902 [2] 701). — \*IV, 1070.  
 4) **4-Benzylidenhydrazidoazobenzol.** Sm. 168,5—169°. HCl, H<sub>2</sub>SO<sub>4</sub> (*Ar.* 244, 328 *C.* 1906 [2] 1601; *B.* 40, 210 *C.* 1907 [1] 804; *J. pr.* [2] 78, 383 *C.* 1909 [1] 356).  
 5) **5-Amido-2-[4-Amidophenyl]-1-Phenylbenzimidazol.** Sm. 270—272°. H<sub>2</sub>SO<sub>4</sub> + 1½ H<sub>2</sub>O (*Bl.* [3] 19, 29). — IV, 1287.  
 6) **2-Diamido-1,2-Diphenylbenzimidazol.** Sm. 229—231° (*Bl.* [3] 17, 872).  
 7) **6-Amido-2,3-Diphenyl-2,3-Dihydro-1,2,4-Benztriazin.** Sm. 223° u. Zers. H<sub>2</sub>SO<sub>4</sub> (*B.* 30, 2596; D.R.P. 76491). — IV, 1286; \*IV, 955.  
 8) **Methylphenosafuranin.** HCl (*B.* 30, 402). — IV, 1283.  
 9) **Methylamidoaposafranin.** HBr (*B.* 30, 2490). — IV, 1279.  
**C<sub>19</sub>H<sub>16</sub>N<sub>8</sub>** 1) **αα-Diphenylazo-α-Phenylhydrazonmethan** (Formazylazobenzol). Sm. 162—163°. Cu, Ag (*B.* 25, 3189, 3205, 3457; 27, 148; *J. pr.* [2] 64, 199; *G.* 31 [1] 583; *J. pr.* [2] 65, 138 *C.* 1902 [1] 995; *B.* 36, 55 *C.* 1903 [1] 450). — IV, 1492; \*IV, 1086.  
 2) **2-[3-(2,4-Diamidophenyl)azophenyl]benzimidazol** (*B.* 32, 907). — \*IV, 1084.  
**C<sub>19</sub>H<sub>16</sub>S<sub>3</sub>** 1) **Triphenyläther d. Trimerkaptomethan.** Sm. 39,5° (40°) (*B.* 10, 185; *B.* 40, 1743 *C.* 1907 [1] 1781). — II, 784.  
**C<sub>19</sub>H<sub>17</sub>N** C 88,0 — H 6,6 — N 5,4 — M. G. 259.  
 1) **α-Amidotriphenylmethan** (Triphenylmethylamin). Sm. 105° (102°). HCl, (2HCl, PtCl<sub>4</sub> + 7½ H<sub>2</sub>O) (*B.* 16, 1276; 17, 442, 702, 741; *B.* 35, 1827 *C.* 1902 [2] 212). — II, 641.  
 2) **2-Amidotriphenylmethan.** Sm. 128—130°. + C<sub>6</sub>H<sub>6</sub> (Sm. 94—95°) (*B.* 37, 3198 *C.* 1904 [2] 1472).  
 3) **3-Amidotriphenylmethan.** Sm. 120°. HCl (*B.* 21, 189). — II, 641.  
 4) **4-Amidotriphenylmethan.** Sm. 83—84°. HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, + C<sub>6</sub>H<sub>6</sub> (*A.* 206, 155; *B.* 23, 1623; 24, 728; *B.* 38, 1768 *C.* 1905 [1] 1600). — II, 641.  
 5) **α-Phenylamidodiphenylmethan.** Sd. 232—234°. HCl (*B.* 37, 2693 *C.* 1904 [2] 519; *B.* 38, 1767 *C.* 1905 [1] 1600; *B.* 40, 2097 *C.* 1907 [2] 31).  
 6) **2-Phenylamidodiphenylmethan.** Sm. 89° (*Soc.* 41, 198). — II, 635.  
 7) **3-Methyltriphenylamin** (Diphenyl-*m*-Toluidin). Sm. 69—70° (*B.* 31, 2988; 34, 39). — \*II, 248.  
 8) **Diphenylbenzylamin.** Sm. 86,5—87° (95°) (*B.* 8, 1196; 11, 1761; 14, 1385; *C. r.* 144, 274 *C.* 1907 [1] 1103). — II, 518.  
 9) **4-[α-Amidobenzyl]biphenyl.** Sm. 77°. HCl, (2HCl, PtCl<sub>4</sub> + 4 H<sub>2</sub>O), HNO<sub>3</sub>, Acetat (*M.* 12, 508). — II, 642.  
 10) **2-[2,5-Dimethylbenzyliden]amidonaphtalin.** Sm. 86—87° (*C. r.* 146, 298 *C.* 1908 [1] 1389).  
 11) **2,6-Di[4-Methylphenyl]pyridin.** Sm. 162°. (HCl, AuCl<sub>3</sub>), Pikrat (*B.* 36, 852 *C.* 1903 [1] 976). — \*IV, 275.  
 12) **3,5-Dibenzylpyridin.** Sm. 89°; Sd. oberhalb 300°. HCl, HBr, HNO<sub>3</sub> (*A.* 280, 42; *B.* 24, 2186; 25, 2421). — IV, 456.  
 13) **2-[β-4-Methylphenyläthenyl]-8-Methylchinolin.** Sm. 144° (*B.* 38, 3703 *C.* 1906 [1] 51).  
 14) **2-Phenyl-1,2,3,4-Tetrahydro-α-Naphtochinolin.** Fl. (*A.* 249, 127). — IV, 457.  
 15) **Base** (aus α-Methylzimtsäurealdehyd u. Anilin). (2HCl, PtCl<sub>4</sub>) (*B.* 19, 529). — IV, 456.  
**C<sub>19</sub>H<sub>17</sub>N<sub>3</sub>** C 79,4 — H 5,9 — N 14,6 — M. G. 287.  
 1) **Anhydrid d. α-Oxytri[4-Amidophenyl]methan** (*B.* 36, 4025 *C.* 1904 [1] 167).



$C_{19}H_{17}N_3$ 

- 2) Phenylimidodi[4-Amidophenyl]methan. Fl. (C. 1900 [1] 1180).
- 3)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha$ -[4-Amidophenyl]methan (Carbo-triphenyltriamin). Sm. 198. HCl, (2HCl, PtCl<sub>4</sub>) (J. 1858, 352; A. 160, 173; B. 10, 358; 12, 101, 104; 14, 2174). — IV, 1138.
- 4)  $\alpha$ -Triphenylguanidin. Sm. 143° (145°). HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, Oxalat, Acetat, Pikrat, Guajakolsulfonsaures Salz. Lit. bedeutend. — II, 349, \*II, 160.
- 5) uns- $\beta$ -Triphenylguanidin. Sm. 131°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 8, 294; 33, 2725). — II, 351; \*II, 161.
- 6) Isotriphenylguanidin. HCl +  $\frac{1}{2}$  H<sub>2</sub>O (B. 7, 1231).
- 7)  $\alpha$ -Phenylhydrazon-4-Amidodiphenylmethan. Sm. 169° (A. 311, 147). — \*IV, 504.
- 8)  $\alpha$ -Phenylimido- $\alpha$ -[ $\alpha$ -Phenylhydrazido]- $\alpha$ -Phenylmethan. Sm. 119°. HCl, Pikrat (B. 28, 2372; Am. 31, 582 C. 1904 [2] 109). — IV, 1137.
- 9)  $\alpha$ -Phenylamido- $\alpha$ -[ $\beta$ -Phenylhydrazido]- $\alpha$ -Phenylmethan. Sm. 174 bis 175°. HCl, Pikrat (B. 28, 2373; J. pr. [2] 54, 122; Am. 31, 583 C. 1904 [2] 109). — IV, 1137.
- 10)  $\alpha\alpha$ -Diphenyl- $\beta$ -[ $\alpha$ -Imidobenzyl]hydrazin (Diphenylbenzenylhydrazidin). Sm. 170°. HCl (J. pr. [2] 54, 171). — IV, 1137.
- 11) 4-Phenylimidomethyl-s-Diphenylhydrazin. Sm. 183—186° (Am. 28, 45 C. 1902 [2] 701). — \*IV, 1096.
- 12) 1-Benzyl diazoamidobenzol. Sm. 74° (C. r. 140, 1039 C. 1905 [1] 1539).
- 13) 1-Phenylbenzylamidodiazobenzol. Sm. 81° (B. 19, 2037). — IV, 1572.
- 14) 1-Diphenylamido-2-Methyldiazobenzol. Fl. (C. r. 140, 789 C. 1905 [1] 1246).
- 15) 1-Diphenylamido-3-Methyldiazobenzol. Zers. bei 135—140° (C. r. 140, 789 C. 1905 [1] 1246).
- 16) 1-Diphenylamido-4-Methyldiazobenzol. Fl. (C. r. 140, 789 C. 1905 [1] 1246).
- 17) Phenylazotetrahydro- $\alpha$ -Naphtochinolin. H<sub>2</sub>SO<sub>4</sub> (B. 24, 2478). — IV, 1487.
- 18) 4-Phenylazo-1,2,3,4-Tetrahydro- $\beta$ -Naphtochinolin. Sm. 96,5—97° (B. 24, 2645). — IV, 1582.
- 19) 5-Äthylamido-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 182°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub> (B. 23, 3806). — IV, 1210.
- 20) 5-Dimethylamido-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 230°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 23, 3809). — IV, 1210.
- 21) 5,7-Anhydrid d. 5-Methylamido-10-Methyl- $\alpha\beta$ -Naphtophenazin-7-Methylhydroxyd. Sm. 175° (D.R.P. 77226, 78222, 79539, 79960). — \*IV, 875.
- 22) 3-Äthyl-2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 219°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 24, 1006). — IV, 1393.
- 23) Mauvanilin +  $\frac{1}{2}$  H<sub>2</sub>O (Z. 1867, 236). — III, 677.

 $C_{19}H_{17}N_5$ 

- 1) Dibenzyladenin. Sm. 171°. HCl, HNO<sub>3</sub> (H. 18, 427). — IV, 1320.
- 2) 4-Methylphenylazophenylamidodiazobenzol. Zers. bei 72—73° (B. 28, 171). — IV, 1572.
- 3) 4-[4-Amidobenzyliden]hydrazidoazobenzol. Sm. 180,5° u. Zers. (J. pr. [2] 78, 376 C. 1909 [1] 356).
- 4) 5-Amido-1,2-Di[4-Amidophenyl]benzimidazol. Sm. 223—224° (B. 37, 1071 C. 1904 [1] 1273).
- 5) 5-[2-Amido-1-Naphtyl]azo-1,2-Dimethylbenzimidazol. Sm. 260° (B. 29, 1055). — IV, 1490.
- 6) 3-[4,6-Diamido-3-Methylphenyl]azocarbazol. Acetat (B. 34, 1680). — \*IV, 1077.
- 7) 6-Amido-3-[2-Amidophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benzotriazin. Sm. 204° u. Zers. (B. 30, 2601). — IV, 1287.
- 8) 6-Amido-3-[3-Amidophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benzotriazin. Sm. 187° u. Zers. (B. 30, 2602). — IV, 1287.
- 9) 6-Amido-3-[4-Amidophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benzotriazin. Sm. 200° u. Zers. (B. 30, 2602). — IV, 1287.
- 1) Diphenyl-4-Methylphenylphosphin. Sm. 68° (B. 21, 1511). — IV, 1671.

 $C_{19}H_{17}P$

- C<sub>18</sub>H<sub>17</sub>As** 1) Diphenyl-4-Methylphenylarsin. Sm. 50°. + HgCl<sub>2</sub>, (2HCl, PtCl<sub>4</sub>) (A. 321, 187 C. 1902 [2] 45). — \*IV, 1194.  
C 87,0 — H 6,9 — O 6,1 — M. G. 262.
- C<sub>18</sub>H<sub>18</sub>O** 1)  $\gamma$ -Keto- $\alpha\epsilon$ -Di[4-Methylphenyl]- $\alpha\delta$ -Pentadiën. Sm. 175° (A. 347, 363 C. 1906 [2] 604).  
2)  $\epsilon$ -Keto- $\alpha\epsilon$ -Di[4-Methylphenyl]- $\alpha\gamma$ -Pentadiën. Sm. 123—124° (B. 36, 852 C. 1903 [1] 976).  
3) 2-Keto-1,3-Dimethyl-4,5-Diphenyl-2,3-Dihydro-R-Penten (Dibenzal-diäthylketon). Sm. 122° (B. 31, 1887; Soc. 83, 303 C. 1903 [1] 878; Soc. 85, 1477 C. 1905 [1] 172). — \*III, 193.  
4) 3-Keto-2,4-Dimethyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 128° (Soc. 85, 1483 C. 1905 [1] 172).  
5) 9-Keto-10-Isoamyliden-9,10-Dihydroanthracen (Isoamylenanthon). Sm. 71—72° (A. 212, 93, 94). — III, 244.  
C 82,0 — H 6,5 — O 11,5 — M. G. 278.
- C<sub>19</sub>H<sub>16</sub>O<sub>2</sub>** 1) 1-Oxy-3-Keto-2-Äthyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 156° (Soc. 51, 432; 71, 129; 75, 10, 19; 79, 1039). — III, 253; \*III, 193.  
2) 1-Oxy-3-Keto-4-Äthyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 114° (Soc. 79, 1038). — \*III, 193.  
3) 1-Oxy-3-Keto-2,2-Dimethyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 181° (Soc. 79, 1037). — \*III, 193.  
4) 1-Oxy-3-Keto-2,4-Dimethyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 150° (Soc. 51, 432; 79, 1037). — III, 253; \*III, 193.  
5) Benzyläther d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 129—130° (A. 294, 304). — \*III, 217.  
6)  $\beta$ -Oxy- $\alpha\gamma$ -Diphenyl- $\beta$ -[2-Furanyl]propan. Sm. 82,7° (Am. 35, 73 C. 1906 [1] 852).  
7)  $\alpha\delta$ -Diketo- $\alpha\beta$ -Diphenyl- $\gamma$ -Methyl- $\beta$ -Hexen. Sm. 128° (Soc. 79, 1036). — \*III, 234.  
8) Säure (aus 2-Keto-1,4,5-Triox-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen). Sm. 215—216°. Ag (Soc. 83, 301 C. 1903 [1] 879).  
9) Lakton d.  $\alpha$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propen- $\gamma$ -Carbonsäure. Sm. 124° (B. 36, 921 C. 1903 [1] 1031; A. 333, 245 C. 1904 [2] 1391; B. 38, 3127 C. 1905 [2] 1429).  
10) Lakton d.  $\gamma$ -Oxy- $\beta$ -Phenyl- $\gamma$ -[4-Isopropylphenyl]propen- $\alpha$ -Carbonsäure. Sm. 122° (B. 38, 3127 C. 1905 [2] 1429).  
11) Formiat d. Geraniol. Sd. 112—114°<sub>15</sub> (B. 29, 907 Anm.). — III, 477.  
C 77,5 — H 6,1 — O 16,3 — M. G. 294.
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>** 1) Trimethyläther d.  $\beta$ -Trioxyäthenylphenanthren. Sm. 60—61°. Pikrat (B. 38, 3157 C. 1905 [2] 1440).  
2) Trimethyläther d.  $\beta$ -Trioxyäthenylphenanthren. Sm. 122,5°. Pikrat (B. 37, 2789 C. 1904 [2] 716).  
3) Butyryldibenzoylmethan. Sm. bei 115° (Am. 19, 880). — \*III, 244.  
4) 2,4'-Dipropionyldiphenylketon. Sm. 105° (A. 309, 111; B. 28, 1135). — III, 321; \*III, 244.  
5) Dimethyläther d.  $\gamma$ -Keto- $\alpha\epsilon$ -Di[2-Oxyphenyl]- $\alpha\delta$ -Pentadiën. Sm. 123° (124°) (B. 31, 1511; C. 1899 [2] 187; J. pr. [2] 60, 148; B. 40, 3460 C. 1907 [2] 1412). — \*III, 191.  
6) Dimethyläther d.  $\gamma$ -Keto- $\alpha\epsilon$ -Di[3-Oxyphenyl]- $\alpha\delta$ -Pentadiën. Sm. 52 bis 54° (B. 35, 3023 C. 1902 [2] 1113).  
7) Dimethyläther d.  $\gamma$ -Keto- $\alpha\epsilon$ -Di[4-Oxyphenyl]- $\alpha\delta$ -Pentadiën (Dianisal-aceton). Sm. 126,5—127° (129—130°). + HCl, + 2HCl, + HBr, + 1(2)H<sub>2</sub>SO<sub>4</sub>, + H<sub>3</sub>PO<sub>4</sub>, + Chloressigsäure, 2 Pikrat, 2HJ, (2 + HJ, J.) (B. 35, 1192 C. 1902 [1] 1004; C. 1903 [2] 284; B. 36, 1481 C. 1903 [1] 1349; B. 36, 131 C. 1903 [1] 457; A. 349, 42 C. 1906 [2] 1199).  
8) Dimethyläther d. 2-Keto-4,5-Di[4-Oxyphenyl]-2,3-Dihydro-R-Penten. Sm. 129° (B. 38, 1629 C. 1905 [1] 1557).  
9) Methyläther d. 6-Oxy-2-[4-Isopropylphenyl]-1,4-Benzpyron. Sm. 135° (B. 40, 3670 C. 1907 [2] 1421).  
10) 1,8-Diketo-9-Phenyl-1,2,3,4,5,6,7,8-Oktahydroxanthen. Sm. 255° (A. 309, 376). — \*III, 583.  
11) Äthyläther d. Thebenol (Äthebenol). Sm. 103—105° (B. 32, 184). — \*III, 677.

- $C_{19}H_{18}O_8$
- 12)  $\gamma$ -Benzoylmethyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure. Sm. 125° (*C.* 1903 [2] 944; *A.* 345, 220 *C.* 1908 [1] 1494).
  - 13) Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propan- $\gamma$ -Carbonsäure. Sm. 186° (*B.* 36, 920 *C.* 1903 [1] 1031; *A.* 333, 238 *C.* 1904 [2] 1390).
  - 14) isom. Lakton d.  $\alpha$ -Oxy- $\gamma$ -Keto- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propan- $\gamma$ -Carbonsäure. Sm. 198° (*B.* 36, 920 *C.* 1903 [1] 1031; *A.* 333, 251 *C.* 1904 [2] 1391).
  - 15) Lakton d.  $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -[4-Isopropylphenyl]äthan- $\beta$ -Ketocarbonsäure. Sm. 212° (*A.* 337, 281 *C.* 1905 [1] 378).
  - 16) Methylester d.  $\gamma$ -Benzoyl- $\alpha$ -Phenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 90 bis 91° (*A.* 306, 170). — \*II, 1018.
  - 17) Äthylester d.  $\gamma$ -Keto- $\alpha$ -Diphenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 76° (*B.* 32, 1433). — \*II, 1016.
  - 18) Äthylester d. Säure  $C_{17}H_{14}O_8$ . Sm. 118—120° (*A.* 341, 51 *C.* 1905 [2] 821).
  - 19) Monoisovalerat d. 9,10-Dioxyphenanthren. Sm. 149° (*A.* 249, 142). — II, 1001.
  - 20) 4-Cinnamylat d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 90° (*D.R.P.* 68111). — \*II, 851.
  - 21) Verbindung (aus 2-Keto-1,4,5-Trioxy-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen). Sm. 89—90° (*Soc.* 83, 304 *C.* 1903 [1] 879). *C* 73,6 — *H* 5,8 — *O* 20,6 — *M. G.* 310.
- $C_{19}H_{18}O_4$
- 1) Methyläther- $\beta$ -Äthyläther d.  $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- $\alpha$ -Buten. Sm. 105° (*B.* 27, 719). — III, 317.
  - 2) Trimethyläther d. 5,6-Dioxy-1-Keto-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 188°. *HCl* (*Soc.* 91, 1102 *C.* 1907 [2] 604).
  - 3) Diäthyläther d. 5,6-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 115° (*B.* 29, 1889). — \*III, 532.
  - 4) 7-Methyläther d. 3,7-Dioxy-2-[4-Isopropylphenyl]-1,4-Benzpyron. Sm. 201° (*B.* 40, 3672 *C.* 1907 [2] 1421).
  - 5) Diäthyläther d. 6-Oxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 106° (*B.* 33, 2510). — \*III, 562.
  - 6) Diäthyläther d. 6-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 135 bis 136° (*B.* 33, 1479). — \*III, 562.
  - 7) Diäthyläther d. 6-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 143° (*B.* 32, 1929). — \*III, 562.
  - 8) Diäthyläther d. 7-Oxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 125° (*B.* 32, 1032). — \*III, 562.
  - 9) Diäthyläther d. 7-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 153 bis 154° (*B.* 33, 323). — \*III, 563.
  - 10) o-Kresophenochinon. Sm. 67° (*C.* 1898 [1] 887). — \*III, 261.
  - 11) p-Kresophenochinon. Sm. 48° (*C.* 1898 [1] 887). — \*III, 261.
  - 12) Phenotoluchinon. Sm. 18° (*C.* 1898 [1] 887). — \*III, 265.
  - 13) Desoxytrimethylbrasilon. Sm. 173° (165—168°) (*C.* 1900 [1] 1292; *Soc.* 81, 1046 *C.* 1902 [2] 749; *B.* 38, 2167 *C.* 1905 [2] 335). — \*III, 480.
  - 14)  $\alpha\delta$ -Di[4-Methoxyphenyl]- $\alpha\gamma$ -Butadien- $\beta$ -Carbonsäure (p-Dianisylpentolsäure). Sm. 160°. *Ca* + 3H<sub>2</sub>O, *Ba* + 2H<sub>2</sub>O, *Ag* (*A.* 255, 299). — II, 1899.
  - 15)  $\alpha$ -Oxy- $\beta$ -Phenylakryleugenoläthersäure. Sm. 142°. *Na*, *Ba* +  $\frac{1}{2}$ H<sub>2</sub>O, *Ag* (*G.* 23 [1] 557). — II, 1637.
  - 16)  $\epsilon$ -Keto- $\gamma\delta$ -Diphenylhexan- $\gamma\delta$ -Oxyd- $\beta$ -Carbonsäure. *Na*, *Ag* (*Soc.* 83, 295 *C.* 1903 [1] 878).
  - 17)  $\alpha$ -Phenyl- $\beta$ -Benzyl- $\alpha$ -Buten- $\gamma\delta$ -Dicarbonsäure. Sm. 146—147°. *Na*<sub>2</sub>, *Ca*, *Ba*, *Ag*<sub>2</sub> (*B.* 28, 3194; *A.* 308, 177). — \*II, 1102.
  - 18)  $\alpha\gamma$ -Lakton d.  $\gamma$ -Oxy- $\gamma$ -Acetoxyl- $\alpha\delta$ -Diphenylvaleriansäure. Sm. 98 bis 99° (105—106°) (*A.* 219, 29; *A.* 319, 222 *C.* 1902 [1] 109). — II, 1717; \*II, 1012.
  - 19) Lakton d.  $\gamma$ -Oxy- $\gamma$ -[4-Benzoxylphenyl]pentan- $\gamma^2$ -Carbonsäure. Sm. 101° (*B.* 41, 505 *C.* 1908 [1] 1184).
  - 20)  $\alpha\delta$ -Lakton d.  $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpentan- $\delta\epsilon$ -Dicarbonsäure. Sm. 185 bis 187° (*A.* 314, 134). — \*II, 1146.
  - 21) Lakton d.  $\beta$ -Oxy- $\delta$ -Acetoxyl- $\alpha\gamma$ -Diphenylbutan- $\delta$ -Carbonsäure. Sm. 142° (*A.* 333, 279 *C.* 1904 [2] 1393).



- C<sub>19</sub>H<sub>18</sub>O<sub>4</sub>**
- 22) Monomethylester d.  $\alpha$ -Truxillsäure. Sm. 195°. Ag (B. 27, 1414). — II, 1901.
  - 23) Monomethylester d.  $\gamma$ -Truxillsäure. Sm. 180°. Ag (B. 27, 1415). — II, 1903.
  - 24) Äthylester d. 5,6-Dioxyphenanthrendimethyläther-1-Carbonsäure. Sm. 81—83° (B. 40, 1998 C. 1907 [2] 157).
  - 25) Äthylester d. 3,4-Dioxyphenanthrendimethyläther-9-Carbonsäure. Sm. 80° (B. 40, 2041 C. 1907 [2] 161).
  - 26) Äthylester d.  $\alpha\gamma$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta$ -Carbonsäure. Cu (B. 35, 936 C. 1902 [1] 808).
  - 27) Äthylester d.  $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 55 bis 58° (69—72°) (B. 21, 1487; A. 331, 316 C. 1904 [2] 46). — II, 1899.
  - 28)  $\beta$ -Monäthylester d.  $\alpha\alpha$ -Diphenylpropen- $\beta\gamma$ -Dicarbonsäure (M. d. Diphenylitakonsäure). Sm. 124,5—125,5°. Na, Ca, Ba, Ag (A. 282, 318; 308, 89; B. 28, 3192). — II, 1900; \*II, 1100.
  - 29) Äthylester d. Xanthen-9-Acetessigsäure. Sm. 87—89° (C. r. 143, 241 C. 1906 [2] 886).
  - 30) 2-Acetate d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropen-4-Äthyläther. Sm. 74—75° (B. 31, 698). — \*III, 182.
  - 31)  $\gamma^2$ -Acetat d.  $\gamma$ -Keto- $\alpha\gamma$ -Di[2-Oxyphenyl]propen- $\alpha^2$ -Äthyläther. Sm. 68° (B. 32, 321). — \*III, 181.
  - 32) Benzoat d. Oporosinotannol. Sm. 121° (C. 1899 [2] 315). — \*III, 424.
  - 33) Verbindung (aus ?-Dimethyl-6-Phenylcumalin u. 1,4-Dioxybenzol). Sm. 113° (B. 29, 1677; G. 26 [2] 343). — \*II, 985.  
C 69,6 — H 5,5 — O 24,5 — M. G. 326.
- C<sub>16</sub>H<sub>16</sub>O<sub>5</sub>**
- 1) Dibenzylidenarabinose. Sm. 154° (B. 25, 154 C. 1906 [2] 23).
  - 2) Dibenzylidenxylose. Sm. 130° (R. 25, 155 C. 1906 [2] 23).
  - 3) 2<sup>4</sup>,5,6-Trimethyläther d. 5,6-Dioxy-1-Keto-2-[2,4-Dioxybenzyliden]-2,3-Dihydroinden. Zers. bei 240°. HCl, K (Soc. 91, 1098 C. 1907 [2] 604).
  - 4) 1<sup>5</sup>,4-Dimethyläther-5-Äthyläther d. 5-Oxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzofuran. Sm. 148—149° (B. 32, 2258). — \*III, 532.
  - 5) 2<sup>2</sup>,2<sup>3</sup>,2<sup>4</sup>-Trimethyläther d. 7-Oxy-4-Methylen-2-[2,3,4-Trioxyphe-nyl]-1,4-Benzpyran. Sm. 105—110°. HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat (B. 39, 218 C. 1906 [1] 680).
  - 6) 2<sup>4</sup>-Methyläther d. 5-Oxy-7-Keto-6,8,8-Trimethyl-2-[4-Oxyphenyl]-7,8-Dihydro-1,4-Benzpyron. Sm. 185° (G. 31 [1] 77). — \*III, 565.
  - 7) 5,7-Dimethyläther-2<sup>2</sup>-Äthyläther d. 5,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 164—165° (B. 34, 1457). — \*III, 564.
  - 8) 5,7-Dimethyläther-2<sup>3</sup>-Äthyläther d. 5,7-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 151—152° (B. 34, 111). — \*III, 564.
  - 9) 7,2<sup>2</sup>-Diäthyläther d. 5,7-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 108—110° (B. 34, 1456). — \*III, 564.
  - 10) 7,2<sup>4</sup>-Diäthyläther d. 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (D. d. Apigenin). Sm. 161—162° (163—164°) (Soc. 71, 814; B. 33, 1994). — \*III, 565.
  - 11) Methyläther d. Ononetin. Sm. 95—110° (M. 24, 149 C. 1903 [1] 1033).
  - 12) Trimethyläther d. Brasileïn. Sm. 177—178°. + Ameisensäure (Soc. 93, 1133 C. 1908 [2] 611).
  - 13)  $\alpha$ -Keto- $\alpha\gamma$ -Diphenylpentan- $\delta\epsilon$ -Dicarbonsäure. Sm. 175—177°. Na<sub>2</sub> + 4 $\frac{1}{2}$ H<sub>2</sub>O, Ca, Ba + 3H<sub>2</sub>O, Ag<sub>2</sub> (A. 314, 125; A. 326, 362 C. 1903 [1] 1124). — \*II, 1152.
  - 14)  $\gamma$ -Keto- $\alpha\epsilon$ -Diphenylpentan- $\beta\delta$ -Dicarbonsäure ( $\alpha\alpha$ -Dibenzylacetondicarbonsäure). Sm. 115—116°. Ag<sub>2</sub> (A. 261, 185). — II, 1978.
  - 15)  $\gamma\delta$ -Diphenyl- $\beta$ -Methylbutan- $\gamma\delta$ -Oxyd- $\beta\delta$ -Dicarbonsäure. Sm. 171° (184°). Ag<sub>2</sub> (Soc. 83, 306 C. 1903 [1] 879).
  - 16)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\gamma$ -Acetoxyl- $\beta$ -Phenyl- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther- $\gamma$ -Carbonsäure. Sm. 117° (A. 333, 271 C. 1904 [2] 1392).
  - 17) Monolakton d.  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Dicarbonsäure. Sm. noch nicht bei 160°. Ba, Ag (A. 331, 189 C. 1904 [1] 1212).

- C<sub>19</sub>H<sub>19</sub>O<sub>5</sub>**
- 18) Methylester d. Mekoninmethylphenylketon. Sm. 97—98° (*M.* 20, 710). — \*II, 1150.
  - 19) Dimethylester d.  $\beta$ -Keto- $\alpha\alpha$ -Diphenylpropan- $\gamma\gamma$ -Dicarbonsäure (D. d. Diphenylacetylmalonsäure). Sm. 56—57° (*A.* 356, 89 *C.* 1907 [2] 1701).
  - 20) Diäthylester d. Diphenylketon-2,4-Dicarbonsäure? Sm. 95° (*B.* 9, 1763). — II, 1975.
  - 21) Diäthylester d. Diphenylketon-2,5-Dicarbonsäure. Sm. 100—101° (*J.* 1878, 403). — II, 1975.
  - 22) Diäthylester d. Diphenylketon-2,2'-Dicarbonsäure. Sm. 73—74° (*A.* 242, 246). — II, 1975.
  - 23)  $\gamma^2$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3-Oxyphenyl]propen- $\alpha^3, \gamma^4$ -Dimethyläther. Sm. 70—71° (*B.* 37, 4159 *C.* 1904 [2] 1658).
  - 24)  $\gamma^2$ -Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[4-Oxyphenyl]propen- $\alpha^4, \gamma^4$ -Dimethyläther. Sm. 103—104° (*B.* 32, 322). — \*III, 183.
  - 25) 2-Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxyphenyl]- $\alpha$ -Phenylpropen-3,4-Dimethyläther. Sm. 110° (*B.* 36, 4239 *C.* 1904 [1] 381).
  - 26) 6-Acetat d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphenyl]- $\alpha$ -Phenylpropen-2,4-Dimethyläther. Sm. 129—130° (*B.* 32, 2263). — \*III, 183.
  - 27) Diacetat d. 1,3-Dioxy-2,4-Dimethylxanthen. Sm. 117—118° (*M.* 25, 327 *C.* 1904 [1] 1495).
  - 28) Diacetat d. Lapachol. Sm. 131—132° (*G.* 12, 360; 19, 606). — III, 399.
  - 29) Verbindung (aus d. Verb. C<sub>27</sub>H<sub>30</sub>O<sub>12</sub>). Sm. 180—181° (*M.* 24, 211 *C.* 1903 [2] 38).  
C 66,7 — H 5,2 — O 28,1 — M. G. 342.
- C<sub>19</sub>H<sub>19</sub>O<sub>6</sub>**
- 1) Amanitin (*C.* 1896 [2] 307).
  - 2)  $\alpha$ -Trimethyläther d. Brasilon. Sm. 191° (184—186° u. Zers.) (*C.* 1899 [1] 750; *Soc.* 81, 1040 *C.* 1902 [2] 748; *B.* 36, 1221 *C.* 1903 [1] 1183). — \*III, 479.
  - 3)  $\beta$ -Trimethyläther d. Brasilon. Sm. 150—160° (165°) (*M.* 23, 173 *C.* 1902 [1] 1106; *B.* 35, 1670 *C.* 1902 [1] 1354; *B.* 36, 1220 *C.* 1903 [1] 1183; *Soc.* 93, 1144 *C.* 1908 [2] 1144).
  - 4) Trimethyläther d. Methyluteolin. Sm. 191—192° (185—189°) (*Soc.* 69, 211; 77, 1317; *B.* 33, 2340). — III, 584; \*III, 440.
  - 5) 2<sup>2</sup>, 2<sup>3</sup>, 2<sup>4</sup>-Trimethyläther d. 7,8-Dioxy-2-[2,3,4-Trioxyphenyl]-4-Methylen-1,4-Benzpyran. Sm. 183—185°. HCl, H<sub>2</sub>SO<sub>4</sub> (*B.* 39, 853 *C.* 1906 [1] 1171).
  - 6) 2<sup>2</sup>, 2<sup>3</sup>, 2<sup>4</sup>-Trimethyläther d. 5-Oxy-7-Keto-4-Methyl-2-[2,3,4-Trioxyphenyl]-1,7-Benzpyran + H<sub>2</sub>O. Sm. 140—145°. HCl + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + C<sub>2</sub>H<sub>5</sub>O, 2H<sub>2</sub>SO<sub>4</sub>, Pikrat (*B.* 39, 2029 *C.* 1906 [2] 256).
  - 7) 2<sup>2</sup>, 2<sup>4</sup>-Dimethyläther d. 7-Äthyläther d. 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 193—194° (*B.* 37, 789 *C.* 1904 [1] 1157).
  - 8) Tetramethyläther d. 7-Oxy-2-[3,4,5-Trioxyphenyl]-1,4-Benzpyron. Sm. 191—192° (*B.* 35, 2545 *C.* 1902 [2] 596).
  - 9) Tetramethyläther d. 3,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (T. d. Fisetin). Sm. 152—153° (149—150°) (*B.* 19, 1746; *M.* 30, 535 *C.* 1909 [2] 1569). — III, 584.
  - 10) Tetramethyläther d. 3,5,7-Trioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 175—176° (*Ar.* 247, 453 *C.* 1909 [2] 2082).
  - 11)  $\alpha\alpha$ -Di[ $p$ -Acetoxyphenyl]propionsäure. *Ba.* 16, 2074). — II, 1882.
  - 12)  $\alpha$ -Keto- $\alpha$ -[4-Methoxyphenyl]- $\gamma$ -Phenylbutan- $\delta\delta$ -Dicarbonsäure. Sm. 166° u. Zers. (*A.* 281, 61). — II, 2027.
  - 13)  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenyl- $\beta$ -Penten- $\gamma\delta$ -Dicarbonsäure. *Ca*, *Ba*, *Ag*<sub>2</sub> (*A.* 331, 179 *C.* 1904 [1] 1212).
  - 14) 1-Dibenzylidenxylonsäure. Sm. 199° (*R.* 18, 307). — \*III, 7.
  - 15) Trimethylester d. Diphenyläthan- $\alpha, \beta, \gamma$ -Tricarbonsäure. Sm. 145° (*A.* 242, 236). — II, 2024.
  - 16) Monäthylester d.  $\beta$ -Oxy- $\alpha$ -Keto- $\alpha\beta$ -Diphenylpropan- $\gamma\gamma$ -Dicarbonsäure (M. d. Benzoänylmalonsäure). Sm. 134°. *Na* (*Soc.* 67, 133). — II, 2025.
  - 17) Äthylester d. d- $\alpha\beta$ -Dibenzoxylpropionsäure. Sm. 25°; *Sd.* 254 bis 258°<sub>10</sub> (*Soc.* 69, 107; 75, 499). — \*II, 722.
  - 18) Acetat d. Decarbousnol. Sm. 135° (*A.* 324, 186 *C.* 1902 [2] 1512).

- C<sub>19</sub>H<sub>18</sub>O<sub>6</sub>** 19) Acetat d. Methylgenisteindimethyläther. Sm. 212—214° (Soc. 77, 1312).  
 20) Diacetat d. Alkannin. Ba (B. 13, 1515). — III, 650.  
 21) Diacetat d. α-Oxylapachol. Sm. 82° (Soc. 67, 791). — III, 402.  
 22) β-Acetat-αγ-Dibenzot d. αβγ-Trioxypuran. Sd. 248—251°<sub>22</sub> (C. 1903 [1] 134).  
 23) Verbindung (aus Brasilon-β-Trimethyläther). Sm. 174—175° (B. 37, 631 C. 1904 [1] 955; M. 25, 880 C. 1904 [2] 1312).  
**C<sub>19</sub>H<sub>18</sub>O<sub>7</sub>** C 63,7 — H 5,0 — O 31,3 — M. G. 358.  
 1) 3'4'-Methylenäther-2,4,6-Trimethyläther d. 2,4,6,3',4'-Pentaoxydibenzoylmethan. Sm. 115° (B. 33, 3413). — \*III, 227.  
 2) 2<sup>3</sup>,2<sup>4</sup>,5,7-Tetramethyläther d. 3,5,7-Trioxo-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 197—198° (B. 37, 1404 C. 1904 [1] 1356).  
 3) Tetramethyläther d. 3,5,7-Trioxo-2-[2,4-Dioxyphenyl]-1,4-Benzpyron (T. d. Morin). Sm. 131—132° (128—130°) (Soc. 69, 796; M. 30, 533 C. 1909 [2] 1569). — III, 683.  
 4) Tetramethyläther d. 3,5,7-Trioxo-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (T. d. Quercetin). Sm. 156—157° (A. 196, 317; M. 5, 83; 6, 889; 9, 552; Soc. 71, 819; 73, 271; C. 1909 [1] 773). — III, 604; \*III, 448.  
 5) 2<sup>3</sup>,2<sup>4</sup>,7,8-Tetramethyläther d. 3,7,8-Trioxo-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 217° (B. 38, 937 C. 1905 [1] 1027).  
 6) Eriodonol + H<sub>2</sub>O. Sm. 199° (Soc. 95, 86 C. 1909 [1] 1165).  
 7) Diacetylsolorinsäure. Sm. 147—148° (A. 284, 114). — II, 1971.  
 8) α,α'-Lakton d. α-Oxy-β-Keto-α-[4,5-Dimethoxyphenyl]-β-[2,4-Dimethoxyphenyl]äthan-α'-Carbonsäure. Sm. 200° (Soc. 95, 405 C. 1909 [1] 1572).  
**C<sub>19</sub>H<sub>18</sub>O<sub>8</sub>** 9) Methylester d. Usnolsäure. Sm. 202° (A. 324, 179 C. 1902 [2] 1512).  
 C 61,0 — H 4,8 — O 34,2 — M. G. 374.  
 1) Pentamethyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 192—194° (C. 1904 [2] 709).  
 2) α,2-Lakton d. α,4,5,4'-Tetraoxydiphenylmethan-4,5,4'-Trimethyläther-2-Carbonsäure-2'-Oxyessigsäure. Sm. 227° (C. 1900 [1] 1293; Soc. 81, 1038 C. 1902 [2] 748; Soc. 93, 515 C. 1908 [1] 1701). — \*III, 483.  
 3) Atranorsäure (Atranorin; Parmelin) oder C<sub>20</sub>H<sub>18</sub>O<sub>9</sub>. Sm. 195—197° (187 bis 188°) (J. 1877, 811; G. 10, 157; 12, 19, 256; A. 284, 174; 288, 38; 295, 224; 297, 274; 300, 322; 306, 282; 313, 317; 314, 110; 317, 120, 139; B. 30, 358, 1984; J. pr. [2] 57, 232, 274, 280, 410 Anm.; [2] 58, 465; [2] 63, 430). — II, 2083; \*II, 1219.  
**C<sub>19</sub>H<sub>18</sub>O<sub>9</sub>** C 58,5 — H 4,6 — O 36,9 — M. G. 390.  
 1) Leprarin (Leprariasäure; siehe auch C<sub>21</sub>H<sub>20</sub>O<sub>10</sub>). Sm. 155°. + CHCl<sub>3</sub> (C. 1901 [1] 640; A. 295, 290; 297, 310; 319, 392; C. 1901 [1] 640; J. pr. [2] 68, 69 C. 1903 [2] 514; A. 340, 289 C. 1905 [2] 898). — \*III, 467.  
 2) 4,5,4'-Trioxydiphenylketontrimethyläther-2-Carbonsäure-2'-Oxyessigsäure (Brasilinsäure). Sm. 208—210°. K, Ag, (C. 1900 [1] 1293; Soc. 79, 1410 C. 1902 [1] 203; Soc. 81, 1031 C. 1902 [2] 747; Soc. 93, 515 C. 1908 [1] 1701). — \*III, 482.  
 3) Verbindung (aus d. Trimethyläther d. Dihydrobrasileinol). Sm. 98° (Soc. 93, 1145 C. 1908 [2] 612).  
 4) Verbindung (aus d. Trimethyläther d. ?-Trioxo-4-Methylcumarin). Sm. 253—254° (G. 23 [2] 615). — II, 2007.  
**C<sub>19</sub>H<sub>18</sub>O<sub>10</sub>** C 56,2 — H 4,4 — O 39,4 — M. G. 406.  
**C<sub>19</sub>H<sub>18</sub>O<sub>11</sub>** 1) Säure (aus d. Trilakton C<sub>19</sub>H<sub>12</sub>O<sub>7</sub>). Ba<sub>3</sub> (B. 40, 4237 C. 1907 [2] 1842).  
 C 54,0 — H 4,3 — O 41,7 — M. G. 422.  
 1) l-Euxanthinsäure + 2H<sub>2</sub>O (oder C<sub>19</sub>H<sub>18</sub>O<sub>10</sub>). Sm. 156—158° u. Zers. (161—162°). (NH<sub>4</sub>)<sub>2</sub>, K + H<sub>2</sub>O, Mg + 5H<sub>2</sub>O, Ba + 9H<sub>2</sub>O (J. pr. [1] 33, 190; A. 51, 426; 93, 87; 155, 264; 254, 267; 290, 155, 158; 318, 345; B. 15, 1964; 19, 2919; 25, 2569; 33, 3360; C. 1902 [2] 844; H. 44, 119 C. 1905 [1] 1087). — II, 2102; \*II, 1231.  
**C<sub>19</sub>H<sub>18</sub>O<sub>14</sub>** C 48,5 — H 3,8 — O 47,7 — M. G. 470.  
 1) Benzoylhexaglyoxalhydrat (A. 172, 7). — I, 966.  
**C<sub>19</sub>H<sub>18</sub>N<sub>2</sub>** C 83,2 — H 6,6 — N 10,2 — M. G. 274.  
 1) 3,4-Diamidotriphenylmethan. + C<sub>6</sub>H<sub>6</sub> (Sm. 71—72°) (J. pr. [2] 71, 569 C. 1905 [2] 328).



- $C_{19}H_{18}N_2$
- 2) 4,4'-Diamidotriphenylmethan. Sm. 139°. +  $C_6H_6$  (Sm. 106°). (2HCl,  $PtCl_4$ ),  $H_2SO_4$  (B. 11, 276, 840; 12, 975, 1693; 13, 665, 985; 15, 236, 676; A. 206, 147; 217, 246; Z. Ang. 1897, 20; J. pr. [2] 36, 247; G. 14, 511; 15, 51; B. 37, 2860 C. 1904 [2] 776). — IV, 1041; \*IV, 700.
  - 3) 3,5-Di[Phenylamido]-1-Methylbenzol. Sm. 105° (J. pr. [2] 33, 542). — IV, 625.
  - 4)  $\alpha\alpha$ -Di[Phenylamido]phenylmethan. +  $SO_2$  (A. 316, 137).
  - 5) 4-Benzylamidodiphenylamin. Sm. 124° (A. 255, 190). — IV, 586.
  - 6) 4,4'-Diamido-3-Benzylbiphenyl. Sm. 209°. 2HCl,  $H_2SO_4$  (C. r. 148, 493 C. 1909 [1] 1167; Bl. [4] 5, 277 C. 1909 [1] 1485).
  - 7)  $\alpha$ -Methylimido- $\alpha$ -[Methyl-2-Naphtyl]amido- $\alpha$ -Phenylmethan (Benzenyl- $\beta$ -Naphtylmethylamid-Methylimidin). Fl. Pikrat (B. 28, 2369). — IV, 845.
  - 8)  $\alpha$ -[2-Naphtyl]imido- $\alpha$ -Dimethylamido- $\alpha$ -Phenylmethan (Benzenyl-dimethylamid- $\beta$ -Naphtylimidin). Fl. HJ, Pikrat (B. 28, 2371). — IV, 845.
  - 9) Triphenylmethylhydrazin. HCl (B. 42, 3024 C. 1909 [2] 1336).
  - 10) 4-[4-Methylphenyl]-s-Diphenylhydrazin. Sm. 102° (C. 1904 [1] 1491).
  - 11) Di[2-Methyl-3-Indolyl]methan. Sm. 230—231° (230—240°) (J. pr. [2] 61, 256; Bl. [4] 5, 737 C. 1909 [2] 713). — \*IV, 701.
  - 12) Di[2-Methyl-5-Indolyl]methan. Sm. 170—175° (J. pr. [2] 74, 156 C. 1906 [2] 1125).
  - 13)  $\alpha$ -[4-Dimethylamidophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 177°. (2HCl,  $PtCl_4$ ), Pikrat (B. 39, 2750 C. 1906 [2] 1203).
  - 14) 9-Dimethylamido-7,12-Dihydronaphtakridin. Sm. 202—207° (B. 34, 4318 C. 1902 [1] 323). — \*IV, 699.
  - 15) Dehydrocinchen + 3  $H_2O$ . Sm. bei 60°. (2HCl,  $PtCl_4$ ), 2HBr (B. 19, 2857; 28, 1077). — III, 839.
- $C_{19}H_{18}N_4$
- 1)  $\alpha$ -Phenylhydrazon- $\alpha\alpha$ -Di[Phenylamido]methan (Diphenylanilguandin). Sm. 160°. HCl, (2HCl,  $PtCl_4$ ),  $H_2SO_4$ , Pikrat (B. 21, 2272; 25, 3116; B. 38, 858 C. 1905 [1] 881; J. pr. [2] 64, 272 Anm.). — IV, 1224; \*IV, 890.
  - 2)  $\alpha$ -Phenylhydrazondi[3-Amidophenyl]methan. Sm. 183° (B. 20, 511). — IV, 775.
  - 3)  $\alpha$ -Phenylhydrazido- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylmethan (Benzenyl-diphenylazidin). Sm. 170° (B. 17, 183). — IV, 1246.
  - 4) 4-Methylbenzenyl-2-Naphtenylhydrazidin. Sm. 202° (B. 30, 1883; A. 298, 42). — IV, 1298.
- $C_{19}H_{18}N_6$
- 1) Benzoldisazobenzol-2,4-Toluylendiamin (B. 16, 2035). — IV, 1385.
  - 2) Phenylendiamin-Disazobenzoltoluol. Sm. 192° (B. 16, 2029). — IV, 1384.
  - 3) isom. Phenylendiamin-Disazobenzoltoluol. Sm. 225° (B. 16, 2030). — IV, 1385.
  - 4) isom. Phenylendiamin-Disazobenzoltoluol. Sm. 214° (B. 16, 2030). — IV, 1385.
- $C_{19}H_{18}S$
- 1) 2,4,6-Trimethylphenyläther d. 1-Merkaptonaphtalin. Sm. 120,6°; Sd. 245,11° (B. 28, 2329). — \*II, 509.
  - 2) 2,4,6-Trimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 87,5°; Sd. 245,11° (B. 28, 2330). — \*II, 529.
- $C_{19}H_{18}Si$   
 $C_{19}H_{19}N$
- 1) Methyltriphenylsilicium. Sm. 67—67,5° (Soc. 93, 210 C. 1908 [1] 1267). C 87,4 — H 7,3 — N 5,3 — M. G. 261.
  - 1) Äthyl-4-Methylphenyl-2-Naphtylamin (C. 1900 [2] 652).
  - 2) p-[1-Hexahydropyridyl]anthracen. (2HCl,  $PtCl_4$  + 2  $H_2O$ ) (B. 23, 1385). — IV, 10.
  - 3) p-[1-Hexahydropyridyl]phenanthren. Sm. 113°. (2HCl,  $PtCl_4$  + 6  $H_2O$ ) (B. 23, 1386). — IV, 10.
  - 4) 4-[4-Isopropylbenzyl]isochinolin. Sm. 72,5—73,5°. HCl, (HCl,  $HgCl_2$ ), (2HCl,  $PtCl_4$ ), Pikrat (A. 326, 301 C. 1903 [1] 929). — \*IV, 266.
- $C_{19}H_{19}N_3$
- 1) 2,4,4''-Triamidotriphenylmethan. Sm. 165°. 3HCl (B. 16, 1305; R. 24, 128 C. 1905 [1] 1325). — IV, 1193; \*IV, 852.
  - 2) 3,4,4''-Triamidotriphenylmethan (Pseudoleukanilin). Sm. 150°. +  $C_6H_6$  (Sm. 145°). (6HCl, 3  $PtCl_4$ ) (B. 13, 672). — IV, 1193; \*IV, 852.

- C<sub>19</sub>H<sub>19</sub>N<sub>3</sub>** 3) 4,4',4''-Triamidotriphenylmethan (p-Leukanilin). Sm. 148°. 3HCl + H<sub>2</sub>O, 4HCl + H<sub>2</sub>O (A. 194, 268, 272; D. R. P. 16710, 87972, 93699; B. 12, 2241; 13, 669; 15, 678; 16, 1301; 28, 1698; 33, 304; J. 1862, 349). — IV, 1194; \*IV, 853.
- 4) 2-Äthylamido-1-[2-Methylphenyl]azonaphtalin. Sm. 132° (B. 17, 2670). — IV, 1400.
- 5) 2-Äthylamido-1-[4-Methylphenyl]azonaphtalin. Sm. 112—113° (B. 17, 2670). — IV, 1400.
- 6) 3,5-Di[4-Amidobenzyl]pyridin. Sm. 155—157°. 3HCl (A. 280, 57). — IV, 1197.
- 7) 6-Äthylphenylamido-4-Methyl-2-Phenyl-1,3-Diazin. Sm. 87° (Am. 20, 488). — IV, 1168.
- C<sub>19</sub>H<sub>19</sub>Cl** 1) 10-Chlor-9-Isoamylanthracen. Sm. 70—71° (B. 14, 797; A. 212, 111). — II, 277.
- C<sub>19</sub>H<sub>19</sub>Br** 1) 10-Brom-9-Isoamylanthracen. Sm. 76°, Pikrat (B. 14, 797; A. 212, 111). — II, 277.
- C<sub>19</sub>H<sub>20</sub>O** C 86,4 — H 7,6 — O 6,0 — M. G. 264.
- 1) γ-Keto-αε-Diphenyl-α-Hepten. Sm. 87° (Am. 38, 542 C. 1908 [1] 228).
- 2) ε-Keto-αγ-Diphenyl-γ-Äthyl-α-Penten. Sm. 76° (B. 38, 690 C. 1905 [1] 724; B. 38, 1207 C. 1905 [1] 1240; B. 39, 1916 C. 1906 [2] 124).
- 3) γ-Keto-αα-Diphenyl-δδ-Dimethyl-α-Penten. Sm. 66° (Am. 38, 541 C. 1908 [1] 228).
- 4) 2-Keto-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen. Sm. 122° (Soc. 85, 1480 C. 1905 [1] 172).
- 5) 10-Keto-9-Isoamyl-9,10-Dihydroanthracen. Sm. 252—253° (B. 21, 2509). — III, 250.
- C<sub>19</sub>H<sub>20</sub>O<sub>2</sub>** C 81,4 — H 7,1 — O 11,4 — M. G. 280.
- 1) Isoamyloxanthranol. Sm. 125° (B. 13, 1598; A. 212, 73). — III, 244.
- 2) αη-Diketo-αη-Diphenylheptan. Sm. 67—68°; Sd. oberhalb 300° u. ger. Zers. (Soc. 55, 347). — III, 301.
- 3) γ-Keto-β-Acetyl-α-Phenyl-α-[4-Methylphenyl]butan. Sm. 104—106° (C. r. 145, 1292 C. 1908 [1] 643).
- 4) αγ-Diketo-αγ-Di[4-Äthylphenyl]propan. Sm. 42° (Bl. [3] 9, 700). — III, 301.
- 5) αγ-Diketo-αγ-Di[2,4(β)-Dimethylphenyl]propan. Sm. 82° (Bl. [3] 9, 701). — III, 301.
- 6) αγ-Diketo-αγ-Di[2,5-Dimethylphenyl]propan. Sm. 101—102° (Bl. [3] 9, 702). — III, 301.
- 7) αγ-Diketo-αγ-Di[3,4(β)-Dimethylphenyl]propan. Sm. 138° (Bl. [3] 9, 700). — III, 301.
- 8) Diphenyloxeton. Fl. (A. 288, 200). — \*III, 176.
- 9) 2,6-Diphenyl-3,5-Dimethyltetrahydro-1,4-Pyron. Sm. 106° (109°; 111,5—112,5°); Sd. 235—237°<sub>10</sub> (B. 29, 1352, 1836; 30, 2262 Anm.; 31, 1887; Soc. 85, 1485 Anm. C. 1905 [1] 172). — III, 239; \*III, 176.
- 10) Säure (aus Benzyl-4-Methylphenylketon). Sm. 92,5°. Ca, Ba (B. 14, 1646). — II, 1477.
- 11) Äthylester d. Distyrensäure. Fl. (A. 216, 185). — II, 1476.
- 12) 3-Methyl-6-Isopropylphenylester d. β-Phenylakrylsäure. Sm. 69 bis 70° (74°); Sd. 239—240°<sub>15</sub> (B. 18, 1946 C. 1900 [1] 1086). — II, 1406; \*II, 851.
- 13) 1-Naphtylester d. Isolauronolsäure. Sm. 82° (C. 1899 [2] 831). — \*II, 503.
- 14) 2-Naphtylester d. Isolauronolsäure. Sm. 82° (C. 1899 [2] 831). — \*II, 521.
- 15) Acetat d. Oxyretenfluoren. Sm. 70—71° (B. 17, 694; A. 229, 142). — II, 1082.
- C<sub>19</sub>H<sub>20</sub>O<sub>3</sub>** C 77,0 — H 6,7 — O 16,2 — M. G. 296.
- 1) γ<sup>4</sup>-Methyläther d. γ-Keto-γ-[2,4-Dioxyphenyl]-α-[4-Isopropylphenyl]-propen. Sm. 104° (B. 40, 3671 C. 1907 [2] 1421).
- 2) Diäthyläther d. γ-Keto-γ-[2,4-Dioxyphenyl]-α-Phenylpropen. Sm. 92—93° (B. 29, 1887). — \*III, 182.
- 3) Diäthyläther d. γ-Keto-γ-[2,5-Dioxyphenyl]-α-Phenylpropen. Sm. 50—51° (B. 32, 329). — \*III, 182.

$C_{19}H_{20}O_3$ 

- 4) Methyläther d. 6-Oxy-2-[4-Isopropylphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 90° (B. 40, 3669 C. 1907 [2] 1421).
- 5) Methyläther d. 7-Oxy-2-[4-Isopropylphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 75° (B. 40, 3671 C. 1907 [2] 1421).
- 6)  $\gamma$ -Oxy- $\beta$ -Phenyl- $\alpha$ -[4-Isopropylphenyl]propen- $\gamma$ -Carbonsäure. Sm. 136° (B. 36, 921 C. 1903 [1] 1031; A. 333, 246 C. 1904 [2] 1391).
- 7)  $\beta$ -[2-Methoxyphenyl]- $\alpha$ -[4-Isopropylphenyl]akrylsäure. Sm. 198 bis 199°. Ag (G. 15, 511). — II, 1717.
- 8)  $\alpha$ -Oxy- $\beta$ -Phenylakryl[6-Isopropyl-3-Methylphenyläther]säure. Sm. 136°. Ba + 2 $\frac{1}{2}$  H<sub>2</sub>O (G. 19, 357). — II, 1637.
- 9)  $\beta$ -Oxy- $\beta$ -Phenylakryl-[6-Isopropyl-3-Methylphenyläther]säure. Sm. 138° u. Zers. Ag (Soc. 79, 918).
- 10)  $\beta$ -[4-Isopropylbenzoyl]- $\beta$ -Phenylpropionsäure. Sm. 111° (B. 36, 921 C. 1903 [1] 1031; A. 333, 246 C. 1904 [2] 1391).
- 11)  $\alpha\gamma$ -Lakton d.  $\alpha\gamma$ -Dioxy- $\beta$ -Phenyl- $\gamma$ -[4-Isopropylphenyl]buttersäure. Sm. 169° (B. 36, 920 C. 1903 [1] 1031; A. 333, 242 C. 1904 [2] 1390).
- 12) Methylester d.  $\beta$ -Keto- $\alpha\alpha$ -Di[4-Methylphenyl]propan- $\alpha$ -Carbonsäure. Sm. 119°; Sd. 235°<sub>15</sub> (C. r. 148, 849 C. 1909 [1] 1760).
- 13) Methylester d. Retenoxyessigsäure. Sm. 112–113° (M. 29, 770 C. 1908 [2] 1602).
- 14) Äthylester d.  $\beta$ -Oxy- $\beta$ -Phenylakryl-2,4-Dimethylphenyläthersäure. Sd. 225–226°<sub>10</sub> (Soc. 79, 1187).
- 15) Äthylester d.  $\gamma$ -Benzoyl- $\gamma$ -Phenylbuttersäure. Sm. 33–34° (B. 21, 1353). — II, 1716.
- 16) Äthylester d.  $\gamma$ -Keto- $\alpha\alpha$ -Diphenylbutan- $\beta$ -Carbonsäure. Sm. 85° (Soc. 71, 676; C. r. 145, 1291 C. 1908 [1] 643). — \*II, 1014.
- 17) Äthylester d. Säure C<sub>17</sub>H<sub>16</sub>O<sub>3</sub>. Sm. 48–50° (B. 37, 2247 C. 1904 [2] 328).

 $C_{19}H_{20}O_4$ 

- C 73,1 — H 6,4 — O 20,5 — M. G. 312.
- 1) Dibenzylidenäther d. Pentaerythrit. Sm. 160° (A. 289, 34). — III, 8.
  - 2) 2-Keto-1,4,5-Trioxyl-3-Dimethyl-4,5-Diphenyl-R-Pentamethylen. Sm. 89° (Soc. 83, 295 C. 1903 [1] 878).
  - 3)  $\alpha^2, \gamma^4$ -Diäthyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[2-Oxyphenyl]-propen. Sm. 125° (B. 32, 1031). — \*III, 182.
  - 4)  $\alpha^3, \gamma^4$ -Diäthyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3-Oxyphenyl]-propen. Sm. 85° (B. 33, 323). — \*III, 182.
  - 5) 2,4-Diäthyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxypheyl]- $\alpha$ -Phenylpropen. Sm. 118–119° (B. 32, 2265). — \*III, 183.
  - 6) Diäthyläther d. 2,4-Dioxydibenzoylmethan. Sm. 120–121° (B. 34, 3726 C. 1902 [1] 46). — \*III, 226.
  - 7) Diäthyläther d. 2,5-Dioxydibenzoylmethan. Sm. 72–74° (B. 33, 2514). — \*III, 226.
  - 8) Diäthyläther d. 2,4'-Dioxydibenzoylmethan. Sm. 110–111° (B. 33, 2516). — \*III, 227.
  - 9) Dimethyläther d. 2,6-Di[2-Oxyphenyl]tetrahydro-1,4-Pyron. Sm. 173° (170°) (B. 31, 1510; 32, 810; J. pr. [2] 60, 147; C. 1899 [2] 186). — \*III, 544.
  - 10) Diäthyläther d. 6-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 100–101° (B. 33, 2509). — \*III, 559.
  - 11) Diäthyläther d. 6-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 96–97° (B. 33, 1478). — \*III, 559.
  - 12) Benzalbishydroresorcin. Sm. 208° u. Zers. (A. 309, 375). — \*III, 249.
  - 13) Trimethyläther d. 5,6,4'-Trioxyl-1,2-Hydrindochroman (Soc. 91, 1100 C. 1907 [2] 604).
  - 14)  $\alpha\delta$ -Di[4-Methoxyphenyl]- $\alpha$ -Buten- $\gamma$ -Carbonsäure. Sm. 101°. Ca + 2H<sub>2</sub>O, Ag (A. 255, 302). — II, 1892.
  - 15)  $\alpha$ -Phenyl- $\alpha$ -[4-Äthylphenyl]propan- $\beta\gamma$ -Dicarbonsäure. Sm. 135–140° (C. 1905 [1] 1388).
  - 16) Dialdehyd d. 6-Oxy-1-Methylbenzol- $\alpha\gamma$ -Propylenäther-3-Carbonsäure. Sm. 114° (A. 357, 378 C. 1908 [1] 358).
  - 17)  $\alpha\gamma$ -Lakton d.  $\alpha$ -Oxy- $\alpha\delta$ -Di[4-Methoxyphenyl]butan- $\gamma$ -Carbonsäure (Dianisylpentalakton). Sm. 83° (A. 255, 306). — II, 1971.
  - 18) Dimethylester d. ?-Isopropylbiphenyldicarbonsäure. Sm. 93–95° (M. 29, 774 C. 1908 [2] 1603).



- C<sub>19</sub>H<sub>20</sub>O<sub>4</sub>**
- 19) Äthylester d.  $\alpha$ -Acetoxy- $\beta\beta$ -Diphenylpropionsäure. Sm. 53° (A. 248, 44). — II, 1699.
  - 20) Diäthylester d. Diphenylmethan-2,4-Dicarbonsäure. Fl. (B. 9, 1765). — II, 1888.
  - 21) Isocamylester d. 2-Benzoxylbenzol-1-Carbonsäure (A. 92, 314). — II, 1497.
  - 22) Dibenzylester d. Propan- $\alpha\gamma$ -Dicarbonsäure. Sd. 248°<sub>14</sub> (B. 35, 4084 C. 1903 [1] 75).
  - 23) Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\alpha$ -Diphenylpropan. Sm. 153° (B. 39, 2302 C. 1906 [2] 525).
  - 24) Diacetat d.  $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylpropan. Sm. 105° (C. 1909 [1] 1335).
  - 25) Diacetat d.  $\beta\beta$ -Di[4-Oxyphenyl]propan. Sm. 78° (C. 1904 [2] 1737).
  - 26) Dibenzoat d. Amylenglykol. Sm. 123° (A. 133, 256). — II, 1141.
  - 27) Dibenzoat eines isom. Amylenglykol. Sm. 40° (G. 21, 541). — II, 1141.
  - 28) Dibenzoat d.  $\delta\delta$ -Dioxy- $\beta$ -Methylbutan. Sm. 111°; Sd. 264° (A. 109, 299). — II, 1153.
  - 29) Dibenzoat d.  $\alpha\gamma$ -Dioxy- $\beta\beta$ -Dimethylpropan. Sm. 53° (B. 27, 1089; A. 289, 41). — II, 1142; \*II, 714.
  - 30) Verbindung (aus Trimethylolbisacetophenon). Sm. 108° (B. 36, 1354 C. 1903 [1] 1299).
- C<sub>19</sub>H<sub>20</sub>O<sub>5</sub>**
- C 69,5 — H 6,0 — O 24,4 — M. G. 328.
- 1)  $\alpha^3, \alpha^4$ -Dimethyläther- $\gamma^4$ -Äthyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 124—125° (B. 32, 2257). — \*III, 183.
  - 2) Trimethyläther d. 4,6,3'-Trioxy-2-Methyldibenzoylmethan. Sm. 107° (B. 41, 796 C. 1908 [1] 1555).
  - 3) Trimethyläther d. 2,6,2'-Trioxy-4-Methyldibenzoylmethan. Sm. 118° (B. 41, 788 C. 1908 [1] 1553).
  - 4) Trimethyläther d. 2,6,3'-Trioxy-4-Methyldibenzoylmethan. Sm. 98° (B. 41, 789 C. 1908 [1] 1553).
  - 5) Trimethyläther d. 2,6,4'-Trioxy-4-Methyldibenzoylmethan. Sm. 97—98° (B. 41, 790 C. 1908 [1] 1553).
  - 6) Trimethyläther d. 5-Oxy-4-[3,4-Dioxybenzoyl]-2-Methyl-1,2-Dihydrobenzofuran. Sm. 119—120° (B. 41, 1334 C. 1908 [1] 1980).
  - 7) 2<sup>3</sup>,2<sup>4</sup>-Dimethyläther-7-Äthyläther d. 7-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 110° (B. 37, 788 C. 1904 [1] 1157).
  - 8) Trimethyläther d. Brasilin. Sm. 138—139°; amorphe Modif. Sm. 82 bis 86° (B. 20, 3365; 21, 3009; 22, 1547; 23, 1430; 27, 525; M. 14, 56; 15, 269; B. 35, 1669 C. 1902 [1] 1353; Soc. 79, 1403 C. 1902 [1] 203). — III, 652; \*III, 478.
  - 9) Dibenzylidenadonit. Sm. 164—165° (B. 26, 638; R. 18, 151). — III, 8; \*III, 5.
  - 10) Dibenzylidenxylit. Sm. 175° (R. 18, 151). — \*III, 5.
  - 11) Anhydrolariciresinol. Sm. 207° (M. 23, 1026 C. 1903 [1] 288).
  - 12) Isovaleryloreoselin. Sm. 95—97° (A. 174, 82). — III, 620.
  - 13)  $\alpha$ -Oxy- $\alpha\gamma$ -Diphenylpentan- $\delta\epsilon$ -Dicarbonsäure. Ba (A. 314, 135). — \*II, 1146.
  - 14) Guajakonsäure (oder C<sub>20</sub>H<sub>24</sub>O<sub>5</sub>). Sm. 95—100° (74—75°). + PbO (J. 1862, 467; C. 1897 [1] 167; M. 3, 125, 822). — II, 1974; \*II, 1146.
  - 15) Diacetat d. Isobutyl-1,8-Dioxy-2-Naphtylketon. Sm. 110—111° (C. 1901 [2] 1287). — \*III, 143.
  - 16) Diacetat d. Hydrolapachon. Sm. 161° (G. 19, 611). — II, 1028.
  - 17) Verbindung (aus Guajakharz). Sm. 107° (Ar. 244, 99 C. 1906 [1] 1891).
  - 18) Verbindung (aus Papaverinbromäthylat). Sm. 180—181° (M. 10, 688). — IV, 441.
- C<sub>19</sub>H<sub>20</sub>O<sub>6</sub>**
- C 66,3 — H 5,8 — O 27,9 — M. G. 344.
- 1) Tetramethyläther d. 2,4,6,4'-Tetraoxydibenzoylmethan. Sm. 91° (107°) (B. 33, 1990; 34, 1450 Anm.). — \*III, 227.
  - 2) Tetramethyläther d. 3,4,3',5'-Tetraoxydibenzoylmethan. Sm. 115° (Soc. 89, 1653 C. 1907 [1] 406).
  - 3)  $\alpha^3, \alpha^4, \gamma^3, \gamma^4$ -Tetramethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 124° (B. 38, 936 C. 1905 [1] 1027).

$C_{19}H_{20}O_6$ 

- 4)  $\alpha^2, \alpha^4, \gamma^2, \gamma^4$ -Tetramethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphe-  
nyl]- $\alpha$ -[2,4-Dioxyphenyl]propen. Sm. 152° (B. 37, 794 C. 1904 [1] 1159).
- 5)  $\alpha^3, \alpha^4, \gamma^2, \gamma^4$ -Tetramethyläther d.  $\gamma$ -Keto- $\gamma$ -[2,4,6-Trioxyphe-  
nyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 157° (B. 37, 793 C. 1904 [1] 1158).
- 6) Trimethyläther d. 3,5,7-Trioxo-2-[4-Oxyphenyl]- $\beta$ -Methyl-1,4-Benz-  
pyron (Trimethylderivat d. Kämpferid). Sm. 178° (B. 32, 863; G. 30  
[2] 334). — \*III, 464.
- 7) Tetramethyläther d. 5,7-Dioxy-2-[2,4-Dioxyphenyl]-2,3-Dihydro-  
1,4-Benzpyron. Sm. 167—168° (B. 39, 626 C. 1906 [1] 1028).
- 8) Tetramethyläther d. 5,7-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-  
1,4-Benzpyron. Sm. 159—160° (B. 37, 1403 C. 1904 [1] 1355).
- 9) Tetramethyläther d. 7,8-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-  
1,4-Benzpyron. Sm. 144° (B. 38, 937 C. 1905 [1] 1027).
- 10) Pinoresinol. Sm. 122°.  $K_2 + 4H_2O$ , Ca (M. 15, 507; 18, 481). — III,  
563; \*III, 426.
- 11) Trimethyläther d. Dihydrobrasileinol. Sm. 177° (Soc. 93, 1136 C.  
1908 [2] 611).
- 12) Trimethyläther d. Eriodictyonon. Sm. 162° (M. 28, 1035 C. 1907  
[2] 2065).
- 13)  $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Dicarbonsäure. Ca, Ag<sub>2</sub> (A. 331,  
189 C. 1904 [1] 1213).
- 14)  $\alpha\epsilon$ -Dioxypentandiphenyläther- $\gamma\gamma$ -Dicarbonsäure. Sm. 150—152° u.  
Zers. Ag (Soc. 69, 169, 1501). — \*II, 367.
- 15) Dialdehyd d. 3,4-Dioxybenzol-3,3'-Dimethyläther-4,4'-Propylen-  
äther-1-Carbonsäure. Sm. 145—146° (A. 357, 381 C. 1908 [1] 358).
- 16) Dimethylester d. Di[4-Methoxyphenyl]malonsäure. Sm. 90° (C. r.  
148, 720 C. 1909 [1] 1560).
- 17) Diäthylester d. Dioxymalondiphenyläthersäure. Sd. 250—260°<sub>63</sub> (B.  
24, 3004). — II, 667.
- 18) Diäthylester d. 1,3,4-Trimethyl- $\beta$ -Benzdifuran-2,5-Dicarbonsäure.  
Sm. 133° (A. 283, 267). — III, 736.
- 19) Acetat d. Toluresitannol (C. 1895 [1] 353).
- 20) Diacetat d. Verb.  $C_{15}H_{16}O_4$ . Sm. 126° (Bl. [3] 7, 564). — II, 919.
- 21) Verbindung (aus d. Verb.  $C_{19}H_{18}O_6$ ) (M. 25, 881 C. 1904 [2] 1312).  
C 63,3 — H 5,5 — O 31,1 — M. G. 360.

 $C_{19}H_{20}O_7$ 

- 1) Pentamethyläther d. Katechon. Sm. 174—175° (B. 39, 4013 C. 1907  
[1] 260).
- 2) Benzylidenarbutin. Sm. 218° (R. 25, 158 C. 1906 [2] 24).
- 3) Barbatinsäure (Rhizonsäure). Sm. 186° (187° u. Zers.).  $Na + 2H_2O$ ,  
K, Ca, Ba +  $3H_2O$ , Pb, Cu +  $4H_2O$ , Ag (A. 203, 302; 306, 299; B.  
30, 358; 31, 664; J. pr. [2] 57, 237; [2] 58, 527; A. 324, 59 C. 1902  
[2] 904; J. pr. [2] 68, 12 C. 1903 [2] 510; A. 327, 340 C. 1903 [2] 509;  
J. pr. [2] 73, 129 C. 1906 [1] 1101). — II, 2054; \*II, 1036.
- 4) Acetyldecarbousninsäure (Acetylderivat d. Decarbusnein). Sm. 112°  
(120—121°) (A. 284, 166; 310, 270). — II, 2057; \*II, 1204.
- 5) Diacetyldecarbousninsäure. Sm. 130—131° (G. 12, 236). — II, 2058;  
\*II, 1206.
- 6) Methyl ester d. Saligeninglykolsäure? Fl. (G. 21 [1] 258). — II, 1109.
- 7) Monacetat d. 3,4,2',4',6'-Pentaoxydiphenylketontetramethyläther.  
Sm. 170° (B. 25, 1135). — III, 208.

 $C_{19}H_{20}O_8$ 

- 8) Diacetat d. Osthin. Sm. 183—186° (C. 1896 [1] 561).  
C 60,6 — H 5,3 — O 34,0 — M. G. 376.
- 1) Anhydrodiacetylpikrothin. Sm. oberhalb 300° (B. 31, 2973). — \*III, 472.
- 2) 3,4-Dioxybenzoldimethylpropylenäther-1-Carbonsäure (Bl. 29, 270).  
— II, 1744.
- 3)  $\beta\gamma^2$ -Lakton d.  $\beta\gamma$ -Dioxy- $\alpha$ -[2,5-Dioxy-4-Methoxyphenyl]propan- $\beta$ -  
Methyläther- $\gamma$ -[2-Oxy-5-Methoxyphenyl]äther- $\beta$ -Carbonsäure.  
Sm. 218—220° (Soc. 93, 1156 C. 1908 [2] 613).
- 4) Diacetat d. Pikrotoxinin. Sm. 254—255° (G. 9, 60; B. 31, 2969). —  
III, 643; \*III, 471.
- 5) Tetraacetat d. Emodinanthranol. Sm. 197° (C. 1909 [1] 774).
- 6) Benzoeat d. Arbutin. Sm. 184,5° (D. R. P. 151036 C. 1904 [1] 1308).  
C 58,1 — H 5,1 — O 36,7 — M. G. 392.
- 1) Aeromelidin. Sm. 162° (J. pr. [2] 76, 43 C. 1907 [2] 1083).

 $C_{19}H_{20}O_9$

- C<sub>19</sub>H<sub>20</sub>O<sub>9</sub>** 2) Malettotannin (*C.* 1909 [1] 1707).  
 3) Squamatsäure. Sm. 215° (*J. pr.* [2] 62, 450; [2] 63, 536; *A.* 324, 73 *C.* 1902 [2] 905; *J. pr.* [2] 70, 449 *C.* 1905 [1] 257). — \*II, 1240.
- C<sub>19</sub>H<sub>20</sub>O<sub>10</sub>** 4) 3,4,6,4',6' [oder 4,5,6,4',6'] - Pentaoxybiphenylpentamethyläther - 2,2'-Dicarbonsäure. Sm. 247—249° (*M.* 29, 285 *C.* 1908 [2] 313).  
 C 55,9 — H 4,9 — O 39,2 — M. G. 408.  
 1) Brasilinsäurehydrat. Sm. 130° (*Soc.* 81, 1037 *C.* 1902 [2] 748). — \*III, 482.  
 2) 4,5,6,4',5',6' - Hexaoxybiphenyl-4,5,6,4',5' - Pentamethyläther - 2,2'-Dicarbonsäure. Sm. 200—203° (*M.* 29, 275 *C.* 1908 [2] 312).  
 3) Tetracetylcarminsäure? (*B.* 30, 1738).  
 C 82,6 — H 7,2 — N 10,1 — M. G. 276.
- C<sub>19</sub>H<sub>20</sub>N<sub>2</sub>** 1) 4-Dimethylamido-2-[2-Naphtyl]amido-1-Methylbenzol. Sm. 95—96° (*D. R. P.* 89659). — \*IV, 400.  
 2) ε-[2-Methylphenyl]imido-α-[2-Methylphenyl]amido-αγ-Pentadien. Fl. HCl, HBr (*J. pr.* [2] 69, 136 *C.* 1904 [1] 816; *J. pr.* [2] 70, 42 *C.* 1904 [2] 1235; *A.* 333, 324 *C.* 1904 [2] 1149).  
 3) ε-[3-Methylphenyl]imido-α-[3-Methylphenyl]amido-αγ-Pentadien. HBr (*J. pr.* [2] 70, 45 *C.* 1904 [2] 1235).  
 4) ε-[4-Methylphenyl]imido-α-[4-Methylphenyl]amido-αγ-Pentadien. Sm. 121°. HCl, HBr (*A.* 333, 323 *C.* 1904 [2] 1149; *J. pr.* [2] 70, 46 *C.* 1904 [2] 1236).  
 5) 1-Methylamido-3-Dimethylamido-2-Phenylnaphtalin? Sm. 98—99°. 2HCl (*Soc.* 91, 1299 *C.* 1907 [2] 992).  
 6) 1-Äthylamido-2-[4-Methylphenyl]amidonaphtalin. Sm. 68° (*B.* 27, 2778). — IV, 918.  
 7) 5-Pseudobutyl-1,3-Diphenylpyrazol. Sm. 77°; Sd. 229—231°<sub>25</sub> (*B.* 30, 2273). — IV, 943.  
 8) 2-Isobutyl-4,5-Diphenylimidazol. Sm. 223°. (2HCl, PtCl<sub>4</sub>) (*Soc.* 49, 476). — IV, 1035.  
 9) 1-Methyl-2-Propyl-4,5-Diphenylimidazol. Sm. oberhalb 110° (*C.* 1909 [1] 1883).  
 10) 1-Methyl-2-Isopropyl-4,5-Diphenylimidazol. Sm. 97° (*C.* 1909 [1] 1883).  
 11) Cinchen. Sm. 123—125°. (2HCl, PtCl<sub>4</sub>) (*B.* 14, 103, 1854; 17, 1985, 1987; 18, 1219; 23, 2677; 31, 2361; *J.* 1882, 366). — III, 836.  
 12) Base (aus Cinchotinsulfonsäure). Fl. 2 Pikrat (*M.* 22, 810). — \*III, 643.  
 13) Nitril d. α-Phenyl-β-[4-Diäthylamidophenyl]akrylsäure. Sm. 97° (*B.* 39, 2169 *C.* 1906 [2] 234).  
 C 75,0 — H 6,6 — N 18,4 — M. G. 304.
- C<sub>19</sub>H<sub>20</sub>N<sub>4</sub>** 1) αs-Di[Phenylcyanamido]pentan. Sm. 76° (*B.* 41, 2167 *C.* 1908 [2] 706).  
 2) 4,4'-Di[Cyandimethylamido]diphenylmethan. Sm. 107° (*B.* 41, 2142 *C.* 1908 [2] 701).  
 3) Phenylsazon (aus 3-Keto-1,2-Dioxy-1-Methylhexahydrobenzol). Sm. 128° (*B.* 35, 1177 *C.* 1902 [1] 989). — \*IV, 501.  
 4) 2,6-Di[Phenylamido]-4-Methyl-5-Äthyl-1,3-Diazin. HCl (*B.* 36, 1922 *C.* 1903 [2] 209). — \*IV, 913.  
 5) Di[2-Äthyl-6-Benzimidazolyl]methan. Sm. 263—264° (*B.* 33, 260). — \*IV, 961.
- C<sub>19</sub>H<sub>21</sub>N** C 86,7 — H 8,0 — N 5,3 — M. G. 263.  
 1) 3-Hexyl-β-Naphtochinolin. Sm. 83° (*B.* 27, 2023).  
 2) 1,3,4,6,7,9-Hexamethylakridin. Sm. 221—222°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat, + HgCl<sub>2</sub> (*Soc.* 81, 285 *C.* 1902 [1] 528, 811; *Soc.* 91, 1934 *C.* 1908 [1] 384). — \*IV, 255.  
 3) Nitril d. γδ-Diphenylhexan-γδ-Dicarbonsäure. Sm. 105° (*Am.* 35, 393 *C.* 1906 [2] 47).
- C<sub>19</sub>H<sub>21</sub>N<sub>3</sub>** C 78,3 — H 7,2 — N 14,4 — M. G. 291.  
 1) γ-Phenylhydrazon-α-[4-Dimethylamidophenyl]-α-Buten. Sm. 165° (*C.* 1906 [2] 1325).  
 2) 5-Propylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 74° (*B.* 40, 4486 *C.* 1908 [1] 138).  
 3) 2,5-Phenylimido-3-Methyl-2-Propyl-1-Phenyl-2,2-Dihydropyrazol. Sm. 50°. (2HCl, PtCl<sub>4</sub>), HJ (*B.* 40, 4486 *C.* 1908 [1] 138).



- C<sub>19</sub>H<sub>21</sub>N<sub>3</sub>** 4) **2,5-Methylimido-2,3-Dimethyl-1-Phenyl-4-Benzyl-2,5-Dihydropyr-azol.** Carbonat + H<sub>2</sub>O (A. 339, 164 C. 1905 [1] 1401).  
 5) **4-Phenylazooktohydro-β-Naphtochinolin.** Sm. 95°. Pikrat (B. 24, 2656). — IV, 1581.
- C<sub>19</sub>H<sub>21</sub>N<sub>5</sub>** C 71,5 — H 6,6 — N 21,9 — M. G. 319.  
 1) **Base** (aus Anilin u. Amidodiphenylguanidin). Sm. 105°. Oxalat (B. 32, 2816; 33, 1059, 1064).
- C<sub>19</sub>H<sub>21</sub>Br** 1) **β-Brom-αα-Diphenyl-α-Hepten.** Sm. 74° (B. 37, 1454 C. 1904 [1] 1353).
- C<sub>19</sub>H<sub>22</sub>O** C 85,7 — H 8,3 — O 6,0 — M. G. 266.  
 1) **α-Oxyhexahydrotriphenylmethan.** Sm. 70–71°; Sd. 210–220°<sub>14</sub> u. Zers. (B. 40, 4166 C. 1907 [2] 1843; B. 41, 449 C. 1908 [1] 846).  
 2) **10-Oxy-10-Isoamyl-9,10-Dihydroanthracen.** Sm. 73–74° (B. 14, 801; A. 212, 103). — II, 900.  
 3) **γ-Keto-εε-Diphenyl-ββ-Dimethylpentan.** Sm. 85° (Am. 38, 539 C. 1908 [1] 227).  
 4) **α-Keto-αγ-Di[2,5-Dimethylphenyl]propan.** Sm. 52°; Sd. 255–265°<sub>30</sub> (A. ch. [7] 2, 206). — III, 239.  
 5) **2,4,6-Triäthylidiphenylketon.** Sd. 340° (B. 32, 1565). — \*III, 176.  
 6) **Benzylidenxyliton.** Sd. 230–240°<sub>14</sub> (A. 299, 230). — \*III, 176.  
 7) **Cinnamylidencampher.** Sm. 88–89°; Sd. 280–290°<sub>50</sub> (B. 24 [2] 732; B. 38, 110 C. 1905 [1] 526). — III, 514.  
 8) **Verbindung** (aus Hexylen u. Benzophenon). Sd. 310–320° (G. 39 [1] 355 C. 1909 [2] 195).
- C<sub>19</sub>H<sub>22</sub>O<sub>2</sub>** C 80,8 — H 7,8 — O 11,4 — M. G. 282.  
 1) **Diäthyläther d. αα-Di[β-Oxyphenyl]propen.** Sm. 76–77° (B. 22, 1130). — II, 999.  
 2) **αα-Di[β-Äthylphenyl]propionsäure.** Sm. 116° (B. 14, 1597). — II, 1472.  
 3) **αα-Di[2,4-Dimethylphenyl]propionsäure.** Sm. 168–169°. Ag (B. 38, 847 C. 1905 [1] 875).  
 4) **αα-Di[3,4-Dimethylphenyl]propionsäure.** Sm. 149°. Ba (B. 38, 843 C. 1905 [1] 875).  
 5) **Äthylester d. αα-Di[4-Methylphenyl]propionsäure.** Sm. 145° (B. 15, 1476). — II, 1471.  
 6) **Bornylester d. Phenylpropionsäure.** Sm. 45°; Sd. 228–230°<sub>21</sub> (Soc. 93, 7 C. 1908 [1] 838).  
 7) **Acetat d. 3-Oxy-β-Benzyl-4-Isopropyl-1-Methylbenzol.** Sd. 245° (G. 11, 348). — II, 899.  
 8) **Acetat d. 2-Oxy-β-Benzyl-4-Isopropyl-1-Methylbenzol.** Sd. 230°<sub>30</sub> (G. 31 [1] 471).  
 9) **Acetat d. α-Oxy-2,3,4,6-Tetramethyldiphenylmethan.** Sd. oberhalb 360° (Bl. 42, 172). — II, 1081.
- C<sub>19</sub>H<sub>22</sub>O<sub>3</sub>** C 76,5 — H 7,4 — O 16,1 — M. G. 298.  
 1) **Diäthyläther d. Di[β-Oxy-β-Methylphenyl]keton.** Sm. 105–106° (B. 28, 2872). — III, 232.  
 2) **Dipropyläther d. 4,4'-Dioxydiphenylketon.** Sm. 127° (B. 28, 2871). — III, 199.  
 3) **Pyroguajacin.** Sm. 183° (181°). Na + H<sub>2</sub>O, K + 1½ H<sub>2</sub>O (A. 52, 404; 119, 277; J. 1854, 612; B. 30, 379; C. 1897 [1] 167). — II, 1878; \*II, 1086.  
 4) **Äthylester d. α-Oxy-αα-Diphenyl-β-Methylpropan-β-Carbonsäure.** Sm. 101° (Bl. [3] 35, 600 C. 1906 [2] 861).  
 5) **Isoamylester d. α-Oxydiphenylessigsäure.** Sd. 230–232°<sub>25</sub> (B. 37, 2767 C. 1904 [2] 708).  
 6) **2-Methylphenylester d. α-Oxyisovalerian-2-Methylphenyläther-säure.** Sd. 191°<sub>15</sub> (B. 39, 3836 C. 1907 [1] 92).  
 7) **3-Methylphenylester d. α-Oxyisovalerian-3-Methylphenyläther-säure.** Sd. 202°<sub>15</sub> (B. 39, 3838 C. 1907 [1] 93).  
 8) **4-Methylphenylester d. α-Oxyisovalerian-4-Methylphenyläther-säure.** Sd. 215°<sub>15</sub> (B. 39, 3839 C. 1907 [1] 93).  
 9) **Acetat d. d-1-Oxy-2-Benzoylcamphen.** Sm. 107° (Soc. 79, 1002). — \*III, 219.

- C<sub>19</sub>H<sub>22</sub>O<sub>4</sub>** C 72,6 — H 7,0 — O 20,4 — M. G. 314.  
 1) Tetramethyläther d.  $\alpha$ -Di[2,5-Dioxyphenyl]propen. Sm. 87° (A. 344, 77 C. 1906 [1] 1098).  
 2)  $\alpha$ -Dioxy- $\beta$ -Phenyl- $\gamma$ -[4-Isopropylphenyl]buttersäure. Ag (A. 333, 243 C. 1904 [2] 1390).  
 3) Methylester d. Di[4-Äthoxylphenyl]essigsäure. Sm. 68° (A. 306, 84). — \*II, 1090.  
 4) Methylester d. O-Benzoylcamphocarbonsäure. Sm. 58,5—59,5° (B. 36, 4273 C. 1904 [1] 457).  
 5) Äthylester d.  $\alpha$ -Phenyl- $\alpha$ -[2-Methoxyphenyl]propan- $\beta$ -Carbonsäure. Sm. 65° (B. 41, 341 C. 1908 [1] 836).
- C<sub>19</sub>H<sub>22</sub>O<sub>5</sub>** C 69,1 — H 6,7 — O 24,2 — M. G. 330.  
 1) 2',5,6-Trimethyläther d. 1,5,6-Trioxy-2-[2,4-Dioxybenzyl]-2,3-Dihydroinden (Soc. 91, 1100 C. 1907 [2] 604).  
 2) Tetramethyläther d. 4,3',4',5'-Pentaoxy-3-Äthylidiphenylketon. Sm. 105° (B. 40, 3666 Ann. C. 1907 [2] 1420).  
 3) Tetramethyläther d. Phloretin. Sm. 58° (B. 28, 1397). — III, 230.  
 4) Diäthylester d. 1-Keto-5-Methyl-3-Phenyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 87—88° (86—87°) (B. 18, 2584; A. 281, 77; 313, 172). — II, 1971; \*II, 1142.  
 5) 2-Methoxyphenylester d.  $\alpha$ -Oxyisovalerian-2-Methoxyphenyläthersäure. Sd. 230°<sub>15</sub> (B. 39, 3854 C. 1907 [1] 94).  
 6) Di[2-Propoxyphenylester] d. Kohlensäure. Sm. 60° (D.R.P. 72806). — \*II, 551.  
 7) Di[2-Isopropoxyphenylester] d. Kohlensäure. Sm. 49° (D.R.P. 72806). — \*II, 551.  
 8) Hexenonderivat (aus  $\beta_3$ -Benzylidenbisacetessigsäureäthylester). Sm. 75° (A. 313, 174).
- C<sub>19</sub>H<sub>22</sub>O<sub>6</sub>** C 65,9 — H 6,3 — O 27,7 — M. G. 346.  
 1) Tetramethyläther-Äthyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon. Sm. 162° (B. 25, 1138). — III, 208.  
 2) 3,4',4',5-Tetramethyläther d. 3,5-Dioxy-4-[ $\alpha$ ,3,4-Trioxybenzyl]-1,2-Dihydrobenzofuran (Tetramethyläther d. Katechin). Sm. 142—143° (B. 35, 1868 C. 1902 [2] 51; B. 35, 2410 C. 1902 [2] 448). — \*III, 496.  
 3) Tetramethyläther d. Acakatechin. Sm. 152—153° (C. 1904 [2] 439).  
 4) Lariciresinol. Sm. 169° (164°). K + H<sub>2</sub>O (M. 18, 502; 20, 647, 755; M. 23, 1022 C. 1903 [1] 287). — \*III, 426.  
 5) isom. Lariciresinol. Sm. 95—97° (104°); Zers. bei 115—120° (M. 20, 655, 757; 21, 564; M. 23, 1023 C. 1903 [1] 288). — \*III, 427.  
 6) isom. Lariciresinol. Sm. 152—155° (M. 20, 758). — \*III, 427.
- C<sub>19</sub>H<sub>22</sub>O<sub>7</sub>** C 63,0 — H 6,1 — O 30,9 — M. G. 362.  
 1) Hexamethyläther d. 2,3,4,3',4',5'-Hexaoxydiphenylketon. Sm. 121° (Soc. 89, 1665 C. 1907 [1] 408).  
 2) Hexamethyläther d. 2,4,6,3',4',5'-Hexaoxydiphenylketon. Sm. 122° (B. 39, 4024 C. 1907 [1] 262).  
 3) Benzylarbutin + H<sub>2</sub>O. Sm. 161° (wasserfrei) (A. 221, 366). — III, 572.  
 4) Triäthylester d.  $\delta$ -Keto- $\delta$ -Phenyl- $\beta$ -Buten- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 242—245°<sub>20</sub> (Soc. 69, 1384; 71, 324; 75, 785; 77, 242, 805). — \*II, 1200.
- C<sub>19</sub>H<sub>22</sub>O<sub>8</sub>** C 57,9 — H 5,6 — O 36,5 — M. G. 394.  
 1) Lignon (B. 26, 2528).  
 2) Diacetat d. Pikrotoxin + 2H<sub>2</sub>O. Sm. 207—210° (B. 31, 2973). — \*III, 471.  
 3) Verbindung (aus Pikrotoxin). Sm. 227° (G. 11, 51). — III, 643.
- C<sub>19</sub>H<sub>22</sub>O<sub>10</sub>** C 55,6 — H 5,3 — O 39,0 — M. G. 410.  
 1) Cyclopia-roth (J. 1881, 1019). — III, 629.  
 2) Pentaacetat d. 2,4,6-Trioxy-5-Dioxymethyl-1,3-Dimethylbenzol. Sm. 152—153° (M. 24, 879 C. 1904 [1] 369).  
 3) Monobenzoat d. Karamelan (C. 1899 [2] 1022). — \*I, 594.
- C<sub>19</sub>H<sub>22</sub>O<sub>11</sub>** C 53,5 — H 5,1 — O 41,3 — M. G. 426.  
 1) Saponarin (oder C<sub>21</sub>H<sub>24</sub>O<sub>12</sub>). Sm. 231° u. Zers. (C. 1904 [2] 1503).  
 2) Dimethylester d.  $\beta\zeta$ -Diketo- $\delta$ -[2-Furyliden]heptan- $\alpha\gamma\epsilon\eta$ -Tetracarbonsäure. Sm. 162—175° (B. 40, 2883 C. 1907 [2] 448).
- C<sub>19</sub>H<sub>22</sub>O<sub>12</sub>** C 51,6 — H 5,0 — O 43,4 — M. G. 442.  
 1) Oxy-cyclopia-roth (J. 1881, 1019). — III, 629.

- $C_{19}H_{22}N_2$  C 82,0 — H 7,9 — N 10,1 — M. G. 278.
- 1) Di[4-Propylphenylimido]methan. Sm. 168°. HCl (B. 17, 1228). — II, 549.
  - 2) Di[1,2,3,4-Tetrahydro-1-Chinolyl]methan. Sm. 61–62°. 2HCl (R. 25, 261 C. 1906 [2] 800).
  - 3) Di[1,2,3,4-Tetrahydro-6-Chinolyl]methan. Sm. 130°. 2HCl (R. 25, 264 C. 1906 [2] 800).
  - 4) Dihydrocinchen. Sm. 145°. (2HCl, PtCl<sub>4</sub>), Pikrat (B. 27, 1504, 2291; 31, 2363; J. pr. [2] 61, 44). — III, 837; \*III, 633.
  - 5) Desoxycinchonin. Sm. 90–92°. (2HCl, PtCl<sub>4</sub>) (B. 28, 3145; 31, 2355). — III, 837; \*III, 633.
  - 6) Desoxycinchonidin. Sm. 61°. (2HCl, PtCl<sub>4</sub>) (B. 29, 373; 31, 2355). — III, 852.
  - 7) Base (aus 1,2,3,4-Tetrahydrochinolin u. Formaldehyd). Sm. 120° (R. 25, 263 C. 1906 [2] 800).
- $C_{19}H_{22}N_4$  C 74,5 — H 7,2 — N 18,3 — M. G. 306.
- 1) 2,3-Di[Phenylhydrazon]-1-Methylhexahydrobenzol. Sm. 152° (B. 35, 1178 C. 1902 [1] 990). — \*IV, 509.
  - 2) 3-Äthylphenylhydrazon-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazol. Sm. 78° (B. 42, 2769 C. 1909 [2] 625).
- $C_{19}H_{22}N_6$  C 68,3 — H 6,6 — N 25,1 — M. G. 334.
- 1) Di[Benzylidenamido]pentamethylentetramin. Sm. 226–227° (A. 288, 233). — III, 29.
- $C_{19}H_{23}N$  C 86,0 — H 8,7 — N 5,3 — M. G. 265.
- 1) 5-[2,4,6-Trimethylbenzyliden]amido-1,2,4-Trimethylbenzol. Sm. 82° (B. 34, 831).
  - 2) 2-[β-Phenyläthyl]-6-Phenylpyridin. Fl. HCl, (2HCl, PtCl<sub>4</sub>) (B. 33, 3496). — \*IV, 242.
  - 3) 2-[β-4-Methylphenyläthyl]-6-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 68° (B. 38, 3704 C. 1906 [1] 51).
- $C_{19}H_{23}N_3$  C 77,8 — H 7,8 — N 14,3 — M. G. 293.
- 1) γ-[4-Dimethylamidophenyl]imido-α-[4-Dimethylamidophenyl]propen. Sm. 196° (C. 1907 [1] 109).
  - 2) α-Phenylamido-α-[2-Piperidylphenyl]imidoäthan. Sm. 135° (B. 33, 2904). — \*IV, 365.
- $C_{19}H_{24}O$  C 85,1 — H 8,9 — O 6,0 — M. G. 268.
- 1) α-Oxy-αα-Diphenylheptan. Sd. 200–201°<sub>11</sub> (B. 37, 1454 C. 1904 [1] 1353).
- $C_{19}H_{24}O_2$  C 80,3 — H 8,4 — O 11,3 — M. G. 284.
- 1) αα-Di[4-Oxyphenyl]heptan. Sm. 103° (C. 1904 [1] 1650).
  - 2) δδ-Di[β-Oxyphenyl]heptan. Sm. 155° (J. r. 23, 502). — II, 996.
  - 3) 6,6'-Dioxy-2,3,5,2',3',5'-Hexamethyldiphenylmethan. Sm. 170° (171 bis 172°) (A. 353, 363 C. 1907 [2] 401; A. 356, 141 C. 1907 [2] 1698).
  - 4) Dipropyläther d. αα-Dioxydiphenylmethan. Sm. 33–34,5°; Sd. 204°<sub>40</sub> (Soc. 79, 1206). — \*III, 145.
  - 5) Diphenyläther d. αη-Dioxyheptan. Sm. 54,5–55° (C. 1899 [1] 26; B. 38, 2347 C. 1905 [2] 494; C. r. 145, 129 C. 1907 [2] 1060). — \*II, 357.
  - 6) Äthyläther d. d-2-Oxybenzylidencampher. Sm. 65° (C. 1896 [2] 381; Bl. [3] 27, 546). — \*III, 388.
  - 7) Phenylbutadienyltrimethyleyklopentencarbonsäure. Sd. 236–238°<sub>12</sub> (B. 38, 117 C. 1905 [1] 527; B. 38, 760 C. 1905 [1] 873).
  - 8) Bornylester d. β-Phenylakrylsäure. Sm. 33°; Sd. 226–230°<sub>27</sub> (C. r. 136, 238 C. 1903 [1] 584; Soc. 93, 7 C. 1908 [1] 838).
  - 9) l-Menthylester d. Phenylpropioisäure. Sm. 33° (67°); Sd. 235–238°<sub>30</sub> (Soc. 93, 6 C. 1908 [1] 838; A. 369, 329 C. 1909 [2] 2153).
- $C_{19}H_{24}O_3$  C 76,0 — H 8,0 — O 16,0 — M. G. 300.
- 1) Äthylester d. 5-Keto-β-Benzyliden-1,1,3-Trimethylhexahydrobenzol-2-Carbonsäure. Sd. 200–202°<sub>5</sub> (A. 366, 186 C. 1909 [2] 614).
- $C_{19}H_{24}O_4$  C 72,2 — H 7,6 — O 20,2 — M. G. 316.
- 1) Di[2,6-Dioxy-3,4,5-Trimethylphenyl]methan. Sm. 228° (Ar. 244, 568 C. 1907 [1] 547).
  - 2) 4,4'-Dioxy-3,3'-Di[Oxymethyl]-2,6,2',6'-Tetramethyldiphenylmethan. Sm. 190° (B. 40, 2536 C. 1907 [2] 324).
  - 3) Acetylpodocarpinsäure. Sm. 152° (A. 170, 238). — II, 1685.



- C<sub>19</sub>H<sub>24</sub>O<sub>4</sub>** 4) Methyl-Geraniol-ester d. Benzol-1,2-Dicarbonsäure (Methylester d. Rhodinolphthalsäure). Fl. (*J. pr.* [2] 56, 22).  
C 68,7 — H 7,2 — O 24,1 — M. G. 332.
- C<sub>19</sub>H<sub>24</sub>O<sub>5</sub>** 1) 2,5,2',5'-Tetramethyläther d.  $\alpha$ -Oxy- $\alpha$ -Di[2,5-Dioxyphenyl]propan. Sm. 120° (*A.* 344, 76 *C.* 1906 [1] 1098).  
2) 4,3',4',5'-Tetramethyläther d.  $\alpha$ ,4,3',4',5'-Pentaoxy-3-Äthyl-diphenylmethan. Sm. 85–86° (*B.* 40, 3666 Anm. *C.* 1907 [2] 1420).  
C 65,5 — H 6,9 — O 27,6 — M. G. 348.
- C<sub>19</sub>H<sub>24</sub>O<sub>6</sub>** 1) Hexamethyläther d.  $\alpha$ ,2,4,6,3',4'-Hexaoxydiphenylmethan. Sm. 94 bis 96° (*B.* 39, 4021 *C.* 1907 [1] 262).  
2) Diacetylmetasantoninsäure. Sm. 207° (*G.* 25 [2] 462). — \*II, 1045.  
3) Diäthylester d.  $\beta$ ̣-Dioxy- $\delta$ -Phenyl- $\beta$ ̣-Heptadien- $\gamma$ ̣-Dicarbonsäure. Sm. 60° (*B.* 32, 88).  
4)  $\alpha$ ₁-Benzylidenbisacetessigsäureäthylester + H₂O. Sm. 68–70°. Na + C₂H₆O (*A.* 313, 176, 182). — \*II, 1175.  
5)  $\alpha$ ₂-Benzylidenbisacetessigsäureäthylester. Fl. Na (*A.* 313, 186). — \*II, 1175.  
6)  $\alpha$ ₃-Benzylidenbisacetessigsäureäthylester. Sm. 65–67° (*A.* 313, 190). — \*II, 1175.  
7)  $\beta$ ₁-Benzylidenbisacetessigsäureäthylester + H₂O (Diäthylester d.  $\beta$ ̣-Diketo- $\delta$ -Phenylheptan- $\gamma$ ̣-Dicarbonsäure). Sm. 154° (152°) (*B.* 18, 2583; 31, 605, 608, 747, 1390, 2773; 32, 88, 333; *A.* 281, 76; 313, 166, 176; 323, 103; *B.* 35, 392, 399 *C.* 1902 [1] 570; *B.* 36, 2186 *C.* 1903 [2] 569; *Soc.* 83, 129 *C.* 1904 [1] 95). — II, 2019; \*II, 1174.  
8)  $\beta$ ₂-Benzylidenbisacetessigsäureäthylester. Sm. 154° u. Zers. (*A.* 313, 167, 185; 323, 103). — \*II, 1175.  
9)  $\beta$ ₃-Benzylidenbisacetessigsäureäthylester + 2H₂O. Sm. 90–93° (107 bis 108 wasserfrei) (*A.* 313, 167, 189; *A.* 323, 103). — \*II, 1175.  
10) isom. Benzylidenbisacetessigsäureäthylester. Sm. 120° (*B.* 31, 606; 32, 335; *A.* 313, 171 Anm.).  
11) isom. Benzylidenbisacetessigsäureäthylester. Sm. 133–134° (*B.* 31, 606; 32, 335; *A.* 313, 171 Anm.; *Soc.* 83, 1298 *C.* 1904 [1] 95).  
12) isom. Benzylidenbisacetessigsäureäthylester. Sm. 142–143° (*B.* 32, 336).  
13) Triäthylester d.  $\delta$ -Phenyl- $\alpha$ -Buten- $\alpha\gamma\gamma$ -Tricarbonsäure. Sd. 237 bis 239°<sub>23</sub> (*J. pr.* [2] 58, 406). — \*II, 1174.  
C 62,6 — H 6,6 — O 30,8 — M. G. 364.
- C<sub>19</sub>H<sub>24</sub>O<sub>7</sub>** 1) 2,4,6,3',4',5'-Hexamethyläther d.  $\alpha$ ,2,4,6,3',4',5'-Heptaoxydiphenylmethan. Sm. 124–125° (*B.* 39, 4025 *C.* 1907 [1] 263).  
2)  $\alpha$ ,2-Lakton d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenylbutanäthyläther- $\beta$ , $\beta$ ,2-Tricarbonsäure- $\beta$ , $\beta$ -Diäthylester. Fl. (*A.* 242, 52). — II, 2071.  
3) Triäthylester d.  $\alpha$ -Benzoylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 250°<sub>16</sub> (*J. pr.* [2] 53, 312; *Soc.* 73, 728). — \*II, 1198.  
4) Triäthylester d.  $\beta$ -Benzoylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 225°<sub>14</sub> (*J. pr.* [2] 53, 313). — \*II, 1199.  
C 57,6 — H 6,0 — O 36,4 — M. G. 396.
- C<sub>19</sub>H<sub>24</sub>O<sub>8</sub>** 1) Bastin (*Soc.* 38, 667; 41, 99; 43, 19; 55, 204). — I, 1080.  
**C<sub>19</sub>H<sub>24</sub>O<sub>10</sub>** C 55,3 — H 5,8 — O 38,8 — M. G. 412.  
1) Anamirtin (*M.* 1, 131). — III, 644.  
2) Tetraäthylester d. 3,6-Dioxybenzol-3-Methyläther-1,2,4,5-Tetracarbonsäure. Na (*A.* 258, 288). — II, 2095.  
C 81,4 — H 8,6 — N 10,0 — M. G. 280.
- C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>** 1)  $\alpha\alpha$ -Di[4-Dimethylamidophenyl]propen. Sm. 99–100° (*B.* 39, 1118 *C.* 1906 [1] 1349; *C. r.* 149, 349 *C.* 1909 [2] 1450).  
2) Di[2,4,5-Trimethylphenyl]formamidin. Sm. 160°. HCl (*B.* 35, 2501 *C.* 1902 [2] 437).  
3) Phenylhydrazon d. Curcumin. Sm. 92° (*B.* 42, 2519 *C.* 1909 [2] 529).  
4) 2-Methyl-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 105° (*B.* 25, 3278). — II, 488.  
C 74,0 — H 7,8 — N 18,2 — M. G. 308.
- C<sub>19</sub>H<sub>24</sub>N<sub>4</sub>** 1)  $\gamma$ -Di[Phenylhydrazon]heptan. Sm. 106° (108°) (*J. pr.* [2] 55, 194; *G.* 32 [1] 422 *C.* 1902 [2] 262). — IV, 782; \*IV, 508.  
2)  $\delta\epsilon$ -Di[Phenylhydrazon]- $\beta$ -Methylhexan. Sm. 115–116° (116,5°) (*G.* 27, [1] 276; *B.* 22, 2122). — IV, 782.

- C<sub>19</sub>H<sub>24</sub>N<sub>4</sub>** 3) Di[4-Isopropylidenhydrazidophenyl]methan. Sm. 90—91° (*J. pr.* [2] 74, 156 *C. 1906* [2] 1125).
- 4) 4,4'-Di[α-Methyl-β-Äthylidenhydrazido]diphenylmethan. Sm. 114° (*B. 41*, 2175 *C. 1908* [2] 708).
- C<sub>19</sub>H<sub>25</sub>N** C 85,4 — H 9,3 — N 5,3 — M. G. 267.
- 1) Isoamylidi[4-Methylphenyl]amin. Sd. 290—300°<sub>15</sub> (*Bl. 24*, 120). — II, 487.
- C<sub>19</sub>H<sub>25</sub>N<sub>3</sub>** C 77,3 — H 8,5 — N 14,2 — M. G. 295.
- 1) α-Imidodi[4-Äthylamido-3-Methylphenyl]methan (D.R.P. 68004). — \*IV, 833.
- 2) α-Äthylimidodi[4-Dimethylamidophenyl]methan (Äthylauramin). Sm. 130—131° (D.R.P. 136616 *C. 1902* [2] 1376). — \*IV, 831.
- 3) 4-[4-Diäthylamidobenzyliden]amido-1-Dimethylamidobenzol. Sm. 140—141° (136°) (*B. 31*, 2253; *B. 37*, 860 *C. 1904* [1] 1206). — \*IV, 394.
- 4) Di[4-Propylphenyl]guanidin. Sm. 113°. (2HCl, PtCl<sub>4</sub>) (*B. 17*, 1225). — II, 549.
- 5) Di[2,4,6-Trimethylphenyl]guanidin. Sm. 218° (*B. 15*, 1014). — II, 554.
- C<sub>19</sub>H<sub>26</sub>O** C 84,4 — H 9,6 — O 5,9 — M. G. 270.
- 1) α-Phenylpropylcampher (Äthylphenylcamphomethan). Sm. 80° (*C. r.* 142, 974 *C. 1906* [1] 1827).
- 2) γ-Phenylpropylcampher. Sd. 200°<sub>11</sub> (*B. 38*, 114 *C. 1905* [1] 526).
- 3) Kristallalban. Sm. 227,5—228° (*Ar. 241*, 485 *C. 1903* [2] 1178).
- 4) Verbindung (aus Aceton). Sd. 137—138°<sub>11</sub> (*B. 39*, 3463 *C. 1906* [2] 1560).
- C<sub>19</sub>H<sub>26</sub>O<sub>2</sub>** C 79,7 — H 9,1 — O 11,2 — M. G. 286.
- 1) Äthyläther d. 2-Oxybenzylcampher. Sm. 65° (*C. 1896* [2] 590; *C. r.* 130, 222; *Bl. 3* [2] 27, 548). — \*III, 389.
- 2) Bornylester d. β-Phenylpropionsäure. Sd. 205—207°<sub>20</sub> (*Soc. 93*, 7 *C. 1908* [1] 838).
- 3) l-Menthylester d. α-Phenylakrylsäure. Fl. (*A. 369*, 330 *C. 1909* [2] 2153).
- 4) l-Menthylester d. β-Phenylakrylsäure. Sd. 230—233°<sub>27</sub> (*Soc. 79*, 1308 *C. 1902* [1] 195; *C. 1902* [2] 1238; *Soc. 93*, 6 *C. 1908* [1] 838; *A. 369*, 318 *C. 1909* [2] 2152). — \*III, 335.
- C<sub>19</sub>H<sub>26</sub>O<sub>3</sub>** C 75,5 — H 8,6 — O 15,9 — M. G. 302.
- 1) 1,8-Diketo-3,3,6,6-Tetramethyl-9-Äthyl-1,2,3,4,5,6,7,8-Oktahydroxanthen. Sm. 139° (*A. 309*, 373). — \*III, 583.
- 2) 1,8-Diketo-3,3,6,6,9,9-Hexamethyl-1,2,3,4,5,6,7,8-Oktahydroxanthen. Sm. 245° (*A. 309*, 374). — \*III, 583.
- 3) Äthylester d. Benzoylcampholsäure. Sm. 48—49°; Sd. 225°<sub>15</sub> (*C. r.* 144, 299 *C. 1907* [1] 1126).
- 4) Äthylester -d. Podocarpinsäure. Sm. 143—146° (*A. 170*, 223). — II, 1685.
- 5) l-Menthylester d. β-Oxy-α-Phenylakrylsäure. Na, Cu (*C. 1902* [2] 203, 358; *Soc. 81*, 1496 *C. 1903* [1] 153). — \*III, 335.
- 6) l-Menthylester d. Formylphenylessigsäure. Sm. 82—83° (82—84°) (*C. 1902* [2] 208, 358; *Soc. 81*, 1494 *C. 1903* [1] 153). — \*III, 335.
- C<sub>19</sub>H<sub>26</sub>O<sub>4</sub>** C 71,7 — H 8,2 — O 20,1 — M. G. 318.
- 1) Cerbertin. Sm. 85,5° (*R. 12*, 26). — III, 573.
- 2) Cerberitrin (*B. 26* [2] 679).
- 3) Methyl-Citronellolester d. Benzol-1,2-Dicarbonsäure (Methylester d. Citronellalpthalsäure). Fl. (*J. pr.* [2] 56, 41).
- C<sub>19</sub>H<sub>26</sub>O<sub>5</sub>** C 68,3 — H 7,8 — O 23,9 — M. G. 334.
- 1) Diäthylester d. Dehydrodioxyparasantonsäure (*C. 1903* [2] 1447).
- 2) Gem. Carbonat d. Menthol u. 2-Oxybenzol-1-Carbonsäuremethyl-ester. Fl. (D.R.P. 206055 *C. 1909* [1] 704).
- C<sub>19</sub>H<sub>26</sub>O<sub>6</sub>** C 65,1 — H 7,4 — O 27,4 — M. G. 350.
- 1) Diacetylisophotosantonsäure. Sm. 163—166° (*B. 19*, 2263; *G. 32* [1] 312 *C. 1902* [1] 1404). — II, 1933.
- 2) Triäthylester d. α-Phenylbutan-ββγ-Tricarbonsäure. Sd. 337,8° (*B. 23*, 654). — II, 2016.

- $C_{19}H_{26}O_7$  C 62,3 — H 7,1 — O 30,6 — M. G. 366.  
 1) Essigsäureverbindung d. Acetylsantonsäure. Sm. 126—128° (*J.* 1875, 608). — II, 1789.
- $C_{19}H_{26}O_{10}$  C 55,1 — H 6,3 — O 38,6 — M. G. 414.  
 1) Cocculin (*A.* 222, 353). — III, 644.
- $C_{19}H_{26}O_{18}$  C 49,4 — H 5,6 — O 45,0 — M. G. 462.  
 1) Hexaacetat d.  $\alpha$ -Glykoheptose. Sm. 156° (*A.* 270, 78). — I, 1057.
- $C_{19}H_{26}N_2$  C 80,8 — H 9,2 — N 9,9 — M. G. 282.  
 1)  $\alpha\alpha$ -Di[ $\beta$ -Amidophenyl]heptan. Fl.  $HNO_3$  (*Bl.* 47, 49). — IV, 986.  
 2)  $\alpha\alpha$ -Di[Phenylamido]heptan. +  $SO_2$  (*A.* 316, 135).  
 3)  $\alpha\beta$ -Di[2-Methylphenylamido]pentan. Sd. 191—193°<sub>23</sub>. Pikrat (*B.* 32, 851). — \*II, 249.  
 4)  $\alpha\epsilon$ -Di[Methylphenylamido]pentan. Sm. 38°; Sd. 244—245°<sub>8</sub> (*B.* 41, 2162 *C.* 1908 [2] 705).  
 5)  $\alpha\epsilon$ -Di[2-Methylphenylamido]pentan. Sm. 76—77°; Sd. 290—291°<sub>20</sub>.  $H_2SO_4$  (*B.* 40, 855 *C.* 1907 [1] 1123).  
 6)  $\alpha\epsilon$ -Di[4-Methylphenylamido]pentan. Sm. 60°. 2HCl, 2HBr (*B.* 40, 3924 *C.* 1907 [2] 1525).  
 7)  $\alpha\gamma$ -Di[Äthylphenylamido]propan. Sd. 245—247°<sub>30</sub>. Pikrat (*B.* 40, 764 *C.* 1907 [1] 1031).  
 8)  $\alpha\alpha$ -Di[4-Dimethylamidophenyl]propan. Sm. 50—51° (*B.* 39, 1119 *C.* 1906 [1] 1349; *C. r.* 149, 350 *C.* 1909 [2] 1451).  
 9)  $\alpha\gamma$ -Di[2-Dimethylamidophenyl]propan. Sd. 227—229°<sub>40</sub>. (2HCl,  $PtCl_4$ ) (*B.* 25, 2408). — IV, 983.  
 10)  $\beta\beta$ -Di[4-Dimethylamidophenyl]propan. Sm. 83°. 2HCl, (4HCl,  $3HgCl_2$ ), (2HCl,  $PtCl_4$ ), 2HBr, 2HJ (*B.* 4, 743; 6, 347; 12, 813). — IV, 984; \*IV, 658.  
 11) 4,4'-Di[Dimethylamido]-2,2'-Dimethyldiphenylmethan. Sm. 82° (*J. pr.* [2] 71, 112 *C.* 1905 [1] 1024).  
 12) 4,4'-Di[Äthylamido]-3,3'-Dimethyldiphenylmethan. Sm. 96° (92 bis 93°); Sd. bei 300°<sub>40</sub> (*M.* 19, 632; D.R.P. 68004). — \*IV, 658.  
 13) 2-Amido-4'-Diäthylamido-3,5-Dimethyldiphenylmethan. Fl. (*C.* 1900 [1] 1112).  
 14) 4-Methylamido-4'-Diäthylamido-3-Methyldiphenylmethan. Fl. (*C.* 1900 [1] 1112).  
 15) Di[4-Diäthylamidophenyl]methan. Pikrat (*C. r.* 135, 347 *C.* 1902 [2] 799).  
 16) 4-Dimethylamido-4'-Diäthylamidodiphenylmethan. Fl. (*C.* 1900 [1] 1111).  
 17) Di[2,4,5-Trimethylphenylamido]methan. (2HCl,  $PtCl_4$  +  $H_2O$ ) (*Soc.* 91, 1935 *C.* 1908 [1] 384).  
 $C_{19}H_{26}N_4$  C 73,5 — H 8,4 — N 18,1 — M. G. 310.  
 1) 2,2-Di[4-Dimethylamidophenyl]tetrahydroimidazol(Äthylenaauramin). (2HCl,  $PtCl_4$ ), Pikrat (*B.* 20, 2855). — IV, 1174.
- $C_{19}H_{27}N_3$  C 76,8 — H 9,1 — N 14,1 — M. G. 297.  
 1) Morrhuin. Fl. (2HCl,  $PtCl_4$ ) (*Bl.* [3] 2, 229). — III, 888.
- $C_{19}H_{28}O$  C 83,8 — H 10,3 — O 5,9 — M. G. 272.  
 1) 3-Keto-2-[ $\alpha$ -Phenylpropyl]-4-Isopropyl-1-Methylhexahydrobenzol (Menthoäthylphenylmethan). Sm. 102,5—103,5° (*C. r.* 145, 330 *C.* 1907 [2] 1242).  
 2) isom. 3-Keto-2-[ $\alpha$ -Phenylpropyl]-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 89—91° (*C. r.* 145, 330 *C.* 1907 [2] 1242).
- $C_{19}H_{28}O_2$  C 79,1 — H 9,7 — O 11,1 — M. G. 288.  
 1) 2,4-Divaleryl-1,3,5-Trimethylbenzol. Sm. 55°; Sd. 210—211°<sub>18-20</sub> (*B.* 30, 1286). — \*III, 212.  
 2) Abietinsäure. Sm. 153—154°. Salze meist bekannt. Lit. bedeutend. — II, 1435; \*II, 861.  
 3)  $\alpha$ -Abietinsäure. Sm. 143—155°. Ag (*Ar.* 241, 507 *C.* 1903 [2] 1179).  
 4)  $\beta$ -Abietinsäure. Sm. 145—158°. Ag (*Ar.* 241, 508 *C.* 1903 [2] 1179).  
 5)  $\gamma$ -Abietinsäure. Sm. 153—154°. Ag (*Ar.* 241, 512 *C.* 1903 [2] 1179).  
 6) isom. Abietinsäure. Sm. 166—167° (*Ar.* 245, 2 *C.* 1907 [1] 1331).  
 7) Canadolsäure? Sm. 143—145° (*C.* 1900 [2] 970). — \*III, 419.  
 8) Isobutylester d. 2-Phenyl-1,1,2-Trimethyl-R-Pentamethylen-3-Carbonsäure. Sm. 71—72° (*Bl.* [3] 21, 839). — \*II, 861.



- $C_{19}H_{28}O_2$  9) Amylester d. Eudesmiasäure. Sd. 245–290° (C. 1901 [1] 1007).  
 10) l-Menthylester d.  $\alpha$ -Phenylpropionsäure. Sd. 90–91°<sub>0,25</sub> (A. 369, 332 C. 1909 [2] 2153).  
 11) l-Menthylester d.  $\beta$ -Phenylpropionsäure. Sm. 28°; Sd. 203°<sub>15</sub> (B. 31, 1778; C. 1902 [2] 1238; Soc. 93, 5 C. 1908 [1] 837; A. 369, 319 C. 1909 [2] 2153). — \*III, 335.  
 12) Benzoat d. Lanolinalkohol. Sm. 65–66° (G. 25 [1] 46). — \*II, 714.
- $C_{19}H_{28}O_3$  1) Äthylester d. d-7-Äthoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Ä. d. d-Äthyläthersantonigen Säure). Sm. 31–32° (B. 16, 427; G. 25 [1] 499). — II, 1671; \*II, 977.  
 2) Äthylester d. l-Äthyläthersantonigen Säure. Sm. 31–32° (G. 25 [1] 517). — \*II, 978.  
 3) Äthylester d. i-7-Äthoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Äthyl- $\alpha$ -Carbonsäure (Ä. d. i-Äthylätherisantonigen Säure). Sm. 54° (B. 16, 428). — II, 1671.  
 4) Verbindung (aus Boldoglykosid) (Bl. 42, 291). — III, 573.
- $C_{19}H_{28}O_4$  C 71,2 — H 8,7 — O 20,0 — M. G. 320.  
 1)  $\beta$ -Heerabomyrrhol. Sm. 116–124° (Ar. 243, 645 C. 1906 [1] 477).  
 2) Strophanthidin (oder  $C_{28}H_{40}O_6$ ). Sm. 195° (180°) (M. 19, 399; C. 1902 [2] 1514). — \*III, 476.  
 3) Benzoxyllaurinsäure. Sm. 41,5° (C. 1897 [1] 419). — \*II, 722.  
 4) Diäthylester d. i-Dehydrophotosantonsäure. Fl. (B. 18, 2863; G. 23 [1] 289). — II, 1932.  
 5) Isobutylester d. Santonsäure. Sm. 67° (B. 13, 2209). — II, 1788.  
 6)  $\alpha$ -Palmitat d.  $\alpha\beta\gamma$ -Trioxypropan. Sm. 65° (C. 1903 [1] 133).
- $C_{19}H_{28}O_5$  C 67,8 — H 8,3 — O 23,8 — M. G. 336.  
 1) Diäthylester d.  $\alpha$ -Oxyheptanphenyläther- $\delta\delta$ -Dicarbonsäure. Sd. 279°<sub>100</sub> (B. 28, 1198, 1200). — \*II, 366.
- $C_{19}H_{28}O_6$  C 64,8 — H 7,9 — O 27,3 — M. G. 352.  
 1) Diäthylester d.  $\alpha$ -Oxybutter-5-Methyl-1,3-Phenylenäthersäure. Sd. 330–340°<sub>768</sub> (B. 33, 1685). — \*II, 581.  
 2) Diäthylester d.  $\alpha$ -Oxyisobutter-5-Methyl-1,3-Phenylenäthersäure. Sd. 280–300°<sub>781</sub> (B. 33, 1685). — \*II, 581.
- $C_{19}H_{28}O_8$  C 59,4 — H 7,3 — O 33,3 — M. G. 384.  
 1) Triisobutyrylshikiminsäure (B. 24, 1284). — I, 769.  
 2) Verbindung (aus Formaldehyd u. Acetylaceton). Sm. 167° (B. 36, 2178 C. 1903 [2] 372).
- $C_{19}H_{28}O_{10}$  C 54,8 — H 6,7 — O 38,5 — M. G. 416.  
 1) Tetraäthylester d.  $\beta\zeta$ -Diketoheptan- $\alpha\gamma\epsilon\eta$ -Tetracarbonsäure (T. d. Methylenbisacetondicarbonsäure). Sm. 105° (A. 288, 354). — \*I, 451.  
 2) Säure (aus Cholsäure). Sm. 226° u. Zers.  $Cu_5$ ,  $Ag_5$  +  $H_2O$  (H. 61, 221 C. 1909 [2] 1214).  
 3) Tetraäthylester d.  $\alpha\epsilon$ -Diketo- $\gamma$ -Äthylpentan- $\alpha\beta\delta\epsilon$ -Tetracarbonsäure +  $H_2O$ . Sm. 118° (Bl. [4] 1, 43 C. 1907 [1] 1053).  
 4) Pentaäthylester d.  $\alpha$ -Buten- $\alpha\beta\gamma\gamma\delta$ -Pentacarbonsäure. Sd. 229 bis 231°<sub>10</sub> (B. 31, 48). — \*I, 450.  
 5) Pentaäthylester d.  $\alpha$ -Buten- $\alpha\beta\gamma\delta\delta$ -Pentacarbonsäure? Fl. (J. pr. [2] 49, 22). — \*I, 450.
- $C_{19}H_{28}O_{11}$  C 52,8 — H 6,5 — O 40,7 — M. G. 432.  
 1) Pentaäthylester d.  $\alpha$ -Ketobutan- $\alpha\beta\gamma\gamma\delta$ -Pentacarbonsäure. Fl. (A. 297, 104). — \*I, 452.  
 2) Pentaacetat d. Anhydro- $\alpha\gamma\epsilon$ -Trioxy- $\beta\beta\delta\delta$ -Tetra[Oxymethyl]pentan. Sm. 84° (B. 27, 1089; A. 289, 49). — \*I, 150.
- $C_{19}H_{28}O_{12}$  C 50,9 — H 6,3 — O 42,8 — M. G. 448.  
 1) Tetramethylester d. Heptan- $\alpha\gamma\gamma\epsilon\epsilon\eta$ -Hexacarbonsäure. Sm. 87° (J. pr. [2] 66, 125 C. 1902 [2] 734).
- $C_{19}H_{28}O_{13}$  C 49,1 — H 6,0 — O 44,8 — M. G. 464.  
 1) Calmatambin +  $2H_2O$ . Sm. 144–145° (wasserfrei) (Soc. 91, 1229 C. 1907 [2] 993).  
 2) Helicinglykose (A. 244, 26). — III, 68.
- $C_{19}H_{28}O_{17}$  C 43,2 — H 5,3 — O 51,5 — M. G. 528.  
 1) Xylanbassorinsäure. BaO (Soc. 79, 1182).

- C<sub>19</sub>H<sub>23</sub>N<sub>2</sub>** C 80,3 — H 9,8 — N 9,8 — M. G. 284.  
 1) Oktohydrocinchen. Fl. (2HCl, CdCl<sub>2</sub> + H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub>) (B. 25, 1547). — **III**, 840.  
 2) 1-Phenylhydrazon-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 157—159° (A. 288, 346). — **IV**, 770.
- C<sub>19</sub>H<sub>30</sub>O** C 83,2 — H 10,9 — O 5,8 — M. G. 274.  
 1)  $\alpha$ -Keto- $\alpha$ -Phenyl- $\beta$ -Methyldodekan. Sd. 199—200°<sub>9-10</sub> (C. r. 149, 7 C. 1909 [2] 600).  
 2) Äthyl-2,3,4,5,6-Pentaäthylphenylketon. Sm. 70—71°; Sd. 179—180°<sub>19</sub> (B. 32, 1564). — **\*III**, 127.  
 3) Picoresen. Sm. 90—95° (Ar. 240, 283 C. 1902 [2] 135). — **\*III**, 428.  
 C 78,6 — H 10,3 — O 11,0 — M. G. 290.
- C<sub>19</sub>H<sub>30</sub>O<sub>2</sub>**  
 1) Bengukopalsäure. Sm. 134—136° (Ar. 246, 302 C. 1908 [2] 250).  
 2)  $\alpha$ -Canadinolsäure. Sm. 95° (C. 1900 [2] 971). — **\*III**, 419.  
 3)  $\beta$ -Canadinolsäure. Sm. 95° (C. 1900 [2] 971). — **\*III**, 419.  
 4) Kongokopalsäure. Sm. 115—118°. K, Ag (Ar. 246, 297 C. 1908 [2] 250).  
 5) 4-Methylphenylester d. Laurinsäure. Sm. 28°; Sd. 219,5°<sub>15</sub> (B. 17, 1378). — **II**, 749.
- C<sub>19</sub>H<sub>30</sub>O<sub>3</sub>** C 74,5 — H 9,8 — O 15,7 — M. G. 306.  
 1) Verbindung (aus Cholsäure) (H. 16, 492). — **I**, 782.
- C<sub>19</sub>H<sub>30</sub>O<sub>4</sub>** C 70,8 — H 9,3 — O 19,9 — M. G. 322.  
 1) Ursocholeinsäure (oder C<sub>18</sub>H<sub>28</sub>O<sub>4</sub>). Sm. 100—101°. Ba +  $\frac{1}{2}$ H<sub>2</sub>O (H. 36, 547 C. 1902 [2] 1420).
- C<sub>19</sub>H<sub>30</sub>O<sub>5</sub>** C 67,4 — H 8,9 — O 23,7 — M. G. 338.  
 1) Helleboretin, siehe auch C<sub>14</sub>H<sub>20</sub>O<sub>3</sub> (C. 1897 [2] 764). — **\*III**, 442.  
 2) Acetyllichesterinsäure. Sm. 124° (J. pr. [2] 57, 305).  
 3) Diäthylester d. 1-Keto-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sd. 202—204°<sub>17</sub> (A. 288, 341). — **\*I**, 390.  
 C 61,6 — H 8,1 — O 30,3 — M. G. 370.
- C<sub>19</sub>H<sub>30</sub>O<sub>7</sub>** 1) Panakon (A. 90, 234). — **III**, 640.
- C<sub>19</sub>H<sub>30</sub>O<sub>9</sub>** C 56,7 — H 7,4 — O 35,8 — M. G. 402.  
 1) Tetraäthylester d.  $\delta$ -Ketoheptan- $\alpha\gamma\epsilon\eta$ -Tetracarbonsäure. Sd. 220 bis 230°<sub>12</sub> (B. 37, 3816 C. 1904 [2] 1606).
- C<sub>19</sub>H<sub>30</sub>O<sub>10</sub>** C 54,5 — H 7,2 — O 38,3 — M. G. 418.  
 1) Herniarin (C. 1895 [1] 352).  
 2) Glykosid (aus d. Samen von Dregea rubicunda) oder C<sub>23</sub>H<sub>38</sub>O<sub>12</sub>. Sm. 85° (107° wasserfrei) (C. 1902 [2] 1514).  
 3) Pentaäthylester d. Butan- $\alpha\alpha\beta\beta\delta$ -Pentacarbonsäure. Sd. 215—218°<sub>17</sub> (C. 1903 [1] 628; Soc. 85, 611 C. 1904 [1] 1254, 1553).  
 4) Pentaäthylester d. Butan- $\alpha\alpha\gamma\gamma\delta$ -Pentacarbonsäure. Sd. 220—240°<sub>12</sub> (J. pr. [2] 66, 14 C. 1902 [2] 508).  
 5) Pentaäthylester d. Butan- $\alpha\beta\beta\gamma\delta$ -Pentacarbonsäure. Sd. 216—218°<sub>18</sub> (B. 23, 3760). — **I**, 871.  
 6) Pentaäthylester d. Butanpentacarbonsäure. Sd. 232—233°<sub>12</sub> (Soc. 73, 1014). — **\*I**, 449.  
 7) Tetracetat d.  $\beta$ -Amylenhydrat-d-Glykosid. Sm. 122—123° (B. 42, 1466 C. 1909 [1] 1985).
- C<sub>19</sub>H<sub>30</sub>N<sub>4</sub>** C 72,6 — H 9,6 — N 17,8 — M. G. 314.  
 1) Amidoguanidinderivat d. Keton C<sub>18</sub>H<sub>28</sub>O. Pikrat (B. 40, 158 C. 1907 [1] 564).
- C<sub>19</sub>H<sub>32</sub>O<sub>2</sub>** C 78,1 — H 10,9 — O 10,9 — M. G. 292.  
 1) Methylester d. Linolensäure. Sd. 207°<sub>14</sub> (H. 62, 423 C. 1909 [2] 1985).
- C<sub>19</sub>H<sub>32</sub>O<sub>3</sub>** C 74,0 — H 10,4 — O 15,6 — M. G. 308.  
 1) Santalolester d. Oxyessigäthyläthersäure. Sd. 185—190°<sub>20</sub> (D. R. P. 191547 C. 1908 [1] 566).
- C<sub>19</sub>H<sub>32</sub>O<sub>4</sub>** C 70,4 — H 9,9 — O 19,7 — M. G. 324.  
 1) Lichesterinsäure, siehe auch C<sub>14</sub>H<sub>24</sub>O<sub>3</sub>. Sm. 124,5—125°. NH<sub>4</sub>, K, Ca, Cu, Ag (C. 1898 [2] 964; A. 306, 292; Ar. 241, 1 C. 1903 [1] 697). — **\*I**, 263.  
 2) Protolichesterinsäure. Sm. 104—105° (A. 324, 39 C. 1902 [2] 904; A. 327, 353 C. 1903 [2] 510).
- C<sub>19</sub>H<sub>32</sub>O<sub>5</sub>** C 67,1 — H 9,4 — O 23,5 — M. G. 340.  
 1) Säure (aus Cholesterin). Cu (M. 17, 593).

- $C_{19}H_{32}O_5$  2) Methylester d.  $\alpha$ -Lichesterinsäure. Sm.  $50,5^\circ$  (*J. pr.* [2] 62, 352).  
 3) Methylester d. Proto- $\alpha$ -Lichesterinsäure. Sm.  $33^\circ$  (*J. pr.* [2] 68, 31 C. 1903 [2] 511).  
 $C_{19}H_{32}O_6$  C 64,0 — H 9,0 — O 27,0 — M. G. 356.  
 1) Diäthylester d.  $\beta\theta$ -Diketo- $\gamma\eta$ -Diäthylnonan- $\gamma\eta$ -Dicarbonsäure (D. d. Diacetyl-diäthylpimelinsäure). Sm.  $44-45^\circ$ ; Sd.  $249-252^\circ_{45-50}$  (*Soc.* 57, 30). — I, 822.  
 2) Diäthylester d.  $\beta\zeta$ -Diketo- $\delta$ -Hexylheptan- $\gamma\epsilon$ -Dicarbonsäure (D. d. Önanthylidendiacetessigsäure). Sm.  $71^\circ$  (A. 288, 340). — \*I, 421.  
 3) Triäthylester d. Hydrocampherylmalonsäure. Sd.  $253-255^\circ_{80}$  (A. 257, 302). — I, 822.  
 $C_{19}H_{32}O_8$  C 58,8 — H 8,2 — O 33,0 — M. G. 388.  
 1) Tetraäthylester d. Heptan- $\alpha\alpha\epsilon\epsilon\epsilon$ -Tetracarbonsäure. Sd.  $275^\circ_{75}$  (*Soc.* 65, 990). — \*I, 443.  
 2) Tetraäthylester d. Heptan- $\alpha\alpha\eta\eta$ -Tetracarbonsäure. Sd.  $270-275^\circ_{50}$  (*Soc.* 65, 104). — \*I, 443.  
 3) Tetraäthylester d. Heptan- $\beta\beta\zeta\zeta$ -Tetracarbonsäure. Sd.  $238-240^\circ_{30}$  (*Soc.* 59, 829; B. 28, 2828). — I, 862; \*I, 443.  
 4) Tetraäthylester d. Heptan- $\gamma\gamma\epsilon\epsilon\epsilon$ -Tetracarbonsäure. Sm.  $61^\circ$ ; Sd.  $195^\circ_{12}$  (A. 256, 185). — I, 862.  
 5) Tetraäthylester d.  $\beta\delta$ -Dimethylpentan- $\alpha\gamma\gamma\epsilon$ -Tetracarbonsäure. Sd.  $204-207^\circ_9$  (B. 33, 3748).  
 6) Tetraäthylester d.  $\beta\delta$ -Dimethylpentan- $\beta\gamma\gamma\delta$ -Tetracarbonsäure. Sd.  $315-334^\circ$  (B. 23, 666). — I, 862.  
 7) Tetraäthylester d.  $\beta$ -Isobutylpropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sd.  $204^\circ_{15}$  (B. 31, 2590; *Soc.* 73, 1012). — \*I, 443.  
 $C_{19}H_{32}O_{12}$  C 50,4 — H 7,1 — O 42,5 — M. G. 452.  
 1) Säure (aus d. Säure  $C_{19}H_{28}O_{10}$ ). Sm.  $230-231^\circ$ . ( $NH_4$ )<sub>3</sub>, Ag<sub>4</sub> (H. 61, 234 C. 1909 [2] 1215).  
 $C_{19}H_{32}N_2$  C 79,2 — H 11,1 — N 9,7 — M. G. 288.  
 1)  $\eta$ -Phenylhydrazontridekan. Fl. (*Soc.* 57, 536). — IV, 769.  
 $C_{19}H_{33}N$  C 82,9 — H 12,0 — N 5,1 — M. G. 275.  
 1)  $\epsilon$ -[4-Dimethylamidophenyl]- $\beta\theta$ -Dimethylnonan. Sd.  $184-185^\circ_{13}$  (B. 40, 4367 C. 1908 [1] 34).  
 $C_{19}H_{34}O_2$  C 77,5 — H 11,5 — O 10,9 — M. G. 294.  
 1) Canadinsäure? Sm.  $135-136^\circ$  (C. 1900 [2] 970). — \*III, 419.  
 2) Methylester d. Chaulmoograsäure. Sm.  $22^\circ$ ; Sd.  $227^\circ_{20}$  (*Soc.* 85, 853 C. 1904 [2] 348, 604).  
 3) Methylester d. Linolsäure. Sd.  $221-224^\circ_{35}$  (H. 62, 411 C. 1909 [2] 1984).  
 $C_{19}H_{34}O_4$  C 69,9 — H 10,4 — O 19,6 — M. G. 326.  
 1) Methylester d. Oxyketodihydrochaulmoograsäure. Sm.  $64^\circ$  (*Soc.* 91, 567 C. 1907 [2] 72).  
 $C_{19}H_{34}O_5$  C 66,7 — H 9,9 — O 23,4 — M. G. 342.  
 1) Dimethylester d.  $\gamma$ -Ketopentadekan- $\alpha\alpha$ -Dicarbonsäure. Sm.  $66^\circ$  (*Soc.* 91, 573 C. 1907 [2] 72).  
 $C_{19}H_{34}O_6$  C 63,7 — H 9,5 — O 26,8 — M. G. 358.  
 1) Trimethylester d. Tridekan- $\alpha\gamma\gamma$ -Tricarbonsäure. Sm.  $28^\circ$ ; Sd.  $245^\circ_{16}$  (*Soc.* 91, 577 C. 1907 [2] 73).  
 2)  $\lambda$ -Methylester- $\alpha\alpha$ -Diäthylester d. Undekan- $\alpha\alpha\lambda$ -Tricarbonsäure. Sd.  $233-234^\circ_{10}$  (B. 33, 3574).  
 3) Triäthylester d.  $\beta\eta$ -Dimethyloktan- $\gamma\delta\delta$ -Tricarbonsäure. Sd. 290 bis  $295^\circ$  (B. 29, 977). — \*I, 414.  
 $C_{19}H_{34}N_6$  C 65,9 — H 9,8 — N 24,3 — M. G. 346.  
 1) Verbindung (Base aus Isobuttersäurenitril). Sm.  $241^\circ$ . ( $2HCl$ ,  $PtCl_4 + 2\frac{1}{2}H_2O$ ) (*J. pr.* [2] 37, 400). — I, 1466.  
 $C_{19}H_{36}O_2$  C 77,0 — H 12,2 — O 10,8 — M. G. 296.  
 1) Cerebrinsäure. Sm.  $78-80^\circ$  (C. 1902 [2] 460). — \*II, 434.  
 2) Döglingsäure. Ba (*J.* 1847/48, 568). — I, 527.  
 3) Methylester d. Ölsäure. Sd.  $212-213^\circ_{15}$  (A. 28, 257; C. r. 143, 805 C. 1907 [1] 421). — I, 526.  
 4) Methylester d. Elaidinsäure (A. 28, 256). — I, 527.  
 5) Methylester d. Dihydrochaulmoograsäure. Sm.  $26-27^\circ$ ; Sd. 222 bis  $223^\circ_{20}$  (*Soc.* 85, 858 C. 1904 [2] 348, 604).



- $C_{19}H_{36}O_8$  C 73,1 — H 11,5 — O 15,4 — M. G. 312.  
 1) Methylester d. Ricinolsäure. *Sd.* 245°<sub>10</sub> (225—227°<sub>10</sub>) (*B.* 36, 783 *C.* 1903 [1] 823; *C. r.* 144, 465 *C.* 1907 [1] 1438).
- $C_{19}H_{36}O_4$  C 69,5 — H 11,0 — O 19,5 — M. G. 328.  
 1) Heptadekan- $\alpha\alpha$ -Dicarbonsäure (Cetylmalonsäure). *Sm.* 121,5—122° (115—117°). *Ba*, *Cd*, *Zn*, *Cu*, *Ag*<sub>2</sub> (*A.* 206, 359; *B.* 24, 2781; *J. pr.* [2] 49, 114). — *I.* 690; \**I.* 315.  
 2) Heptadekan- $\omega$ -Dicarbonsäure (Dioktylmalonsäure). *Sm.* 75°. *Ca* (*A.* 204, 164). — *I.* 690.  
 3) Methylester d.  $\alpha$ -Dioxydihydrochaulmoograsäure. *Sm.* 75—76° (*Soc.* 91, 565 *C.* 1907 [2] 71).  
 4) Methylester d.  $\beta$ -Dioxydihydrochaulmoograsäure. *Sm.* 68—69° (*Soc.* 91, 566 *C.* 1907 [2] 72).  
 5) Diäthylester d.  $\beta\kappa$ -Dimethylundekan- $\delta$ 9-Dicarbonsäure. *Sd.* 235 bis 237°<sub>100</sub> (*Soc.* 59, 842). — *I.* 689.  
 6) l-Menthylester d. Oktan- $\alpha$ -Carbonsäure (*C.* 1902 [2] 1238).  
 C 50,0 — H 7,9 — O 42,1 — M. G. 456.
- $C_{19}H_{36}O_{12}$  1) Önantholsaccharose (*A.* 244, 23). — *I.* 1070.
- $C_{19}H_{38}O$  C 80,8 — H 13,5 — O 5,7 — M. G. 282.  
 1)  $\beta$ -Ketononadekan (Methylseptdekylketon). *Sm.* 55,5°; *Sd.* 266,5°<sub>110</sub> (*B.* 12, 1672; 15, 1707, 1724; *C.* 1909 [1] 1403). — *I.* 1005.  
 2)  $\delta$ -Ketononadekan. *Sm.* 50,5°; *Sd.* 211°<sub>11</sub> (*Bl.* [3] 15, 766; *A.* 357, 162 *C.* 1908 [1] 260). — \**I.* 513.  
 3)  $\kappa$ -Ketononadekan (Dinonylketon; Caprinon). *Sm.* 58°; *Sd.* oberhalb 350° (*A.* 157, 270). — *I.* 1005.  
 4)  $\beta$ -Keto- $\gamma$ -Oktylundekan (Dioktylacetone). *Sd.* 325—330° (*A.* 204, 10). — *I.* 1005.
- $C_{19}H_{38}O_2$  C 76,5 — H 12,7 — O 10,7 — M. G. 298.  
 1) Oktadekan-P-Carbonsäure. *Sm.* 66,5°; *Sd.* 297—299°<sub>100</sub>. *Ba*, *Cu*, *Ag* (*J.* 1884, 1193). — *I.* 447.  
 2) Methylester d. Stearinsäure. *Sm.* 38°; *Sd.* 214—215°<sub>15</sub> (*J.* 1858, 301; *B.* 37, 3659 *C.* 1904 [2] 1452; *C. r.* 143, 805 *C.* 1907 [1] 421). — *I.* 445.  
 3) Äthylester d. Daturinsäure. *Sm.* 27° (*B.* 26 [2] 288; *Bl.* [3] 5, 96). — *I.* 444; \**I.* 159.  
 4) Äthylester d. Margarinsäure. *Sm.* 24—25° (28°) (*C.* 1902 [2] 1421; *Soc.* 85, 837 *C.* 1904 [2] 509).
- $C_{19}H_{38}O_8$  C 72,6 — H 12,1 — O 15,3 — M. G. 314.  
 1) Methylester d.  $\lambda$ -Oxyheptadekan- $\alpha$ -Carbonsäure. *Sm.* 58° (*C.* 1909 [1] 1751).
- $C_{19}H_{38}O_4$  C 69,1 — H 11,5 — O 19,4 — M. G. 330.  
 1) Säure (aus Dorschleberthran) (*C.* 1896 [1] 171).  
 2) Methylester d. Dioxystearinsäure (aus Ölsäure). *Sm.* 106—108° (*J. pr.* [2] 40, 245). — *I.* 636.  
 3) Methylester d. Dioxystearinsäure (aus Ricinusöl). *Sm.* 106—108° (*Bl.* [3] 13, 239). — \**I.* 275.  
 4)  $\alpha$ -Palmitat d.  $\alpha\beta\gamma$ -Trioxypropan. *Sm.* 72° (63°) (*A. ch.* [3] 41, 238; *Am.* 6, 225; *B.* 36, 4342 *C.* 1904 [1] 434). — *I.* 444.
- $C_{19}H_{38}O_5$  C 65,9 — H 11,0 — O 23,1 — M. G. 346.  
 1) Methylester d. Trioxystearinsäure. *Sm.* 110° (*J. pr.* [2] 39, 341). — *I.* 738.
- $C_{19}H_{38}N_4$  C 70,8 — H 11,8 — N 17,4 — M. G. 322.  
 1) Amidoguanidinverbindung d.  $\kappa$ -Keto-9-Methyl-9-Oktadeken. *Pi-*krat (*C.* 1902 [2] 1407; *B.* 36, 2558 *C.* 1903 [2] 655).
- $C_{19}H_{40}O_8$  C 72,2 — H 12,6 — O 15,2 — M. G. 316.  
 1)  $\alpha\gamma$ -Dioktyläther d.  $\alpha\beta\gamma$ -Trioxypropan. *Sd.* 224° (*C.* 1900 [2] 32).

### $C_{19}$ -Gruppe mit drei Elementen.

- $C_{19}H_6O_5Br_6$  1) Monobenzoat d. Hexabrom-o-Oxybrenzkatechinäther. *Sm.* 316 bis 318° (*Am.* 30, 524 *C.* 1904 [1] 366).
- $C_{19}H_8O_4Br_2$  1) 3-Brom-2-[2-Brom-1,3-Diketo-2,3-Dihydro-2-Indenyl]-1,4-Naphtochinon. *Sm.* 225° (*B.* 35, 3964 *C.* 1903 [1] 33).



- $C_{19}H_{11}O_3N_3$  2) Anhydrid d. Methenylbisindandiontrioxim. Sm. 312° u. Zers. (G. 33 [2] 158 C. 1903 [2] 1273).
- $C_{19}H_{11}O_3J_3$  1) Trijodaurin (D.R.P. 85929). — \*II, 700.
- $C_{19}H_{11}O_4N$  1) C 71,9 — H 3,5 — O 20,2 — N 4,4 — M. G. 317.
- 1) Phtalon d. 2-Methylchinolin-4-Carbonsäure. Sm. oberhalb 300° u. Zers. (J. pr. [2] 56, 292). — \*IV, 277.
- 2) Anhydrid d. 2-[ $\alpha$ -Oximidobenzyl]naphthalin-4,5-Dicarbonsäure. Sm. 242° u. Zers. (Bl. [3] 31, 380 C. 1904 [1] 1271).
- $C_{19}H_{11}O_4N_3$  C 66,1 — H 3,2 — O 18,5 — N 12,2 — M. G. 345.
- 1) 1,3-Dinitro-5-Phenylakridin. Sm. 240° (B. 39, 362 C. 1906 [1] 844).
- 2) 2,8-Dinitro-5-Phenylakridin (A. 224, 29; B. 39, 977 C. 1906 [1] 1357). — IV, 468.
- 3) 6-Nitro-2-Phenyl-1,7-Naphtisodiazin-4-Carbonsäure. Sm. 285° (B. 33, 2930). — \*IV, 726.
- 4) 6-Nitro-3-Phenyl-4,7-Naphtisodiazin-1-Carbonsäure. Sm. 310° (B. 33, 2920). — \*IV, 726.
- $C_{19}H_{11}O_4Br$  1) Verbindung (aus 1,2,3-Trioxybenzol) (B. 26, 1143). — II, 1044.
- $C_{19}H_{11}O_5N$  C 68,5 — H 3,3 — O 24,0 — N 4,2 — M. G. 333.
- 1) Oxim d. Dicumarinketon. Sm. 251° (B. 37, 4494 C. 1905 [1] 250).
- $C_{19}H_{11}O_5N_3$  C 63,2 — H 3,0 — O 22,2 — N 11,6 — M. G. 361.
- 1) 7,9-Dinitro-1-Oxy-5-Phenylakridin. Sm. 233° (B. 39, 368 C. 1906 [1] 845).
- $C_{19}H_{11}O_5Br$  1) 2,3,7-Trioxy-9-[3-Bromphenyl]fluoron.  $H_2SO_4$  (B. 38, 2879 C. 1905 [2] 1099).
- $C_{19}H_{11}O_6N_5$  C 56,3 — H 2,7 — O 23,7 — N 17,3 — M. G. 405.
- 1) 9-Phenylhydrazon-2,3,7-Trinitrofluoren. Sm. 276° u. Zers. (B. 38, 3762 C. 1906 [1] 43).
- $C_{19}H_{11}O_6Br$  1) 2,3,7-Trioxy-9-[3-Brom-2-Oxyphenyl]fluoron (B. 38, 2882 C. 1905 [2] 1110).
- $C_{19}H_{11}O_7N$  C 62,5 — H 3,0 — O 30,7 — N 3,8 — M. G. 365.
- 1) 2,3,7-Trioxy-9-[3-Nitrophenyl]fluoron. Sm. oberhalb 300°.  $H_2SO_4 + H_2O$  (B. 38, 2879 C. 1905 [2] 1098).
- 2) Dioxyfluorescein (aus Chinolinsäure) (B. 35, 1786 C. 1902 [2] 53). — \*IV, 283.
- $C_{19}H_{11}O_8N$  C 59,9 — H 2,9 — O 33,6 — N 3,6 — M. G. 381.
- 1) 2,3,7-Trioxy-9-[5-Nitro-2-Oxyphenyl]fluoron.  $H_2SO_4 + 2H_2O$  (B. 38, 2880 C. 1905 [2] 1099).
- $C_{19}H_{11}O_9Br_5$  1) Diacetat d.  $\beta$ -Pentabrom- $\alpha$ -Di[2,3,4( $\beta$ )-Trioxyphenyl]propionsäure (B. 16, 2409). — II, 2078.
- $C_{19}H_{11}O_{12}N_3$  C 48,2 — H 2,3 — O 40,6 — N 8,9 — M. G. 473.
- 1) Trimethyläther d.  $\beta$ -Trinitro-3,6',7'-Trioxybrasanchinon. Sm. 275° u. Zers. (B. 41, 2800 C. 1908 [2] 1442).
- $C_{19}H_{11}NCl_2$  1)  $\beta$ -Dichlor-5-Phenylakridin (B. 39, 982 C. 1906 [1] 1358).
- $C_{19}H_{11}NS$  1) Chrysylsenfö. Sm. 176° (B. 24, 955). — II, 643.
- $C_{19}H_{11}N_2Br_3$  1) 2,3,7-Tribrom-9-Phenylhydrazonfluoren. Sm. 227° u. Zers. (B. 38, 3768 C. 1906 [1] 44).
- $C_{19}H_{12}ON_2$  C 49,6 — H 2,6 — O 41,7 — N 6,1 — M. G. 460.
- 1) 2,2'-Dichinolylyketon. Sm. 230–240° (B. 37, 1239 C. 1904 [1] 1362).
- 2) Dichinolylyketon. Sm. 174°. 2HCl (B. 24, 1609). — IV, 376.
- $C_{19}H_{12}ON_4$  C 73,1 — H 3,8 — O 5,1 — N 17,9 — M. G. 312.
- 1) Leukonditoluylenchinoxalin. Sm. oberhalb 300° (B. 19, 776). — IV, 1302.
- $C_{19}H_{12}OBr_2$  1) 3,5-Dibrom-4-Keto-1-Diphenylmethylen-1,4-Dihydrobenzol. Sm. 232° (225°) (B. 34, 3078; B. 36, 3237 C. 1903 [2] 883).
- $C_{19}H_{12}OS$  1) Verbindung (aus Phenanthrenchinon u. Methylthiophen) (B. 16, 1624; 17, 1338). — III, 448.
- $C_{19}H_{12}O_2N_2$  C 76,0 — H 4,0 — O 10,7 — N 9,3 — M. G. 300.
- 1) 3-Nitro-5-Phenylakridin. Sm. 209° (B. 39, 300 C. 1906 [1] 682).
- 2) Methyltriphendioxazin (B. 29, 2077). — IV, 1078.
- 3) 2-Phenyl-1,4-Naphtisodiazin-2'-Carbonsäure. Sm. oberhalb 300° u. Zers. (B. 41, 392 C. 1908 [1] 862).
- 4) 3-Phenyl-1,4-Naphtisodiazin-3'-Carbonsäure. Sm. 246° u. Zers. (B. 41, 394 C. 1908 [1] 863).



- C<sub>19</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>** 5) 2-Phenyl-1,7-Naphtisodiazin-4-Carbonsäure. Sm. 353—355°. Na, Cu, Ag, HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub> (B. 33, 2928). — **IV**, 726.  
 6) 3-Phenyl-4,7-Naphtisodiazin-1-Carbonsäure. Sm. 290°. Na, K, Ba, Cu, Ag (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub>, 2H<sub>2</sub>SO<sub>4</sub> (B. 33, 2919). — **IV**, 725.  
 7) 8,8'-Bichinoly-5'-Carbonsäure. Sm. 310—312°. NH<sub>4</sub> + 4H<sub>2</sub>O, Ba + 11H<sub>2</sub>O (B. 42, 645 C. 1909 [1] 1011).
- C<sub>19</sub>H<sub>12</sub>O<sub>2</sub>N<sub>4</sub>** C 69,5 — H 3,6 — O 9,8 — N 17,1 — M. G. 328.  
 1) Homofluorindin-2-Carbonsäure (B. 36, 4033 C. 1904 [1] 294).
- C<sub>19</sub>H<sub>12</sub>O<sub>2</sub>Br<sub>4</sub>** 1) 3,5,3',5'-Tetrabrom-4,4'-Dioxytriphenylmethan. Sm. 160—161° (A. 363, 268 C. 1909 [1] 175).
- C<sub>19</sub>H<sub>12</sub>O<sub>3</sub>N<sub>2</sub>** C 72,2 — H 3,8 — O 15,2 — N 8,8 — M. G. 316.  
 1) 6-[2-Oxy-1-Naphtylazo]-1,2-Benzpyron. Sm. 222° (Soc. 85, 1234 C. 1904 [2] 1124).  
 2) 2-Oxybenzylidenamidobenzolazoxindol. Sm. oberhalb 300° (B. 28, 298). — **IV**, 1005.  
 3) Benzoylamidobenzolazoxindon. Sm. 264,5° (A. 226, 65). — **IV**, 1005.  
 4) p-Nitro-9-Benzoylcarbazol. Sm. 181° (B. 24, 280). — **IV**, 393.  
 5) 3-Nitro-5-[4-Oxyphenyl]akridin (B. 39, 309 C. 1906 [1] 683).  
 6) Benzylidenbenzo-β-Ketopentamethylenazinmethylsäure. Sm. 198° (Bl. [3] 25, 720). — **IV**, 720.  
 7) 6-Oxy-2-Phenyl-1,7-Naphtisodiazin-4-Carbonsäure. Sm. 293°. Ba (B. 33, 2932). — **IV**, 727.  
 8) 6-Oxy-3-Phenyl-4,7-Naphtisodiazin-1-Carbonsäure (B. 33, 2921). — **IV**, 727.
- C<sub>19</sub>H<sub>12</sub>O<sub>3</sub>Cl<sub>2</sub>** 1) Methylester d. 3,6-Dichlor-2-[1-Naphtoyl]benzol-1-Carbonsäure. Sm. 144° (A. 340, 265 C. 1905 [2] 486).
- C<sub>19</sub>H<sub>12</sub>O<sub>3</sub>Br<sub>4</sub>** 1) 3,5,3',5'-Tetrabrom-α,4,4'-Trioxytriphenylmethan (A. 363, 273 C. 1909 [1] 176).
- C<sub>19</sub>H<sub>12</sub>O<sub>4</sub>N<sub>2</sub>** C 68,7 — H 3,6 — O 19,3 — N 8,4 — M. G. 332.  
 1) Dinitrophenylendiphenylmethan. Sm. bei 240° u. Zers. (Bl. [3] 1, 775). — **II**, 294.  
 2) Methyläther d. 3-Oxy-4-Keto-1-[α-Cyan-4-Nitrobenzyliden]-1,4-Dihydronaphtalin. Sm. 243° (B. 38, 3693 C. 1905 [2] 1731).  
 3) 9-Phenylhydrazon-2,7-Dinitrofluoren. Sm. 263—264° u. Zers. (B. 38, 3747 C. 1906 [1] 42).  
 4) 3-Nitro-1-Benzoylphenoxazin. Sm. 217° (B. 39, 369 C. 1906 [1] 845).  
 5) 5-Nitro-3-Benzoylphenoxazin. Sm. 216° (A. 366, 100 C. 1909 [2] 123).  
 6) p-Nitro-2,6-Dimethylchinolinphtalon. Sm. 132° (B. 34, 2309). — **IV**, 207.  
 7) 7-Oxy-5-Phenylphenazon-8-Carbonsäure (N-Phenylsafranolkarbonsäure). Na (B. 31, 1184). — **IV**, 1020.
- C<sub>19</sub>H<sub>12</sub>O<sub>4</sub>N<sub>4</sub>** C 63,3 — H 3,3 — O 17,8 — N 15,6 — M. G. 360.  
 1) 2,7-Dinitro-9-Phenylhydrazonfluoren. Sm. 257—258° u. Zers. (M. 16, 825). — **IV**, 778; **IV**, 505.  
 2) 4,5-Dinitro-9-Phenylhydrazonfluoren. Sm. 241° u. Zers. (B. 38, 3750 C. 1906 [1] 42).  
 3) p-Dinitro-9-Phenylhydrazonfluoren. Sm. 227—228° u. Zers. (M. 16, 826). — **IV**, 778; **IV**, 505.  
 4) 5,p-Dinitro-1,2-Diphenylbenzimidazol. Sm. 220° (Bl. [3] 17, 872). — **IV**, 562.  
 5) 5-Nitro-1-Phenyl-2-[3-Nitrophenyl]benzimidazol. Sm. 218—220° (Bl. [3] 19, 519). — **IV**, 1008.  
 6) 5-Nitro-1-Phenyl-2-[4-Nitrophenyl]benzimidazol. + C<sub>6</sub>H<sub>6</sub> (Sm. 195°) (Bl. [3] 17, 1029). — **IV**, 1008.  
 7) 7,9-Dinitro-3-Amido-5-Phenylakridin. Sm. oberhalb 360° (B. 39, 366 C. 1906 [1] 845).
- C<sub>19</sub>H<sub>12</sub>O<sub>4</sub>Br<sub>2</sub>** 1) Dibromoresorcinbenzein (J. pr. [2] 48, 390). — **II**, 1123.
- C<sub>19</sub>H<sub>12</sub>O<sub>5</sub>N<sub>2</sub>** C 65,5 — H 3,4 — O 23,0 — N 8,0 — M. G. 348.  
 1) αγ-Di[1,2-Phtalylamido]-β-Ketopropan. Sm. 264—268° (B. 27, 1042; 32, 1250; B. 42, 3240 C. 1909 [2] 1539). — **II**, 1814.  
 2) Verbindung (aus Nitrophenylacetylen). Zers. bei 165° (B. 15, 213). — **II**, 174.
- C<sub>19</sub>H<sub>12</sub>O<sub>5</sub>N<sub>4</sub>** C 60,6 — H 3,2 — O 21,3 — N 14,9 — M. G. 376.  
 1) 6-Nitro-3-[3-Nitrophenyl]-4-Phenyl-1,2,4-Benzoxdiazin. Sm. 189° (B. 32, 2695). — **IV**, 676.

- $C_{19}H_{12}O_5N_4$  2) 6-Nitro-3-[4-Nitrophenyl]-4-Phenyl-1,2,4-Benzoxdiazin. Sm. 182° (B. 32, 2694). — \*IV, 676.
- $C_{19}H_{12}O_5Br_2$  1) 3,4,3',4'-Dimethylenäther d.  $\gamma$ -Keto- $\alpha$ s-Di[ $\beta$ -Brom-3,4-Dioxyphenyl]- $\alpha$  $\delta$ -Pentadien (B. 24, 2596). — III, 252.
- $C_{19}H_{12}O_6N_2$  C 62,6 — H 3,3 — O 26,4 — N 7,7 — M. G. 364.  
1) 1,2-Phthalylasparagin-3-Amidobenzol-1-Carbonsäure. Ag (G. 16, 7). — II, 1813.
- $C_{19}H_{12}O_6N_4$  C 58,2 — H 3,0 — O 24,5 — N 14,3 — M. G. 392.  
1) Benzoat d. 3,2'-Dinitro-4-Oxyazobenzol. Sm. 174° (Soc. 87, 228 C. 1905 [1] 929, 1316).  
2) Benzoat d. 3,3'-Dinitro-4-Oxyazobenzol. Sm. 169° (Soc. 87, 229 C. 1905 [1] 930, 1316).  
3) Benzoat d. 3,4'-Dinitro-4-Oxyazobenzol. Sm. 179° (Soc. 87, 231 C. 1905 [1] 930, 1316).
- $C_{19}H_{12}O_6Cl_2$  1) Diacetat d. 5,6-Dioxy-2-Keto-1-[ $\beta$ -Dichlorbenzyliden]-1,2-Dihydrobenzofuran. Sm. 189—191° u. Zers. (B. 29, 2434). — \*III, 532.
- $C_{19}H_{12}O_6Br_2$  1) Dibromoxylin. Sm. 173° (Soc. 79, 955). — \*III, 469.
- $C_{19}H_{12}O_6Br_8$  1) Triacetat d. 2,3,5,2',3',5'-Hexabrom- $\alpha$ ,4,4'-Trioxydiphenylmethan. Sm. 204° (A. 330, 76 C. 1904 [1] 1148).
- $C_{19}H_{12}O_6S$  1) Resorcinsulfonphtalein. Sm. oberhalb 300° (Am. 11, 78; 14, 471; 18, 802; 20, 266; Bl. [3] 17, 822). — III, 200; \*II, 702.
- $C_{19}H_{12}O_7N_2$  C 60,0 — H 3,1 — O 29,4 — N 7,4 — M. G. 380.  
1) Acetat d. 3-Oxy-4-Keto-1-[2,4-Dinitrobenzyliden]-1,4-Dihydronaphthalin. Sm. 187,5—188° (C. 1907 [1] 1131).
- $C_{19}H_{12}O_8N_2$  C 57,6 — H 3,0 — O 32,3 — N 7,1 — M. G. 396.  
1) Dinitroresorcinbenzein (J. pr. [2] 48, 395). — II, 1123.
- $C_{19}H_{12}O_8N_4$  C 53,8 — H 2,8 — O 30,2 — N 13,2 — M. G. 424.  
1) Benzoat d. 2,4,6-Trinitro-2'-Oxydiphenylamin. Sm. 157° (Soc. 59, 722). — II, 1147.  
2) Benzoat d. 2,4,6-Trinitro-4'-Oxydiphenylamin. Sm. 191° (Soc. 59, 720). — II, 1147.
- $C_{19}H_{12}O_8S$  1) Pyrogallolsulfonphtalein (Am. 20, 268). — \*II, 703.
- $C_{19}H_{12}O_9N_2$  C 55,3 — H 2,9 — O 34,9 — N 6,8 — M. G. 412.  
1) 3,4,3',4'-Dimethylenäther d.  $\gamma$ -Keto- $\alpha$ s-Di[ $\beta$ -Nitro-3,4-Dioxyphenyl]- $\alpha$  $\delta$ -Pentadien. Sm. 218° u. Zers. (B. 24, 618). — III, 252.
- $C_{19}H_{12}O_{10}N_2$  C 53,3 — H 2,8 — O 37,4 — N 6,5 — M. G. 428.  
1) Diacetat d.  $\beta$ -Dinitro-5,7-Dioxy-2-Phenyl-1,4-Benzpyron (D. d. Dinitrochrysin). Sm. 229° (B. 27, 22). — III, 628.
- $C_{19}H_{12}NCl$  1) 5-[4-Chlorphenyl]akridin. Sm. noch nicht bei 270°. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>CrO<sub>4</sub>, Pikrat (Soc. 91, 1661 C. 1907 [2] 2061).
- $C_{19}H_{12}NBr$  1) 5-[4-Bromphenyl]akridin. Sm. 234°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, H<sub>2</sub>CrO<sub>4</sub> (B. 39, 2402 C. 1906 [2] 801).  
2)  $\beta$ -Brom-5-Phenylakridin. Sm. 275°. + (CH<sub>3</sub>)<sub>2</sub>SO<sub>4</sub> (B. 39, 981 C. 1906 [1] 1358; Soc. 91, 1665 C. 1907 [2] 2062).
- $C_{19}H_{12}NBr_3$  1) Dibromid d. 5-[4-Bromphenyl]akridin. Sm. 212°. H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, Pikrat (Soc. 91, 1664 C. 1907 [2] 2061).  
2) Dibromid d.  $\beta$ -Brom-5-Phenylakridin. Sm. 180°. H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>, 2 Pikrat (Soc. 91, 1664 C. 1907 [2] 2062).
- $C_{19}H_{12}N_2Cl_2$  1)  $\beta$ -Dichlor-9-Phenylhydrazonfluoren. Sm. 185—186° (M. 16, 811). — IV, 778.
- $C_{19}H_{12}N_2Br_2$  1) 2,7-Dibrom-9-Phenylhydrazonfluoren. Sm. 192—193° (190°) (M. 16, 812; B. 38, 3754 C. 1906 [1] 42). — IV, 778.  
2)  $\beta$ -Dibrom-9-Phenylhydrazonfluoren. Sm. 252° u. Zers. (M. 16, 822). — IV, 778.
- $C_{19}H_{12}ClBr_3$  1)  $\alpha$ -Chlor-2,4,4''-Tribromtriphenylmethan. Sm. 154—155° (B. 39, 3284 C. 1906 [2] 1613).  
2)  $\alpha$ -Chlor-4,4,4''-Tribromtriphenylmethan. Sm. 153° (237°) (B. 39, 3283 C. 1906 [2] 1613; B. 40, 3089 C. 1907 [2] 814; B. 42, 409 C. 1909 [1] 752).  
3) 4-Chlor- $\alpha$ ,4,4''-Tribromtriphenylmethan. Sm. 174° (B. 42, 413 C. 1909 [1] 752).
- $C_{19}H_{12}ClI_3$  1)  $\alpha$ -Chlor-4,4,4''-Trijodtriphenylmethan. Sm. 180° u. Zers. + SnCl<sub>4</sub>, + FeCl<sub>3</sub> (B. 38, 590 C. 1905 [1] 824; B. 38, 1162 C. 1905 [1] 1247; B. 40, 3090 C. 1907 [2] 814).

- C<sub>19</sub>H<sub>12</sub>Cl<sub>2</sub>Br<sub>2</sub>** 1)  $\alpha,4$ -Dichlor-4',4''-Dibromtriphenylmethan. Sm. 133° (135°) (B. 40, 1864 C. 1907 [2] 60; B. 42, 416 C. 1909 [1] 753).
- C<sub>19</sub>H<sub>12</sub>Cl<sub>3</sub>Br** 1)  $\alpha$ -Brom-4,4',4''-Trichlortriphenylmethan. Sm. 148°. + FeCl<sub>3</sub>, + FeBr<sub>3</sub> (B. 40, 3088 C. 1907 [2] 813).
- 2)  $\alpha,4,4'$ -Trichlor-4''-Bromtriphenylmethan. Sm. 122° (B. 40, 1863 C. 1907 [2] 59; B. 42, 416 C. 1909 [1] 753).
- C<sub>19</sub>H<sub>13</sub>ON** C 84,1 — H 4,8 — O 5,9 — N 5,2 — M. G. 271.
- 1) 7-Oximido-8-Benzylidenacenaphten. Sm. 48° (A. 290, 204). — III, 260.
- 2) 9-Phenylimidoxanthen. Sm. 134,5° (B. 32, 1689). — \*III, 154.
- 3) 2-Oxy-5-Phenylakridin. HCl (B. 24, 2046). — IV, 468.
- 4) 3-Oxy-5-Phenylakridin. Sm. oberhalb 275° (B. 18, 695; B. 41, 4138 C. 1909 [1] 192). — IV, 468.
- 5) 5-[2-Oxyphenyl]akridin. Sm. 289—290° u. Zers. (Bl. [3] 31, 1085 C. 1904 [2] 1508).
- 6) 5-[4-Oxyphenyl]akridin. Sm. 355—356° u. Zers. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), H<sub>2</sub>CrO<sub>7</sub>, Pikrat (Bl. [3] 31, 1091 C. 1904 [2] 1509).
- 7) 5-Keto-10-Phenyl-5,10-Dihydroakridin. Sm. 276° (266°) (B. 40, 2450 C. 1907 [2] 244; B. 40, 2519 C. 1907 [2] 254).
- 8) 9-Benzoylcarbazol. Sm. 95,5° (98,5°) (G. 20, 413; B. 24, 279). — IV, 392.
- 9) 3-[2-Oxyphenyl]- $\beta$ -Naphtochinolin. Sm. 217° (B. 27, 2029).
- C<sub>19</sub>H<sub>13</sub>ON<sub>3</sub>** C 76,3 — H 4,3 — O 5,4 — N 14,0 — M. G. 299.
- 1) P-[2-Naphtyl]azo-6-Oxychinolin (B. 21, 1643). — IV, 1486.
- 2) P-[2-Naphtyl]azo-8-Oxychinolin (B. 19, 1645). — IV, 1486.
- 3) 8-Keto-5,7-Diphenyl-7,8-Dihydro-1,6,7-Benzotriazin. Sm. 233—235° (M. 17, 525). — IV, 799.
- C<sub>19</sub>H<sub>13</sub>OCl** 4) N-Methyltriphenazinoxazin. Sm. 250° (B. 32, 3525). — \*IV, 879.
- 1) 9-Phenylxanthoniumchlorid. + FeCl<sub>3</sub>, + HgCl<sub>2</sub> (B. 37, 2935 C. 1904 [2] 1142).
- 2) 2-Phenylnaphtopyranchlorid. + FeCl<sub>3</sub> (A. 364, 42 C. 1909 [1] 543).
- 3) 9-Phenylbiphenopyryliumchlorid. + FeCl<sub>3</sub> (B. 41, 3757 C. 1908 [2] 1932).
- C<sub>19</sub>H<sub>13</sub>OCl<sub>3</sub>** 1)  $\alpha$ -Oxy-2,4',4''-Trichlortriphenylmethan. Sm. 111,5—112,5° (B. 39, 3282 C. 1906 [2] 1612).
- 2)  $\alpha$ -Oxy-4,4',4''-Trichlortriphenylmethan. Sm. 98°. Sulfat + H<sub>2</sub>SO<sub>4</sub> (B. 38, 338 C. 1905 [1] 530; B. 38, 585 C. 1905 [1] 823; B. 38, 1161 C. 1905 [1] 1247; C. 1909 [1] 1704).
- C<sub>19</sub>H<sub>13</sub>OBr<sub>3</sub>** 1)  $\alpha$ -Oxy-4,4',4''-Tribromtriphenylmethan. Sm. 131° (133°) (B. 38, 337 C. 1905 [1] 530; C. 1909 [1] 1704).
- 2)  $\alpha,3,5$ -Tribrom-4-Oxytriphenylmethan. Sm. 130—133° (B. 36, 3243 C. 1903 [2] 884).
- 3) 9-Phenylxanthoniumtribromid. Sm. 168—170° u. Zers. (B. 37, 2936 C. 1904 [2] 1142).
- C<sub>19</sub>H<sub>13</sub>OJ<sub>3</sub>** 1)  $\alpha$ -Oxy-4,4',4''-Trijodtriphenylmethan. Sm. 155° (162—163°). + C<sub>6</sub>H<sub>6</sub>, Sulfat + H<sub>2</sub>SO<sub>4</sub> (B. 38, 338 C. 1905 [1] 530; B. 38, 589 C. 1905 [1] 824; B. 38, 1160 C. 1905 [1] 1247; C. 1909 [1] 1704).
- C<sub>19</sub>H<sub>13</sub>O<sub>2</sub>N** C 79,4 — H 4,5 — O 11,1 — N 4,9 — M. G. 287.
- 1) Methyläther d. 3-Oxy-4-Keto-1-[ $\alpha$ -Cyanbenzyliden]-1,4-Dihydro-naphtalin. Sm. 190° (B. 38, 3690 C. 1905 [2] 1730).
- 2) 2-Nitro-9-Phenylfluoren. Sm. 135° (B. 38, 293 C. 1905 [1] 617).
- 3) Amidophenylfluoren. Sm. 305° (B. 41, 3444 C. 1908 [2] 1779).
- 4) 3-Benzoylamidodiphenylenoxyd. Sm. 201° (B. 41, 1941 C. 1908 [2] 173).
- 5) 3-[ $\alpha$ -Oximidobenzyl]diphenylenoxyd. Sm. 234—235° (B. 41, 1944 C. 1908 [2] 173).
- 6) 3,5-Dibenzoylpyridin. Sm. 123°. (2HCl, PtCl<sub>4</sub>) (A. 280, 47, 69). — IV, 186.
- 7) 2,4-Dimethylchinolinphtalon. Sm. 237—238° (J. pr. [2] 33, 407). — IV, 328.
- 8) 2,6-Dimethylchinolinphtalon. Sm. 203° (231—232°). HBr (B. 16, 2603; 34, 2306). — IV, 329; \*IV, 206.
- 9) o-Methylchinophtalon. Sm. 276,5—277° (279°) (B. 36, 3917 C. 1904 [1] 97; B. 37, 3017 C. 1904 [2] 1409).
- 10) p-Methylchinophtalon. Sm. 233° (B. 37, 3017 C. 1904 [2] 1409).



- C<sub>19</sub>H<sub>19</sub>O<sub>2</sub>N** 11) *o*-Methylisochinophthalon. Sm. 235° (*B.* 37, 3017 *C.* 1904 [2] 1409).  
 12) *p*-Methylisochinophthalon. Sm. 237° (*B.* 37, 3017 *C.* 1904 [2] 1409).  
 13)  $\alpha$ -Di-*o*-Benzylenolpyridin. Sm. 270—275° (*G.* 33 [1] 425 *C.* 1903 [2] 951).  
 14) Acetat d. 3'-Oxy-1,2-Naphtakridin. Sm. 160° (*B.* 39, 2440 *C.* 1906 [2] 887).  
 15) Nitril d.  $\alpha$ -Benzoxyl-2-Naphtylelessigsäure. Sm. 239° (*Soc.* 95, 1406 *C.* 1909 [2] 1228).  
 16) Imid d. 2-Benzylnaphtalin-4,5-Dicarbonsäure. Sm. 227° (*Bl.* [3] 31, 378 *C.* 1904 [1] 1271; *Bl.* [3] 31, 924 *C.* 1904 [2] 778).  
 17) Benzylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 196,6° (*G.* 25 [1] 251; *B.* 28, 362). — *II*, 1880.  
 18) 2-Methylphenylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 214° (217—218°) (*G.* 25 [1] 251; *B.* 28, 362; *G.* 34 [2] 455 *C.* 1905 [1] 615). — *II*, 1880.  
 19) 3-Methylphenylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 175 bis 176° (*G.* 34 [2] 456 *C.* 1905 [1] 615).  
 20) 4-Methylphenylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 304 bis 305° (*G.* 34 [2] 457 *C.* 1905 [1] 615).
- C<sub>19</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>** 1) Verbindung (aus Salicylaldehydphenylhydrazon) = (C<sub>19</sub>H<sub>13</sub>O<sub>2</sub>N<sub>2</sub>)<sub>x</sub>. Sm. 184° (*A.* 305, 183). — \*IV, 491.
- C<sub>19</sub>H<sub>13</sub>O<sub>2</sub>N<sub>3</sub>** C 72,4 — H 4,1 — O 10,2 — N 13,3 — M. G. 315.  
 1) *p*-Phenylazo-5-Oxy-1-Phenylbenzoxazol. Sm. 184° (*B.* 35, 4202 *C.* 1903 [1] 146). — \*IV, 1077.  
 2) 5-Nitro-1,2-Diphenylbenzimidazol. Sm. 181—182°. HCl (*Bl.* [3] 17, 867; *J. pr.* [2] 74, 244 *C.* 1906 [2] 1436). — IV, 562.  
 3) 1-Phenyl-2-[4-Nitrophenyl]benzimidazol. Sm. 174° (*Bl.* [3] 17, 1028). — IV, 1007.  
 4) 7-Nitro-3-Amido-5-Phenylakridin. Sm. 181°. HCl (*B.* 39, 305 *C.* 1906 [1] 683).  
 5)  $\alpha$ -Cyan- $\beta\beta'$ -Di[2-Cyanphenyl]isobuttersäure. Sm. 160° u. Zers. (*B.* 25, 3026). — *II*, 1470.  
 6) 6-Amido-2-Phenyl-1,7-Naphtisodiazin-4-Carbonsäure. Sm. 302 bis 303°. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 2931). — \*IV, 879.  
 7) 6-Amido-3-Phenyl-4,7-Naphtisodiazin-1-Carbonsäure. Sm. 293°. (2HCl, PtCl<sub>4</sub>) (*B.* 33, 2921). — \*IV, 879.
- C<sub>19</sub>H<sub>19</sub>O<sub>2</sub>N<sub>5</sub>** C 66,5 — H 3,8 — O 9,3 — N 20,4 — M. G. 343.  
 1) *peri*-Naphtylenhydrazimethylen-*m*-Nitroisobenzalazin. Sm. 215 bis 216° u. Zers. (*C.* 1899 [1] 114; *J. pr.* [2] 60, 19). — \*III, 291.
- C<sub>19</sub>H<sub>13</sub>O<sub>2</sub>Br** 1) 3-Brom-2-Phenyl-2,3-Dihydro-1,4- $\alpha$ -Naphtopyron. Sm. 134° (*B.* 39, 1653 *C.* 1906 [2] 57).  
 2) Oxoniumbromid d. 2-Oxy-9-Phenylxanthen. Sm. oberhalb 300° u. Zers. (*B.* 42, 581 *C.* 1909 [1] 1002).
- C<sub>19</sub>H<sub>13</sub>O<sub>3</sub>N** C 75,2 — H 4,3 — O 15,8 — N 4,6 — M. G. 303.  
 1) 3-Oximido-2-Phenyl-2,3-Dihydro-1,4- $\alpha$ -Naphtopyron. Sm. 173—174° (*B.* 39, 1651 *C.* 1906 [2] 56).  
 2) 2-Oxy-4,9-Diketo-1-Benzyl-4,9-Dihydro- $\beta\beta$ -Naphtindol (*B.* 33, 571). — \*II, 1089.  
 3) Methyläther d. 4-Oxy-2-Naphtalin-2-Indolindigo (*M.* 29, 383 *C.* 1908 [2] 516).  
 4) Naphtostyrlphenylelessigsäure. Sm. 186—187° (*B.* 35, 4222 *C.* 1903 [1] 166).  
 5) Benzoat d. 5-Nitroso-2-Oxybiphenyl. Sm. 174—175° u. Zers. (*B.* 32, 2936; *A.* 312, 217). — \*III, 288.
- C<sub>19</sub>H<sub>13</sub>O<sub>3</sub>N<sub>3</sub>** C 68,9 — H 3,9 — O 14,5 — N 12,7 — M. G. 331.  
 1) 5-Nitro-2-Phenyl-1-[4-Oxyphenyl]benzimidazol. Sm. 259—260° (*D. R. P.* 175829 *C.* 1906 [2] 1798).  
 2) 6-Nitro-3,4-Diphenyl-1,2,4-Benzoxdiazin. Sm. 168° (*B.* 32, 2691). — \*IV, 676.  
 3) 7-Nitro-4-Keto-2-Methyl-3-[2-Naphtyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 218—219° (*C.* 1908 [2] 180).
- C<sub>19</sub>H<sub>19</sub>O<sub>3</sub>Br** 1) Benzoat d. Methyl-*p*-Dibrom-1-Oxy-2-Naphtylketon. Sm. 133 bis 134° (*B.* 39, 3097 *C.* 1906 [2] 1410).

- C<sub>19</sub>H<sub>13</sub>O<sub>4</sub>N** C 71,5 — H 4,1 — O 20,0 — N 4,4 — M. G. 319.  
 1) 1-[1-Naphtyl]imidomethylbenzol-2,6-Dicarbonsäure. Sm. 202 bis 207°. Ba, Ag<sub>2</sub> (B. 30, 695). — \*II, 1130.  
 2) 2,4-Diphenylpyridin-5,6-Dicarbonsäure. Sm. 185°. Ag<sub>2</sub> (J. pr. [2] 78, 529 C. 1908 [2] 594).  
 3) Anhydrid d. Chinolylphenetoldicarbonsäure. Sm. 210—211° (J. pr. [2] 61, 31). — \*IV, 270.  
 4) Benzoat d. 5-Nitro-2-Oxybiphenyl. Sm. 120° (99,3°) (A. 312, 223; Am. 33, 10 C. 1905 [1] 509). — \*II, 538.  
 5) Dibenzoat d. 2,4-Dioxybipyridin. Sm. 103° (B. 31, 1690). — \*IV, 96.
- C<sub>19</sub>H<sub>13</sub>O<sub>4</sub>N<sub>3</sub>** C 65,7 — H 3,7 — O 18,4 — N 12,1 — M. G. 347.  
 1) Benzoat d. 3-Nitro-4-Oxyazobenzol. Sm. 132° (Soc. 77, 102). — \*IV, 1036.  
 2) Benzoat d. 4'-Nitro-4-Oxyazobenzol. Sm. 195° (C. 1899 [2] 1113). — \*IV, 1036.
- C<sub>19</sub>H<sub>13</sub>O<sub>4</sub>N<sub>5</sub>** C 60,8 — H 3,5 — O 17,1 — N 18,7 — M. G. 375.  
 1) 3'-Nitro-4-[3-Nitrophenyl]imidomethylazobenzol. Sm. 239,5° (Am. 36, 511 C. 1907 [1] 336).  
 2) 4'-Nitro-4-[4-Nitrophenyl]imidomethylazobenzol. Sm. 237—238,5° (Am. 36, 513 C. 1907 [1] 336).
- C<sub>19</sub>H<sub>13</sub>O<sub>5</sub>N** C 68,0 — H 3,9 — O 23,9 — N 4,2 — M. G. 335.  
 1) 1-[α-Oximidobenzyl]naphtalin-4,5-Dicarbonsäure. Sm. 199° (A. 327, 98 C. 1903 [1] 1228).  
 2) 4-Keto-2,6-Diphenyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 258° (B. 41, 1694 C. 1908 [2] 71; C. 1909 [2] 833).
- C<sub>19</sub>H<sub>13</sub>O<sub>5</sub>N<sub>3</sub>** C 62,8 — H 3,6 — O 22,0 — N 11,6 — M. G. 363.  
 1) 2-Dinitro-4-Benzoylamidobiphenyl. Sm. 206° (A. 209, 346; B. 8, 873). — II, 1169.  
 2) 3,5-Dinitro-2-Phenylamidodiphenylketon. Sm. 206° (B. 39, 361 C. 1906 [1] 844).  
 3) 3,5-Dinitro-4-Phenylamidodiphenylketon. Sm. 211° (A. 366, 99 C. 1909 [2] 123).  
 4) Phenylester d. 4'-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 165° (J. pr. [2] 78, 397 C. 1909 [1] 362).  
 5) Monobenzoat d. 4'-Nitro-2,5-Dioxyazobenzol. Sm. 195—197° (B. 26, 1910). — IV, 1447.  
 6) Diphenylamid d. 3,5-Dinitrobenzol-1-Carbonsäure. Sm. 180—181° (Am. 36, 300 C. 1906 [2] 1420).  
 7) Di[2-Nitrophenyl]amid d. Benzolcarbonsäure (A. 132, 166; B. 15, 829). — II, 1164.  
 8) Di[4-Nitrophenyl]amid d. Benzolcarbonsäure. Sm. 224° (A. 132, 167; B. 15, 828). — II, 1164.
- C<sub>19</sub>H<sub>13</sub>O<sub>6</sub>N** C 65,0 — H 3,7 — O 27,3 — N 4,0 — M. G. 351.  
 1) Verbindung (aus Brommethylphenylketon-2-Carbonsäure). Sm. 223° (B. 40, 78 C. 1907 [1] 555; B. 40, 4232 C. 1907 [2] 1841).
- C<sub>19</sub>H<sub>13</sub>O<sub>6</sub>N<sub>3</sub>** C 60,1 — H 3,4 — O 25,3 — N 11,1 — M. G. 379.  
 1) Tri[4-Nitrophenyl]methan. Sm. 203° (206—207°; 212,5°) (A. 194, 254; B. 7, 1208; 21, 2476; D.R.P. 40340; R. 24, 125 C. 1905 [1] 1325). — \*II, 288; \*II, 128.  
 2) 4-Amido-4'-[2,4,6-Trinitrobenzyliden]amidobiphenyl. Sm. 223° (B. 39, 2760 C. 1906 [2] 1323).  
 3) 3,5-Dinitro-2-[2-Oxyphenyl]amidodiphenylketon. Sm. 233° (B. 39, 368 C. 1906 [1] 845).  
 4) 3,5-Dinitro-4-[2-Oxyphenyl]amidodiphenylketon. Sm. 220° u. Zers. (A. 366, 100 C. 1909 [2] 123).  
 5) Acetat d. 4-[2,4-Dinitrobenzyliden]amido-1-Oxynaphtalin. Sm. 210° (B. 40, 3233 C. 1907 [2] 814).  
 6) 3-Acetat d. 3-Oxy-5,6-Di[3,4-Dioxyphenyl]-1,2,4-Triazindimethylenäther. Sm. 208° u. Zers. (A. 339, 274 C. 1905 [2] 47).
- C<sub>19</sub>H<sub>13</sub>O<sub>6</sub>N<sub>5</sub>** C 56,0 — H 3,2 — O 23,6 — N 17,2 — M. G. 407.  
 1) 1-[2,4-Dinitrophenyl]amido-4-[4-Nitrobenzyliden]amidobenzol (D.R.P. 135335 C. 1902 [2] 1167).

- C<sub>19</sub>H<sub>13</sub>O<sub>7</sub>N<sub>3</sub>** C 57,7 — H 3,3 — O 28,3 — N 10,6 — M. G. 395.  
 1)  $\alpha$ -Oxytri[4-Nitrophenyl]methan. Sm. 188—189° (u. 167°). +  $\frac{1}{2}$  C<sub>6</sub>H<sub>6</sub> (A. 194, 256; B. 21, 2476; C. 1904 [1] 461; B. 37, 1639 C. 1904 [1] 1649; B. 37, 3355 C. 1904 [2] 1126; R. 24, 127 C. 1905 [1] 1325). — II, 1084.
- C<sub>19</sub>H<sub>13</sub>O<sub>7</sub>N<sub>5</sub>** C 53,9 — H 3,1 — O 26,5 — N 16,5 — M. G. 423.  
 1)  $\alpha$ -[2,4,6-Trinitrophenyl]- $\alpha$ - $\beta$ -Diphenylharnstoff. Sm. 213—214° (J. pr. [2] 79, 530 C. 1909 [2] 428).  
 2) 2,4-Dinitrophenyläther d.  $\alpha$ -Oximido- $\alpha$ -Phenylamido- $\alpha$ -[3-Nitrophenyl]methan. Sm. 162° (B. 32, 2695). — \*II, 774.  
 3) 2,4-Dinitrophenyläther d.  $\alpha$ -Oximido- $\alpha$ -Phenylamido- $\alpha$ -[4-Nitrophenyl]methan. Sm. 177° (B. 32, 2693). — \*II, 776.  
 4) 2,4,6-Trinitrophenyläther d. 2-Oxybenzylidenphenylhydrazin. Sm. 217° (G. 26 [2] 559). — IV, 759.
- C<sub>19</sub>H<sub>13</sub>O<sub>8</sub>N** C 59,5 — H 3,4 — O 33,4 — N 3,6 — M. G. 383.  
 1) Diacetat d. 5,6-Dioxy-2-Keto-1-[3-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. 218—219° (B. 29, 2434). — \*III, 532.  
 2) Diacetat d. 5,6-Dioxy-2-Keto-1-[4-Nitrobenzyliden]-1,2-Dihydrobenzofuran. Sm. 219° (B. 37, 823 C. 1904 [1] 1151).
- C<sub>19</sub>H<sub>13</sub>O<sub>9</sub>N<sub>3</sub>** C 53,4 — H 3,0 — O 33,7 — N 9,8 — M. G. 427.  
 1) Tri[2-Nitrophenyläther] d. Trioxymethan. Sm. 182° (J. pr. [2] 26, 445). — II, 680.  
 2) Tri[4-Nitrophenyläther] d. Trioxymethan. Sm. 232° (J. pr. [2] 26, 446). — II, 682.
- C<sub>19</sub>H<sub>13</sub>O<sub>9</sub>Br<sub>3</sub>** 1) Diacetat d.  $\beta$ -Tribrom- $\alpha\alpha$ -Di[2,3,4( $\beta$ )Trioxyphenyl]propionsäure (B. 16, 2409). — II, 2078.
- C<sub>19</sub>H<sub>13</sub>N<sub>2</sub>Cl** 1)  $\beta$ -Chlor-9-Phenylhydrazonfluoren. Sm. 139—141° (M. 16, 810). — IV, 778.
- C<sub>19</sub>H<sub>13</sub>N<sub>2</sub>Br** 1) 2-Brom-9-Phenylhydrazonfluoren. Sm. 148° (B. 38, 3752 C. 1906 [1] 42).
- C<sub>19</sub>H<sub>13</sub>N<sub>6</sub>Cl<sub>3</sub>** 1) Tri[4-Diazophenyl]methan (A. 199, 269). — IV, 1544.
- C<sub>19</sub>H<sub>13</sub>ClBr<sub>2</sub>** 1)  $\alpha$ -Chlor-4,4'-Dibromtriphenylmethan. Sm. 100° (B. 39, 1466 C. 1906 [1] 1743; B. 39, 3280 C. 1906 [2] 1612; B. 42, 414 C. 1909 [1] 753).
- C<sub>19</sub>H<sub>13</sub>ClS** 1) 9-Phenylthioxanthoniumchlorid. + FeCl<sub>3</sub> (B. 37, 2937 C. 1904 [2] 1143).
- C<sub>19</sub>H<sub>13</sub>Br<sub>3</sub>S** 1) 9-Phenylthioxanthoniumtribromid. Sm. 180° (B. 37, 2938 C. 1904 [2] 1143).
- C<sub>19</sub>H<sub>14</sub>ON<sub>2</sub>** C 79,7 — H 4,9 — O 5,6 — N 9,8 — M. G. 286.  
 1) 9-Phenylhydrazon-1-Oxyfluoren. Sm. 173—174° (B. 31, 3034; J. pr. [2] 59, 450). — \*IV, 506.  
 2) 9-Phenylhydrazonxanthen. Sm. 152° (B. 32, 1690). — \*IV, 505.  
 3) 2-Phenyläther d. 2-[2-Oxyphenyl]benzimidazol. Sm. 147°. HCl (A. 257, 81). — II, 1495.  
 4) 1-Benzoylamidocarbazol. Sm. 225° (B. 42, 3798 C. 1909 [2] 1750).  
 5) 3-Benzoylamidocarbazol. Sm. 250—251° (G. 21 [2] 385). — IV, 992.  
 6)  $\alpha$ -2,6-Dimethylchinolinphtalin. Sm. 270—271° (B. 34, 2309). — \*IV, 206.  
 7)  $\beta$ -2,6-Dimethylchinolinphtalin. Sm. 209° (B. 34, 2310). — \*IV, 206.  
 8) Methyläther d. 6-Oxy- $\beta$ -Bichinolyl. Sm. 120°. (2HCl, PtCl<sub>4</sub>) (B. 20, 1926). — IV, 1071.  
 9) Methyläther d. 6-Oxy- $\beta$ -Bichinolyl. Sm. 151°. 2HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (B. 20, 1925). — IV, 1071.  
 10) 2-Oxy-5-[4-Amidophenyl]akridin + 2H<sub>2</sub>O (Chrysophenol). Sm. 115°. HCl, 2HCl, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>CrO<sub>4</sub> (A. 226, 181; Soc. 89, 1473 C. 1906 [2] 1679). — IV, 1072.  
 11) 2'-Acetylamido-1,2-Naphtakridin. Sm. 255° (D. R. P. 118439, 123260). — \*IV, 716.  
 12) 3'-Acetylamido-1,2-Naphtakridin. Sm. 267° (B. 39, 2438 C. 1906 [2] 887).  
 13) 10-Methylphtaloperinol. Sm. 241°. HJ, Pikrat (A. 365, 120 C. 1909 [1] 1413).
- C<sub>19</sub>H<sub>14</sub>ON<sub>4</sub>** C 72,6 — H 4,4 — O 5,1 — N 17,8 — M. G. 314.  
 1) 5-Keto-4-[1-Naphtyl]hydrazon-3-Phenyl-4,5-Dihydropyrazol. Sm. 216° (B. 27, 784; J. pr. [2] 51, 62). — IV, 1940.



- C<sub>19</sub>H<sub>14</sub>ON<sub>4</sub>** 2) **5-Keto-4-[2-Naphtyl]hydrazon-3-Phenyl-4,5-Dihydropyrazol.** Sm. oberhalb 250° (*B.* 27, 784; *J. pr.* [2] 51, 62). — **IV**, 1490.
- C<sub>18</sub>H<sub>14</sub>OCl<sub>2</sub>** 1) **4,4'-Dichlor- $\alpha$ -Oxytriphenylmethan.** Sm. 87° (*B.* 39, 1466 *C.* 1906 [1] 1743; *B.* 39, 3280 *C.* 1906 [2] 1612).
- C<sub>18</sub>H<sub>14</sub>OBr<sub>2</sub>** 1) **4,4'-Dibrom- $\alpha$ -Oxytriphenylmethan.** Sm. 110° (*B.* 39, 1466 *C.* 1906 [1] 1743; *B.* 39, 3280 *C.* 1906 [2] 1612).
- 2) **p-Dibrom-4-Oxytriphenylmethan.** Sm. 131° (*B.* 35, 3139 *C.* 1902 [2] 1210).
- C<sub>19</sub>H<sub>14</sub>OJ<sub>2</sub>** 1) **4-Benzoyldiphenyljodoniumjodid.** Sm. 138° (*B.* 38, 3456 *C.* 1905 [2] 1587).
- C<sub>19</sub>H<sub>14</sub>OS** 1) **9-Oxy-9-Phenylthioxanthen.** Sm. 105—106° (*B.* 37, 2937 *C.* 1904 [2] 1142).
- C<sub>19</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>** C 75,5 — H 4,6 — O 10,6 — N 9,3 — M. G. 302.
- 1) **4-Benzoylphenylhydrazon-1-Keto-1,4-Dihydrobenzol.** Sm. 171° (*B.* 28, 2415; *Am.* 22, 366; *B.* 39, 4162 *C.* 1907 [1] 227; *B.* 40, 1434 *C.* 1907 [1] 1499; *A.* 369, 239 *C.* 1909 [2] 1996). — **IV**, 795.
- 2)  **$\alpha$ -[2-Nitrophenyl]- $\beta$ -[6-Phenyl-2-Pyridyl]äthen.** Sm. 62°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub> + 2H<sub>2</sub>O), HBr (*B.* 35, 415 *C.* 1902 [1] 668). — **\*IV**, 281.
- 3)  **$\alpha$ -[3-Nitrophenyl]- $\beta$ -[6-Phenyl-2-Pyridyl]äthen.** Sm. 139°. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr (*B.* 35, 417 *C.* 1902 [1] 669). — **\*IV**, 281.
- 4)  **$\alpha$ -[4-Nitrophenyl]- $\beta$ -[6-Phenyl-2-Pyridyl]äthen.** Sm. 142°. HCl (*B.* 35, 2783 *C.* 1902 [2] 993). — **\*IV**, 281.
- 5) **2-Phenylacetylarnido- $\alpha$ -Naphtoxazol.** Sm. 104—105° (*B.* 22, 3242). — **II**, 865.
- 6) **2-Oxy-1[oder 4]-Methylphenylphenazon.** Sm. 245—265° (*A.* 290, 303). — **IV**, 1009.
- 7) **5,7-Anhydrid d. 5-Acetylamido-9-Methyl-7,12-Naphtophenoxazin.** Zers. bei 170—180°. HNO<sub>3</sub> + H<sub>2</sub>O (*B.* 40, 2082 *C.* 1907 [2] 151).
- 8) **5-Phenylimido-2,4-Dioxy-5,10-Dihydroakridin.** Sm. 269—270° (*B.* 38, 3015 *C.* 1905 [2] 1264).
- 9) **3'-Acetylamido-6-Oxy-1,2-Naphtakridin.** Sm. 263° (*B.* 39, 2446 *C.* 1906 [2] 888).
- 10) **3'-Acetylamido-7-Oxy-1,2-Naphtakridin.** Sm. 283—285° (*B.* 39, 2442 *C.* 1906 [2] 888).
- 11) **Methyläther d. Safranöl.** Sm. 266° (*A.* 286, 213; *B.* 29, 369 Anm.). — **IV**, 1003.
- 12) **Methyläther d. Oxyaposafranon.** Sm. 246—248° (*B.* 29, 365). — **IV**, 1004.
- 13) **Benzoat d. 2-Oxyazobenzol.** Sm. 93° (*C.* 1909 [1] 1093).
- 14) **Benzoat d. 3-Oxyazobenzol.** Sm. 91,5—92° (*B.* 36, 4104 *C.* 1904 [1] 271).
- 15) **Benzoat d. 4-Oxyazobenzol.** Sm. 136° (138°) (*B.* 6, 561; 28, 2416; *Am.* 22, 368; *B.* 39, 4161 *C.* 1907 [1] 227; *B.* 40, 1434 *C.* 1907 [1] 1499). — **IV**, 1408.
- 16) **p-Nitrosodiphenylamid d. Benzolcarbonsäure.** Sm. 156° (*A.* 277, 103). — **II**, 1164.
- 17) **Nitril d.  $\beta$ -Acetoxy- $\beta$ -[4-Methylphenyl]- $\alpha$ -[2-Cyanphenyl]akrylsäure (p-Methyl- $\alpha$ -Dicyan- $\beta$ -Acetoxy-*stilben*).** Sm. 186—188° (*B.* 29, 2547). — **\*II**, 1150.
- C<sub>16</sub>H<sub>14</sub>O<sub>2</sub>N<sub>4</sub>** C 69,1 — H 4,2 — O 9,7 — N 17,0 — M. G. 330.
- 1) **4-Semicarbazon-3-Oxy-1-[ $\alpha$ -Cyanbenzyliden]-1,4-Dihydronaphtalin.** Sm. 272—275° (*C.* 1907 [1] 1129).
- 2) **3'-Nitro-4-Phenylimidomethylazobenzol.** Sm. 132° (*Am.* 36, 513 *C.* 1907 [1] 336).
- 3) **4'-Nitro-4-Phenylimidomethylazobenzol.** Sm. 152° (*Am.* 36, 514 *C.* 1907 [1] 337).
- C<sub>18</sub>H<sub>14</sub>O<sub>2</sub>Br<sub>2</sub>** 1) **3,5-Dibrom- $\alpha$ ,4-Dioxytriphenylmethan.** Sm. 138° (*B.* 36, 3242 *C.* 1903 [2] 884).
- C<sub>18</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub>** 1) **Diphenyläther d. 3,6-Dimerkapto-2-Methyl-1,4-Benzochinon.** Sm. 141—142° (*A.* 336, 160 *C.* 1904 [2] 1300).
- C<sub>18</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>** C 71,7 — H 4,4 — O 15,1 — N 8,8 — M. G. 318.
- 1) **4-[2-Nitrocinnamyliden]amido-1-Oxynaphtalin.** Sm. 173° (*C.* 1907 [1] 108).

- C<sub>19</sub>H<sub>14</sub>O<sub>3</sub>N<sub>2</sub>** 2) 4-[3-Nitrocinnamyliden]amido-1-Oxynaphtalin. Sm. 204° (C. 1907 [1] 108).  
 3) 4-[4-Nitrocinnamyliden]amido-1-Oxynaphtalin. Sm. 210° (C. 1907 [1] 108).  
 4) 1-[2-Nitrocinnamyliden]amido-2-Oxynaphtalin. Sm. 100° (C. 1907 [1] 108).  
 5) 1-[3-Nitrocinnamyliden]amido-2-Oxynaphtalin. Sm. 164° (C. 1907 [1] 108).  
 6) 1-[4-Nitrocinnamyliden]amido-2-Oxynaphtalin. Sm. 164° (C. 1907 [1] 108).  
 7) 3-Nitro-4-Benzoylamidobiphenyl. Sm. 143° (B. 8, 873; A. 209, 346). — II, 1169.  
 8) 5-Nitro-2-Phenylamidodiphenylketon. Sm. 155° (B. 39, 301 C. 1906 [1] 682).  
 9) 3-Nitro-4-Phenylamidodiphenylketon. Sm. 157° (B. 24, 3772). — III, 183.  
 10) Benzoylderivat d. 3,5-Diamido-1,2-Dioxybenzol-1,2-Phenylenäther. Sm. 274—275° (Am. 26, 364).  
 11) Monobenzoat d. 2,5-Dioxyazobenzol. Sm. 110—112° (B. 26, 1910). — IV, 1447.  
 12) Phenylester d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 121° (A. 263, 229). — IV, 1468.  
 13) Benzoat d. 5-Benzoylamido-2-Oxypyridin. Sm. 212,5° (Soc. 93, 1383 C. 1908 [2] 885).  
 14) 4-Nitrodiphenylamid d. Benzolcarbonsäure. Sm. 129° (A. 132, 167; B. 15, 825). — II, 1164; \*II, 731.
- C<sub>19</sub>H<sub>14</sub>O<sub>3</sub>N<sub>4</sub>** C 65,9 — H 4,0 — O 13,9 — N 16,2 — M. G. 346.  
 1) 3,5-Di[Phenylazo]-2-Oxybenzol-1-Carbonsäure. Sm. 218° (B. 40, 3450 C. 1907 [2] 1505).  
 2) 2,6[oder 4,6]-Di[Phenylazo]-3-Oxybenzol-1-Carbonsäure. Sm. 222 bis 223° (J. pr. [2] 78, 407 C. 1909 [1] 363).  
 3) isom. 2,6[oder 4,6]-Di[Phenylazo]-3-Oxybenzol-1-Carbonsäure. Sm. 226—227° (J. pr. [2] 78, 407 C. 1909 [1] 364).  
 4) Ester (aus 4-Oxy-1-Phenylpyrazol u. 4-Oxy-1-Phenylpyrazol-3-Carbonsäure). Sm. 177° (A. 313, 19). — \*IV, 348.  
 5) Phenylamid d. 5-Nitroazobenzol-2-Carbonsäure. Sm. 180,5° (B. 35, 2717 C. 1902 [1] 638; B. 36, 4375 C. 1904 [1] 446).  
 C 61,0 — H 3,7 — O 12,8 — N 22,5 — M. G. 374.
- C<sub>19</sub>H<sub>14</sub>O<sub>3</sub>N<sub>6</sub>** 1) Amid d. 4-[α-Cyan-4-Nitrobenzyliden]amido-3-Methyl-5-Phenylpyrazol-1-Carbonsäure. Sm. 235° (B. 40, 678 C. 1907 [1] 970).
- C<sub>19</sub>H<sub>14</sub>O<sub>3</sub>S** 1) 2-Benzoyldiphenylsulfon. Sm. 183,5—184° (186°) (Am. 17, 363; 25, 108; B. 29, 2298; 31, 1663; Am. 33, 414 C. 1905 [1] 1395). — III, 192; \*III, 151.  
 2) 4-Benzoyldiphenylsulfon. Sm. 133° (Am. 20, 310). — \*III, 151.  
 3) Sulton d. α-Oxytriphenylmethan-2-Sulfonsäure. Sm. 210° (163°) (Am. 17, 366; B. 29, 2298; 31, 1664; B. 37, 3267 C. 1904 [2] 1031; Am. 35, 507 C. 1906 [2] 330). — \*II, 667.
- C<sub>19</sub>H<sub>14</sub>O<sub>4</sub>N<sub>2</sub>** C 68,2 — H 4,2 — O 19,2 — N 8,4 — M. G. 334.  
 1) αγ-Di[1,2-Phtalylamido]propan (Trimethylenidiphtalimid). Sm. 197 bis 198° (B. 21, 2669). — II, 1807.  
 2) 1-Benzoyl-4-Benzoylimido-2,6-Diketo-2,3,5,6-Tetrahydropyridin (Dibenzoylglutazin). Sm. 215—216° (B. 20, 2658). — II, 1174.  
 3) 1-Acetoxy-2-Phenylazonaphtalin-2<sup>3</sup>-Carbonsäure. Sm. 210° (B. 24, 1600). — IV, 1463.  
 4) 1-Acetoxy-4-Phenylazonaphtalin-2-Carbonsäure. Sm. 124° (B. 39, 3610 C. 1907 [1] 47).  
 5) Äthylester d. 2-Cyan-3,4-β-Naphtopyron-1-Cyanessigsäure. Sm. 283° u. Zers. (B. 37, 4490 C. 1905 [1] 249).  
 6) 2-Nitrophenylester d. Diphenylamidoameisensäure. Sm. 112—114° (113,5—114,5°) (B. 20, 2122; B. 40, 1833 C. 1907 [2] 46). — II, 680.  
 7) 3-Nitrophenylester d. Diphenylamidoameisensäure. Sm. 90° (B. 24, 2111). — II, 681.  
 8) 4-Nitrophenylester d. Diphenylamidoameisensäure. Sm. 116° (B. 24, 2111). — II, 683.

- $C_{19}H_{14}O_4N_2$  9) 2-Acetat d. 1-[3,4-Dioxyphenyl]azo-2-Oxynaphtalin-3,4-Methylen-äther. Sm. 105—107° (*G.* 39 [2] 320 *C.* 1909 [2] 1804).
- 10) 2-Nitrophenylamid d. 2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 121° (*A.* 257, 81). — II, 1495.
- $C_{19}H_{14}O_4N_4$  1) 4-[2,4-Dinitrobenzyliden]amido-4-Amidobiphenyl. Sm. 186° (*B.* 35, 2709 *C.* 1902 [2] 637). — \*IV, 644.
- 2)  $\alpha$ -[2,4-Dinitrophenyl]hydrazondiphenylmethan. Sm. 229° (*G.* 24 [1] 570).
- 3)  $\alpha$ -Phenylhydrazondi[3-Nitrophenyl]methan. Sm. 219—220° (*B.* 20, 510). — IV, 775.
- 4)  $\alpha$ -Phenylhydrazondi[*p*-Nitrophenyl]methan. Sm. 234° (*A.* 279, 327).
- 5) Benzoat d. 4-Oximido-1-[2-Nitrophenyl]hydrazon-1,4-Dihydrobenzol (*A.* 357, 183 *C.* 1908 [1] 248).
- 6) Benzoat d. 4-Oximido-1-[4-Nitrophenyl]hydrazon-1,4-Dihydrobenzol. Sm. noch nicht bei 260° (*A.* 357, 188 *C.* 1908 [1] 249).
- $C_{19}H_{14}O_4Br_2$  1) Dilakton d.  $\gamma\delta$ -Dibrom- $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Dicarbonsäure. Sm. 192° (*A.* 331, 185 *C.* 1904 [1] 1212).
- $C_{19}H_{14}O_5N_2$  1)  $\alpha\gamma$ -Di[1,2-Phthalylamido]- $\beta$ -Oxypropan ( $\beta$ -Oxytrimethylen-diphtalimid). Sm. 205° (*B.* 21, 2690; 22, 224). — II, 1807.
- 2) 2-Keto-1,3-Di[3-Nitrobenzyliden]-*R*-Pentamethylen. Sm. 209° (*B.* 36, 1504 *C.* 1903 [1] 1352).
- 3) 2-Keto-1,3-Di[4-Nitrobenzyliden]-*R*-Pentamethylen. Sm. 240° u. Zers. (*B.* 36, 1504 *C.* 1903 [1] 1352).
- $C_{19}H_{14}O_5N_4$  1)  $\alpha$ -[2,4-Dinitrophenyl]- $\alpha\beta$ -Diphenylharnstoff. Sm. 134—135° (*J. pr.* [2] 79, 528 *C.* 1909 [2] 427).
- 2) 3,5-Dinitro-2-[4-Amidophenyl]diphenylketon. Sm. 221° (*B.* 39, 365 *C.* 1906 [1] 845).
- 3) 2,4-Dinitrophenyläther d.  $\alpha$ -Oximido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan. Sm. 150° (*B.* 32, 2690). — \*II, 754.
- $C_{19}H_{14}O_5N_6$  1) *p*-Di[4-Nitrophenylazo]-2-Oxy-1-Methylbenzol. Sm. 258—260° (*A.* 357, 178 *C.* 1908 [1] 248).
- $C_{19}H_{14}O_5S$  1) Phenolsulfonphtalein (*Am.* 20, 263). — \*II, 698.
- 2) Lakton d. 4,4',*p*-Trioxitriphenylsulfhydroxyd-*p*-Carbonsäure (Di-4-Oxyphenylsalicylthetin). (2HCl, PtCl<sub>4</sub>) (*Soc.* 91, 1121 *C.* 1907 [2] 899).
- 3) Diphenylester d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 117,5 bis 118,5° (*Am.* 17, 353; 18, 798; *B.* 31, 1661; *Am.* 30, 297 *C.* 1903 [2] 1121). — \*II, 798.
- 4) Benzolsulfonat d. 2-Oxybenzol-1-Carbonsäurephenylester. Sm. 80 bis 82° (*C.* 1900 [1] 543). — \*II, 890.
- $C_{19}H_{14}O_6N_2$  1) *p*-Dinitro-4,4'-Dioxytriphenylmethan. Sm. 133—134° (*B.* 22, 1946). — II, 1003.
- 2) Benzoat d. 5-Oxy-2,4,6-Triketo-5-Benzoylmethylhexahydro-1,3-Diazin. Sm. 252° u. Zers. (*B.* 42, 1296 *C.* 1909 [1] 1550).
- $C_{19}H_{14}O_6N_4$  1) Methylester d. *p*-Naphtylazo-2,4-Dinitrophenyllessigsäure. Sm. 94° (*B.* 22, 326). — IV, 1465.
- $C_{19}H_{14}O_6N_6$  1) Tri[3-Nitrophenyl]guanidin. Sm. 189° (*B.* 16, 50). — II, 351.
- $C_{19}H_{14}O_6Cl_4$  1) 4,4'-Diacetat d.  $\alpha$ -Oxy- $\beta$ -Keto- $\alpha\beta$ -Di[3,5-Dichlor-4-Oxyphenyl]-äthan- $\alpha$ -Methyläther. Sm. 128—130° (*A.* 325, 59 *C.* 1903 [1] 462).
- 2) Triacetat d.  $\alpha$ -Oxydi[3,5-Dichlor-4-Oxyphenyl]methan. Sm. 123 bis 124° (*A.* 362, 232 *C.* 1908 [2] 944).
- $C_{19}H_{14}O_6S$  1) Diphenylester d. 2-Oxybenzol-1-Carbonsäure-5-Sulfonsäure. Sm. 172—173° (*J. pr.* [2] 61, 546). — \*II, 901.
- $C_{19}H_{14}O_7N_2$  1) 3,5-Dinitro- $\alpha$ ,2,4-Trioxitriphenylmethan. Sm. 175—176° (*A.* 360, 260 *C.* 1908 [1] 2176).
- 2) Acetonildiphtalaminsäure? Sm. 105—107°. Ag<sub>2</sub> (*B.* 27, 1043).



- $C_{19}H_{14}O_7N_2$  3)  $\alpha\gamma$ -Di[Benzoylamido]- $\beta$ -Ketopropan-2,2'-Dicarbonsäure (Acetondiphtalamidsäure). Sm. 105—107°.  $Ag_2$  (B. 27, 1043). — II, 1798.
- $C_{19}H_{14}O_7S$  1) Hydrochinonsulfonphtalein (Am. 20, 268). — \*II, 702.
- $C_{19}H_{14}O_8N_4$  1) C 53,5 — H 3,3 — O 30,0 — N 13,1 — M. G. 426.
- 1) 4,6-Dinitro-1,3-Di[4-Oxyphenylamido]benzol-1<sup>3</sup>-Carbonsäure. Sm. 245° u. Zers. (D.R.P. 114270 C. 1900 [2] 999). — \*IV, 372.
- 2) 4,6-Dinitro-1-[2-Oxyphenyl]amido-3-[4-Oxyphenyl]amidobenzol-3<sup>3</sup>-Carbonsäure. Sm. 236° u. Zers. (D.R.P. 114270 C. 1900 [2] 999). — \*IV, 372.
- $C_{19}H_{14}O_9Br_4$  1) Tetrabrombrasilinsäure. Sm. 170°.  $K_2$  (Soc. 81, 1036 C. 1902 [2] 748). — \*III, 483.
- $C_{19}H_{14}O_{10}Br_2$  1) Dibromeichenrindengerbsäure (A. 240, 331). — III, 588.
- $C_{19}H_{14}NCl$  1)  $\alpha$ -Phenylimido-2-Chlordiphenylmethan. Sm. 128° (B. 32, 1687). — \*III, 150.
- 2) 1-Chlor-2-Cinnamylidenamidonaphtalin. Sm. 133—134° (Soc. 77, 1218). — \*III, 46.
- 3) Chlorphenylat d. Akridin. +  $FeCl_3$ , 2 +  $PtCl_4$  (B. 40, 2519 C. 1907 [2] 254).
- $C_{19}H_{14}NBr$  1) 1-Brom-2-Cinnamylidenamidonaphtalin. Sm. 126° (Soc. 77, 1217). — \*III, 46.
- $C_{19}H_{14}NJ$  1) Jodphenylat d. Akridin. Sm. 233° u. Zers. +  $J_2$  (B. 40, 2518 C. 1907 [2] 254).
- $C_{19}H_{14}N_2Br_2$  1)  $\alpha$ -Phenylhydrazondi[4-Bromphenyl]methan. Sm. 138° (B. 24, 3768). — IV, 775.
- $C_{19}H_{14}N_2S$  1) Chrysilthioharnstoff. Sm. 238° (B. 24, 956). — II, 643.
- 2) 8-Chinolyläther d. 8-Merkaptomethylchinolin. Sm. 187° (B. 41, 941 C. 1908 [1] 1704).
- 3) 1-[2-Amidocinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 225°.  $HCl$  (C. 1905 [1] 100).
- 4) 1-[3-Amidocinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 194° (C. 1905 [1] 100).
- 5) 1-[4-Amidocinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 245° (C. 1905 [1] 100).
- 6) 2-[2-Amidocinnamenyl]- $\beta$ -Naphtothiazol. Sm. 185° (C. 1905 [1] 101).
- 7) 2-[3-Amidocinnamenyl]- $\beta$ -Naphtothiazol. Sm. 152° (C. 1905 [1] 101).
- 8) 2-[4-Amidocinnamenyl]- $\beta$ -Naphtothiazol. Sm. 177° (C. 1905 [1] 101).
- 9) Verbindung (aus d. Verb.  $C_{18}H_{16}N_2$  aus Diphenylhydrazophenyl u.  $CS_2$ ). Sm. 150° (C. 1908 [2] 948).
- $C_{19}H_{14}N_3Cl_3$  1) Tri[4-Chlorphenyl]guanidin.  $HCl$ ,  $HJ$ ,  $H_2SO_4$  (A. 176, 51). — II, 350.
- $C_{19}H_{14}N_3Br_3$  1) Tribromisotriphenylguanidin.  $HCl$ , ( $2HCl$ ,  $PtCl_4$ ) (B. 13, 233). — II, 351.
- 2) 2,4,6-Tribrom-4'-Methylphenylamidoazobenzol. Sm. 138° (J. pr. [2] 27, 125). — IV, 1356.
- $C_{19}H_{14}N_3J_3$  1) Tri[4-Jodphenyl]guanidin (B. 5, 158). — II, 350.
- $C_{19}H_{14}N_4Cl_2$  1)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha$ -(2,4-Dichlorphenyl)azomethan. Sm. 130° (B. 39, 1400 C. 1906 [1] 1658).
- 2) 4,4'-Bidiazotriphenylmethanchlorid. +  $2AuCl_3$  (G. 15, 45). — IV, 1544.
- $C_{19}H_{14}N_4J_2$  1)  $\alpha$ -[2,4-Dijodphenyl]hydrazon- $\alpha$ -Phenylazo- $\alpha$ -Phenylmethan (II-2,4-Dijodformazylbenzol). Sm. 186° (J. pr. [2] 74, 314 C. 1906 [2] 1821).
- $C_{19}H_{14}ClBr$  1)  $\alpha$ -Chlor-3-Bromtriphenylmethan. Sm. 67° (C. 1906 [1] 1828).
- 2)  $\alpha$ -Chlor-4-Bromtriphenylmethan. Sm. 111° (111—114°) (B. 37, 1633 C. 1904 [1] 1649; C. 1906 [1] 1828; B. 39, 3278 C. 1906 [2] 1611; B. 42, 414 C. 1909 [1] 753).
- $C_{19}H_{14}ClJ$  1)  $\alpha$ -Chlor-4-Jodtriphenylmethan. Sm. 123° (B. 37, 1633 C. 1904 [1] 1649; B. 39, 3279 C. 1906 [2] 1612).
- $C_{19}H_{14}Br_2S_2$  1) Di[4-Bromphenyläther] d. Dimerkaptomethylbenzol. Sm. 79—80° (B. 18, 885). — III, 10.
- $C_{19}H_{16}ON$  C 83,5 — H 5,5 — O 5,9 — N 5,1 — M. G. 273.
- 1)  $\alpha$ -Phenylimido-2-Oxydiphenylmethan. Sm. 138,5° (B. 32, 1684). — \*III, 152.

- C<sub>19</sub>H<sub>15</sub>ON**
- 2)  $\gamma$ -[2-Oxy-1-Naphtyl]imido- $\alpha$ -Phenylpropen. Sm. 128° (C. 1907 [1] 107).
  - 3)  $\gamma$ -[4-Oxy-1-Naphtyl]imido- $\alpha$ -Phenylpropen. Sm. 187° (C. 1907 [1] 107).
  - 4) Phenyläther d. Phenylimido- $\alpha$ -Oxyphenylmethan. Sm. 104° (B. 26, 927). — II, 1162.
  - 5)  $\gamma$ -[2-Naphtyl]imido- $\alpha$ -Keto- $\alpha$ -Phenylpropan. Sm. 180—182° (B. 21, 2193). — III, 95.
  - 6) ?-Benzoylamidoacenaphten. Sm. 210° (B. 21, 1458). — II, 1169.
  - 7) 2-Benzoylamidobiphenyl. Sm. 85—86° (102°) (B. 29, 1187; C. 1909 [2] 1993). — \*II, 732.
  - 8) 4-Benzoylamidobiphenyl. Sm. 226° (230°) (B. 13, 1968; A. 209, 345). — II, 1169.
  - 9) Oxim d. 4-Benzoylbiphenyl. Sm. 193—194° (M. 12, 502). — III, 257.
  - 10) 3-[ $\alpha$ -Oximidobenzyl]acenaphten. Sm. 185° (175°) (A. 327, 97 C. 1903 [1] 1228; Bl. [3] 31, 861 C. 1904 [2] 653).
  - 11) 2-[ $\beta$ -2-Oxyphenyläthenyl]-6-Phenylpyridin. Sm. 138°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 33, 3497). — \*IV, 281.
  - 12) meso-Keto-N-Äthyldihydrophenonaphtakridin. Sm. 174—175° (B. 26, 2594). — IV, 464.
  - 13) Acetyldihydrophenonaphtakridin. Sm. 181—181,5° (B. 27, 2842). — IV, 456.
  - 14) Phenylamid d. Biphenyl-2-Carbonsäure. Sm. 100° (A. 279, 265). — II, 1462.
  - 15) Phenylamid d. Biphenyl-4-Carbonsäure. Sm. 212° (224°) (J. pr. [2] 41, 309; M. 12, 504). — II, 1463.
  - 16) Diphenylamid d. Benzolcarbonsäure. Sm. 180° (176,5—177°). + 5PCl<sub>5</sub> (A. 132, 166; 192, 13; B. 14, 2368; 15, 1288, 3013; 20, 2119; Am. 38, 460 C. 1907 [2] 1973; B. 41, 636 C. 1908 [1] 1265). — II, 1164.
  - 17) Acetylderivat d. Base C<sub>17</sub>H<sub>13</sub>N. Sm. 231—232° (B. 40, 864 C. 1907 [1] 1054).
- C<sub>19</sub>H<sub>16</sub>ON<sub>3</sub>**
- C 75,7 — H 5,0 — O 5,3 — N 14,0 — M. G. 301.
- 1) Benzoyldiazoamidobenzol. Sm. 131° u. Zers. (B. 27, 2315). — IV, 1561.
  - 2) 4-[2-Oxybenzyliden]amidoazobenzol. Sm. 155° (G. 28 [1] 243). — IV, 1357.
  - 3) 4-Oxy-3-Phenylimidomethylazobenzol. Sm. 135—136° (B. 33, 1327). — \*IV, 1070.
  - 4) 4-Benzoylamidoazobenzol. Sm. 205° (211°) (B. 35, 1432 C. 1902 [1] 1161; Soc. 81, 983 C. 1902 [2] 360). — \*IV, 1011.
  - 5) 5-Benzoylamido-2-Methyl- $\alpha$ -Naphtimidazol. Sm. 278—280° u. Zers. HCl, H<sub>2</sub>SO<sub>4</sub>, Pikrat (Soc. 75, 1015; 77, 1165; Soc. 83, 1199 C. 1903 [2] 1445). — \*IV, 828.
  - 6) 1-Acetylamido-2-Phenyl- $\beta\beta$ -Naphtimidazol. Sm. 192° (J. pr. [2] 73, 561 C. 1906 [2] 884).
  - 7) 2-[4-Acetylamidophenyl]-peri-Naphtimidazol. Zers. oberhalb 200° (B. 42, 3681 C. 1909 [2] 1664).
  - 8) 9-Acetylamido-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 295° (B. 38, 1815 C. 1905 [1] 1655).
  - 9) Phenylamid d. Azobenzol-2-Carbonsäure. Sm. 113° (B. 36, 4376 C. 1904 [1] 446).
- C<sub>19</sub>H<sub>16</sub>ON<sub>5</sub>**
- C 69,3 — H 4,6 — O 4,8 — N 21,3 — M. G. 329.
- 1)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylimido- $\alpha$ -Phenylnitrosamidomethan (J. pr. [2] 61, 442 Ann.). — \*IV, 890.
  - 2) 5-[ $\beta$ -Phenyläthenyl]-3-[5-Methyl-1,2,4-Oxdiazolyl-3]-1-Phenyl-1,2,4-Triazol. Sm. 201—202°. — IV, 1170.
  - 3) Azofarbstoff (aus 2-Amidonaphtalin u. 5-Methyl-3-[2-Amidophenyl]-1,2,4-Oxdiazol). Sm. 153—154° (B. 29, 629). — IV, 1138.
- C<sub>19</sub>H<sub>15</sub>OCl**
- 1)  $\alpha$ -Oxy-2-Chlortriphenylmethan. Sm. 91° (B. 39, 1466 C. 1906 [1] 1743).
  - 2)  $\alpha$ -Oxy-4-Chlortriphenylmethan. Sm. 85° (B. 39, 3278 C. 1906 [2] 1611).
- C<sub>19</sub>H<sub>15</sub>OBr**
- 1)  $\alpha$ -Oxy-4-Bromtriphenylmethan. Sm. 74° (C. 1906 [1] 1828; B. 39, 3279 C. 1906 [2] 1612).
- C<sub>19</sub>H<sub>15</sub>O<sub>2</sub>N**
- C 78,9 — H 5,2 — O 11,0 — N 4,8 — M. G. 289.
- 1) 2-Nitrotriphenylmethan. Sm. 93—94° (B. 40, 4941 C. 1908 [1] 469).

- $C_{19}H_{15}O_2N$
- 2) 3-Nitrotriphenylmethan. Sm. 90° (B. 21, 188). — II, 288.
  - 3) 4-Nitrotriphenylmethan. Sm. 93° (B. 23, 1622; D.R.P. 40340). — II, 288; \*II, 128.
  - 4)  $\alpha$ -Phenylimido-2,4'-Dioxydiphenylmethan. Sm. 214° (B. 32, 1685). — \*III, 155.
  - 5) Diphenyläther d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenylimidomethan (D. d. Phenylimidokohlensäure). Sm. 136° (B. 28, 977). — \*II, 362.
  - 6) 6-Oxy-3-Acetyl-2,4-Diphenylpyridin. Sm. 225° (Soc. 75, 782). — \*IV, 277.
  - 7) Methylenäther d.  $\alpha$ -[3,4-Dioxyphenyl]- $\beta$ -[8-Methyl-2-Chinolyl]-äthen. Sm. 176°. HCl, Pikrat (B. 38, 3713 C. 1906 [1] 53).
  - 8) Triphenylamin-2-Carbonsäure. Sm. 208° (B. 40, 2449 C. 1907 [2] 244).
  - 9) 2-Methyl-4,6-Diphenylpyridin-3-Carbonsäure. Sm. 264° (J. pr. [2] 78, 528 C. 1908 [2] 594).
  - 10) Äthylester d. Phenylnaphtylcarbazoncarbonsäure. Sm. 175° (B. 29, 268). — IV, 458.
  - 11) Lakton d.  $\gamma$ -Cyan- $\varepsilon$ -Oxy- $\beta\varepsilon$ -Diphenyl- $\alpha$ -Penten- $\gamma$ -Carbonsäure. Sm. 157° (Soc. 95, 487 C. 1909 [1] 1756).
  - 12) Phenylester d. Diphenylamidoameisensäure. Sm. 104—105° (B. 40, 1833 C. 1907 [2] 46).
  - 13) Benzoat d. 3-Oxydiphenylamin. Sm. 125,5—126,5° (A. 364, 171 Anm. C. 1909 [1] 918).
  - 14) Benzoat d. 4-Oxydiphenylamin. Sm. 114—115° (Soc. 93, 317 C. 1908 [1] 1619).
  - 15) Nitril d.  $\alpha$ -Phenyl- $\alpha$ -[4-Oxy-3-Methoxyl-1-Naphtyl]essigsäure. Sm. 195° (B. 38, 3691 C. 1905 [2] 1730).
  - 16) Phenylamid d. 2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 97° (A. 257, 80). — II, 1495.
  - 17) Diphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 193° (J. pr. [2] 61, 548). — \*II, 892.
  - 18) 2-Oxydiphenylamid d. Benzolcarbonsäure. Sm. 214° (B. 42, 4009 C. 1909 [2] 1927).
  - 19) 3-Oxydiphenylamid d. Benzolcarbonsäure. Sm. 201° (A. 364, 171 Anm. C. 1909 [1] 918).
- $C_{19}H_{15}O_2N_3$
- C 71,9 — H 4,7 — O 10,1 — N 13,2 — M. G. 317.
- 1) 4-[3-Nitrobenzyliden]amido-1-Phenylamidobenzol. Sm. 123° (A. 255, 190). — IV, 596.
  - 2) 4-[4-Nitrobenzyliden]amido-1-Phenylamidobenzol. Sm. 172° (A. 255, 190). — IV, 596.
  - 3)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha$ -[4-Nitrophenyl]methan. HCl (B. 12, 103; 34, 123). — IV, 843; \*IV, 566.
  - 4)  $\alpha$ -[3-Nitrophenyl]imido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan (Benzenyl-3-Nitrodiphenylamidin). Sm. 118° (B. 30, 1785). — IV, 843.
  - 5) 2-Nitro-4'-Benzylidenamidodiphenylamin. Sm. 98—99° (C. 1900 [2] 852). — \*IV, 394.
  - 6) 4-Nitro-4'-Benzylidenamidodiphenylamin. Sm. 219° (C. 1900 [2] 852). — \*IV, 394.
  - 7) 4,4'-[4-Nitrobenzyliden]diamidobiphenyl. Sm. 221—222° (J. r. 23, 69). — IV, 967.
  - 8)  $\alpha$ -Phenylhydrazon-3-Nitrodiphenylmethan. Sm. 116° (C. r. 144, 34 C. 1907 [1] 726; Bl. [4] 5, 282 C. 1909 [1] 1486).
  - 9)  $\alpha$ -Phenylhydrazon-4-Nitrodiphenylmethan. Sm. 142° (C. r. 144, 34 C. 1907 [1] 726; Bl. [4] 5, 281 C. 1909 [1] 1486).
  - 10)  $\alpha$ -[2-Nitrophenyl]hydrazondiphenylmethan. Sm. 161° (R. 24, 37 C. 1905 [1] 1278).
  - 11)  $\alpha$ -[3-Nitrophenyl]hydrazondiphenylmethan. Sm. 138° (R. 24, 36 C. 1905 [1] 1277).
  - 12)  $\alpha$ -[4-Nitrophenyl]hydrazondiphenylmethan. Sm. 154—155° (B. 32, 1814). — \*IV, 504.
  - 13)  $\alpha\alpha$ -Diphenyl- $\beta$ -[2-Nitrobenzyliden]hydrazin. Sm. 146° (B. 32, 3062). — \*IV, 486.
  - 14)  $\alpha\alpha$ -Diphenyl- $\beta$ -[3-Nitrobenzyliden]hydrazin. Sm. 119—120° (B. 32, 3062). — \*IV, 486.



- C<sub>19</sub>H<sub>15</sub>O<sub>2</sub>N<sub>3</sub>** 15)  $\alpha\alpha$ -Diphenyl- $\beta$ -[4-Nitrobenzyliden]hydrazin. Sm. 131° (B. 32, 3062). — \*IV, 486.
- 16) 4-Benzoylphenylhydrazon-1-Oximido-1,4-Dihydrobenzol. Sm. 177° (A. 343, 199 C. 1906 [1] 838).
- 17)  $\alpha$ -Nitro- $\alpha$ -Phenylazo- $\alpha\alpha$ -Diphenylmethan. Sm. 151—151,5° (B. 33, 2055). — \*IV, 1030.
- 18) 2',4'-Dioxy-2-[ $\beta$ -4-Pyridyläthenyl]azobenzol. HCl (B. 40, 4862 C. 1908 [1] 262).
- 19) 2',4'-Dioxy-4-[ $\beta$ -2-Pyridyläthenyl]azobenzol. HCl (B. 39, 2975 C. 1906 [2] 1504).
- 20) 2',4'-Dioxy-4-[ $\beta$ -4-Pyridyläthenyl]azobenzol. HCl (B. 39, 2975 C. 1906 [2] 1504).
- 21) 3-Äthyl-2-[4-Nitrophenyl]- $\alpha$ -Naphtimidazol. Sm. 225° (B. 26, 194). — IV, 1062.
- 22) Äthyläther d. 2-Keto-6-Oxy-3-Phenyl-2,3-Dihydro-1,3,4-Naphtisotriazin. Sm. 236° (C. 1905 [1] 1105).
- 23) Methyläther d. o-Amidosafrol (B. 40, 3409 C. 1907 [2] 1428).
- 24) 4-Phenylamidoazobenzol-4<sup>2</sup>-Carbonsäure. Sm. 221—222° (D.R.P. 146950 C. 1903 [2] 1402; D.R.P. 150469 C. 1904 [1] 1115).
- 25) Phenylhydrazon d. 3-Benzoylpyridin-3<sup>4</sup>-Carbonsäure. Sm. 246 bis 248° u. Zers. (M. 21, 991). — \*IV, 529.
- 26) Benzoat d. 4-Oxy-1-Phenylamidodiazobenzol. Sm. 132,5° (B. 36, 4145 C. 1904 [1] 136).
- 27) Phenylamidoformiat d. 4-Oxyazobenzol. Sm. 157° (B. 23, 489; B. 38, 1108 C. 1905 [1] 1236). — IV, 1408.
- 28) Nitril d. 4-Phenylhydrazon-3,5-Diketo-1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 110° (A. 294, 290). — IV, 1475.
- 29) Phenylamid d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 188—189° (A. 263, 231). — IV, 1468.
- 30) Di[Phenylamid] d. Pyridin-3,4-Dicarbonsäure. Sm. 199—206° (M. 11, 145). — IV, 165.
- C<sub>19</sub>H<sub>15</sub>O<sub>2</sub>N<sub>5</sub>** C 66,1 — H 4,3 — O 9,3 — N 20,3 — M. G. 345.
- 1)  $\alpha$ -[2-Nitrophenyl]azo- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylmethan (III-2-Nitroformazylbenzol). Sm. 150° (B. 31, 1756). — \*IV, 934.
- 2)  $\alpha$ -[3-Nitrophenyl]azo- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylmethan (III-3-Nitroformazylbenzol). Sm. 180° (B. 31, 1756). — \*IV, 934.
- 3)  $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylmethan (III-4-Nitroformazylbenzol). Sm. 165—170° (B. 31, 1756). — \*IV, 934.
- 4) 4-[3-Nitrobenzyliden]hydrazidoazobenzol. Sm. 198—199°. H<sub>2</sub>SO<sub>4</sub> (Ar. 244, 331 C. 1906 [2] 1601).
- 5) 4-[4-Nitrobenzyliden]hydrazidoazobenzol. Sm. 173° (Ar. 244, 331 C. 1906 [2] 1601; B. 40, 210 C. 1907 [1] 804).
- 6) 3'-Nitro-4-Phenylhydrazonmethyllazobenzol. Sm. 213,5° (Am. 36, 512 C. 1907 [1] 336).
- 7) 4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amido-3,5-Dimethyl-1-Phenylpyrazol. Sm. 160° (B. 40, 668 C. 1907 [1] 968).
- 8) 6-Amido-3-[2-Nitrophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benzotriazin. Sm. 118—119° u. Zers. (B. 30, 2601). — IV, 1287.
- 9) 6-Amido-3-[3-Nitrophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benzotriazin. Sm. 204—205° u. Zers. (B. 30, 2601). — IV, 1287.
- 10) 6-Amido-3-[4-Nitrophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benzotriazin. Sm. 211° u. Zers. (B. 30, 2602). — IV, 1287.
- C<sub>19</sub>H<sub>15</sub>O<sub>2</sub>J** 1) 4-Benzoyldiphenyljodoniumhydroxyd. Salze, siehe (B. 38, 3455 C. 1905 [2] 1587).
- C<sub>19</sub>H<sub>15</sub>O<sub>3</sub>N** C 74,7 — H 4,9 — O 15,7 — N 4,6 — M. G. 305.
- 1)  $\alpha$ -Oxy-3-Nitrotriphenylmethan. Sm. 75° (B. 21, 190). — II, 1084.
- 2)  $\alpha$ -Oxy-4-Nitrotriphenylmethan. Sm. 97—98° (B. 23, 1623; B. 37, 606 C. 1904 [1] 887). — II, 1084.
- 3) Methyläther d. 5-Nitro-2-Oxy-1,3-Diphenylbenzol. Sm. 152—153° (Am. 24, 7). — \*II, 543.
- 4)  $\alpha$ -Phenylimido-2,3,4-Trioxydiphenylmethan. Sm. 95° (B. 32, 1686). — \*III, 156.
- 5) 2-Amidoaurin (Isatinrot) (B. 40, 3596 C. 1907 [2] 1747).

- C<sub>19</sub>H<sub>15</sub>O<sub>3</sub>N** 6) 3-Phenylacetylamidonaphtalin-2-Carbonsäure. Sm. 225–227° (B. 26, 2595). — II, 1458.
- 7) Laktam d.  $\alpha$ -Amido- $\delta$ -Benzoxyl- $\alpha$ -Phenyl- $\alpha\gamma$ -Pentadien- $\gamma$ -Carbonsäure. Zers. bei 195° (B. 39, 3882 C. 1907 [1] 172).
- 8) 2-Naphtylester d. 2-Acetylamidobenzol-1-Carbonsäure. Sm. 173° (B. 35, 3419 C. 1902 [2] 1314).
- 9) Benzoat d. 2-Acetylamido-1-Oxynaphtalin. Sm. 185° (A. 359, 381 C. 1908 [1] 1774).
- 10) Benzoat d. 8-Oxy-10-Keto-3,4-Dihydrojulol (B. d.  $\gamma_1$ -Oxy- $\alpha_1$ -Ketojulolin). Sm. 151° (B. 25, 1199). — IV, 195.
- 11) Phenylamid d. 3-Acetoxylnaphtalin-2-Carbonsäure. Sm. 152° (A. 367, 254 C. 1909 [2] 1239).
- 12) 1-Naphtylamid d. Benzoxylessigsäure. Sm. 190–191,5° (C. 1896 [1] 996).
- 13) 2-Naphtylamid d. Benzoxylessigsäure. Sm. 163° (C. 1896 [1] 996).
- C<sub>19</sub>H<sub>15</sub>O<sub>3</sub>N<sub>3</sub>** C 68,4 — H 4,5 — O 14,4 — N 12,7 — M. G. 333.
- 1) 4-Nitrophenyläther d. Phenylamidophenylimidooxymethan. Sm. 100° (J. pr. [2] 79, 526 C. 1909 [2] 427).
- 2) 4-Nitro-2-Benzoylamidodiphenylamin. Sm. 201–202° (Bl. [3] 17, 866; J. pr. [2] 74, 243 C. 1906 [2] 1436). — IV, 562.
- 3)  $\alpha\alpha$ -Diphenyl- $\beta$ -[3-Nitrophenyl]harnstoff. Sm. 154–155° (B. 20, 2121). — II, 381.
- 4)  $\alpha\alpha$ -Diphenyl- $\beta$ -[4-Nitrophenyl]harnstoff. Sm. 175–176° (B. 20, 2121). — II, 381.
- 5)  $\alpha\beta$ -Diphenyl- $\alpha$ -[4-Nitrophenyl]harnstoff. Sm. 152° (J. pr. [2] 79, 528 C. 1909 [2] 427).
- 6) 2-Benzoylamidoacetylazo-1-Oxynaphtalin. Sm. 180–181° (A. 340, 97 C. 1905 [2] 322).
- 7) 4-Benzoylamidoacetylazo-1-Oxynaphtalin. Sm. 229° (A. 340, 97 C. 1905 [2] 322).
- 8) Phenylamid d. 4-Nitrodiphenylamin-2-Carbonsäure. Sm. 159° (B. 24, 3810). — II, 1283.
- 9) Phenylamid d. 2-Nitrodiphenylamin-4-Carbonsäure. Sm. 215 bis 216° (B. 23, 3445, 3448). — II, 1285.
- C<sub>19</sub>H<sub>15</sub>O<sub>3</sub>N<sub>5</sub>** C 63,1 — H 4,1 — O 13,3 — N 19,4 — M. G. 361.
- 1)  $\alpha$ -Phenyl- $\beta$ -Phenylazo- $\beta$ -[3-Nitrophenyl]harnstoff. Sm. 104° (B. 21, 2573). — IV, 1563.
- 2)  $\alpha$ -Phenyl- $\beta$ -Phenylazo- $\beta$ -[4-Nitrophenyl]harnstoff. Sm. 115° (B. 21, 2572). — IV, 1563.
- 3)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenyl]azo- $\alpha$ -[4-Nitrophenyl]methan. Sm. 194° (B. 31, 479). — IV, 1419.
- 4) 2'-Nitro-4-Oxy-3-Phenylhydrazonmethylazobenzol. Sm. 192° (J. pr. [2] 78, 398 C. 1909 [1] 362).
- 5) 4'-Nitro-4-Oxy-3-Phenylhydrazonmethylazobenzol. Sm. 235–240° u. Zers. (Soc. 91, 1263 C. 1907 [2] 1078).
- 6) 4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihdropyrazol. Sm. 270° (B. 40, 678 C. 1907 [1] 970).
- C<sub>19</sub>H<sub>15</sub>O<sub>3</sub>As** 1) Triphenylarsinoxid-4-Carbonsäure. Sm. 253–254°. Ba, Ag (A. 321, 190 C. 1902 [2] 46). — \*IV, 1198.
- C<sub>19</sub>H<sub>15</sub>O<sub>4</sub>N** C 71,0 — H 4,7 — O 19,9 — N 4,4 — M. G. 321.
- 1) 3-Nitro-4,4''-Dioxytriphenylmethan. Sm. 59–60° (G. 21, 175). — II, 1003.
- 2) 4-Nitro-4,4''-Dioxytriphenylmethan (B. 42, 4168 C. 1909 [2] 1930).
- 3) 1-Diacetylamido-2-Methyl-9,10-Anthrachinon. Sm. 203–206° (D. R. P. 212204 C. 1909 [2] 667).
- 4)  $\alpha$ -Phenyl- $\alpha$ -[1-Naphtyl]amidoessigsäure-8-Carbonsäure. Na<sub>2</sub> (B. 35, 4222 C. 1903 [1] 166).
- 5)  $\gamma$ -Cyan- $\alpha\alpha$ -Diketo- $\alpha\alpha$ -Diphenylpentan- $\gamma$ -Carbonsäure (Diphenacylcyanessigsäure). Sm. 172–174°. NH<sub>4</sub> + 2½ H<sub>2</sub>O, Na + 2 H<sub>2</sub>O, Ba + H<sub>2</sub>O (Bl. [3] 15, 1008). — \*II, 1188.
- 6) 1-Methyl-2,5-Diphenylpyrrol-2<sup>3</sup>,5<sup>2</sup>-Dicarbonsäure. Sm. 231° (B. 20, 1487). — IV, 452.
- 7) 2-Methyl-1,5-Diphenylpyrazol-1<sup>3</sup>,3-Dicarbonsäure. Sm. 210° (B. 19, 3162). — IV, 358.

- $C_{19}H_{15}O_4N$  8) Säure (aus Apocinchenäthyläther). Sm. bei 230° u. Zers. (B. 20, 2683). — III, 839.
- 9) 1,2-Lakton d. 3,4-Dioxy-1-[2-Naphtyl]amidooxymethylbenzol-3[oder 4]-Methyläther-2-Carbonsäure (Methylnoropian- $\beta$ -Naphtalidsäure). Sm. 225° u. Zers. (B. 29, 2033). — \*II, 1119.
- 10) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Benzoxyl- $\beta$ -Phenylakrylsäure. Sm. 78—79° (C. r. 136, 691 C. 1903 [1] 920; Bl. [3] 31, 336 C. 1904 [1] 1135).
- 11) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Keto- $\alpha$ -Benzoyl- $\alpha$ -Phenyläthan- $\beta$ -Carbon-säure. Sm. 102—103° (A. 282, 79). — II, 1642.
- 12) Monamid d. Pulvinsäuremonomethylester. Sm. 216—217° (A. 282, 49). — II, 2031.
- 13) Monomethylamid d. Pulvinsäure. Sm. 237°. Methylaminsalz (A. 282, 25). — II, 2031.
- 14) Benzoylimid d. Phenylloxymaleinäthyläthersäure. Sm. 105—106° (A. 282, 78).
- $C_{19}H_{15}O_4N_8$  C 65,3 — H 4,3 — O 18,3 — N 12,0 — M. G. 349.
- 1) Benzyl-2,4-Dinitrodiphenylamin. Sm. 168° (R. 25, 111 C. 1906 [2] 33).
- 2) Phenyl-2,4-Dinitrophenylbenzylamin. Sm. 168° (C. 1906 [2] 1314).
- 3) 3,5-Di[4-Nitrobenzyl]pyridin. Sm. 144—146°. HCl, (2HCl, PtCl<sub>4</sub>), HNO<sub>3</sub>, Pikrat (A. 280, 52). — IV, 456.
- 4)  $\beta$ -Naphtolazohippursäure (B. 14, 2040). — IV, 1464.
- 5) Acetat d. 2-[4-Nitro-2-Methylphenyl]azo-1-Oxynaphtalin. Sm. 172 bis 173° (B. 28, 854, 1125). — IV, 1436.
- 6) Acetat d. 4-[4-Nitro-2-Methylphenyl]azo-1-Oxynaphtalin. Sm. 163° (B. 28, 854, 1125). — IV, 1436.
- 7) Di[Phenylamid] d. 6-Oxy-2-Keto-1,2-Dihydropyridin-3,5-Dicarbon-säure. Zers. bei 298°. Na (J. pr. [2] 80, 49 C. 1909 [2] 1319).
- $C_{19}H_{15}O_4N_5$  C 60,5 — H 4,0 — O 17,0 — N 18,5 — M. G. 377.
- 1) 3-Nitro-1-[Benzyl-3-Nitrophenyl]amidodiazobenzol. Sm. 142° (B. 19, 3250). — IV, 1572.
- 2) 4-Nitro-1-[Benzyl-3-Nitrophenyl]amidodiazobenzol. Sm. 180° (B. 19, 3251). — IV, 1572.
- 3) 4-Nitro-1-[Benzyl-4-Nitrophenyl]amidodiazobenzol. Sm. 187—190° (B. 19, 3249). — IV, 1572.
- $C_{19}H_{15}O_4Br$  1) 2'-Acetat d. 6-Brom-1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydro-inden-2'-Methyläther. Sm. 201—202° (B. 31, 725). — \*III, 189.
- 2) Dilakton d.  $\gamma$ -[oder  $\delta$ ]-Brom- $\alpha\epsilon$ -Dioxy- $\alpha\epsilon$ -Diphenylpentan- $\beta\gamma$ -Di-carbonsäure. Sm. 186° (A. 331, 186 C. 1904 [1] 1212).
- $C_{19}H_{15}O_5N$  C 67,6 — H 4,4 — O 23,7 — N 4,2 — M. G. 337.
- 1) Oxim d. Dipiperonalaceton? Sm. 159—161° (G. 29 [2] 418). — \*III, 192.
- 2) Chinolylphenetoldicarbonsäure. Sm. 236° u. Zers. Na<sub>2</sub>, K<sub>2</sub>, Ag<sub>2</sub> (J. pr. [2] 61, 29). — \*IV, 270.
- 3) Dilakton d.  $\alpha\epsilon$ -Dioxy- $\gamma$ -Oximido- $\alpha\epsilon$ -Diphenylpentan- $\alpha^2\epsilon^2$ -Dicarbon-säure. Sm. 197—203° (M. 19, 432). — \*II, 1207.
- 4) Diacetat d. 3,4-Dioxybenzaldehydindogenid. Sm. 182° (Soc. 95, 798 C. 1909 [2] 31).
- $C_{19}H_{15}O_5N_3$  C 62,5 — H 4,1 — O 21,9 — N 11,5 — M. G. 365.
- 1)  $\alpha$ -[4-Triphenylhydrazon-2,3,4-Trioxydiphenylmethan. Sm. 164 bis 165° (B. 34, 3922 C. 1902 [1] 123).
- $C_{19}H_{15}O_5Br$  1) 2-Brom-3,2',4',2'',4''-Pentaoxytriphenylmethan (B. 42, 4170 C. 1909 [2] 1930).
- 2) 3-Brom-4,2',4',2'',4''-Pentaoxytriphenylmethan (B. 42, 4170 C. 1909 [2] 1930).
- $C_{19}H_{15}O_6N$  C 64,6 — H 4,2 — O 27,2 — N 4,0 — M. G. 353.
- 1) 3-Nitro-2',4',2'',4''-Tetraoxytriphenylmethan. Sm. 97—100° (G. 21, 180). — II, 1039.
- 2) 4-Nitro-2',4',2'',4''-Tetraoxytriphenylmethan (G. 21, 341; B. 42, 4168 C. 1909 [2] 1930). — II, 1039.
- 3) 2-Nitro-2',5',2'',5''-Tetraoxytriphenylmethan (G. 21, 343). — II, 1039.
- 4) 3-Nitro-2',5',2'',5''-Tetraoxytriphenylmethan. Zers. bei 264° (G. 21 [2] 331). — II, 1039.



- C<sub>19</sub>H<sub>15</sub>O<sub>6</sub>N** 5) 4-Nitro-2',5',2'',5''-Tetraoxytriphenylmethan. Zers. bei 260° (*G.* 21 [2] 335; *B.* 42, 4169 *C.* 1909 [2] 1930). — II, 1039.  
 6) 4-Nitro-3',4',3'',4''-Tetraoxytriphenylmethan (*B.* 42, 4168 *C.* 1909 [2] 1930).  
 7)  $\alpha$ -Cyan- $\alpha$ -Phenyl- $\beta$ -[3,4-Dimethoxyphenyl]äthen- $\alpha^2\beta^2$ -Dicarbon-säure. Zers. bei 194° (*B.* 40, 1213 *C.* 1907 [1] 1258).  
 8) Methylimid d.  $\alpha\beta$ -Dibenzoxyläthan- $\alpha\beta$ -Dicarbonsäure.  $\alpha$ -Modif. Sm. 56°;  $\beta$ -Modif. Sm. 106–108°.  $4 + 3\text{C}_2\text{H}_6\text{O}$  (*B.* 29, 2716). — II, 723.
- C<sub>19</sub>H<sub>15</sub>O<sub>6</sub>N<sub>5</sub>** C 55,8 — H 3,7 — O 23,4 — N 17,1 — M. G. 409.  
 1) 2,4,6-Trinitro-3,5-Di[Phenylamido]-1-Methylbenzol. Sm. 206° (*R.* 23, 128 *C.* 1904 [2] 201).  
 2)  $\alpha$ -Phenyl- $\beta$ -Benzylidenhydrazin + 1,3,5-Trinitrobenzol. Sm. 134° (*G.* 36 [2] 95 *C.* 1906 [2] 1053).
- C<sub>19</sub>H<sub>15</sub>O<sub>6</sub>Cl** 1) Diäthylester d. 1,2-Anhydro-3-Chlor-1,4-Naphtochinon-2-Aceton-dicarbonsäure. Sm. 159–160° (*B.* 33, 2408). — II, 1184.
- C<sub>19</sub>H<sub>15</sub>O<sub>6</sub>Br** 1) Diäthylester d. 5-Brom-3,6-Diketopentanthren-2,4-Dicarbonsäure. Sm. 157° (*B.* 34, 1550).
- C<sub>19</sub>H<sub>15</sub>O<sub>7</sub>N** C 61,8 — H 4,1 — O 30,3 — N 3,8 — M. G. 369.  
 1) Trimethyläther d. Nitro- $\alpha$ -Anhydrobrasilon (*Soc.* 95, 393 *C.* 1909 [1] 1571).  
 2) Methylester d. Aristinsäure. Sm. 250° (*B.* 29 [2] 38). — III, 780.  
 3) Diacetat d.  $\gamma$ -Keto- $\gamma$ -[3-Nitrophenyl]- $\alpha$ -[3,4-Dioxyphenyl]propen. Sm. 179° (*B.* 34, 3531). — \*III, 181.
- C<sub>19</sub>H<sub>15</sub>O<sub>8</sub>N** C 59,2 — H 3,9 — O 33,2 — N 3,6 — M. G. 385.  
 1) 4-Nitro-2',4',6',2'',4'',6''-Hexaoxytriphenylmethan (*B.* 42, 4169 *C.* 1909 [2] 1930).  
 2) 3-Nitro-3',4',5',3'',4'',5''-Hexaoxytriphenylmethan. Sm. 245° (*G.* 21, 173). — II, 1044.  
 3) 4-Nitro-3',4',5',3'',4'',5''-Hexaoxytriphenylmethan (*B.* 42, 4169 *C.* 1909 [2] 1930).  
 4) Dimethylester d.  $\beta$ -[3-Nitrobenzoxyl]- $\alpha$ -Phenylakrylsäure- $\alpha^2$ -Carbonsäure. Sm. 139° (*B.* 41, 3262 *C.* 1908 [2] 1433).  
 5) Dimethylester d. isom.  $\beta$ -[3-Nitrobenzoxyl]- $\alpha$ -Phenylakrylsäure- $\alpha^2$ -Carbonsäure. Sm. 98° (*B.* 41, 3262 *C.* 1908 [2] 1433).
- C<sub>19</sub>H<sub>15</sub>O<sub>9</sub>Cl<sub>4</sub>** 1) Verbindung (aus Hanf) (*Soc.* 43, 19; 55, 204).
- C<sub>19</sub>H<sub>15</sub>NBr<sub>2</sub>** 1)  $\alpha\beta$ -Dibrom- $\gamma$ -[1-Naphtyl]imido- $\alpha$ -Phenylpropan. Sm. bei 154° u. Zers. (*A.* 239, 384). — III, 54.  
 2)  $\alpha\beta$ -Dibrom- $\gamma$ -[2-Naphtyl]imido- $\alpha$ -Phenylpropan. Sm. bei 191° u. Zers. (*A.* 239, 384). — III, 54.  
 3) 2-[ $\alpha\beta$ -Dibrom- $\beta$ -Phenyläthyl]-6-Phenylpyridin. Sm. 190° (*B.* 33, 3496). — \*IV, 274.
- C<sub>19</sub>H<sub>15</sub>NBr<sub>4</sub>** 1) Tetrabromid d. 2-[ $\beta$ -Phenyläthenyl]-6-Phenylpyridin. HBr (*B.* 33, 3496).
- C<sub>19</sub>H<sub>15</sub>NS** 1) Diphenylamid d. Benzolthiocarbonsäure. Sm. 150–151° (*A.* 192, 37). — II, 1293.
- C<sub>19</sub>H<sub>15</sub>N<sub>2</sub>Cl** 1)  $\alpha$ -Chlor- $\alpha$ -Phenylimido- $\alpha$ -Diphenylamidomethan. Sm. 90–92° (*B.* 37, 964 *C.* 1904 [1] 1002).  
 2) 4-Chlor-4'-Benzylidenamidodiphenylamin. Sm. 144° (*A.* 303, 315). — \*IV, 394.  
 3)  $\alpha$ -Phenylhydrazon-4-Chlordiphenylmethan. Sm. 106° (*B.* 26, 27). — IV, 775.  
 4) 5-Chlorphenylat d. 2-Methyl-5,10-Naphtdiazin (Phenyltoluphenazoniumchlorid). + FeCl<sub>3</sub> (*B.* 31, 973). — IV, 1009.
- C<sub>19</sub>H<sub>15</sub>N<sub>2</sub>J** 1) Jodmethylylat d. 2,3'-Bichinolyl. Sm. 286° u. Zers. (*A.* 287, 44; *M.* 2, 499). — IV, 1067.  
 2) Jodmethylylat d. 2,5'-Bichinolyl + H<sub>2</sub>O. Sm. 231–232° u. Zers. (*M.* 8, 142). — IV, 1068.  
 3) Jodmethylylat d. 6,6'-Bichinolyl (*M.* 5, 422). — IV, 1069.  
 4) Jodmethylylat d. 6,7'-Bichinolyl. Sm. 126° (*M.* 6, 552). — IV, 1070.  
 5) Jodmethylylat d. isom. Bichinolyl (vom Sm. 159°). Sm. 263° (*B.* 18, 1913). — IV, 1070.
- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>Cl<sub>4</sub>** 1)  $\alpha$ -Chlortri[3-Chlor-4-Amidophenyl]methan (Trichlorfuchsin) (*J. pr.* [2] 79, 494 *C.* 1909 [2] 362).

- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>S** 1) 6-Phenylamido-2-Merkapto-1-Phenylbenzimidazol. Sm. 208° (A. 286, 182). — IV, 1123.  
 2) 2-Methylphenylthionin. HNO<sub>3</sub> + H<sub>2</sub>O (C. 1900 [2] 342; B. 33, 3294). — \*II, 479.  
 3) Nitril d. 2-Naphtylimidomerkaptomethylamidoameisenbenzyläthersäure (β-Naphtylpseudothiobenzyhlarnstoffcyanid). Sm. 201° (A. 361, 349 C. 1908 [2] 883).
- C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>S<sub>2</sub>** 1) Methyläther d. 3-Merkapto-5-Thiocarbonyl-4-Phenyl-1-[1-Naphtyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 197—198° (B. 34, 319). — \*IV, 751.
- C<sub>19</sub>H<sub>15</sub>N<sub>4</sub>Cl** 1) α-Phenylimido-α-Phenylamido-α-[4-Chlorphenyl]azomethan. Sm. 155° (B. 39, 1399 C. 1906 [1] 1658).  
 2) α-Phenylhydrazon-α-Phenylazo-α-[2-Chlorphenyl]methan. Sm. 190° (C. 1903 [2] 427).  
 3) 4-[3-Chlorbenzyliden]hydrazidoazobenzol. Sm. 160,5° (J. pr. [2] 78, 374 C. 1909 [1] 356).  
 4) 2-Chlorphenylat d. 1,4-Diphenyl-1,2,3,5-Tetrazol. Sm. 243° u. Zers. + C<sub>2</sub>H<sub>6</sub>O + CHCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (B. 27, 323, 2928). — IV, 1268.
- C<sub>19</sub>H<sub>15</sub>N<sub>4</sub>Br** 1) 4-[3-Brombenzyliden]hydrazidoazobenzol. Sm. 173°. H<sub>2</sub>SO<sub>4</sub> (J. pr. [2] 78, 375, 382 C. 1909 [1] 356).  
 2) 2-Bromphenylat d. 1,4-Diphenyl-1,2,3,5-Tetrazol + 1½ H<sub>2</sub>O. Sm. 255° u. Zers. + C<sub>2</sub>H<sub>6</sub>O (B. 27, 323, 2929). — IV, 1268.
- C<sub>19</sub>H<sub>15</sub>N<sub>4</sub>J** 1) α-[4-Jodphenyl]hydrazon-α-Phenylazo-α-Phenylmethan (II-p-Jodformazylbenzol). Sm. 185—186° (J. pr. [2] 74, 314 C. 1906 [2] 1821).
- C<sub>19</sub>H<sub>15</sub>N<sub>6</sub>Cl** 1) 2-Chlorphenylat d. 4-Phenylazo-1-Phenyl-1,2,3,5-Tetrazol. Sm. 249° u. Zers. (B. 27, 2930). — IV, 1492.
- C<sub>19</sub>H<sub>15</sub>ClMg** 1) α-Triphenylmethylmagnesiumchlorid (B. 39, 4188 C. 1907 [1] 256; B. 40, 2325 C. 1907 [2] 337; B. 42, 3469 C. 1909 [2] 1557).  
 2) β-Triphenylmethylmagnesiumchlorid (B. 39, 4195 C. 1907 [1] 256; B. 40, 2326 C. 1907 [2] 337).
- C<sub>19</sub>H<sub>15</sub>BrJ<sub>4</sub>** 1) α-Bromtriphenylmethantetrajodid. Sm. 152° (C. 1898 [2] 1132). — \*II, 127.
- C<sub>19</sub>H<sub>15</sub>BrJ<sub>5</sub>** 1) α-Bromtriphenylmethanpentajodid. Sm. 92° (B. 35, 1832 C. 1902 [2] 212).
- C<sub>19</sub>H<sub>18</sub>ON<sub>2</sub>** C 79,2 — H 5,5 — O 5,5 — N 9,7 — M. G. 288.  
 1) Triphenylharnstoff. Sm. 136° (B. 9, 398, 715; 17, 2093; C. 1902 [1] 20). — II, 381.  
 2) 4-[2-Oxybenzyliden]amidodiphenylamin. Sm. 120°. HCl, 2HCl (A. 255, 190; B. 31, 1521; C. 1908 [2] 688). — IV, 597; \*IV, 395.  
 3) Phenyläther d. Phenylamidophenylimidooxymethan. Sm. 104°. Oxalat, Pikrat (J. pr. [2] 79, 521 C. 1909 [2] 427).  
 4) β-Phenylamido-2-Methyl-1,4-Benzochinonphenylimid. Sm. 151° (A. 256, 259). — III, 359.  
 5) α-[2-Naphtyl]imido-α-Acetylamidophenylmethan. Sm. 137° (Am. 20, 575). — \*IV, 567.  
 6) N-Monobenzoyl-2-Amidodiphenylamin. Sm. 112° (B. 35, 1970 C. 1902 [2] 111). — \*IV, 367.  
 7) N-Benzoyl-4-Amidodiphenylamin (B. 15, 826). — IV, 594.  
 8) Monobenzoyl-4,4'-Diamidobiphenyl. Sm. 203—205° (D.R.P. 60332, 65080). — \*IV, 643.  
 9) αα-Diphenyl-β-[2-Oxybenzyliden]hydrazin. Sm. 138,5° (139°) (A. 258, 248; B. 32, 3062). — IV, 759; \*IV, 492.  
 10) αα-Diphenyl-β-[3-Oxybenzyliden]hydrazin. Sm. 118—119° (B. 39, 3586 C. 1907 [1] 18).  
 11) Phenyläther d. Phenyl-4-Oxybenzylidenhydrazin. Sm. 123° (A. 357, 365 C. 1908 [1] 357).  
 12) β-Benzoyl-αα-Diphenylhydrazin. Sm. 192° (183°) (A. 190, 178; B. 25, 415, 1078). — IV, 669.  
 13) α-Benzoyl-αβ-Diphenylhydrazin. Sm. 138—139° (C. r. 136, 1553 C. 1903 [2] 359; B. 36, 139 C. 1903 [1] 507). — \*IV, 1089.  
 14) isom. α-Benzoyl-αβ-Diphenylhydrazin. Sm. 126° (C. r. 136, 1554 C. 1903 [2] 359).  
 15) α-Phenylhydrazon-2-Oxydiphenylmethan. Sm. 155° (M. 17, 108). — IV, 776.  
 16) Benzyläther d. 4-Oxyazobenzol. Sm. 116° (B. 39, 4160 C. 1907 [1] 227).

- $C_{19}H_{16}ON_2$  17) 5-Keto-3-Methyl-1-Phenyl-4- $[\gamma$ -Phenylallyliden]pyrazol. Sm. 159° (A. 238, 180). — IV, 993.
- 18) 3-Äthyl-2-[2-Oxyphenyl]- $\alpha$ -Naphtimidazol. Sm. 133° (B. 26, 194). — IV, 1062.
- 19) Äthyläther d. 5-Oxy-3-Phenyl- $\alpha$ -Naphtimidazol. Sm. 184—186° (B. 25, 1017). — II, 866.
- 20)  $\gamma$ -Phenylamido- $\alpha$ -Keto- $\alpha$ -[4-Chinolyl]- $\beta$ -Buten. Sm. 129,5°. 2HCl (M. 17, 412). — IV, 374.
- 21)  $\alpha$ -[4-Acetylamidophenyl]- $\beta$ -[2-Chinolyl]äthen. Sm. 194° (B. 22, 287). — IV, 1040.
- 22) 5-Phenylhydroxyd d. 2-Methyl-5,10-Naphtdiazin. Chlorid, Chlorid + FeCl<sub>3</sub>, Nitrat (B. 31, 973). — IV, 1009.
- 23) Äthyläther d. 5-Oxy-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 195° (B. 19, 916). — IV, 1063.
- 24) Nitril d. 6-Phenylamido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 230° (A. 294, 288). — \*II, 1084.
- 25) Amid d. 2-Methyl-4,6-Diphenylpyridin-3-Carbonsäure + H<sub>2</sub>O. Sm. 216° wasserfrei (J. pr. [2] 78, 528 C. 1908 [2] 594).  
C 72,2 — H 5,0 — O 5,0 — N 17,7 — M. G. 316.
- $C_{19}H_{16}ON_4$
- 1)  $\beta$ -Nitroso- $\alpha\alpha$ -Diphenyl- $\beta$ -[ $\alpha$ -Imidobenzyl]hydrazin. Sm. 206° u. Zers. (J. pr. [2] 54, 174). — IV, 1137.
- 2) Phenylamidoformyl diazoamidobenzol. Sm. 125° (B. 21, 2559). — IV, 1561.
- 3) 4-[2-Oxybenzyliden]hydrazidoazobenzol. Sm. 205—206° (Ar. 244, 332 C. 1906 [2] 1601).
- 4) 4-[4-Oxybenzyliden]hydrazidoazobenzol. Sm. 196° (J. pr. [2] 78, 378 C. 1909 [1] 356).
- 5)  $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylazo- $\alpha$ -[2-Oxyphenyl]methan. Sm. 164 bis 165° (C. 1903 [2] 426).
- 6)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Oxyphenylazo]phenylmethan (p-Monoxyform-azylbenzol). Sm. 153—155° (B. 29, 1855).
- 7) 4-Oxy-3-Phenylhydrazonmethylazobenzol. Sm. 198—199° (B. 33, 1326).
- 8) 6-Oxy-3-Phenylazo-1-Phenylhydrazonmethylbenzol (C. 1903 [2] 427).
- 9) 3,5-Di[Phenylazo]-2-Oxy-1-Methylbenzol. Sm. 114—115° (B. 17, 364). — IV, 1423.
- 10) 4,6-Di[Phenylazo]-3-Oxy-1-Methylbenzol. Sm. 149° (B. 17, 367). — IV, 1424.
- 11) 3,5-Di[Phenylazo]-4-Oxy-1-Methylbenzol. Sm. 180° (G. 37 [1] 82 C. 1907 [2] 404).
- 12) Benzoldisazobenzolazo-p-Kresol. Sm. 160° (B. 17, 354). — IV, 1424.
- 13) 4-Phenylazo-2-[4-Methylphenyl]azo-1-Oxybenzol. Sm. 121° (B. 9, 628; 25, 1336). — IV, 1416.
- 14) 2-Phenylazo-4-[4-Methylphenyl]azo-1-Oxybenzol. Sm. 115—116° (B. 25, 1337). — IV, 1416.
- 15) Methyläther d. 4-Oxy-1,3-Di[Diphenylazo]benzol. Sm. 110° (B. 17, 368; C. 1908 [1] 23). — IV, 1415.
- 16) 4-Phenylureidoazobenzol. Sm. 216° (B. 23, 500). — IV, 1357.
- 17) 6-Acetyl-3-Methyl-1,4-Diphenylbipyrazol. Sm. 174° (B. 36, 527 C. 1903 [1] 642). — \*IV, 950.
- 18) 2-Oxy-1,2,4-Triphenyl-1,2-Dihydro-1,2,3,5-Tetrazol. Salze, siehe diese (B. 27, 323, 2929).
- 19) 3-[2-Oxy-1-Naphtyl]azo-5,7-Dimethylindazol. Sm. 261—262° (266 bis 267°) (A. 305, 331; B. 32, 1796). — \*IV, 1082.
- 20) Verbindung (aus Benzenylanilidoxim). Na (B. 31, 245). — IV, 1582.
- 21) Verbindung (aus 3-Oxyhexahydrobenzol-1-Carbonsäure u. Diazobenzol-chlorid). Sm. 131° (A. 291, 302). — IV, 1468.
- $C_{19}H_{16}OCl_4$  1) 1,3-Dichlor-2-Keto-1,3-Di[ $\alpha$ -Chlorbenzyl]-R-Pentamethylen. Sm. 185° u. Zers. (B. 36, 1500 C. 1903 [1] 1351).
- $C_{19}H_{16}OBr_4$  1) 1,3-Dibrom-2-Keto-1,3-Di[ $\alpha$ -Brombenzyl]-R-Pentamethylen. Sm. 175° u. Zers. (B. 29, 1837). — \*III, 186.
- 2) 1,3,4,5-Tetrabrom-2-Keto-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen. Sm. 180° u. Zers. (B. 31, 1888; Soc. 85, 1478 C. 1905 [1] 172). — \*III, 176.



- $C_{19}H_{16}OS_3$  1) Dimethyläther d. 2,6-Dimerkapto-4-Keto-3,5-Diphenyl-1,4-Phen-thiophen. Sm. 167° (B. 37, 1607 C. 1904 [1] 1444; B. 38, 2891 C. 1905 [2] 1433).
- $C_{19}H_{16}O_2N_2$  C 75,0 — H 5,3 — O 10,5 — N 9,2 — M. G. 304.
- 1) *p*-Nitro-3-Methyltriphenylamin. Sm. 164—165° (B. 31, 2989; 34, 40). — \*II, 249.
  - 2) 3-Nitro-4-Amidotriphenylmethan. Sm. 98° (J. pr. [2] 71, 568 C. 1905 [2] 328).
  - 3) 4-Amido-4'-[2-Oxybenzoyl]amidobiphenyl. Sm. noch nicht bei 250° (J. pr. [2] 61, 548). — \*IV, 643.
  - 4) 3-Oxyphenyläther d. Phenylamidophenylimidooxymethan. Sm. 147° (J. pr. [2] 79, 524 C. 1909 [2] 427).
  - 5) *p*-Di[Phenylamido]-2-Methyl-1,4-Benzochinon. Sm. 232° (A. 287, 153; B. 16, 1559). — III, 360.
  - 6) 5,6[*p*]-Di[Phenylamido]-2-Methyl-1,4-Benzochinon. Sm. noch nicht bei 300° (A. 287, 152). — III, 359.
  - 7) *p*-Phenylamido-*p*-Oxy-2-Methyl-1,4-Benzochinonphenylimid (B. 16, 1561). — III, 361.
  - 8) Methyläther d. 5-Phenylamido-2-Oxy-1,4-Benzochinonphenylimid. Sm. 194° (188—189°) (B. 18, 788; 21, 677). — III, 347.
  - 9)  $\alpha$ -Diphenylhydrazondi[2-Oxyphenyl]methan. Sm. 152° (B. 19, 2610). — IV, 776.
  - 10)  $\beta$ -Acetyl- $\alpha$ -Benzoyl- $\alpha$ -[1-Naphtyl]hydrazin. Sm. 184° (Am. 25, 488). — \*IV, 613.
  - 11) 3',4'-Dioxy-2-Benzylazobenzol (Diphenylmethan-o-Azodioxybenzol). Sm. 170° (B. 27, 2788). — IV, 1446.
  - 12) Phenylazopropionyl- $\alpha$ -Naphtol. Sm. 110° (J. pr. [2] 43, 96). — IV, 1478.
  - 13) 3,5-Dimethyl-1,4-Dibenzoylpyrazol. Sm. 124—125,5° (G. 24 [1] 9). — IV, 551.
  - 14) 4-Phenylhydrazon-2-Phenyl-1,4-Dihydrobenzol-6-Carbonsäure (B. 17, 2762). — IV, 698.
  - 15) Äthylester d. 3,6-Diphenyl-1,2-Diazin-4-Carbonsäure. Sm. 98—99° (B. 40, 4603 C. 1908 [1] 266).
  - 16) Äthylester d. 2,3-Diphenyl-1,4-Diazin-5-Carbonsäure. Sm. 91—92° (Soc. 63, 1307). — IV, 1049.
  - 17) 2-Amidophenylester d. Diphenylamidoameisensäure. Sm. 189 bis 191° (177°) (B. 20, 2125; B. 40, 1833 C. 1907 [2] 46). — II, 706.
  - 18) 3-Amidophenylester d. Diphenylamidoameisensäure. Sm. 132 bis 133° (B. 24, 2111). — II, 715.
  - 19) 4-Amidophenylester d. Diphenylamidoameisensäure. Sm. 146° (B. 24, 2111). — II, 716.
  - 20) Acetat d. 1-[6-Oxy-3-Methylphenyl]azonaphtalin. Sm. 109—111° (A. 365, 312 C. 1909 [1] 1865).
  - 21) Acetat d. 2-[6-Oxy-3-Methylphenyl]azonaphtalin. Sm. 95—96° (A. 365, 313 C. 1909 [1] 1866).
  - 22) Acetat d. 2-Oxy-1-[2-Methylphenyl]azonaphtalin (Soc. 63, 929). — IV, 1435.
  - 23) Acetat d. 2-Oxy-1-[4-Methylphenyl]azonaphtalin. Sm. 99° (Soc. 63, 925). — IV, 1435.
  - 24) Acetat d. 4-Oxy-1-[4-Methylphenyl]azonaphtalin. Sm. 101—102° (B. 19, 2488). — IV, 1435.
  - 25) Acetat d. 1-Oxy-2-[4-Methylphenyl]azonaphtalin. Sm. 102° (B. 42, 1385 Anm. C. 1909 [1] 1710).
  - 26) Benzoat d. 4-Oxy-*s*-Diphenylhydrazin. Sm. 173° (B. 24, 2310; 28, 2416). — IV, 1504.
  - 27)  $\beta$ ,2'-Methylimidd.  $\alpha$ -[2-Cyanphenyl]- $\beta$ -Phenylpropan- $\beta$ ,2'-Dicarbon-säure. Sm. 117—118° (B. 27, 2497). — II, 2027.
  - 28) Verbindung (aus 1-Methylacetylamido-4-Dimethylamido-9,10-Anthra-chinon) (D.R.P. 192201 C. 1908 [1] 571).
- $C_{19}H_{16}O_2N_4$  C 68,7 — H 4,8 — O 9,6 — N 16,9 — M. G. 332.
- 1) 3,5-Di[Phenylnitrosamido]-1-Methylbenzol. Sm. 170° u. Zers. (J. pr. [2] 33, 545). — IV, 625.

- C<sub>19</sub>H<sub>16</sub>O<sub>2</sub>N<sub>4</sub>** 2) **3-Nitrotriphenylguanidin**. Sm. 159°. 2HCl, PtCl<sub>4</sub> (B. 7, 1236; 16, 50). — II, 350.
- 3) **4,6-Dioxy-1-Phenylhydrazonmethylazobenzol**. Sm. 217° u. Zers. (B. 34, 2099). — \*IV, 1071.
- 4) **Resorcindisazobenzoltoluol**. Sm. 195—196° (B. 15, 2823). — IV, 1444.
- 5) **isom. Resorcindisazobenzoltoluol**. Sm. 204—206° (B. 15, 2822). — IV, 1444.
- 6) **isom. Resorcindisazobenzoltoluol**. Sm. 240—241° (B. 15, 2824). — IV, 1444.
- 7) **2,4-Dioxy- $\beta$ -Di[Phenylazo]-1-Methylbenzol**. Sm. 211—212° (Ar. 244, 566 C. 1907 [1] 547).
- 8) **3,5-Dioxy- $\beta$ -Diphenylazo-1-Methylbenzol**. Sm. 229—230° u. Zers. (A. 329, 304 C. 1904 [1] 793).
- 9) **2-Methyläther d. 2,4-Dioxy-1,3-Di[Phenylazo]benzol**. Sm. 189 bis 190° (Am. 26, 165). — \*IV, 1049.
- 10) **2-Methyläther d. 1,2-Dioxy-4,6[ $\beta$ ]-Diphenylazobenzol** (Guajakoldisazobenzol). Sm. 150—150,5° (B. 29, 2686; C. 1908 [1] 127). — IV, 1441.
- 11) **4<sup>t</sup>-Methyläther d. 2-Phenylazo-4-[4-Oxyphenyl]azo-1-Oxybenzol**. Sm. 117° (B. 32, 124). — \*IV, 1039.
- 12) **Di[5-Keto-3-Phenyl-4,5-Dihydro-4-Pyrazolyl]methan**. Sm. 280° u. Zers. (A. 323, 107 C. 1902 [2] 785). — \*IV, 970.
- 13)  **$\beta$ -Phenylhydrazon- $\beta$ -[4-Nitrophenyl]- $\alpha$ -[2-Pyridyl]äthan**. Pikrat (B. 35, 1166 C. 1902 [1] 1015). — \*IV, 529.
- 14)  **$\alpha$ -[1-Phenyl-2,3-Dimethylpyrazolon-(5)yl-(4)imid] d. Isatin**. Sm. 269° u. Zers. Pikrat (B. 36, 4132 C. 1904 [1] 463).
- 15) **2,6-Diketo-3-Methyl-8-Phenyl-7-Benzylpurin** (B. 39, 229 C. 1906 [1] 687).
- C<sub>19</sub>H<sub>16</sub>O<sub>2</sub>N<sub>6</sub>** C 63,3 — H 4,4 — O 8,9 — N 23,3 — M. G. 360.
- 1) **Phenylendiamindisazobenzol-3-Carbonsäure** (B. 16, 2032). — IV, 1461.
- C<sub>19</sub>H<sub>16</sub>O<sub>2</sub>S<sub>2</sub>** 1) **3,6-Diphenyläther d. 3,6-Dimerkapto-2,5-Dioxy-1-Methylbenzol**. Sm. 78—80° (A. 336, 161 C. 1904 [2] 1300).
- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** C 71,2 — H 5,0 — O 15,0 — N 8,7 — M. G. 320.
- 1)  **$\alpha$ -Oxy-3-Nitro-4-Amidotriphenylmethan<sup>p</sup>** Sm. 129° (J. pr. [2] 71, 576 C. 1905 [2] 329).
- 2) **N-Acetyl-2-Nitrobenzyl-1-Naphtylamin**. Sm. 130° (Bl. [3] 27, 1058 C. 1902 [2] 1509).
- 3) **N-Acetyl-3-Nitrobenzyl-1-Naphtylamin**. Sm. 109—110° (Bl. [3] 27, 1060 C. 1902 [2] 1510).
- 4) **N-Acetyl-4-Nitrobenzyl-1-Naphtylamin**. Sm. 112—113° (Bl. [3] 27, 1061 C. 1902 [2] 1510).
- 5) **N-Acetyl-2-Nitrobenzyl-2-Naphtylamin**. Sm. 117—118° (Bl. [3] 27, 1059 C. 1902 [2] 1510).
- 6) **N-Acetyl-3-Nitrobenzyl-2-Naphtylamin**. Sm. 104—105° (Bl. [3] 27, 1061 C. 1902 [2] 1510).
- 7) **Diacetylderivat d. 5-Imido-3,4-Diphenyl-4,5-Dihydroisoxazol**. Sm. 144—145° (J. pr. [2] 55, 313). — \*II, 1003.
- 8) **N-Acetylderivat d. Base C<sub>17</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>**. Zers. bei 170—180° (B. 40, 2089 C. 1907 [2] 152).
- 9) **Acetat d. 5-Keto-4-[4-Oxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol**. Sm. 137° (B. 33, 867). — \*IV, 637.
- 10) **1,3-Diacetyl-2-Keto-4,5-Diphenyl-2,3-Dihydroimidazol**. Sm. 140° (A. 339, 262 C. 1905 [2] 46; A. 368, 174 Ann. C. 1909 [2] 1463).
- 11)  **$\alpha$ -Oxy- $\alpha$ -[2-Nitrophenyl]- $\beta$ -[6-Phenyl-2-Pyridyl]äthan + H<sub>2</sub>O**. Sm. 95°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O) (B. 35, 419 C. 1902 [1] 669). — \*IV, 275.
- 12)  **$\alpha$ -Oxy- $\alpha$ -[4-Nitrophenyl]- $\beta$ -[6-Phenyl-2-Pyridyl]äthan**. Sm. 112°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (B. 35, 2782 C. 1902 [2] 993). — \*IV, 275.
- 13) **Äthylester d. 2-Oxy-1-Phenylazonaphtalin-1<sup>o</sup>-Carbonsäure**. Sm. 104° (105°) (B. 14, 2035; Soc. 95, 1121 C. 1909 [2] 595). — IV, 1463.
- 14) **4-Acetat d. 1-[3,4-Dioxyphenyl]azonaphtalin-3-Methyläther**. Sm. 105—110° (C. 1908 [1] 128).

- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>N<sub>2</sub>** 15) Acetat d. 6-Oxy-2-[4-Acetylamidophenyl]chinolin (*M.* 9, 149). — **IV**, 1025.
- 16) Benzoat d. 6-Oxy-4-Methyl-2-[ $\alpha$ -Oxybenzyl]-1,3-Diazin. Sm. 205 bis 208°. HCl (PINNER, Imidoäther 284). — **IV**, 972.
- 17) Di[Phenylamid] d. 1,4-Pyran-2,6-Dicarbonsäure. Sm. 255° (*Bl.* [4] 1, 133 *C.* 1907 [1] 1428).
- 18) 2-Acetylphenylamid d. 2-Keto-4-Methyl-1,2-Dihydrochinolin-3-Carbonsäure. Sm. 275° (*Ar.* 240, 143 *C.* 1902 [1] 818). — **\*IV**, 216.
- 19) ?-Nitro-4-Methylphenyl-1-Naphtylamid d. Essigsäure. Sm. 240° (*J. pr.* [2] 64, 506 *C.* 1902 [1] 257).
- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>N<sub>4</sub>** C 65,5 — H 4,6 — O 13,8 — N 16,1 — M. G. 348.
- 1) 4-Benzoylamidoacetylhydrazon-1-Oximido-1,4-Dihydronaphtalin. Sm. 260° (*A.* 343, 193 *C.* 1906 [1] 837).
- 2) 2,4,6-Trioxy-3,5-Diphenylazo-1-Methylbenzol. Sm. 238° (*A.* 329, 283 *C.* 1904 [1] 796).
- 3) Monomethyläther d. 2,4-Di[Phenylazo]-1,3,5-Trioxybenzol. Sm. 250—252° (*Soc.* 81, 470 *C.* 1902 [1] 1014). — **\*IV**, 1050.
- 4) 1,3-Diamido-5-Phenylakridin. Sm. 159°. HNO<sub>3</sub> (*B.* 39, 362 *C.* 1906 [1] 844).
- 5) Äthylester d. 4-Phenylazo-3-Keto-2-Phenyl-2,3-Dihydro-1,2-Diazin-6-Carbonsäure. Sm. 163—164° (*B.* 40, 4930 *C.* 1908 [1] 459).
- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>Br<sub>2</sub>** 1) Dimethyläther d.  $\gamma$ -Keto- $\alpha$ -Di[5-Brom-2-Oxyphenyl]- $\alpha$  $\delta$ -Pentadien. Sm. 137° (*B.* 40, 3460 *C.* 1907 [2] 1412).
- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>S** 1) Triphenylmethan- $\alpha$ -Sulfonsäure. Na + 2H<sub>2</sub>O (*B.* 35, 3016 *C.* 1902 [2] 1112).
- C<sub>19</sub>H<sub>16</sub>O<sub>3</sub>S<sub>2</sub>** 1) Phenyläther d.  $\alpha$ -Merkapto- $\gamma$ -[2-Naphtyl]sulfon- $\beta$ -Ketopropan. Sm. 141° (*J. pr.* [2] 55, 413). — **\*II**, 528.
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>N<sub>2</sub>** C 67,8 — H 4,8 — O 19,1 — N 8,3 — M. G. 336.
- 1) 8-Nitro-1-[1-Piperidyl]-9,10-Anthrachinon. Sm. 154° (D.R.P. 136 777 *C.* 1902 [2] 1373). — **\*IV**, 20.
- 2) 2,3-Di[4-Methoxyl]-1,4-Diazin-5-Carbonsäure. Sm. 224—225°. Ag (*Soc.* 63, 1308). — **IV**, 1049.
- 3) Methylester d. Dianhydrodiacetylanthranilsäure. Sm. 250—251° u. Zers. (*B.* 35, 3467 *C.* 1902 [2] 1315).
- 4) Äthylester d. 3-Nitro-4-[1-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 109° (*B.* 23, 3458). — **II**, 1286.
- 5) Äthylester d. 3-Nitro-4-[2-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 127,5° (*B.* 23, 3457). — **II**, 1286.
- 6) Phenylamidoformiat d.  $\beta$ -Oximido- $\alpha$ -Oxy- $\beta$ -[2-Furanyl]- $\alpha$ -Phenyläthan. Fl. (*B.* 38, 84 *C.* 1905 [1] 533).
- 7) Phenylamidoformiat d. isom.  $\beta$ -Oximido- $\alpha$ -Oxy- $\beta$ -[2-Furanyl]- $\alpha$ -Phenyläthan. Sm. 138° (*B.* 38, 84 *C.* 1905 [1] 533).
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>N<sub>4</sub>** C 62,6 — H 4,4 — O 17,6 — N 15,4 — M. G. 364.
- 1)  $\alpha$  $\alpha$ -Di[4-Nitrophenylamido]- $\alpha$ -Phenylmethan. Sm. 85° (*B.* 34, 833). — **\*III**, 21.
- 2) 2,4-Dinitro-3,5-Di[Phenylamido]-1-Methylbenzol. Sm. 162° (*R.* 23, 126 *C.* 1904 [2] 200).
- 3) Di[?Nitro-2-Methyl-3-Indolyl]methan. Sm. 131° (*J. pr.* [2] 61, 274). — **\*IV**, 701.
- 4) Diäthylester d. Bisazodiphenylmethandicarbonsäure. Sm. 280° (*C. r.* 144, 1223 *C.* 1907 [2] 407).
- 5) Di[Carbonylphenylhydrazid] d. Propan- $\alpha$ -Dicarbonsäure. Sm. 112 bis 113° (*B.* 21, 1243). — **IV**, 704.
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>N<sub>6</sub>** C 58,2 — H 4,1 — O 16,3 — N 21,4 — M. G. 392.
- 1)  $\alpha$ -Oxy-4,4',4''-Trisdiazotriphenylmethan. Disulfat (*B.* 38, 588 *C.* 1905 [1] 824).
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>Br<sub>4</sub>** 1) Diacetat d.  $\beta$  $\beta$ -Di[3,5-Dibrom-4-Oxyphenyl]propan. Sm. 169—170° (*A.* 343, 87 *C.* 1906 [1] 132).
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>S** 1) 4-Oxytriphenylmethan- $\alpha$ -Sulfonsäure. Na + 3½H<sub>2</sub>O (*B.* 36, 2793 *C.* 1903 [2] 883).
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>S<sub>2</sub>** 1) Di[Phenylsulfon]methylbenzol (Benzylidendi[phenylsulfon]). Sm. 262° (*B.* 25, 355). — **III**, 10.
- C<sub>19</sub>H<sub>16</sub>O<sub>4</sub>S<sub>3</sub>** 1) Phenyläther d.  $\alpha$ -Merkaptodiphenylsulfonmethan. Sm. 174—175° (*B.* 25, 347; *J. pr.* [2] 51, 315). — **II**, 784.



- $C_{19}H_{16}O_5N_2$  C 64,8 — H 4,5 — O 22,7 — N 7,9 — M. G. 352.  
 1) Nitroderivat d. Kohlenw.  $C_{19}H_{18}$  (A. 212, 100).  
 2) 5-Oxy-2,4,6-Triketo-5-[ $\beta$ -Keto- $\alpha$ - $\gamma$ -Diphenylpropyl]hexahydro-1,3-Diazin. Sm. 233° u. Zers. (B. 38, 3007 C. 1905 [2] 1241).  
 3) 1-Acetyl-3-Keto-5-[4-Acetylamidophenyl]-2,3-Dihydroindol-2-Carbonsäure? Sm. 292° (C. 1903 [1] 35).  
 4) Diäthylester d. 1-Ketoinden-2,3-Di[Cyanmethylecarbonsäure]. Sm. 142–143° (B. 32, 917). — \*II, 1224.  
 5) Chinon (aus Brucinolon). Sm. 295° u. Zers. (B. 42, 3709 C. 1909 [2] 1878).
- $C_{19}H_{16}O_5N_4$  C 60,0 — H 4,2 — O 21,1 — N 14,7 — M. G. 380.  
 1) Methyläther d. 2,6-Dinitro-3,5-Di[Phenylamido]-1-Oxybenzol. Sm. 234° (R. 23, 117 C. 1904 [2] 205).
- $C_{19}H_{16}O_5N_6$  C 55,9 — H 3,9 — O 19,6 — N 20,6 — M. G. 408.  
 1) s-Harnstoff d. 2-Keto-5-Methyl-3-[4-Amidophenyl]-2,3-Dihydro-1,3,4-Oxiazol. Sm. 290° (B. 26, 1320). — IV, 1127.
- $C_{19}H_{16}O_5S_2$  1)  $\alpha$ -Phenylsulfon- $\gamma$ -[2-Naphtyl]sulfon- $\beta$ -Ketopropan. Sm. 144° (J. pr. [2] 55, 411). — \*II, 528.
- $C_{19}H_{16}O_6N_2$  C 61,9 — H 4,3 — O 26,1 — N 7,6 — M. G. 368.  
 1) 2-Methyläther d.  $\beta$ -Oxy- $\alpha$ - $\gamma$ -Diketo- $\beta$ -[4-Nitrophenyl]cyanmethyl- $\alpha$ -[2-Oxyphenyl]butan. Sm. 148° (B. 40, 2723 C. 1907 [2] 326).  
 2)  $\alpha$ -Äthylester d. 2-Carboxyphenylazobenzoylbrenztraubensäure. Sm. 158–160° u. Zers. (B. 37, 2208 C. 1904 [2] 324).  
 3) Äthylester d. 4,5-Diketo-2-Phenyl-1-[3-Nitrophenyl]tetrahydropyrrol-3-Carbonsäure. Sm. 199–200° (B. 30, 604). — IV, 368.  
 4) Äthylester d. 4,5-Diketo-2-[3-Nitrophenyl]-1-Phenyltetrahydropyrrol-3-Carbonsäure. Sm. 208–209° (B. 30, 604). — IV, 368.
- $C_{19}H_{16}O_6N_6$  C 53,8 — H 3,8 — O 22,6 — N 19,8 — M. G. 424.  
 1) Tri[2-Nitro-4-Amidophenyl]methan. Sm. noch nicht bei 300° (B. 36, 2781 C. 1903 [2] 880).  
 2) 4-[2,4,6-Trinitrobenzyliden]amido-3,5-Dimethyl-1-[4-Methylphenyl]pyrazol. Sm. 235° (B. 40, 670 C. 1907 [1] 968).
- $C_{19}H_{16}O_6Br_2$  1) Tetramethyläther d. 6,8-Dibrom-5,7-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 261–262° (B. 37, 2626 C. 1904 [2] 538).  
 2) p-Dibrom- $\alpha$ - $\alpha$ -Di[p-Acetoxyphenyl]propionsäure (B. 16, 2074). — II, 1882.  
 3)  $\gamma^2$ -Acetat d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propan- $\alpha^{3,4}$ -Methylenäther- $\gamma^4$ -Methyläther. Sm. 137–138° (B. 32, 313). — \*III, 169.
- $C_{19}H_{16}O_6S$  1)  $\alpha,2,4$ -Trioxytriphenylmethan-5-Sulfonsäure +  $H_2O$ . Sm. 186° (A. 360, 257 C. 1908 [1] 2175).  
 2) 4,4',p-Trioxxytriphenylsulfonhydroxyd-p-Carbonsäure +  $H_2O$ . Sm. 212° (Soc. 91, 1121 C. 1907 [2] 899).
- $C_{19}H_{16}O_6S_3$  1) Tri[Phenylsulfon]methan. Sm. 215°. K, Ba, Ag (B. 25, 348). — II, 784.
- $C_{19}H_{16}O_7N_4$  C 55,3 — H 3,8 — O 27,2 — N 13,6 — M. G. 412.  
 1) Acetylderivat d. Verb.  $C_{17}H_{14}O_6N_4$  (aus 2-Amidonaphtalin u. 2,4,6-Trinitro-1-Methylbenzol). Sm. 106° (Soc. 79, 531).
- $C_{19}H_{16}O_7S_3$  1) Dimethylester d. 4-Keto-3,5-Diphenyl-1,4-Thiopyran-2,6-Disulfonsäure. Sm. 190–191° (B. 41, 4043 C. 1909 [1] 83).
- $C_{19}H_{16}O_8N_2$  C 57,0 — H 4,0 — O 32,0 — N 7,0 — M. G. 400.  
 1) Äthylester d.  $\beta$ -Benzoxyl- $\alpha$ -[2,4-Dinitrophenyl]propen- $\alpha$ -Carbon-säure. Sm. 142–143° (B. 42, 605 C. 1909 [1] 998).
- $C_{19}H_{16}O_8N_4$  C 53,3 — H 3,7 — O 29,9 — N 13,0 — M. G. 428.  
 1) 1-Amidonaphtalin + 2,4,6-Trinitrobenzol-1-Carbonsäureäthylester. Sm. 135° (Soc. 79, 531).  
 2) 2-Amidonaphtalin + 2,4,6-Trinitrobenzol-1-Carbonsäureäthylester. Sm. 127° (Soc. 79, 531).
- $C_{19}H_{16}O_8Br_2$  1) Tetracetat d. 2,4-Dibrom-3,5,7,8-Tetraoxy-1-Methylnaphtalin. Sm. 206° (B. 26, 2671). — II, 1036.
- $C_{19}H_{16}O_9N_2$  C 54,8 — H 3,8 — O 34,6 — N 6,7 — M. G. 416.  
 1) Diäthylester d. 2,2'-Dinitrodiphenylketon-4,4'-Dicarbonsäure. Sm. 131° (C. r. 146, 1324 C. 1908 [2] 416).

- $C_{19}H_{16}O_9Br_2$  1) Dibrombrasilinsäure. Sm. 182° (*Soc.* 81, 1036 *C.* 1902 [2] 748). — \*III, 483.
- $C_{19}H_{16}O_9S_3$  1) Triphenylmethantrisulfonsäure.  $Ba_3 + 8H_2O$  (*B.* 5, 908; 7, 1205). — II, 288.
- $C_{19}H_{16}O_{11}N_2$  1) C 50,9 — H 3,6 — O 39,3 — N 6,2 — M. G. 448.  
 2) 3,4,3',4'-Dimethylenäther d.  $\alpha\epsilon$ -Dioxy- $\gamma$ -Keto- $\alpha\epsilon$ -Di[6-Nitro-3,4-Dioxyphenyl]pentan. Sm. 195° (*B.* 38, 2856 *C.* 1905 [2] 1098).  
 3)  $\alpha\epsilon$ -Dioxy- $\gamma$ -Keto- $\alpha\epsilon$ -Di[3-Nitrophenyl]pentan- $\beta\delta$ -Dicarbonsäure (*C.* 1899 [2] 187, 188).
- $C_{19}H_{16}O_{11}Cl_2$  1) Dichloreuxanthinsäure (*J. pr.* [1] 37, 392). — II, 2103.
- $C_{19}H_{16}O_{11}Br_2$  1) Dibromeuxanthinsäure (*J. pr.* [1] 37, 392). — II, 2103.
- $C_{19}H_{16}O_{11}S_2$  1) Dipiperonylidenacetonbischydrosulfonsäure.  $K_2 + 2\frac{1}{2}H_2O$ , Ba (*B.* 37, 4055 *C.* 1904 [2] 1649).
- $C_{19}H_{16}O_{12}N_2$  C 49,1 — H 3,4 — O 41,4 — N 6,0 — M. G. 464.  
 1) Lakton d. Dinitrodihydrobrasilinsäure (*Soc.* 81, 1039 *C.* 1902 [2] 748). — \*III, 483.
- $C_{19}H_{16}NCl$  1)  $\alpha$ -Chlor-2-Amidotriphenylmethan. HCl (*B.* 37, 3195 *C.* 1904 [2] 1471).  
 2)  $\alpha$ -Chlor-4-Amidotriphenylmethan. HCl (*B.* 37, 601 *C.* 1904 [1] 886).
- $C_{19}H_{16}NBr$  1)  $\alpha$ -Amido-4-Bromtriphenylmethan. Sm. 108,5—109° (*C.* 1906 [1] 1828).
- $C_{19}H_{16}NJ$  1) Jodmethylat d. 10-Methyl- $\beta$ -Phenakridin. Sm. 282—285° (*B.* 42, 1757 *C.* 1909 [2] 36).  
 2) Jodäthylat d. Anthrachinolin (*A.* 201, 348). — IV, 461.  
 3) Jodäthylat d. Phenonaphtakridin (*B.* 27, 2844). — IV, 464.
- $C_{19}H_{16}N_2Cl_2$  1) 2'',5''-Dichlor-4,4'-Diamidotriphenylmethan. Sm. 107° (*A.* 299, 351). — IV, 1043.  
 2) Chinolinmethylenchlorid. Sm. 168°.  $2 + PtCl_4$  (*B.* 16, 2004). — IV, 250.
- $C_{19}H_{16}N_2J_2$  1) 3-Phenylhydrazonmethyldiphenyljodoniumjodid. Sm. 156° (*B.* 38, 1485 *C.* 1905 [1] 1386).  
 2) 4-Phenylhydrazonmethyldiphenyljodoniumjodid. Sm. 144° (*B.* 38, 1485 *C.* 1905 [1] 1386).  
 3) Chinolinmethylenjodid. Sm. 132° (*B.* 16, 880, 2004). — IV, 250.
- $C_{19}H_{16}N_2S$  1) Phenyläther d. Phenylamidophenylimidomerkaptomethan. Sm. 82° (*J. pr.* [2] 79, 524 *C.* 1909 [2] 427).  
 2) Triphenylthioharnstoff. Sm. 152° (*B.* 17, 2092). — II, 397.  
 3) 2-[1-Naphtyl]imido-3-Phenyltetrahydrothiazol. Sm. 134,5°. (2HCl,  $PtCl_4$ ) (*B.* 21, 1869). — II, 609.  
 4) 2-Phenylimido-3-[1-Naphtyl]tetrahydrothiazol. Sm. 184,5°. (2HCl,  $PtCl_4$ ) (*B.* 21, 1869). — II, 609.  
 5) 2-Thiocarbonyl-1-Methyl-3-[1-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. HJ (*J. pr.* [2] 52, 410). — IV, 635.  
 6) 2-Thiocarbonyl-1-Methyl-3-[2-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 140°. HJ (*J. pr.* [2] 52, 414). — IV, 635.  
 7) 2-Thiocarbonyl-1-Äthyl-3-Phenyl-1,2-Dihydro- $\alpha$ -Naphtimidazol (Äthylphenylnaphtylenthioharnstoff). Sm. oberhalb 300° (*B.* 27, 2775). — IV, 919.
- $C_{19}H_{16}N_3Cl$  1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[2-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 93—95° (*J. pr.* [2] 78, 495 *C.* 1909 [1] 281).  
 2)  $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Chlorphenyl]amido- $\alpha$ -Phenylmethan. Sm. 127—128°. Pikrat (*J. pr.* [2] 78, 489 *C.* 1909 [1] 281).  
 3) 5-Chlorphenylat d. 3-Amido-2-Methyl-5,10-Naphtdiazin (Methylaposafranchlorid).  $2 + PtCl_4$  (*B.* 31, 967, 974). — IV, 1182.
- $C_{19}H_{16}N_4Cl_2$  1)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha$ -[2,4-Dichlorphenyl]hydrazidomethan. Sm. 125°. HCl (*B.* 39, 1399 *C.* 1906 [1] 1658).
- $C_{19}H_{16}N_4S$  1) 4-Phenylthioureidoazobenzol. Sm. 179° (169°) (*B.* 17, 1405; *C.* 1905 [1] 1104). — IV, 1357.
- $C_{19}H_{16}N_6S$  1) Thioharnstoff (aus 5-(?-Amidophenyl)pyrazol]. Sm. 200—202° u. Zers. (*B.* 35, 41 *C.* 1902 [1] 425). — \*IV, 813.
- $C_{19}H_{17}ON$  C 82,9 — H 6,2 — O 5,8 — N 5,1 — M. G. 275.  
 1)  $\alpha$ -Oxy-2-Amidotriphenylmethan. Sm. 121,5°. 2HCl +  $H_2O$ , Pikrat (*B.* 37, 3192 *C.* 1904 [2] 1471).  
 2)  $\alpha$ -Oxy-3-Amidotriphenylmethan. Sm. 155°. HCl (*B.* 21, 190). — II, 1084.

- C<sub>19</sub>H<sub>17</sub>ON**
- 3)  $\alpha$ -Oxy-4-Amidotriphenylmethan. Sm. 116°. HCl + H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + H<sub>2</sub>O (B. 23, 1625; B. 37, 599 C. 1904 [1] 886). — II, 1084.
  - 4)  $\alpha$ -Oxy- $\alpha$ -Phenylamido- $\alpha$ -Diphenylmethan. HCl (B. 35, 992 C. 1902 [1] 870). — \*III, 150.
  - 5) Äthyläther d. 4-Oxy-1-Phenylimidomethylnaphtalin. Sm. 72° (Bl. [3] 17, 811).
  - 6) 1-[ $\alpha$ -Acetylamidobenzyl]naphtalin. Sm. 210° (C. 1902 [2] 789).
  - 7)  $\alpha$ -[1-Naphtyl]amidoäthylphenylketon. Sm. 161—163° (Bl. [3] 17, 74). — \*III, 113.
  - 8)  $\alpha$ -[2-Naphtyl]amidoäthylphenylketon. Sm. 120—121° (Bl. [3] 17, 74). — \*III, 113.
  - 9) 4-Dimethylamidophenyl-1-Naphtylketon. Sm. 115° (D.R.P. 42853). — \*III, 194.
  - 10) 4-Dimethylamidophenyl-2-Naphtylketon. Sm. 127° (D.R.P. 42853). — \*III, 195.
  - 11) Triphenylmethylhydroxylamin. Sm. 124—135° (B. 37, 3152 C. 1904 [2] 1047).
  - 12)  $\epsilon$ -Oximido- $\alpha\eta$ -Diphenyl- $\alpha\gamma\zeta$ -Heptatriën. Sm. 127—128° (B. 29, 615). — III, 257.
  - 13) 3-Acetyl-2-Methyl-4,5-Diphenylpyrrol (B. 35, 3006 C. 1902 [2] 1121). — \*IV, 267.
  - 14) 4-Keto-1-Äthyl-2,6-Diphenyl-1,4-Dihydropyridin. Sm. 105—110° (B. 42, 3692 C. 1909 [2] 1659).
  - 15) 4-Methylphenyl-1-Naphtylamid d. Essigsäure. Sm. 124° (J. pr. [2] 64, 497 C. 1902 [1] 256).
  - 16) 4-Methylphenyl-2-Naphtylamid d. Essigsäure. Sm. 85° (B. 16, 2079). — II, 616.

**C<sub>19</sub>H<sub>17</sub>ON<sub>3</sub>**

- C 75,2 — H 5,6 — O 5,3 — N 13,9 — M. G. 303.
- 1)  $\beta$ -Amido- $\alpha\alpha\beta$ -Triphenylharnstoff. Sm. 128° (B. 33, 247). — \*IV, 432.
  - 2)  $\beta$ -Diphenylamido- $\alpha$ -Phenylharnstoff. Sm. 193° (206—207°) (B. 36, 3157 C. 1903 [2] 1057). — IV, 674.
  - 3) Triphenyloxyguanidin. Sm. 154° (J. pr. [2] 79, 535 C. 1909 [2] 428).
  - 4) 2-Oxytriphenylguanidin. Sm. 132—133° (J. pr. [2] 79, 534 C. 1909 [2] 428).
  - 5) Methyläther d. 2-Oxy-1-Diphenylamidodiazobenzol. Sm. 30—32° (C. r. 139, 571 C. 1904 [2] 1497).
  - 6) Methyläther d. 4-Oxy-1-Diphenylamidodiazobenzol. Fl. (C. r. 139, 571 C. 1904 [2] 1497).
  - 7) 4-Cinnamylidenamido-3-Keto-5-Methyl-1-Phenyl-2,3-Dihydropyrazol. Sm. 232° (A. 350, 298 C. 1907 [1] 735).
  - 8) 4-Cinnamylidenamido-5-Keto-1-Methyl-3-Phenyl-4,5-Dihydropyrazol. Sm. 152° (A. 352, 200 C. 1907 [1] 1050).
  - 9) Dimethylamidotolunaphtoxazin. HCl (C. 1902 [2] 458). — \*IV, 876.
  - 10) Nitril d. 5-Keto-4-Äthyl-3-Benzyl-1-Phenyl-4,5-Dihydropyrazol-4-Carbonsäure. Sm. 167° (Soc. 91, 1907 C. 1908 [1] 252).
  - 11) Isopropylidenhydrazid d. 3-Phenylchinolin-4-Carbonsäure. Sm. 191° (B. 41, 482 C. 1908 [1] 1065).
  - 12)  $\alpha$ -Phenyläthylidenhydrazid d. 2-Naphtylamidoameisensäure. Sm. 201—202° (B. 38, 836 C. 1905 [1] 868).
  - 13) Verbindung (aus p-Rosanilin) (M. 17, 10).

**C<sub>19</sub>H<sub>17</sub>OP**

- 1) Diphenylbenzylphosphinoxid. Sm. 192—193° (B. 18, 2115). — IV, 1662.
- 2) Diphenyl-4-Methylphenylphosphinoxid. Sm. 129—130° (B. 21, 1511). — IV, 1671.

**C<sub>19</sub>H<sub>17</sub>O<sub>2</sub>N**

- C 78,3 — H 5,8 — O 11,0 — N 4,8 — M. G. 291.
- 1) 2-Oxy-1-[ $\alpha$ -Acetylamidobenzyl]naphtalin. Sm. 236—237° (G. 33 [1] 5 C. 1903 [1] 925).
  - 2) 4-Oxy-1-[4-Acetylamidobenzyl]naphtalin. Sm. 124—126° (M. 23, 983 C. 1903 [1] 288).
  - 3) Äthyläther d. 4-Benzoylamido-1-Oxynaphtalin. Sm. 214—215° (J. pr. [2] 45, 549). — II, 1180.
  - 4) Äthyläther d. 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 135—137° (B. 15, 287, 1970). — III, 394.
  - 5) Propyläther d. 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 103—104° (B. 15, 283). — III, 393.



- C<sub>19</sub>H<sub>17</sub>O<sub>2</sub>N**
- 6) Isopropyläther d. 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphthalin. Sm. 99—100° (B. 15, 283). — III, 393.
  - 7) 2,3-Diketo-4-Phenyl-5-[2,4,5-Trimethylphenyl]-2,3-Dihydropyrrol. Sm. 185° (Soc. 95, 1607 C. 1909 [2] 2172).
  - 8) 5-Keto-2-Phenyl-4-[4-Isopropylbenzyliden]-4,5-Dihydrooxazol. Sm. 121° (A. 337, 278 C. 1905 [1] 377).
  - 9) 1-[1-Piperidyl]-9,10-Anthrachinon. Sm. 115° (D.R.P. 136777 C. 1902 [2] 1373). — \*IV, 19.
  - 10) Ketoäthylhomoapocinchen. Sm. 107—109°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 61, 35). — \*III, 635.
  - 11) 2-Methyl-5-Phenyl-1-[2-Methylphenyl]pyrrol-3-Carbonsäure. Sm. 199° (B. 18, 2596). — IV, 357.
  - 12) 2-Methyl-5-Phenyl-1-[4-Methylphenyl]pyrrol-3-Carbonsäure. Sm. 227° (B. 18, 2597). — IV, 357.
  - 13) 2-[4-Isopropylphenyl]chinolin-4-Carbonsäure. Sm. 201°. Ag (A. 249, 102). — IV, 450.
  - 14) Äthylester d. α-Cyan-βγ-Diphenylpropen-α-Carbonsäure. Sm. 163° (J. pr. [2] 54, 549). — \*II, 1100.
  - 15) Äthylester d. Phenyl-2-Naphtylamidoameisensäure. Sm. 93° (B. 24, 2919). — II, 617.
  - 16) Äthylester d. 2,5-Diphenylpyrrol-3-Carbonsäure. Sm. 159° (B. 21, 3060). — IV, 449.
  - 17) Acetat d. γ-Oximido-αε-Diphenyl-αδ-Pentadien. Sm. 93—94° (G. 29 [2] 395). — \*III, 190.
  - 18) Benzoat d. 2-[β-Oxyäthyl]-8-Methylchinolin. Sm. 118° (B. 38, 3713 C. 1906 [1] 53).
  - 19) Phenylamidoformiat d. 1-[β-Oxyäthyl]naphtalin. Sm. 115° (C. r. 141, 45 C. 1905 [2] 471).
  - 20) 1-Naphtylamid d. α-Oxypropionphenyläthersäure. Sm. 131°; Sd. 260°<sub>20</sub> (B. 34, 1850).
  - 21) 2-Naphtylamid d. α-Oxypropionphenyläthersäure. Sm. 117° (B. 34, 1852).
- C<sub>19</sub>H<sub>17</sub>O<sub>2</sub>N<sub>3</sub>**
- C 71,5 — H 5,3 — O 10,0 — N 13,2 — M. G. 319.
- 1) 2-Nitro-4',4''-Diamidotriphenylmethan (B. 16, 1305). — IV, 1043.
  - 2) 3-Nitro-4',4''-Diamidotriphenylmethan. Sm. 136°. + C<sub>6</sub>H<sub>6</sub> (Sm. 81°) (B. 13, 671). — IV, 1043.
  - 3) 4-Nitro-4',4''-Diamidotriphenylmethan. + Toluol. 2HCl, (2HCl, PtCl<sub>4</sub>) (B. 15, 678; D.R.P. 16766). — IV, 1043; \*IV, 700.
  - 4) α-Phenylamido-4-Nitro-4'-Amidodiphenylmethan. Sm. 148° (D.R.P. 106497, 111041). — \*IV, 648.
  - 5) αα-Di[Phenylamido]-α-[3-Nitrophenyl]methan. + SO<sub>2</sub> (A. 316, 140).
  - 6) αα-Diphenyl-β-[2-Nitrobenzyl]hydrazin. Sm. 143° (B. 28, 933). — IV, 811.
  - 7) 2-Oxy-1-[5-Acetylamido-2-Methylphenylazo]naphtalin. Sm. 275 bis 276° (B. 15, 2830). — IV, 1436.
  - 8) Methyläther d. 4-Acetylamido-2-Phenylazo-1-Oxynaphtalin. Sm. 218—220° u. Zers. (B. 29, 2950). — IV, 1431.
  - 9) Methyläther d. 2-Oxyphenylacetylhydrazimido-β-Naphtalin. Sm. 193—199° (B. 18, 3131). — IV, 1576.
  - 10) Isocarbanilidooxyhydrazobenzol. Sm. 218—220° (B. 23, 494). — IV, 1504.
  - 11) Benzoat d. 3-[α-Oximidoäthyl]-5-Methyl-1-Phenylpyrazol. Sm. 156° (C. 1905 [2] 1096; G. 36 [2] 49 C. 1906 [2] 1127).
  - 12) Methylester d. 2,6-Di[Phenylamido]pyridin-4-Carbonsäure. Sm. 142° (B. 35, 2934 C. 1902 [2] 1055). — \*IV, 782.
  - 13) Äthylester d. 1-Phenylazonaphtalin-2-Amidoameisensäure. Sm. 110° (B. 32, 2972). — \*IV, 1028.
  - 14) Äthylester d. 5-[β-Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 148°. — IV, 1170.
  - 15) Phenylamidoformiat d. 4-Oxy-s-Diphenylhydrazin (Carbanilidooxyhydrazobenzol). Sm. 155° (B. 23, 491). — IV, 1504.
  - 16) Phenylamid d. 4-Äthoxyl-1-Naphtylazoameisensäure. Sm. 238° (A. 334, 198 C. 1904 [2] 835).
  - 17) Verbindung (aus 3-Amido-4-Keto-2-Methyl-3,4-Dihydro-1,3-Benzdiazin u. 2-Oxynaphtalin). Sm. 144—145° (C. 1909 [2] 1476).

- $C_{19}H_{17}O_2N_5$  C 65,7 — H 4,9 — O 9,2 — N 20,2 — M. G. 347.
- 1) Acetat d. 3-Oximidoamidomethyl-5-[ $\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol. Sm. 158° u. Zers. — IV, 1170.
  - 2) Di[Phenylhydrazid] d. Cinchomeronsäure. Zers. bei 100—110° (M. 11, 146). — IV, 799.
- $C_{19}H_{17}O_2Cl$  1) Acetat d.  $\gamma$ -Chlor- $\gamma$ -Oxy- $\alpha\epsilon$ -Diphenyl- $\alpha\delta$ -Pentadien. Fl. (B. 39, 2995 C. 1906 [2] 1428).
- $C_{19}H_{17}O_8N$  C 74,3 — H 5,5 — O 15,6 — N 4,6 — M. G. 307.
- 1)  $\epsilon$ -Phthalylamido- $\alpha$ -Keto- $\alpha$ -Phenylpentan. Sm. 94—95° (B. 41, 2011 C. 1908 [2] 305).
  - 2) 5-[1-Piperidyl]-1-Oxy-9,10-Anthrachinon (D.R.P. 136777 C. 1902 [2] 1374).
  - 3) Cusparin (oder  $C_{20}H_{19}O_3N$ ). Sm. 92° (G. 13, 363). — III, 777.
  - 4) Cusparidin. Sm. 79°.  $HCl + 3H_2O$ , (2HCl,  $PtCl_4$ ), (HCl,  $AuCl_3$ ), HBr,  $H_2SO_4$  (B. 25 [2] 201). — III, 778.
  - 5) Apopropapaverin (J. pr. [2] 68, 200 C. 1903 [2] 839).
  - 6) Anhydrohydrastininumaron. Sm. 68—70°. (2HCl,  $PtCl_4$ ) (B. 37, 2743 C. 1904 [2] 544).
  - 7)  $\gamma$ -Cyan- $\epsilon$ -Oxy- $\beta\epsilon$ -Diphenyl- $\alpha$ -Penten- $\gamma$ -Carbonsäure. Sm. 120° (Soc. 95, 487 C. 1909 [1] 1757).
  - 8) 6-Phenylamido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 190° u. Zers. (A. 294, 280). — \*II, 1084.
  - 9) 2-Oximido-4,5-Diphenyl-2,3-Dihydro-R-Penten-1-Methylcarbon-säure. Sm. 183—184° (Soc. 71, 151). — \*II, 1019.
  - 10) Methylapocinchensäure (B. 18, 2383). — III, 838.
  - 11) Lakton d.  $\gamma$ -[2-Methylphenyl]imido- $\alpha$ -Oxy- $\beta$ -Acetyl- $\alpha$ -Phenylpropan- $\gamma$ -Carbonsäure. Sm. 174° (Soc. 89, 1241 C. 1906 [2] 1118).
  - 12) Laktam d. 10-Äthylamido-9-Acetoxy-9,10-Dihydrophenanthren-9-Carbonsäure. Sm. 148—149° (Soc. 87, 697 C. 1905 [2] 245).
  - 13) Methylster d.  $\gamma$ -Cyan- $\alpha$ -Keto- $\alpha\delta$ -Diphenylbutan- $\gamma$ -Carbonsäure. Sm. 133—134° (C. 1895 [2] 918). — \*II, 1151.
  - 14) Äthylester d. 3-Phenylamido-1-Oxynaphtalin-2-Carbonsäure. Sm. 185° (A. 298, 385). — \*II, 988.
  - 15) Äthylester d. 4-Oxy-6-Methyl-2-Phenylchinolin-3-Carbonsäure. Sm. 236° (B. 19, 1542). — IV, 448.
  - 16) Äthylester d. 4-Oxy-8-Methyl-2-Phenylchinolin-3-Carbonsäure. Sm. 208,5° (B. 19, 1545). — IV, 449.
  - 17) Äthylester d. 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure. Sm. 105° (A. 282, 106). — IV, 447.
  - 18) Phenylamidoformiat d. 6-Oxy-4-Keto-1-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 184° (B. 37, 4636 C. 1905 [1] 238).
  - 19) Phenylamid d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-1-Carbonsäure. Sm. 196—197° u. Zers. (B. 37, 4636 C. 1905 [1] 238).
  - 20) Phenylamid d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-5-Carbonsäure. Sm. 136° (B. 37, 4636 C. 1905 [1] 238).
- $C_{19}H_{17}O_8N_3$  C 68,1 — H 5,1 — O 14,3 — N 12,5 — M. G. 335.
- 1) 1-Nitro-2-Naphtyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm. 120° (B. 31, 759). — \*IV, 500.
  - 2) 4-Acetylamido-5-Phenyl-3-[4-Acetylamidophenyl]isoxazol. Sm. oberhalb 250° (A. 328, 227 C. 1903 [2] 998).
  - 3) 2,4-Diacetyl-3-Keto-5,6-Diphenyl-2,3,4,5-Tetrahydro-1,2,4-Triazin. Sm. 138° (A. 339, 283 C. 1905 [2] 47).
  - 4) Amid d. 2,3-Di[4-Methoxyl]-1,4-Diazin-5-Carbonsäure. Sm. 240 bis 241° (Soc. 63, 1308). — IV, 1049.
  - 5) Verbindung (aus 5-Nitrofur-2-Carbonsäure) (Am. 27, 204 C. 1902 [1] 909). — \*III, 505.
- $C_{19}H_{17}O_8P$  1) Diphenylester d. 4-Methylphenylphosphinsäure. Sd. oberhalb 360° (A. 293, 262). — IV, 1668.
- 2) Diphenylester d. Benzylphosphinsäure. Sm. 60° (B. 31, 1051). — IV, 1663.
- $C_{19}H_{17}O_4N$  C 70,6 — H 5,3 — O 19,8 — N 4,3 — M. G. 323.
- 1) 2-Keto-5,6-Dioxy-1-[4-Dimethylamidocinnamyliden]-1,2-Dihydrobenzofuran. Sm. 262° (B. 37, 826 C. 1904 [1] 1152).
  - 2) Opiansäuremethylketolid. Sm. 191° (B. 29, 2035). — IV, 221.

- C<sub>19</sub>H<sub>17</sub>O<sub>4</sub>N** 3) Dimethylester d.  $\alpha$ -Cyan- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 101° (B. 23, 115). — II, 1891.  
 4) Äthylester d. 4-Phenylamido-7-Methyl-1,2-Benzpyron-3-Carbonsäure. Sm. 162° (A. 367, 228 C. 1909 [2] 1236).  
 5) Äthylester d. 4,5-Diketo-1,2-Diphenyltetrahydropyrrol-3-Carbonsäure. Sm. 171° (173°). Na, K + 3½H<sub>2</sub>O, Ba, Cu, Ag (B. 30, 602; 31, 1307; C. r. 139, 211 C. 1904 [2] 636; C. 1907 [2] 1788). — IV, 368; \*IV, 218.  
 6) Diacetat d. 2,8-Dioxy-3,7-Dimethylakridin. Sm. 202° (B. 38, 3795 C. 1906 [1] 58).  
 7) 2-Benzoat d. 2-Oximido-1,1-Dioxy-1,2-Dihydronaphtalin-1,1-Dimethyläther. Sm. 109–110° (B. 36, 4171 C. 1904 [1] 287).  
 8)  $\beta$ ,2'-Methylimid d.  $\alpha\beta$ -Diphenylpropan- $\beta$ ,2,2'-Tricarbonsäure. Sm. 145–147° (B. 27, 2495). — II, 2027.  
 9) Verbindung (aus 2-Nitrobenzoylbenzylmalonsäurediäthylester). Sm. 147° u. Zers. (A. 251, 384). — II, 1978.
- C<sub>19</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>** C 65,0 — H 4,9 — O 18,2 — N 12,0 — M. G. 351.  
 1) Dimethylamidotolamidonaphtazoxoniumanhydrid (C. 1902 [2] 459).  
 2) Äthylester d. 4-Benzoylamido-5-Keto-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 194–195° (B. 24, 1260). — IV, 713.  
 3) Äthylester d. 3-Methyl-1-Phenyl-5-[2-Nitrophenyl]pyrazol-4-Carbonsäure. Sm. 146° (B. 18, 2260). — IV, 949.  
 4) Äthylester d. 3-Methyl-1-Phenyl-5-[4-Nitrophenyl]pyrazol-4-Carbonsäure. Sm. 128° (B. 18, 2257). — IV, 949.  
 5) Äthylester d. 5-Methyl-3-[3-Nitrophenyl]-1-Phenylpyrazol-4-Carbonsäure. Sm. 105,5–106,5° (C. 1906 [1] 1353).  
 6) Äthylester d. 5-Methyl-3-[4-Nitrophenyl]-1-Phenylpyrazol-4-Carbonsäure. Sm. 107–108° (C. 1906 [1] 1354).  
 7) Äthylester d. 5-Benzoxyl-1-[4-Methylphenyl]-1,2,3-Triazol-4-Carbonsäure. Sm. 117–120° (A. 338, 160 C. 1905 [1] 1165).  
 8) 3-Acetat d. 3-Oxy-5,6-Di[4-Oxyphenyl]-1,2,4-Triazin-5',6'-Dimethyläther. Sm. 157° u. Zers. (A. 339, 270 C. 1905 [2] 47).  
 9) Dibenzoat d. 2,6-Di[Oximido]hexahydropyridin (Dibenzoylglutarenimidodioxim). Sm. 179–180° (B. 22, 2971). — II, 1210.
- C<sub>19</sub>H<sub>17</sub>O<sub>4</sub>Cl** 1) Oxoniumchlorid d. 7,4',5'-Trioxy-2,3-Indenobenzpyran-7,4',5'-Trimethyläther + H<sub>2</sub>O. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> (Soc. 93, 1106 C. 1908 [2] 608).  
 2) Oxoniumchlorid d. 7,4',5'-Trioxy-4,3-Indenobenzpyrantrimethyläther + 3H<sub>2</sub>O. + FeCl<sub>3</sub>, 2 + PtCl<sub>4</sub> + 2H<sub>2</sub>O (Soc. 93, 1150 C. 1908 [2] 613).
- C<sub>19</sub>H<sub>17</sub>O<sub>4</sub>Br** 1) 3,5-Diäthyläther d.  $\beta$ -Brom-3,5-Dioxy-1-Benzyliden-1,2-Dihydrobenzofuran. Sm. 205° (B. 32, 2266). — \*II, 532.  
 2) Oxoniumbromid d. 7,4',5'-Trioxy-2,3-Indenobenzpyran-7,4',5'-Trimethyläther. + CdBr<sub>2</sub> (Soc. 93, 1107 C. 1908 [2] 608).  
 3)  $\alpha\gamma$ -Lakton d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Benzylbutan- $\gamma\delta$ -Dicarbonsäure. Sm. 157–159° u. Zers. (A. 308, 180). — \*II, 1146.  
 4)  $\alpha\gamma$ -Lakton d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha\alpha$ -Diphenylpropan- $\beta\gamma$ -Dicarbonsäure- $\beta$ -Äthylester. Sm. 95,5–96,5° (A. 308, 92). — \*II, 1146.
- C<sub>19</sub>H<sub>17</sub>O<sub>4</sub>Br<sub>3</sub>** 1)  $\alpha\gamma$ -Lakton d.  $\beta\gamma\delta$ -Tribrom- $\alpha$ -Oxy- $\alpha\delta$ -Di[4-Methoxyphenyl]butan- $\gamma$ -Carbonsäure. Sm. 140° u. Zers. (A. 255, 302). — II, 1971.
- C<sub>19</sub>H<sub>17</sub>O<sub>5</sub>N** C 67,3 — H 5,0 — O 23,6 — N 4,1 — M. G. 339.  
 1) Dimethyläther d.  $\alpha$ -Phtalylamidoäthyl-3,4-Dioxyphenylketon? Sm. 212° (D. R. P. 209962 C. 1909 [1] 1951).  
 2) Dimethyläther d.  $\beta$ -Phtalylamidoäthyl-3,4-Dioxyphenylketon? Sm. 175° (D. R. P. 209962 C. 1909 [1] 1951).  
 3) 1,8-Diketo-9-[4-Nitrophenyl]-1,2,3,4,5,6,7,8-Oktahydroxanthren. Sm. 246° (A. 309, 376). — \*III, 583.  
 4) Laktam d.  $\alpha$ -Benzoylamido- $\beta$ -[3,4,5-Trimethoxyphenyl]akrylsäure. Sm. 165–166° (B. 41, 3663 C. 1908 [2] 1864).  
 5) Äthylester d.  $\alpha$ -Benzoylamido- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 136° (B. 42, 1190 C. 1909 [1] 1713).  
 6) 4-Äthoxyphenylamid d. 4-Keto-7-Methyl-3,4-Dihydro-1,2-Benzpyron-3-Carbonsäure. Sm. 218° (A. 367, 229 C. 1909 [2] 1236).



- $C_{19}H_{17}O_5N_3$  C 62,1 — H 4,6 — O 21,8 — N 11,4 — M. G. 367.
- 1) Äthylester d.  $\delta$ -Phenylazo- $\gamma$ -Keto- $\alpha$ -[4-Nitrophenyl]- $\alpha$ -Buten- $\delta$ -Carbonsäure. Zers. oberhalb 100°. Na (B. 36, 1450 C. 1903 [1] 1345). — \*IV, 1060.
  - 2) Äthylester d. 6-Keto-2-Phenyl-4-[3-Nitrophenyl]-3,4,5,6-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 181—182° (Soc. 83, 723 C. 1903 [2] 55). — \*IV, 696.
- $C_{19}H_{17}O_5N_5$  C 57,5 — H 4,3 — O 20,2 — N 17,7 — M. G. 395.
- 1) Äthylester d.  $\alpha$ -[4-Nitrophenyl]azo- $\alpha$ -[5-Keto-1-Phenyl-4,5-Dihydropyrazolyl-3-]essigsäure. Sm. 224° u. Zers. (B. 34, 86). — \*IV, 1080.
  - 2) Äthylester d. 5-Keto-4-[4-Nitrophenyl]azo-1-Phenyl-4,5-Dihydropyrazol-3-Methylcarbonsäure. Sm. 189° (B. 34, 84). — \*IV, 1080.
- $C_{19}H_{17}O_5Cl$  1) Oxoniumchlorid d. 7,8,4,5'-Tetraoxy-4,3-Indenobenzpyran-7,8,4'-Trimethyläther. + FeCl<sub>3</sub> (Soc. 93, 1151 C. 1908 [2] 613).
- 2) 3,6-Diacetat d. 5-Chlor-1,3,6-Trioxypentanthren-1-Äthyläther. Sm. 152—153,5° (B. 34, 1555).
- $C_{19}H_{17}O_5Br$  1) Methylester d. 5-Brom-3,4,8-Trioxyphenanthrentrimethyläther-9-Carbonsäure. Sm. 132° (B. 42, 3502 C. 1909 [2] 1459).
- $C_{19}H_{17}O_5Br_3$  1) Trimethyläther d. Tribrombrasilin. Sm. 109—112° (B. 27, 527). — III, 654.
- 2) 6-Acetate d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[p-Brom-2,4,6-Trioxyphenyl]- $\alpha$ -Phenylpropan-2,4-Dimethyläther. Sm. 185° (B. 32, 2263). — \*III, 168.
- $C_{19}H_{17}O_6N_3$  C 59,5 — H 4,4 — O 25,1 — N 11,0 — M. G. 383.
- 1) 4'-Diacetylamido-4-Acetoxyzobenzol-3-Carbonsäure. Sm. 200° u. Zers. (C. 1908 [2] 310).
  - 2) Äthylester d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[2-Nitrophenyl]propan- $\beta$ -Carbonsäure. Sm. 81° (B. 29, 638). — \*II, 1097.
  - 3) Äthylester d.  $\beta$ -Cyan- $\alpha\gamma$ -Di[4-Nitrophenyl]propan- $\beta$ -Carbonsäure. Sm. 164—165° (G. 32 [2] 358 C. 1903 [1] 629).
- $C_{19}H_{17}O_6Br$  1) Bromtrimethylbrasilon. Zers. bei 225° (B. 36, 399 C. 1903 [1] 587). — \*III, 480.
- $C_{19}H_{17}O_6Br_3$  1) Tetramethyläther d. 3,6,8-Tribrom-5,7-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 200° u. Zers. (B. 37, 2626 C. 1904 [2] 538).
- $C_{19}H_{17}O_7N$  C 61,4 — H 4,6 — O 30,2 — N 3,8 — M. G. 371.
- 1) Nornarkotin (A. Spl. 7, 59, 62) — III, 916.
  - 2)  $\alpha$ -[3,4-Dioxyphenyl]acetylamido- $\beta$ -[3,4-Dioxyphenyl]propiondimethyläthersäure. Sm. 179° (B. 42, 1192 C. 1909 [1] 1713).
  - 3) Triacetat d.  $\alpha$ -Oximido-2,3,4-Trioxydiphenylmethan. Sm. 135° (A. 269, 303). — III, 202.
  - 4) Phenylamid d. 3,4,5-Triacetoxybenzol-1-Carbonsäure. Sm. 161 bis 162° (A. 272, 206; Bl. [3] 9, 847). — II, 1923.
- $C_{19}H_{17}O_7Br$  1) 1<sup>2</sup>,2-Lakton d. 2-Brom-2,5,6-Trioxy-1-[4,5-Dioxyphenyl]-1,2-Dihydrobenzofuran-1<sup>4</sup>,1<sup>5</sup>,5,6-Tetramethyläther-1<sup>2</sup>-Carbonsäure. Sm. 158° u. Zers. (Soc. 95, 407 C. 1909 [1] 1572).
- $C_{19}H_{17}O_8N$  C 58,9 — H 4,4 — O 33,1 — N 3,6 — M. G. 387.
- 1) Nitropseudotrimethylbrasilon. Sm. 210—214° (M. 27, 760 C. 1906 [2] 1267).
  - 2)  $\alpha$ -[2-Methoxyphenyl]- $\beta$ -[2-Nitro-3-Methoxy-4-Acetoxyphenyl]-akrylsäure. Sm. 217—218° (B. 33, 178). — \*II, 1145.
  - 3)  $\alpha$ -[4-Methoxyphenyl]- $\beta$ -[2-Nitro-3-Acetoxy-4-Methoxyphenyl]-akrylsäure. Sm. 215° (B. 35, 4407 C. 1903 [1] 342).
- $C_{19}H_{17}O_{10}N$  C 54,4 — H 4,1 — O 38,2 — N 3,3 — M. G. 419.
- 1) Tri[Methylcarbonat] d. 3,4,5-Trioxybenzol-1-Carbonsäurephenylamid. Sm. 175—176° (B. 41, 2887 C. 1908 [2] 1430).
- $C_{19}H_{17}O_{12}N_5$  C 45,0 — H 3,4 — O 37,8 — N 13,8 — M. G. 507.
- 1) Diäthylester d. 2,4,6-Trinitro-3-Phenylamidophenylnitromethandicarbonsäure. Sm. 119° u. Zers. (Am. 14, 342). — II, 1842.
- $C_{19}H_{17}O_{13}N$  C 48,8 — H 3,6 — O 44,5 — N 3,0 — M. G. 467.
- 1) Nitroexanthinsäure. Pb (J. pr. [1] 37, 392). — II, 2103.
- $C_{19}H_{17}NBr_2$  1) Triphenylmethylandibromid (B. 17, 750). — II, 641.
- 2) 2-[ $\alpha\beta$ -Dibrom- $\beta$ -4-Methylphenyläthyl]-6-Methylchinolin. Sm. 167° (B. 38, 3704 C. 1906 [1] 51).

- C<sub>18</sub>H<sub>17</sub>NJ<sub>2</sub>** 1) Triphenylmethyramididjodid (*B.* 17, 749). — II, 641.
- C<sub>18</sub>H<sub>17</sub>N<sub>2</sub>Cl** 1)  $\alpha$ -Chlor-4,4'-Diamidotriphenylmethan (*A.* 217, 245). — II, 1084.
- C<sub>18</sub>H<sub>17</sub>N<sub>2</sub>P** 1) Phenylbenzylhydrazonphenylphosphin. Sm. 141° (*A.* 270, 132). — IV, 1647.
- C<sub>18</sub>H<sub>17</sub>N<sub>3</sub>Cl<sub>2</sub>** 1) Chlormethylat d. 3-Chlor-4,6-Dimethyl-2-[2-Naphtyl]-2,1,5-Benzotriazol. Sm. 264° (*A.* 366, 406 *C.* 1909 [2] 290).
- C<sub>18</sub>H<sub>17</sub>N<sub>3</sub>S** 1)  $\alpha$ -Phenylamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 173—174° (*B.* 25, 3115). — IV, 1496.
- 2)  $\beta$ -Diphenylamido- $\alpha$ -Phenylthioharnstoff. Sm. 181° (*B.* 25, 3113). — IV, 680.
- 3)  $\alpha$ -Phenyl- $\beta$ -[4-Biphenylamido]thioharnstoff. Sm. 182° (*B.* 27, 3106). — IV, 970.
- 4) 4-Methylphenyläther d. 4'-Merkaptodiazocamidobenzol. Sm. 85° (*J. pr.* [2] 68, 275 *C.* 1903 [2] 994).
- C<sub>18</sub>H<sub>17</sub>N<sub>4</sub>Cl** 1)  $\alpha$ -Phenylimido- $\alpha$ -Phenylamido- $\alpha$ -[4-Chlorphenyl]hydrazidomethan. Sm. 154°. HCl (*B.* 39, 1398 *C.* 1906 [1] 1658).
- C<sub>18</sub>H<sub>17</sub>N<sub>4</sub>Br** 1)  $\beta$ -[4-Bromphenyl]hydrazidophenylimidophenylamidomethan. Sm. 141° (*J. pr.* [2] 74, 542 *C.* 1907 [1] 481).
- C<sub>18</sub>H<sub>17</sub>N<sub>6</sub>S<sub>6</sub>** 1) Verbindung (aus Aceton u. 5-Sulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,2,4-Thiodiazol). Sm. 186—187° u. Zers. (*J. pr.* [2] 60, 203). — \*IV, 446.
- C<sub>18</sub>H<sub>17</sub>Cl<sub>2</sub>P** 1) Diphenylbenzylphosphindichlorid. Sm. 187° (*B.* 21, 1506). — IV, 1662.
- C<sub>18</sub>H<sub>17</sub>J<sub>2</sub>As** 1) Jodmethyltriphenylarsoniumjodid. Sm. 227° (*A.* 321, 171 *C.* 1902 [2] 44). — \*IV, 1191.
- C<sub>18</sub>H<sub>17</sub>SP** 1) Diphenyl-4-Methylphenylphosphinsulfid. Sm. 139° (*B.* 21, 1512). — IV, 1671.
- C<sub>18</sub>H<sub>17</sub>SA<sub>3</sub>** 1) Diphenyl-4-Methylphenylarsinsulfid. Sm. 135° (*A.* 321, 189 *C.* 1902 [2] 46). — \*IV, 1194.
- C<sub>18</sub>H<sub>18</sub>ON<sub>2</sub>** C 78,6 — H 6,2 — O 5,5 — N 9,7 — M. G. 290.
- 1)  $\alpha$ -Oxy-4,4'-Diamidotriphenylmethan. Sm. 173—175°. HCl (*B.* 15, 234; *A.* 217, 241; *B.* 37, 2861 *C.* 1904 [2] 776; *Soc.* 95, 899 *C.* 1909 [2] 280). — II, 1084.
- 2)  $\beta$ -Diamido-2-Oxytriphenylmethan (*B.* 16, 1307). — II, 904.
- 3) 4'-Phenylamido-4-Oxy-3-Methyldiphenylamin (D.R.P. 150553 *C.* 1904 [1] 1467).
- 4) 4-[4-Dimethylamidobenzyliden]amido-1-Oxynaphtalin. Sm. 199° (*C.* 1907 [1] 109).
- 5) 1-[4-Dimethylamidobenzyliden]amido-2-Oxynaphtalin. Sm. 109° (*C.* 1907 [1] 109).
- 6) 2-Keto-1,3-Di-[4-Amidobenzyliden]-R-Pentamethylen (*B.* 36, 1505 *C.* 1903 [1] 1352).
- 7)  $\alpha$ -Phenylhydrazon- $\alpha$ -[1-Oxy-2-Naphtyl]propan. Sm. 128° (*J. pr.* [2] 43, 96). — IV, 775.
- 8) 2-Naphtyläther d.  $\beta$ -Phenylhydrazon- $\alpha$ -Oxypropan. Sm. 154° (*B.* 28, 1254; *A.* 312, 312). — \*II, 520.
- 9) 2-Oxy-1-[2,4,5-Trimethylphenyl]azonaphtalin. Sm. 163—164° (*Soc.* 63, 934). — IV, 1438.
- 10) Äthyläther d. 4-Oxy-1-[2-Methylphenyl]azonaphtalin. Sm. 94° (*B.* 19, 2488). — IV, 1435.
- 11) Äthyläther d. 4-Oxy-1-[4-Methylphenyl]azonaphtalin. Sm. 126 bis 127° (*B.* 19, 2487; 27, 2353). — IV, 1435.
- 12) 4-Benzoylmethyl-3,5-Dimethyl-1-Phenylpyrazol. Sm. 87—88° (*C. r.* 133, 47; *C. r.* 134, 844 *C.* 1902 [1] 1164). — \*IV, 360.
- 13) 4[oder 5]-Keto-5[oder 4]-[4-Isopropylbenzyliden]-2-Phenyl-4,5-Dihydropyrazol. Sm. 245° (*A.* 337, 280 *C.* 1905 [1] 377).
- 14) 6-Oxy-4-Phenyl-2-[4-Isopropylphenyl]-1,3-Diazin. Sm. 227° (*B.* 30, 2008). — IV, 1045.
- 15) 6-Oxy-4-Methyl-2,5-Dibenzyl-1,3-Diazin. Sm. 192° (*B.* 22, 1623). — IV, 1044.
- 16) 6-Oxy-4-Methyl-2-[4-Methylphenyl]-5-Benzyl-1,3-Diazin. Sm. 240° (*B.* 23, 3826). — IV, 1045.
- 17) 4-Methyl-2-[2-Propionylamidophenyl]chinolin. Sm. 137° (*C.* 1900 [1] 426). — \*IV, 691.

- C<sub>19</sub>H<sub>18</sub>ON<sub>2</sub>** 18) **2-Oxy-1-Äthyl-3-Phenyl-1,2-Dihydro- $\alpha$ -Naphtimidazol**. Sm. 161° (2HCl, PtCl<sub>4</sub>) (B. 27, 2776). — IV, 918.
- 19) **Methylhydroxyd d. 9-Amido-10-Methyl- $\alpha$ -Phenakridin**. Nitrat, Bichromat (B. 33, 2473). — \*IV, 718.
- 20) **Phenylimid d.  $\beta$ -Phenylacetylamidopropan- $\alpha\beta$ -Dicarbonsäure**. Sm. 168—169° (A. 261, 145). — II, 440.
- 21) **4-Methylbenzylidenhydrazid d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure**. Sm. 204° (A. 367, 27 C. 1909 [2] 526).
- C<sub>19</sub>H<sub>18</sub>ON<sub>4</sub>** C 71,7 — H 5,7 — O 5,0 — N 17,6 — M. G. 318.
- 1) **Benzoldiazo-4-Nitrosophenyl-4-Tolylamin**. Sm. bei 125° u. Zers. (A. 255, 165). — IV, 798.
- 2) **Di[4-Phenyl-4,5-Dihydro-5-Pyrazolyl]keton?** Sm. 214—216° (C. 1905 [2] 1184; G. 36 [2] 55 C. 1906 [2] 1130).
- 3) **Di[5-Phenyl-4,5-Dihydro-4-Pyrazolyl]keton?** Sm. 174—176° (C. 1905 [2] 1184; G. 36 [2] 55 C. 1906 [2] 1130).
- 4) **Harnstoff** (aus 5-Phenylazo-2,4-Dimethylpyrrol u. Phenylisocyanat). Sm. 70—71° (C. 1901 [1] 1323). — \*IV, 1076.
- C<sub>19</sub>H<sub>18</sub>OBr<sub>2</sub>** 1, 3 - **Dibrom-2-Keto-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen**. Sm. 179° u. Zers. (Soc. 85, 1483 C. 1905 [1] 172).
- 2) **3,4-Dibrom-2-Keto-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen**. Sm. 185° u. Zers. (Soc. 85, 1486 C. 1905 [1] 172).
- 3) **Verbindung** (aus Isoamyloxanthranol). Sm. 120° u. Zers. (A. 212, 95). — III, 244.
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>** C 74,5 — H 5,9 — O 10,4 — N 9,1 — M. G. 306.
- 1) **Methylenäther d.  $\epsilon$ -Phenylhydrazon- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadien**. Sm. 141° (152—152,5°) (B. 28, 1193; Ar. 246, 352 C. 1908 [2] 888; B. 41, 2382 C. 1908 [2] 890). — IV, 775.
- 2) **Pyrazolon** (aus  $\delta$ -Keto- $\gamma$ -Benzoylpentan- $\beta$ -Carbonsäureäthylester). Sd. 250—253°<sub>55</sub> (C. 1909 [2] 799).
- 3) **Äthyläther d. 5-Keto-4-[2-Oxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol**. Sm. 142° (B. 33, 865). — \*IV, 637.
- 4) **Äthyläther d. 5-Keto-4-[3-Oxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol**. Sm. 107° (B. 33, 865). — \*IV, 637.
- 5) **Äthyläther d. 5-Keto-4-[4-Oxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol**. Sm. 130° (B. 33, 866). — \*IV, 637.
- 6) **2-Keto-3-Acetyl-1-Äthyl-4,5-Diphenyl-2,3-Dihydroimidazol**. Sm. 122—123° (A. 368, 229 C. 1909 [2] 1468).
- 7) **3,5-Dimethyl-4-Benzyl-1-Phenylpyrazol-4<sup>2</sup>-Carbonsäure**. Sm. 217 bis 218° (B. 40, 191 C. 1907 [1] 553).
- 8) **Äthylester d. 5-Methyl-1,3-Diphenylpyrazol-4-Carbonsäure**. Sm. 110° (105°) (B. 18, 932; C. 1906 [1] 139, 1353). — IV, 949.
- 9) **Äthylester d. 3-Methyl-1,5-Diphenylpyrazol-4-Carbonsäure**. Sm. 121—122° (B. 18, 312; D.R.P. 33536). — IV, 948; \*IV, 627.
- 10) **Äthylester d. 3,6-Diphenyl-4,5-Dihydro-1,2-Diazin-4-Carbonsäure**. Sm. 116—117° (B. 40, 4601 C. 1908 [1] 265).
- 11) **Acetat d.  $\alpha$ -[6-Oxy-3-Methylphenyl]- $\beta$ -[1-Naphtyl]hydrazin**. Sm. 139—141° (A. 365, 312 C. 1909 [1] 1865).
- 12) **Acetat d.  $\alpha$ -[6-Oxy-3-Methylphenyl]- $\beta$ -[2-Naphtyl]hydrazin** (A. 365, 313 C. 1909 [1] 1866).
- 13) **Phenylamid d.  $\beta$ -Oxy- $\alpha$ -Cyan- $\gamma$ -Phenylpropenäthyläther- $\alpha$ -Carbonsäure**. Sm. 85° (Soc. 91, 1906 C. 1908 [1] 251).
- 14) **Phenylamid d.  $\gamma$ -Cyan- $\beta$ -Keto- $\alpha$ -Phenylpentan- $\gamma$ -Carbonsäure**. Sm. 129° (Soc. 91, 1906 C. 1908 [1] 252).
- 15) **2-Methylphenylimid d.  $\alpha$ -[2-Methylphenyl]amidopropen- $\alpha\beta$ -Dicarbonsäure** (2-M. d. 2-Toluidocitrakonsäure). Sm. 138° (J. pr. [2] 74, 301 C. 1906 [2] 1819).
- 16) **4-Methylphenylimid d.  $\alpha$ -[4-Methylphenyl]amidopropen- $\alpha\beta$ -Dicarbonsäure** (4-M. d. 4-Toluidocitrakonsäure). Sm. 177° (J. pr. [2] 74, 300 C. 1906 [2] 1819).
- 17) **4-Methoxybenzylidenhydrazid d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadien- $\delta$ -Carbonsäure**. Sm. 203° (A. 367, 27 C. 1909 [2] 526).
- 18) **Verbindung** (aus Indigo). Sm. 222° (B. 42, 1570 C. 1909 [1] 1934).



- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>N<sub>4</sub>** C 68,2 — H 5,4 — O 9,6 — N 16,8 — M. G. 334.
- 1) 4-Methylnitrosamido-6-[2-Oxy-1-Naphtyl]azo-1,3-Dimethylbenzol. Sm. 195—196° (*Soc.* 91, 364 *C.* 1907 [1] 1404).
  - 2) 5-Keto-1-Benzoyl-4-[2,4-Dimethylphenyl]azo-3-Methyl-4,5-Dihydropyrazol. Sm. 171—172° (*B.* 41, 2363 *C.* 1908 [2] 519).
  - 3) Äthylester d.  $\alpha$ -Cyan- $\alpha$ -Imido- $\gamma$ -Phenylhydrazonbutan- $\beta$ -Carbonsäure. Sm. 163° (*A.* 332, 153 *C.* 1904 [2] 192).
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) Dimethyläther d.  $\gamma\gamma$ -Dichlor- $\alpha\epsilon$ -Di[4-Oxyphenyl]- $\alpha\delta$ -Pentadiën. Sm. 86—87° (+PCl<sub>5</sub> + C<sub>6</sub>H<sub>6</sub>) (*B.* 39, 3003 *C.* 1906 [2] 1430; *B.* 42, 3974 *C.* 1909 [2] 1733).
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>Cl<sub>4</sub>** 1) Dimethyläther d.  $\gamma\gamma\delta\epsilon$ -Tetrachlor- $\alpha\epsilon$ -Di[4-Oxyphenyl]- $\alpha$ -Penten. Sm. 106—107° u. Zers. (*B.* 39, 3004 *C.* 1906 [2] 1430).
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>Br<sub>2</sub>** 1)  $\beta$ -Dibrom-2,6-Diphenyl-3,5-Dimethyltetrahydro-1,4-Pyron. Sm. 144° u. Zers. (*B.* 29, 1353). — III, 239.
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>S<sub>2</sub>** 1) Verbindung (aus Merkaptobenzol u. 2-Methyl-1,4-Benzochinon). Sm. 95 bis 97° (*A.* 336, 159 *C.* 1904 [2] 1300).
- C<sub>19</sub>H<sub>18</sub>O<sub>8</sub>N<sub>2</sub>** C 70,8 — H 5,6 — O 14,9 — N 8,7 — M. G. 322.
- 1)  $\gamma$ -Keto- $\alpha$ -[4-Nitrophenyl]- $\epsilon$ -[4-Dimethylamidophenyl]- $\alpha\delta$ -Pentadiën. Sm. 215°. HCl (*C.* 1906 [2] 1325).
  - 2)  $\gamma$ -Keto- $\alpha\gamma$ -Di[3-Acetylamidophenyl]propen. Sm. 150° (*B.* 34, 3528). — \*III, 180.
  - 3) 1-Methylacetylamido-4-Dimethylamido-9,10-Anthrachinon (D.R.P. 192201 *C.* 1908 [1] 571).
  - 4) Dehydrodiacetyl-päonolphenylhydrazon. Sm. 213° (*B.* 25, 1298). — IV, 772.
  - 5) 4',4'-Dimethyläther d. 5-Keto-4-[3,4-Dioxybenzyliden]-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 160° (*B.* 33, 868). — \*IV, 637.
  - 6) Äthyläther d. 5-Oxy-2-Keto-1-Acetyl-4,5-Diphenyl-2,5-Dihydroimidazol. Sm. 172—173° (*A.* 368, 191 *C.* 1909 [2] 1464).
  - 7) Nitroapocinchen. Sm. 228° u. Zers. (2HCl, PtCl<sub>4</sub>), Na + 1½H<sub>2</sub>O (*J. pr.* [2] 61, 17). — \*III, 635.
  - 8) isom. Nitroapocinchen. Sm. unterhalb 100° u. Zers. HCl + H<sub>2</sub>O (*J. pr.* [2] 61, 20). — \*III, 634.
  - 9) Strychninolon. Sm. 236° (corr.) (*B.* 42, 2499 *C.* 1909 [2] 715).
  - 10) 3-Keto-4-Äthyl-2,6-Diphenyl-2,3,4,5-Tetrahydro-1,2-Diazin-4-Carbonsäure? Sm. 134° (*C.* 1904 [1] 1259).
  - 11) Äthylester d. 5-Keto-3-Benzyl-1-Phenyl-4,5-Dihydropyrazol-4-Carbonsäure. Sm. 124—127° (*B.* 29, 1990). — IV, 718.
  - 12) Äthylester d. 5-Keto-4-Benzyl-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 194° (*B.* 31, 556). — IV, 949.
  - 13) Äthylester d. 6-Keto-2,4-Diphenyl-3,4,5,6-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 188° (*Soc.* 83, 376 *C.* 1903 [1] 845, 1144). — \*IV, 696.
  - 14) Benzoat d. 3-Keto-5-Methyl-1-[ $\beta$ -Oxyäthyl]-2-Phenyl-2,3-Dihydropyrazol. Sm. 182° (D.R.P. 74912). — \*IV, 327.
  - 15) 3-Methoxyl-4-Oxybenzylidenhydrazid d.  $\alpha$ -Phenyl- $\alpha\gamma$ -Butadiën- $\delta$ -Carbonsäure. Sm. 225° (*A.* 367, 28 *C.* 1909 [2] 526).
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>N<sub>4</sub>** C 65,1 — H 5,1 — O 13,7 — N 16,1 — M. G. 350.
- 1)  $\alpha\gamma$ -Di[Acetylphenylhydrazon]- $\beta$ -Ketopropan. Sm. 167—168° u. Zers. (*B.* 27, 220). — IV, 762.
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>Br<sub>4</sub>** 1) Dimethyläther d.  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha\epsilon$ -Di[2-Oxyphenyl]-pentan. Sm. 197° (*B.* 31, 1511; *C.* 1899 [2] 187; *J. pr.* [2] 60, 148). — \*III, 175.
- 2) Dimethyläther d.  $\alpha\beta\delta\epsilon$ -Tetrabrom- $\gamma$ -Keto- $\alpha\epsilon$ -Di[4-Oxyphenyl]pentan. Sm. 157—159° u. Zers. (*B.* 36, 1475 *C.* 1903 [1] 1348).
- C<sub>19</sub>H<sub>18</sub>O<sub>4</sub>N<sub>2</sub>** C 67,4 — H 5,3 — O 18,9 — N 8,3 — M. G. 338.
- 1) 4[oder 5]-Oximido-5[oder 4]-Keto-1,2-Diphenyltetrahydropyrrol-3-Carbonsäure. 2 isom. Formen. Sm. 110° u. 224° (*B.* 30, 603). — IV, 368.
  - 2) Äthylester d.  $\alpha$ -[Acetylphenylhydrazon]benzoylessigsäure. Sm. 151° (*B.* 35, 925 *C.* 1902 [1] 807). — \*IV, 1059.
  - 3) Diäthylester d. 2,2'-Azodiphenylmethan-4,4'-Dicarbonsäure. Sm. 233° (*C. r.* 149, 402 *C.* 1909 [2] 1451).

- $C_{19}H_{18}O_4N_2$  4) Acetat d. 2-Acetyl-4-Oxy-3-Keto-1,5-Diphenyltetrahydropyrazol. Sm. 152° (*Soc.* 85, 1493 *C.* 1905 [1] 173).
- 5) Di[Phenylamid] d.  $\alpha\epsilon$ -Diketopentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 192 bis 193° (*Bl.* [4] 1, 82 *C.* 1907 [1] 1183).
- 6) Di[2-Acetylphenylamid] d. Malonsäure. Sm. 159–160° (*Ar.* 240, 144 *C.* 1902 [1] 819). — \*III, 95.
- $C_{19}H_{18}O_4Br_2$  1) 2-Acetat d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[2,4-Dioxyphenyl]- $\alpha$ -Phenylpropan-4-Äthyläther. Sm. 118–119° (*B.* 31, 698). — \*III, 168.
- $C_{19}H_{18}O_4S_2$  1)  $\beta$ -Phenylsulfon- $\alpha$ -[2-Naphtylsulfon]propan. Sm. 123° (*J. pr.* [2] 53, 498). — \*II, 528.
- $C_{19}H_{18}O_5N_2$  C 64,4 — H 5,1 — O 22,6 — N 7,9 — M. G. 354.
- 1) 1,1-Dimethyläther-2-[4-Nitrobenzyl]äther d. 2-Oximido-1,1-Dioxy-1,2-Dihydronaphtalin. Sm. 97–98° (*B.* 36, 4170 *C.* 1904 [1] 287).
- 2) Bisdsmethylbrucinolon (*B.* 42, 3709 *C.* 1909 [2] 1878).
- 3)  $\alpha$ -[3-Methylphenyl]amido- $\alpha$ -[3-Methylphenyl]imido- $\beta$ -Ketopropan-6,6'-Dicarbonsäure (Pyrotraubenmetadihomoanthranilsäure). Sm. 280° u. Zers. (*B.* 30, 1192). — \*II, 829.
- 4) Diäthylester d. Azooxydiphenylmethandicarbonsäure. Sm. 204° (*C. r.* 144, 1223 *C.* 1907 [2] 407).
- $C_{19}H_{18}O_5N_4$  C 59,7 — H 4,7 — O 20,9 — N 14,7 — M. G. 382.
- 1) Äthyläther d.  $\beta$ -Cyan- $\beta$ -Imidooxymethyl- $\alpha\gamma$ -Di[4-Nitrophenyl]propan. Sm. 169–170° (*G.* 32 [2] 363 *C.* 1903 [1] 629).
- $C_{19}H_{18}O_5Br_2$  1) 2<sup>2</sup>,2<sup>3</sup>,2<sup>4</sup>-Trimethyläther d. 4-Brom-7-Oxy-4-Brommethyl-2-[2,3,4-Trioxyphehyl]-1,4-Benzpyran. Sm. 215° u. Zers. HBr (*B.* 39, 222 *C.* 1906 [1] 681).
- 2) 2-Acetat d.  $\alpha\beta$ -Dibrom- $\gamma$ -Keto- $\gamma$ -[2,3,4-Trioxyphehyl]- $\alpha$ -Phenylpropan-3,4-Dimethyläther. Sm. 140° (*B.* 36, 4239 *C.* 1904 [1] 381).
- 3)  $\gamma^2$ -Acetat d.  $\beta\gamma$ -Dibrom- $\alpha$ -Keto- $\gamma$ -[2-Oxyphenyl]- $\alpha$ -[3,4-Dioxyphenyl]propan- $\alpha^3$ , $\alpha^4$ -Dimethyläther. Sm. 174–175° u. Zers. (*B.* 41, 1340 *C.* 1908 [1] 1981).
- 4)  $\alpha$ -Acetat-4-Benzozat d. 5-Brom-3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3-Methyläther. Sm. 112–114,5° (*B.* 35, 119 *C.* 1902 [1] 474).
- $C_{19}H_{18}O_5Br_4$  1) 2<sup>2</sup>,2<sup>3</sup>,2<sup>4</sup>-Trimethyläther d. 2,3,4-Tribrom-7-Oxy-4-Brommethyl-2-[2,3,4-Trioxyphehyl]-2,3-Dihydro-1,4-Benzpyran. Sm. noch nicht bei 300° (*B.* 39, 223 *C.* 1906 [1] 681).
- $C_{19}H_{18}O_6N_2$  C 61,6 — H 4,9 — O 25,9 — N 7,6 — M. G. 370.
- 1)  $\beta\delta$ -Diketo- $\gamma\gamma$ -Di[2-Nitrobenzyl]pentan. Sm. 123° (*C. r.* 143, 753 *C.* 1907 [1] 245).
- 2)  $\beta\delta$ -Diketo- $\gamma\gamma$ -Di[4-Nitrobenzyl]pentan. Sm. 229° (*C. r.* 143, 752 *C.* 1907 [1] 245).
- 3) 3,4-3',4'-Dimethylenäther d.  $\gamma$ -Oximido- $\delta$ [oder  $\epsilon$ ]-Oxamido- $\alpha\epsilon$ -Di[3,4-Dioxyphenyl]- $\alpha$ -Penten (Dipiperonalacetohydroxylaminoxim). Sm. 177–179° (*G.* 29 [2] 418). — \*III, 192.
- 4)  $\alpha\gamma$ -Di[Benzoylamido]propan-2,2'-Dicarbonsäure (Trimethylenphtalamidsäure). Ag<sub>2</sub> (*B.* 21, 2670). — II, 1798.
- 5) 4,4'-Di[Acetylamido]diphenylmethan-3,3'-Dicarbonsäure. Sm. 259 bis 261° u. Zers. (*A.* 324, 131 *C.* 1902 [2] 1253).
- 6) Di[Acetylphenylamido]methan-2,2'-Dicarbonsäure. Na (*A.* 324, 125 *C.* 1902 [2] 1253).
- 7) Amid d.  $\alpha$ -[3,4-Dioxyphenyl]acetylamido- $\beta$ -[3,4-Dioxyphenyl]propiondimethylenäthersäure. Sm. 189,5° (*B.* 42, 1191 *C.* 1909 [1] 1713).
- 8) Di[4-Acetoxyphenylamid] d. Methandicarbonsäure. Sm. bei 210° (*G.* 25 [2] 538). — \*II, 410.
- 9) Triacetylderivat d. Base  $C_{19}H_{18}O_3N_2$  (*B.* 35, 1483 *C.* 1902 [1] 1209).
- $C_{19}H_{18}O_6Br_2$  1)  $\alpha$ -Benzoat d. 6-Brom-2,3,4,5-Tetraoxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3,4-Methylenäther-2,5-Dimethyläther. Sm. 117–118° (*C.* 1903 [1] 970).
- $C_{19}H_{18}O_6Br_4$  1) Dibrompinoresinoldibromid. Sm. 254° (*M.* 18, 492). — \*III, 426.
- $C_{19}H_{18}O_6S$  1) Sulfonsäure (aus Dibenzalaceton). Na + 3H<sub>2</sub>O, K + 4H<sub>2</sub>O (*B.* 36, 1491 *C.* 1903 [1] 1350).
- $C_{19}H_{18}O_7N_2$  C 59,1 — H 4,7 — O 29,0 — N 7,2 — M. G. 386.
- 1)  $\alpha\gamma$ -Di[Benzoylamido]- $\beta$ -Oxypropan-2,2'-Dicarbonsäure ( $\beta$ -Oxytrime-thylenidphtalamidsäure). Sm. 120° (u. 205°). 2HCl, Ag<sub>2</sub> (*B.* 21, 2690). — II, 1798.

- $C_{19}H_{13}O_7N_4$  C 55,1 — H 4,3 — O 27,1 — N 13,5 — M. G. 414.  
 1) Carboxamidohippursäure. Ba (*J. pr.* [2] 1, 235). — II, 1188.
- $C_{19}H_{13}O_8N_2$  C 56,7 — H 4,5 — O 31,8 — N 6,9 — M. G. 402.  
 1) Methylendi[Phenylamidoessigsäurecarbonsäure. Sm. 206—207° u. Zers. (*C.* 1903 [2] 835).  
 2) Diäthylester d.  $\beta$ -Dinitrodiphenylmethan-4,4'-Dicarbonsäure. Sm. 117° (*C. r.* 141, 199 *C.* 1905 [2] 770).  
 3) Diacetat d.  $\beta\beta$ -Di[ $\beta$ -Nitro-4-Oxyphenyl]propan. Sm. 150° (*C.* 1904 [2] 1737).  
 4) Di[4-Methoxyl-3-Carboxylphenylamid] d. Malonsäure. Sm. 254° (*G.* 36 [2] 736 *C.* 1907 [1] 1122).
- $C_{19}H_{18}O_9N_2$  C 54,5 — H 4,3 — O 34,4 — N 6,7 — M. G. 418.  
 1) Diäthylester d. 4,6-Dinitro-3-Oxyphenylmalonphenyläthersäure. Na (*Am.* 26, 8).
- $C_{19}H_{18}O_9Cl_4$  1) Verbindung (aus Hanf) (*Soc.* 43, 19; 55, 204; *B.* 26, 2525). — I, 1080.  
 $C_{19}H_{18}O_{10}N_2$  C 52,5 — H 4,1 — O 36,9 — N 6,4 — M. G. 434.  
 1) Diäthylester d. Dioxymalondi[2-Nitrophenyläther]säure. Sm. 119° (*B.* 40, 3156 *C.* 1907 [2] 980).  
 2) Diäthylester d. Dioxymalondi[3-Nitrophenyläther]säure. Sm. 72° (*B.* 40, 3157 *C.* 1907 [2] 980).  
 3) Diäthylester d. Dioxymalondi[4-Nitrophenyläther]säure. Sm. 144° (*B.* 40, 3167 *C.* 1907 [2] 981).  
 4) isom. Diäthylester d. Dioxymalondi[4-Nitrophenyläther]säure. Sm. 119° (*B.* 40, 3168 *C.* 1907 [2] 981).
- $C_{19}H_{18}O_{10}N_4$  C 49,3 — H 3,9 — O 34,6 — N 12,1 — M. G. 462.  
 1) Diäthylester d. 2,4,6-Trinitro-3-Phenylamidophenylmethandicarbonsäure. Sm. 133° (*Am.* 14, 354). — II, 1842.
- $C_{19}H_{18}O_{11}N_4$  C 47,7 — H 3,8 — O 36,8 — N 11,7 — M. G. 478.  
 1) Diäthylester d.  $\alpha$ -Oxy- $\alpha$ -[ $\beta$ -Trinitro- $\beta$ -Amidophenyl]methan- $\alpha$ - $\alpha$ -Dicarbonsäure.  $\alpha$ -Modif. Sm. 143°;  $\beta$ -Modif. Sm. 122°. Na<sub>2</sub>, K (*Am.* 14, 347). — II, 1947.
- $C_{19}H_{18}NBr_3$  1) 2,5,8-Tribrom-1,3,4,6,7,9-Hexamethylakridin. Sm. 287° (*Soc.* 81, 287 *C.* 1902 [1] 528; *Soc.* 85, 1202 *C.* 1904 [2] 1060). — \*IV, 255.
- $C_{19}H_{18}NJ$  1) Jodäthylat d. 2-[ $\beta$ -Phenyläthenyl]chinolin. Sm. 216° (*B.* 41, 3058 *C.* 1908 [2] 1607).
- $C_{19}H_{18}NP$  1) Phenylamidophenyl-4-Methylphenylphosphin. Sm. 124° (*A.* 315, 61). — \*IV, 1179.
- $C_{19}H_{18}N_2Cl_2$  1) Verbindung (Base aus 4-Amido-1-Methylbenzol). Acetat (*B.* 23, 1483). — II, 511.
- $C_{19}H_{18}N_2Br_2$  1) Dehydrocinchendibromid. (2HCl, PtCl<sub>4</sub>) (*B.* 25, 1549). — III, 840.  
 $C_{19}H_{18}N_2S$  1) s-[4-Äthylphenyl]-1-Naphtylthioharnstoff. Sm. 148° (*B.* 16, 2023). — II, 610.  
 2) s-[4-Äthylphenyl]-2-Naphtylthioharnstoff. Sm. 158—159° (*B.* 16, 2022). — II, 619.  
 3)  $\alpha$ -Äthyl- $\alpha$ -Phenyl- $\beta$ -[1-Naphtyl]thioharnstoff. Sm. 129—129,5° (*B.* 37, 4326 *C.* 1905 [1] 165).  
 4)  $\alpha$ -Äthyl- $\alpha$ -Phenyl- $\beta$ -[2-Naphtyl]thioharnstoff. Sm. 128,5—129° (*B.* 37, 4326 *C.* 1905 [1] 165).  
 5)  $\alpha$ -Methyl- $\beta$ -[Phenyl-1-Naphtylmethyl]thioharnstoff. Sm. 175—176° (*C.* 1902 [2] 789).  
 6) 5-Thiocarbonyl-3-Methyl-4-[ $\alpha$ -Phenyläthyliden]-1-[4-Methylphenyl]-4,5-Dihdropyrazol. Sm. 106° (*A.* 361, 300 *C.* 1908 [2] 522).
- $C_{19}H_{18}N_2S_2$  1) Di[4-Amidophenyläther] d. Dimerkaptomethylbenzol. 2HCl (*B.* 41, 2271 *C.* 1908 [2] 692).
- $C_{19}H_{18}N_3Cl$  1) Chlormethylat d. 3-Methyl-2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. 2 + PtCl<sub>4</sub> (*B.* 24, 1006). — IV, 1393.
- $C_{19}H_{18}N_3J$  1) Jodmethylat d. 4,6-Dimethyl-2-[2-Naphtyl]-2,1,5-Benzotriazol. Sm. 264° u. Zers. (*A.* 366, 407 *C.* 1909 [2] 290).  
 2) Jodmethylat d. 3-Methyl-2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 244° (*B.* 24, 1006). — IV, 1393.  
 3) 3-Jodäthylat d. 1-Amido-2-Phenyl- $\beta\beta$ -Naphtimidazol. Sm. 195 bis 196° u. Zers. (*J. pr.* [2] 73, 562 *C.* 1906 [2] 884).
- $C_{19}H_{18}ClP$  1) Methyltriphenylphosphoniumchlorid + H<sub>2</sub>O. Sm. 212—213° (wasserfrei). 2 + PtCl<sub>4</sub> (*A.* 229, 310; *B.* 27, 273). — IV, 1660.



- C<sub>19</sub>H<sub>18</sub>ClAs** 1) Methyltriphenylarsoniumchlorid. Sm. 121°. 2 + PtCl<sub>4</sub> (A. 321, 168 C. 1902 [2] 44). — \*IV, 1191.
- C<sub>19</sub>H<sub>18</sub>JP** 1) Methyltriphenylphosphoniumjodid. Sm. 182—183° (A. 229, 310). — IV, 1660.
- C<sub>19</sub>H<sub>18</sub>JAs** 1) Methyltriphenylarsoniumjodid. Sm. 176° (A. 321, 166 C. 1902 [2] 44). — \*IV, 1191.
- C<sub>19</sub>H<sub>19</sub>ON**
- 1) α-Oxy-α-[4-Dimethylamidophenyl]-α-[1-Naphtyl]methan. Sm. 97 bis 98° (B. 38, 516 C. 1905 [1] 736).
  - 2) 4-Äthylamidophenyl-[2-Oxy-1-Naphtyl]methan. Sm. 99—100°. HCl, H<sub>2</sub>SO<sub>4</sub> (M. 23, 999 C. 1903 [1] 290).
  - 3) 4-Äthylamidophenyl-[4-Oxy-1-Naphtyl]methan. Sm. 169°. H<sub>2</sub>SO<sub>4</sub> (M. 23, 998 C. 1903 [1] 290).
  - 4) 6-[4-Methylphenyl]amido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 215° (A. 294, 307). — \*III, 217.
  - 5) ε-Oximido-α-Di[4-Methylphenyl]-αγ-Pentadien. Sm. 178° (B. 36, 852 C. 1903 [1] 976).
  - 6) 2-Oximido-1,3-Dimethyl-4,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 157—159° (B. 31, 1888; Soc. 85, 1478 C. 1905 [1] 172). — \*III, 193.
  - 7) 3-Oximido-2,4-Dimethyl-1,5-Diphenyl-2,3-Dihydro-R-Penten. Sm. 121,5° (Soc. 85, 1486 C. 1905 [1] 172).
  - 8) Acetylderivat d. 2-Methylen-1,3-Dimethyl-3-Phenyl-2,3-Dihydroindol. Sm. 142° (G. 28 [2] 397). — \*IV, 254.
  - 9) Benzoyltrimethyldihydrochinolin. Sm. 137—138° (G. 28 [1] 193).
  - 10) Apocinchen. Sm. 209—210°. HCl, (2HCl, PtCl<sub>4</sub>), HBr, HJ (B. 14, 1855; 18, 1226; 20, 2675; 27, 903; J. pr. [2] 61, 15, 43). — III, 837; \*III, 633.
  - 11) Base (aus Dimethyleinchoninjodmethylat). (2HCl, PtCl<sub>4</sub>) (A. 277, 288). — III, 833.
  - 12) Nitril d. β-Oxy-β-Phenylakryl-[3-Methyl-6-Isopropylphenyl]äthersäure. Sd. 226—229°<sub>11</sub> (C. r. 142, 451 C. 1906 [1] 1095; BL [3] 35, 534 C. 1906 [2] 760).
- C<sub>19</sub>H<sub>19</sub>ON<sub>3</sub>**
- 1) α-Oxytri[4-Amidophenyl]methan (p-Rosanilin). Chlorid, Jodid, Sulfat + 8H<sub>2</sub>O, Bichromat. (HCl, HgCl<sub>2</sub>), HBr + 3H<sub>2</sub>O, HJ, HF, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 3H<sub>2</sub>O (A. 194, 274; A. ch. [5] 8, 192; BL [3] 9, 690; [3] 17, 654; B. 15, 678; 17, 2936; 18, 997; 19, 110; 26, 1789; 28, 521, 1581, 1696, 1703, 1705; 33, 302; C. 1904 [1] 460; M. 17, 5; B. 34, 3816 C. 1902 [1] 45; B. 37, 3031 C. 1904 [2] 1010; B. 38, 3493 C. 1905 [2] 1631). — II, 1087; \*II, 665.
  - 2) 1-Methylnitrosamido-3-Dimethylamido-2-Phenylunaphthalin. Sm. 151° (Soc. 91, 1299 C. 1907 [2] 992).
  - 3) 5-Acetylbenzylamido-3-Methyl-1-Phenylpyrazol. Sm. 114°; Sd. 240 bis 245°<sub>18</sub>. HCl (A. 339, 168 C. 1905 [1] 1402).
  - 4) 3-Benzoylimido-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol + H<sub>2</sub>O. Sm. 146° (wasserfrei) (B. 36, 3288 C. 1903 [2] 1191).
  - 5) 4-[α-Phenyläthyliden]amido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 167° (A. 352, 205 C. 1907 [1] 1051). C 68,5 — H 5,7 — O 4,8 — N 21,0 — M. G. 333.
- C<sub>19</sub>H<sub>19</sub>ON<sub>5</sub>**
- 1) 5-[2-Amido-1-Naphtyl]azo-4-Methylnitrosamido-1,3-Dimethylbenzol. Sm. 184° (B. 31, 2933). — IV, 1400.
- C<sub>19</sub>H<sub>19</sub>OCl** 1) Verbindung (aus Isoamyloxanthranol). Sm. 85° (B. 14, 459, 798; A. 212, 88). — III, 244.
- C<sub>19</sub>H<sub>19</sub>OBr** 1) 9-Brom-10-Keto-9-Isoamyl-9,10-Dihydroanthracen. Sm. 97—98° (B. 38, 2868 C. 1905 [2] 1094).
- C<sub>19</sub>H<sub>19</sub>OAs** 1) Methyltriphenylarsoniumhydroxyd. Sm. 125—126°. Salze, siehe (A. 321, 167 C. 1902 [2] 44). — \*IV, 1191.
- C<sub>19</sub>H<sub>19</sub>O<sub>2</sub>N**
- 1) 4-Äthylamidophenyl-[2,7-Dioxy-1-Naphtyl]methan. Sm. 153—154° (M. 23, 1001 C. 1903 [1] 290).
  - 2) α-Phenylbenzylamido-γ-Keto-β-Acetyl-α-Buten. Sm. 106° (A. 297, 69). — \*II, 301.
  - 3) γ-Keto-β-Benzoyl-α-[4-Dimethylamidophenyl]-α-Buten. Sm. 184° (B. 37, 1744 C. 1904 [1] 1599).

- C<sub>19</sub>H<sub>19</sub>O<sub>2</sub>N** 4) 1-Amylamido-9,10-Anthrachinon. Sm. 90° (D.R.P. 144634 C. 1903 [2] 750).  
 5) 7-Äthylbenzylamido-4-Methyl-1,2-Benzpyron. Sm. 88° (B. 41, 494 C. 1908 [1] 1050).  
 6) Methyläther d. 2-[4-Isopropylphenyl]-5-[4-Oxyphenyl]oxazol. Sm. 55°. HCl (B. 29, 2101). — IV, 445.  
 7) 4,6-Diketo-5-Phenyldekahydrochinolin. Sm. noch nicht bei 310° (A. 309, 377). — \*IV, 242.  
 8) αγ-Dioxy-β-Benzyl-β-[2-Chinolyl]propan. Sm. 141–142°. HCl (B. 32, 3607). — \*IV, 266.  
 9) Benzoylnaphthalanmorpholin. Sm. 194° (A. 307, 177). — \*II, 741.  
 10) Apochinen. Sm. 246°. HBr (B. 18, 1226; 20, 2686; 23, 2671; J. pr. [2] 61, 41). — III, 817; \*III, 629.  
 11) Oxyapocinchen. Sm. 267° (B. 14, 1858; 18, 2385; 20, 2685). — III, 838.  
 12) Ditamin. Sm. 75°. (2HCl, PtCl<sub>4</sub>) (A. 178, 56; 203, 147). — III, 880.  
 13) 2-Amyl-α-Naphtazin-4-Carbonsäure. Sm. 255–260° u. Zers. (Bl. [4] 1, 320 C. 1907 [1] 1782).  
 14) Äthylester d. β-Cyan-αγ-Diphenylpropan-β-Carbonsäure. Sm. 33°; Sd. 237°<sub>25</sub> (Am. 22, 178). — \*IV, 1097.  
 15) Verbindung (aus Benzylecyanid u. Zimtsäureäthylester). Sm. 99–100° (B. 33, 2007). — \*II, 1098.
- C<sub>19</sub>H<sub>19</sub>O<sub>2</sub>N<sub>3</sub>** C 71,0 — H 5,9 — O 10,0 — N 13,1 — M. G. 321.  
 1) 1-Phenylhydrazon-5-Methyl-3-[3-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 135–150° u. Zers. (A. 303, 235). — \*IV, 504.  
 2) 1-Phenylhydrazon-5-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 173° (A. 303, 239). — \*IV, 504.  
 3) Methyläther d. 4-[4-Oxybenzyliden]amido-3-Keto-5-Methyl-1-[4-Methylphenyl]-2,3-Dihydropyrazol. Sm. 235° (A. 350, 315 C. 1907 [1] 736).  
 4) 4<sup>4</sup>-Methyläther d. 4-[4-Oxybenzyliden]amido-1,2-Dimethyl-3-Phenyl-2,2-Dihydropyrazol-2,5-Oxyd. Sm. 177° (A. 352, 205 C. 1907 [1] 1051).  
 5) Äthyläther d. 4-Benzoylamido-5-Oxy-3-Methyl-1-Phenylpyrazol. Sm. 163–164° (D.R.P. 189842 C. 1908 [1] 427).  
 6) 2,8-Di[Acetylamido]-3,7-Dimethylakridin (B. 34, 4310 C. 1902 [1] 322). — \*IV, 843.  
 7) Benzoat d. 3-Oxy-5-Butyl-1-Phenyl-1,2,4-Triazol. Sm. 87–88° (B. 29, 1951). — IV, 1111.  
 8) Nitril d. α-[4-Nitrophenyl]-β-[4-Diäthylamidophenyl]akrylsäure. Sm. 206° (B. 39, 2169 C. 1906 [2] 234).  
 9) Phenylimid d. α-[4-Dimethylamidophenyl]amidopropen-αβ-Dicarbonsäure. Sm. 163° (J. pr. [2] 74, 302 C. 1906 [2] 1820).
- C<sub>19</sub>H<sub>19</sub>O<sub>2</sub>N<sub>5</sub>** C 65,3 — H 5,4 — O 9,2 — N 20,1 — M. G. 349.  
 1) Benzylidenhydrazid d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Aminoameisensäure. Sm. 225° (Bl. [3] 33, 504 C. 1905 [1] 1650).
- C<sub>19</sub>H<sub>19</sub>O<sub>2</sub>As** 1) Diphenyl-4-Methylphenyloxyarsoniumhydroxyd. Sm. 68°. Nitrat (A. 321, 188 C. 1902 [2] 45). — \*IV, 1194.
- C<sub>19</sub>H<sub>19</sub>O<sub>3</sub>N** C 73,8 — H 6,1 — O 15,5 — N 4,5 — M. G. 309.  
 1) Phenyläther d. ε-[1,2-Phtalyl]amido-α-Oxypentan. Sm. 72–73° (B. 35, 1368 C. 1902 [1] 1091).  
 2) Galipidin. Sm. 113° (182°?). HCl + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HJ, H<sub>2</sub>SO<sub>4</sub> (B. 25 [2] 201; C. 1903 [2] 1010; Ar. 243, 485 C. 1905 [2] 1799). — III, 778.  
 3) Acetylapomorphin. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (Ar. 228, 590; B. 35, 4386 C. 1903 [1] 339). — III, 901; \*III, 671.  
 4) Anhydrohydrastininacetophenon. Sm. 74°. (2HCl, PtCl<sub>4</sub>) (B. 37, 215 C. 1904 [1] 591).  
 5) α-Benzoylamido-β-[4-Isopropylphenyl]akrylsäure. Sm. 201° (A. 337, 279 C. 1905 [1] 377).  
 6) Methylester d. γ-Benzoylamido-α-Phenyl-α-Buten-δ-Carbonsäure. Sm. 142–145° (B. 42, 2791 C. 1909 [2] 705).  
 7) Äthylester d. γ-Oximido-α-Diphenyl-α-Buten-γ-Carbonsäure. Sm. 136–138° (B. 32, 1434). — \*II, 1017.

- $C_{19}H_{19}O_8N$  8)  $\delta$ -Phenylmonamid d.  $\alpha$ -Phenyl- $\alpha$ -Buten- $\delta$ -Carbonsäure- $\gamma$ -Methylcarbonsäure. Sm. 142° (B. 36, 2339 C. 1903 [2] 438; A. 345, 212 C. 1906 [1] 1494).
- $C_{19}H_{19}O_3N_3$  C 67,6 — H 5,6 — O 14,2 — N 12,5 — M. G. 337.
- 1) Methylester d.  $\delta$ -Semicarbazon- $\alpha$ - $\delta$ -Diphenyl- $\alpha$ -Buten- $\beta$ -Carbonsäure. Sm. 179° (A. 306, 162). — \*II, 1017.
- 2) Äthylester d. 4[oder 5]-Phenylhydrazon-5[oder 4]-Keto-2-Phenyltetrahydropyrrol-3-Carbonsäure. Sm. 172—173° (C. 1907 [2] 1787).
- 3) Verbindung (aus Dicyanbenzoylessigsäureäthylester). Sm. 155° (A. 332, 151 C. 1904 [2] 192).
- $C_{19}H_{19}O_8Br$  1) Hydrobromid d. Dianisalaceton. Sm. 165° u. Zers. (B. 36, 3543 C. 1903 [2] 1369).
- 2) Methyläther d. 3-Brom-6-Oxy-2-[4-Isopropylphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 125—127° (B. 40, 3670 C. 1907 [2] 1421).
- $C_{19}H_{19}O_4N$  C 70,2 — H 5,8 — O 19,7 — N 4,3 — M. G. 325.
- 1) 2,3,4,5-Tetracetyl-1-[4-Methylphenyl]pyrrol (B. 14, 935). — IV, 67.
- 2) Bulbocapnin. Sm. 199°. HCl, (2HCl, PtCl<sub>4</sub>), HBr, HJ, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (A. 277, 10; C. 1896 [2] 793; M. 18, 385; Ar. 240, 19 C. 1902 [1] 529; Ar. 240, 93 C. 1902 [1] 820; Soc. 83, 625 C. 1903 [1] 1364; Ar. 243, 156 C. 1905 [2] 54). — III, 877; \*III, 651.
- 3) Naudinin. (2HCl, PtCl<sub>4</sub>) (R. 3, 196). — III, 894.
- 4) Benzoylanhalonidin. Sm. 189° (B. 34, 3014). — \*III, 602.
- 5) Trimethyläther d. Papaverolin (Protopapaverin). Zers. bei 240° (260°). Na, HCl + 5H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), HBr + 5H<sub>2</sub>O, HJ + 3H<sub>2</sub>O, Oxalat + 5H<sub>2</sub>O, Pikrat, + HgCl<sub>2</sub> (C. 1903 [1] 844; J. pr. [2] 68, 199 C. 1903 [2] 838).
- 6)  $\epsilon$ -Oximido- $\gamma$ - $\delta$ -Diphenylhexan- $\gamma$ - $\delta$ -Oxyd- $\beta$ -Carbonsäure. Sm. 172—173° u. Zers. Ag (Soc. 83, 295 C. 1903 [1] 878).
- 7) 4-Oximido-1-Oxy-1,2-Diphenyl-R-Pentamethylen-3-Methylcarbonsäure. Sm. 122—123° u. Zers. K, Ag (Soc. 71, 149). — \*II, 1105.
- 8) 1,2-Lakton d. 3,4-Dioxy-1-[1,2,3,4-Tetrahydro-1-Chinolyl]oxymethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opiansäuretetrahydrochinolid). Sm. 180° (B. 29, 182). — IV, 195.
- 9) Lakton (aus  $\beta$ -Phenylimidopropionsäureessigsäureäthylester). Sm. 137 bis 138°. Ca, Ag (Soc. 87, 445 C. 1905 [1] 1639).
- 10) Äthylester d. 5,6-Dioxyphenanthren-5,6-Dimethyläther-1-Amidoameisensäure. Sm. 164—165° (B. 40, 1999 C. 1907 [2] 158).
- 11) Äthylester d. 3,4-Dioxyphenanthrendimethyläther-9-Amidoameisensäure. Sm. 145° (B. 40, 2041 C. 1907 [2] 162).
- 12) 4-[2-Acetylamidobenzoat]d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 102—103° (D.R.P. 189333 C. 1908 [1] 185).
- 13) 4-[3-Acetylamidobenzoat]d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 102° (D.R.P. 189333 C. 1908 [1] 186).
- 14) 4-[4-Acetylamidobenzoat]d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 160—161° (D.R.P. 67923). — \*II, 789.
- $C_{19}H_{19}O_4N_3$  C 64,6 — H 5,4 — O 18,1 — N 11,9 — M. G. 353.
- 1) 4-Äthylbenzylamidophenylalloxan. Sm. 232—233° (C. 1900 [2] 789). — \*II, 1123.
- 2)  $\beta$ -Dinitro-1,3,4,6,7,9-Hexamethylakridin. Sm. 85—87° (Soc. 81, 286 C. 1902 [1] 528). — \*IV, 255.
- 3)  $\delta$ -Semicarbazon- $\beta\gamma$ -Diphenylpentan- $\beta\gamma$ -Oxyd- $\alpha$ -Carbonsäure. Sm. 198° u. Zers. (Soc. 83, 291 C. 1903 [1] 877).
- 4) Äthylester d.  $\beta$ -[2-(4-Nitrobenzyliden)amidophenyl]imidobuttersäure. Sm. 99° (B. 29, 1501). — IV, 563.
- 5) Di[Methylphenylamid] d. Acetoximidomalonsäure. Sm. 130° (Soc. 83, 42 C. 1903 [1] 442).
- 6) isom. Di[Methylphenylamid] d. Acetoximidomalonsäure. Sm. 223° (Soc. 83, 43 C. 1903 [1] 442).
- $C_{19}H_{19}O_4Br$  1) Diäthyläther d.  $\beta$ -Brom-6-Oxy-2-[2-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 101—102° (B. 33, 2510). — \*IV, 559.
- 2) Diäthyläther d. 2-Brom-6-Oxy-2-[3-Oxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 112—113° (B. 33, 1479). — \*III, 559.
- 3)  $\alpha\gamma$ -Lakton d.  $\beta$ -Brom- $\alpha$ -Oxy- $\alpha$ -Di[4-Methoxyphenyl]butan- $\gamma$ -Carbonsäure (Dianisylbrompentalakton). Sm. 136° (A. 255, 306). — II, 1971



- $C_{19}H_{19}O_4J$  1)  $\beta\delta$ -Lakton d.  $\gamma$ -Jod- $\delta$ -Oxy- $\alpha\delta$ -Di[4-Methoxyphenyl]butan- $\beta$ -Carbon-säure. Sm. 115° (C. 1908 [2] 316).  
C 66,9 — H 5,5 — O 23,5 — N 4,1 — M. G. 341.
- $C_{19}H_{19}O_5N$  1) Diäthyläther d.  $\gamma$ -Keto- $\gamma$ -[3-Nitrophenyl]- $\alpha$ -[3,4-Dioxyphenyl]-propen. Sm. 103° (B. 34, 3531). — \*III, 181.  
2) Stylopin. Sm. 202°. HCl, (2HCl, PtCl<sub>4</sub>), HJ (B. 35, 16 C. 1902 [1] 430). — \*III, 697.  
3) Benzoylcotarnin +  $\frac{1}{2}H_2O$ . Sm. 122—123° (A. 254, 335). — III, 917.  
4)  $\alpha$ -Benzoylamido- $\delta$ -Benzoxylvaleriansäure. Sm. 164—165° (H. 56, 292 C. 1908 [2] 684).  
5)  $\alpha$ -Oximido- $\alpha\gamma$ -Diphenylpentan- $\delta\epsilon$ -Dicarbonsäure. Sm. 180—184° (A. 314, 131). — \*II, 1152.  
6) Methylester d.  $\alpha$ -Benzoylamido- $\beta$ -[3,4-Dioxyphenyl]akryl-3,4-Dimethyläthersäure. Sm. 147° (B. 42, 1185 C. 1909 [1] 1712).
- $C_{19}H_{19}O_6Br$  1) Trimethyläther d. Brombrasilin. Sm. 181—184° (B. 21, 3014; 27, 525; 36, 398). — III, 653; \*III, 479.
- $C_{19}H_{19}O_6N$  C 63,9 — H 5,3 — O 26,9 — N 3,9 — M. G. 357.  
1) 2<sup>3</sup>,2<sup>4</sup>-Dimethyläther-7-Äthyläther d. 3-Oximido-7-Oxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 175—176° (B. 37, 788 C. 1904 [1] 1157).  
2) 2<sup>3</sup>,2<sup>3</sup>,2<sup>4</sup>-Trimethyläther d. 7-Oximido-5-Oxy-4-Methyl-2-[2,3,4-Trioxyphe-nyl]-1,7-Benzpyran. Sm. 132—136° (B. 39, 2031 C. 1906 [2] 257).  
3) Oxim d.  $\beta$ -Trimethylbrasilon. Sm. 203—205° (B. 36, 398 C. 1903 [1] 587). — \*III, 480.  
4) Acetat d. Decarbousninsäureoximanhydrid. Sm. 142° (A. 310, 272). — \*II, 1205.  
5) Verbindung (aus 1,4-Dioxybenzol u. CHN) (B. 19, 1008). — II, 939.  
6) Verbindung (aus Cotarnin u. Protokatechualdehyd). HCl + H<sub>2</sub>O (B. 37, 1964 C. 1904 [2] 44).  
C 59,2 — H 4,9 — O 24,9 — N 10,9 — M. G. 385.
- $C_{19}H_{19}O_6N_3$  1) Hexaoxyleukanilin. 3HCl + H<sub>2</sub>O, 3HJ + 2H<sub>2</sub>O (B. 34, 1035).  
2) Lakton d.  $\gamma$ -Phenylhydrazon- $\alpha$ -Oxy- $\alpha$ -[6-Nitro-3,4-Dimethoxyphenyl]butan-2-Carbonsäure (Phenylhydrazon d. Acetonilnitromekonin). Sm. 184° (B. 36, 2209 C. 1903 [2] 443).  
3) Äthylester d.  $\delta$ -Phenylazo- $\gamma$ -Keto- $\alpha$ -Oxy- $\alpha$ -[4-Nitrophenyl]butan- $\delta$ -Carbonsäure. Sm. 147—148° (B. 35, 1863 C. 1902 [2] 41). — \*IV, 1061.
- $C_{19}H_{19}O_6Br$  1) Diäthylester d. 3-Brom-1,4,6-Trimethylisobenzdifuran-2,5-Dicarbonsäure (A. 283, 267).
- $C_{19}H_{19}O_7N$  2) Diacetat d. Verb. C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>Br. Sm. 132° (C. 1901 [1] 114). — \*III, 467.  
C 61,1 — H 5,1 — O 30,0 — N 3,8 — M. G. 373.  
1) 2,4,6,4'-Tetramethyläther d. 2,4,6,4'-Tetraoxydibenzoyloximido-methan. Sm. 189° u. Zers. (B. 34, 1450). — \*III, 243.  
2) 2<sup>3</sup>,2<sup>4</sup>,5,7-Tetramethyläther d. 3-Oximido-5,7-Dioxy-2-[2,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Zers. bei 199° (B. 39, 626 C. 1906 [1] 1028).  
3) 2<sup>3</sup>,2<sup>4</sup>,5,7-Tetramethyläther d. 3-Oximido-5,7-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 183° u. Zers. (B. 37, 1404 C. 1904 [1] 1355).  
4) 2<sup>3</sup>,2<sup>4</sup>,7,8-Tetramethyläther d. 3-Oximido-7,8-Dioxy-2-[3,4-Dioxyphenyl]-2,3-Dihydro-1,4-Benzpyron. Sm. 172° u. Zers. (B. 38, 937 C. 1905 [1] 1027).  
5) Methylester d. Usnolsäureoxim. Sm. 220° (A. 324, 180 C. 1902 [2] 1512).  
6) Verbindung (aus  $\alpha$ -Usninsäureoximanhydrid u. Natriummethylat). Sm. 147° u. Zers. (A. 310, 254). — \*II, 1204.  
C 56,9 — H 4,7 — O 27,9 — N 10,5 — M. G. 401.
- $C_{19}H_{19}O_7N_3$  1) d-Usninsäuresemicarbazon. Zers. bei 219—220° (A. 310, 255). — \*II, 1204.  
2) l-Usninsäuresemicarbazon. Zers. bei 219—220° (A. 310, 255). — \*II, 1204.  
3) r-Usninsäuresemicarbazon. Zers. bei 211° (A. 310, 255). — \*II, 1204.  
C 54,7 — H 4,5 — O 30,7 — N 10,1 — M. G. 417.
- $C_{19}H_{19}O_8N_3$  1) Diäthylester d. 4,6-Dinitro-3-Phenylamidophenylmethandicarbonsäure. Sm. 118°. Na (Am. 11, 102). — II, 1841.

- C<sub>19</sub>H<sub>19</sub>O<sub>3</sub>N** C 56,3 — H 4,7 — O 35,6 — N 3,4 — M. G. 405.  
 1) Nitrooxydihydrotrimethylbrasilon. Sm. 230° u. Zers. (225°) (*Soc.* 81, 1048 *C.* 1902 [2] 749; *B.* 35, 1676 *C.* 1902 [1] 1355; *B.* 35, 4285 *C.* 1903 [1] 291; *B.* 36, 2321 *C.* 1903 [2] 443). — \*III, 481.
- C<sub>19</sub>H<sub>19</sub>N<sub>2</sub>Cl** 1) Dehydrocinchoninchlorid. Sm. 148—149° (*B.* 19, 2857). — III, 839.  
 2) Verbindung (Base aus 4-Amido-1-Methylbenzol). Sm. 135°. HCl, Diacetat (*B.* 23, 1480). — II, 511.
- C<sub>19</sub>H<sub>19</sub>N<sub>3</sub>S** 1)  $\alpha$ -[4-Methylphenyl]- $\beta$ -[2,4-Dimethyl-5(oder 7)-Chinolyl]thioharnstoff. Sm. 142° (*A.* 274, 372). — IV, 938.  
 2) Carbthiol d. Pararosanilin (*B.* 40, 250 *C.* 1907 [1] 726).
- C<sub>19</sub>H<sub>19</sub>N<sub>3</sub>S<sub>2</sub>** 1) Di[4-Amidophenyläther] d. 4-Amido-1-Dimerkaptomethylbenzol. 3 HCl (*B.* 41, 2272 *C.* 1908 [2] 692).
- C<sub>19</sub>H<sub>19</sub>N<sub>4</sub>J** 1) Jodmethylat d. 3,6-Dimethyl-1,4-Diphenylbipyrazol. Sm. 205° (*B.* 36, 529 *C.* 1903 [1] 642). — \*IV, 950.
- C<sub>19</sub>H<sub>20</sub>ON<sub>2</sub>** C 78,0 — H 6,8 — O 5,5 — N 9,6 — M. G. 292.  
 1) Äthyläther d. 4-Amido-3-[4-Methylphenyl]amido-1-Oxynaphtalin. Sm. 118—119° (*B.* 27, 2354). — \*II, 507.  
 2)  $\epsilon$ -[4-Methylphenyl]imido- $\alpha$ -[4-Methylphenyl]amido- $\delta$ -Oxy- $\alpha\gamma$ -Pentadien (p-Furfurtoluidin). HCl, HNO<sub>3</sub> (*A.* 156, 203; *B.* 38, 3827 *C.* 1906 [1] 49). — III, 723.  
 3)  $\gamma$ -Keto- $\alpha$ -[4-Amidophenyl]- $\epsilon$ -[4-Dimethylamidophenyl]- $\alpha\delta$ -Pentadien. Sm. 228° (*C.* 1906 [2] 1325).  
 4) 5-Keto-4-[4-Methylphenyl]imido-2-Methyl-1-[4-Methylphenyl]-tetrahydropyrrrol. Sm. 190° (*C. r.* 147, 126 *C.* 1908 [2] 801).  
 5) 2-Keto-1,3-Diäthyl-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. 138° (*A.* 368, 236 *C.* 1909 [2] 1468).  
 6) 5-Acetyl-6-Methyl-2,4-Diphenyl-1,2,3,4-Tetrahydro-1,3-Diazin. Sm. 147° (*Soc.* 85, 459 *C.* 1904 [1] 1080, 1438).  
 7) Benzyläther d. 3,3-Dimethyl-2-[ $\alpha$ -Oximidoäthyl]pseudoindol. Sm. 77—78° (*G.* 32 [2] 430 *C.* 1903 [1] 838).  
 8) Äthyläther d. 5-Oxy-3-Phenyl-6,7,8,9-Tetrahydro- $\alpha$ -Naphtimidazol. Sm. 139° (*B.* 31, 902). — \*II, 499.  
 9) Amidoapocinchen. Sm. 220° (*J. pr.* [2] 61, 19). — \*III, 634.  
 10) Bz-3-Amidoapocinchen. Sm. 229—230° (*J. pr.* [2] 61, 42). — \*III, 634.  
 11) Cinchoninon. Sm. 126—127°. HCl, Na (*B.* 40, 3657 *C.* 1907 [2] 1750; *B.* 41, 62 *C.* 1908 [1] 964; *B.* 41, 873 *C.* 1908 [1] 1706; *A.* 364, 338 *C.* 1909 [1] 1242).  
 12) Dehydrocinchonidin. Sm. 194°. HCl + 2H<sub>2</sub>O, Oxalat + H<sub>2</sub>O (*J. pr.* [2] 69, 205 *C.* 1904 [1] 1448).  
 13) Dehydrocinchonin. Sm. 202—203°. HBr (*B.* 19, 2856). — III, 839.  
 14) Oxycinchen. Sm. 100—110°. (2HCl, PtCl<sub>4</sub>) (*B.* 23, 2670). — III, 837.  
 15) 4-Phenylamid d. 5-Phenylamido-2-Methyl-2,3-Dihydro-R-Penten-4-Carbonsäure. Sm. 133° (*A.* 317, 91).  
 16) Verbindung (aus Anilin, Brenztraubensäure u. Isobuttersäurealdehyd). Sm. 222° (*A.* 242, 275). — IV, 358.  
 17) Verbindung (aus 4-Amido-1-Methylbenzol u. Brenztraubensäure). Sm. 238° (*B.* 17, 998). — II, 501.
- C<sub>19</sub>H<sub>20</sub>ON<sub>4</sub>** C 71,3 — H 6,2 — O 5,0 — N 17,5 — M. G. 320.  
 1) 4-Nitroso-5-Propylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 73°. HCl (*B.* 40, 4487 *C.* 1908 [1] 138).  
 2) B<sub>1</sub>-4-Amido-B<sub>2</sub>-4-Amido-B<sub>3</sub>-3-Methylbenzosafraninhydrat. Nitrat (*B.* 33, 1213).  
 3) Verbindung (aus 2,6-Dimethyl-1,4-Pyron-3-Carbonsäure). Sm. 140—142° (*A.* 257, 294). — II, 1757.
- C<sub>19</sub>H<sub>20</sub>OBr<sub>2</sub>** 1)  $\delta\epsilon$ -Dibrom- $\alpha$ -Keto- $\alpha\epsilon$ -Diphenyl- $\gamma$ -Äthylpentan. Sm. 142° (*B.* 38, 1207 *C.* 1905 [1] 1240).
- C<sub>19</sub>H<sub>20</sub>O<sub>2</sub>N<sub>2</sub>** C 74,0 — H 6,5 — O 10,4 — N 9,1 — M. G. 308.  
 1) Dimethyläther d.  $\epsilon$ -[2-Oxyphenyl]imido- $\alpha$ -[2-Oxyphenyl]amido- $\alpha\gamma$ -Pentadien. HBr (*J. pr.* [2] 70, 47 *C.* 1904 [2] 1236).  
 2) Dimethyläther d.  $\epsilon$ -[4-Oxyphenyl]imido- $\alpha$ -[4-Oxyphenyl]amido- $\alpha\gamma$ -Pentadien. HBr (*J. pr.* [2] 70, 48 *C.* 1904 [2] 1236).  
 3) Dibenzoyltrimethylenäthylendiamin. Sm. 108° (*B.* 32, 1828). — \*II, 733.

- $C_{10}H_{20}O_2N_2$  4)  $\epsilon$ -[1,2-Phtalyl]amido- $\alpha$ -Phenylamidopentan. Sm. 113–114° (B. 35, 1371 C. 1902 [1] 1091).
- 5) 5-Keto-2-[ $\alpha$ -Oximidobenzyl]-2-Methyl-1-Benzyltetrahydropyrrol. Sm. 218–219° (B. 42, 3957 C. 1909 [2] 1811).
- 6) 1,2-Dibenzoyl-3,5-Dimethyltetrahydropyrazol. Sm. 204,5° (B. 36, 223 C. 1903 [1] 522). — \*IV, 298.
- 7) 2,5-Diketo-1,3-Diäthyl-4,4-Diphenyltetrahydroimidazol. Sm. 110° (C. 1909 [2] 239 C. 1909 [2] 1469).
- 8) Äthyläther d. 5-Oxy-2-Keto-1-Äthyl-4,5-Diphenyl-2,5-Dihydroimidazol. Sm. 104° (A. 368, 233 C. 1909 [2] 1468).
- 9) 1,4-Dibenzoyl-2-Methylhexahydro-1,4-Diazin + 2H<sub>2</sub>O. Sm. 146 bis 147° (wasserfrei) (J. pr. [2] 51, 476). — IV, 481.
- 10) 4-Acetylamido-3-Methyl-6-Isopropyl-1-Phenylbenzoxazol. Sm. 207 bis 208° (G. 25 [2] 403). — \*II, 719.
- 11) 2-[2-Methoxyl-4-Allylphenyl]äther d. 2-Oxymethyl-5[oder 6]-Methylbenzimidazol. Sm. 71–73°. Pikrat (J. pr. [2] 63, 192). — \*IV, 592.
- 12) 4,5-Dimethyl-1,3-Diphenyl-4,5-Dihydropyrazol-5-Methylcarbon-säure. Sm. 169–170° (G. 29 [1] 8). — \*IV, 597.
- 13) Äthylester d.  $\beta$ -[2-Fluorenyl]hydrazonbuttersäure. Sm. 124° (B. 34, 1764). — \*IV, 667.
- 14) Amid d.  $\alpha$ -Benzoylamido- $\beta$ -[4-Isopropylphenyl]akrylsäure. Sm. 170° (A. 337, 280 C. 1905 [1] 377).
- 15) Phenylamid d. cis-R-Pentamethylen-1,3-Dicarbon-säure. Sm. 222 bis 224° (B. 31, 1957). — \*II, 218.
- 16) Phenylamid d. 5-Keto-2-Methyl-1-[4-Methylphenyl]tetrahydro-pyrrol-2-Carbon-säure (B. 38, 1221 C. 1905 [1] 1257).
- 17) 2-Methylphenylmonamid d.  $\alpha$ -[2-Methylphenyl]amido- $\gamma$ -Keto- $\alpha$ -Buten- $\beta$ -Carbon-säure. Sm. 172° (B. 35, 2509 C. 1902 [2] 438).
- 18) 4-Methylphenylmonamid d.  $\alpha$ -[4-Methylphenyl]amido- $\gamma$ -Keto- $\alpha$ -Buten- $\beta$ -Carbon-säure. Sm. 170° (B. 35, 2510 C. 1902 [2] 438).
- 19) Di[4-Methylphenylamid] d. Mesakonsäure. Sm. 212° (A. 353, 196 C. 1907 [2] 139).
- 20) 2-Methylphenylimid d.  $\alpha$ -[2-Methylphenyl]amidopropan- $\alpha\beta$ -Dicarbon-säure. Sm. 144° (J. pr. [2] 74, 301 C. 1906 [2] 1819).
- 21) 4-Methylphenylimid d.  $\alpha$ -[4-Methylphenyl]amidopropan- $\alpha\beta$ -Dicarbon-säure (4-M. d. 4-Toluidobrenzweinsäure). Sm. 200° (J. pr. [2] 74, 300 C. 1906 [2] 1819).
- 22)  $\beta$ -[2,4,5-Trimethylphenylamido]äthylimid d. Benzol-1,2-Dicarbon-säure. Sm. 143° (B. 24, 2198). — II, 1800.
- 23)  $\gamma$ -[4-Methylphenyl]methyamidopropylimid d. Benzol-1,2-Dicarbon-säure. Sm. 125° (B. 30, 2505). — \*II, 1053.
- $C_{19}H_{20}O_2N_4$  C 67,8 — H 6,0 — O 9,5 — N 16,7 — M. G. 336.
- 1) 1,3,7-Trimethyl-4,5-Diphenylacetylendiurein (A. 368, 258 C. 1909 [2] 1567).
- 2) 6-Amido-1-[ $\beta$ -Keto- $\alpha$ -(2,4-Diamidophenyl)butyryl]-2-Methylindol. Zers. bei 142,5° (B. 37, 4374 C. 1905 [1] 170).
- 3) Nitril d.  $\alpha$ -[4-Nitrophenyl]- $\beta$ -[2,4-Di(Dimethylamido)phenyl]akryl-säure. Sm. 170° (B. 41, 102 C. 1908 [1] 520).
- 4) Ketobisphenylhydrazidanhydrid d.  $\beta$ -Acetylpropan- $\alpha\gamma$ -Dicarbon-säure. Sm. 222–223° (A. 295, 121). — IV, 715.
- 5) Anhydrodi[Phenylhydrazid] d. Hydrochelidonsäure. Sm. noch nicht bei 290° (A. 256, 330; 267, 96). — IV, 714.
- 6) Di-Benzylidenhydrazid] d. Propan- $\alpha\gamma$ -Dicarbon-säure. Sm. 231 bis 232° (J. pr. [2] 62, 195). — \*III, 32.
- 7) Di[ $\alpha$ -Phenyläthylidenhydrazid] d. Methandicarbon-säure. Sm. 221° (B. 39, 3374 C. 1906 [2] 1561).
- $C_{19}H_{20}O_4Br_4$  1) 5,5'-Dibrom-4,4'-Dioxy-3,3'-Di[Brommethyl]-2,6,2',6'-Tetramethyl-diphenylmethan. Sm. 232–234° (B. 40, 2537 C. 1907 [2] 324).
- $C_{19}H_{20}O_4S$  1) Benzyläther d.  $\alpha$ -Merkapto- $\gamma$ -Keto- $\beta$ -Acetyl- $\alpha$ -Phenylbutan. Sm. 77–78° (Soc. 87, 21 C. 1905 [1] 741).
- $C_{19}H_{20}O_4S_2$  1) Dibenzoat d.  $\alpha\epsilon$ -Dimerkaptopentan. Sm. 45° (B. 41, 4253 C. 1909 [1] 274).
- $C_{19}H_{20}O_5N_2$  C 70,4 — H 6,2 — O 14,8 — N 8,6 — M. G. 324.
- 1) Methyläther d.  $\beta$ -[4-Dimethylamidophenyl]imido- $\alpha\gamma$ -Diketo- $\alpha$ -[2-Oxyphenyl]butan. Sm. 125° (B. 40, 2720 C. 1907 [2] 325).



- C<sub>19</sub>H<sub>20</sub>O<sub>3</sub>N<sub>2</sub>** 2) Diallyläther d. s-Di[4-Oxyphenyl]harnstoff. Sm. 211° (B. 34, 1941).  
 3) s-Di[4-Propionylphenyl]harnstoff (B. 33, 2644).  
 4) αβ-Dibenzoyl-αβ-Diäthylharnstoff. Sm. 151—152° (A. 368, 237 C. 1909 [2] 1468).  
 5) Di[3-Acetylamido-4-Methylphenyl]keton. Sm. 196—197° (A. 271, 7). — III, 233.  
 6) Äthylester d. δ-Phenylimido-δ-Phenylamido-β-Ketobutan-γ-Carbonsäure. Sm. 109° (B. 32, 3178). — \*II, 160.  
 7) Äthylester d. γ-Hydrazon-α-Benzoyl-γ-Phenylbuttersäure. Sm. 125 bis 126° (B. 40, 4600 C. 1908 [1] 265).  
 8) 6'-Acetat d. 5',6'-Dioxy-3'-Allyl-2-Methylazobenzol-5'-Methyläther. Sm. 72—73° (G. 36 [2] 29 C. 1906 [2] 1192).  
 9) 6'-Acetat d. 5',6'-Dioxy-3'-Allyl-3-Methylazobenzol-5'-Methyläther. Sm. 81° (G. 36 [2] 31 C. 1906 [2] 1192).  
 10) 6'-Acetat d. 5',6'-Dioxy-3'-Allyl-4-Methylazobenzol-5'-Methyläther. Sm. 110—112° (G. 36 [2] 33 C. 1906 [2] 1192; B. 41, 413 C. 1908 [1] 1048).  
 11) γ-Benzoat d. β-Benzoylamido-γ-Oximido-β-Methylbutan. Sm. 142 bis 143° (A. 262, 332). — II, 1194.  
 12) γ-Phenylamid d. β-Phenylamidopropen-αγ-Dicarbonsäure-α-Äthylester. Sm. 129—130° (B. 33, 3444). — \*II, 232.  
 13) Di[Phenylamid] d. Hydrochelidonsäure. Sm. 186—187° (A. 267, 67). — II, 420.  
 14) Piperidid d. α-Benzoylamido-β-[2-Furanyl]akrylsäure. Sm. 162 bis 163° (A. 337, 285 C. 1905 [1] 378).  
**C<sub>19</sub>H<sub>20</sub>O<sub>3</sub>N<sub>4</sub>** C 64,8 — H 5,7 — O 13,6 — N 15,9 — M. G. 352.  
 1) 2,5-Diketo-4-[γ-Phenylureidopropyl]-1-Phenyltetrahydroimidazol. Sm. 191—192° (H. 34, 527 C. 1902 [1] 782).  
 2) Dinitrosocinchotoxin. Sm. 198—199° u. Zers. (B. 28, 1070; 33, 3226; B. 38, 314 C. 1905 [1] 542). — III, 846; \*III, 637.  
 3) Äthylester d. α-Phenylazo-β-Benzoylhydrazonbuttersäure. Sm. 156° (B. 41, 2357 C. 1908 [2] 518).  
 4) Benzylidenhydrazid d. α-Benzoylamidoacetylamidopropionsäure. Sm. 216° (J. pr. [2] 70, 119 C. 1904 [2] 1037).  
 5) Benzylidenhydrazid d. α-Benzoylamidopropionylamidoessigsäure. Sm. 226° (J. pr. [2] 70, 154 C. 1904 [2] 1395).  
**C<sub>19</sub>H<sub>20</sub>O<sub>3</sub>N<sub>6</sub>** C 60,0 — H 5,3 — O 12,6 — N 22,1 — M. G. 380.  
 1) α-[β-Phenylureido]-β-Antipyrilharnstoff. Sm. 236° (Bl. [3] 33, 505 C. 1905 [1] 1650).  
**C<sub>19</sub>H<sub>20</sub>O<sub>3</sub>Cl<sub>2</sub>** 1) Dianisalacetondihydrochlorid. Sm. 123° (B. 36, 1474 C. 1903 [1] 1348).  
**C<sub>19</sub>H<sub>20</sub>O<sub>3</sub>Br<sub>2</sub>** 1) Dianisalacetondihydrobromid (B. 36, 3543 C. 1903 [2] 1369).  
 2) βγ-Dibrom-α-Oxy-β-Phenyl-γ-[4-Isopropylphenyl]buttersäure. Zers. bei 166—173° (A. 333, 247 C. 1904 [2] 1391).  
**C<sub>19</sub>H<sub>20</sub>O<sub>3</sub>S** 1) γ-[4-Methylphenyl]sulfon-ε-Keto-α-Phenyl-α-Hexen. Sm. 125—126° (Am. 31, 183 C. 1904 [1] 877).  
 2) Äthylester d. α-Merkapto-γ-Keto-α-Phenylbutan-α-Phenyläther-β-Carbonsäure. Sm. 72—73° (Soc. 87, 20 C. 1905 [1] 741).  
**C<sub>19</sub>H<sub>20</sub>O<sub>4</sub>N<sub>2</sub>** C 67,1 — H 5,9 — O 18,8 — N 8,2 — M. G. 340.  
 1) Dimethyläther d. 2,5-Diketo-4,4-Di[4-Oxyphenyl]-1,3-Dimethyltetrahydroimidazol. Sm. 114° (A. 368, 218 C. 1909 [2] 1467).  
 2) δ-αδ-Di[Benzoylamido]valeriansäure (Ornithursäure). Sm. 189° (184°). Na, K, Ca, Ba, Brucinsalz + H<sub>2</sub>O (B. 10, 1925; 11, 406; 30, 2880; 34, 456; H. 26, 4; 29, 337; C. 1905 [2] 460; H. 58, 248 C. 1908 [2] 680). — II, 2111; \*II, 1237.  
 3) l-αδ-Di[Benzoylamido]valeriansäure. Sm. 189°. Ca (C. 1905 [2] 461).  
 4) r-αδ-Di[Benzoylamido]valeriansäure. Sm. 187—188°. Ca (B. 34, 462; C. 1905 [2] 460; B. 42, 1026 C. 1909 [1] 1230). — \*II, 1237.  
 5) αα-Di[Phenylacetylamido]propionsäure. Sm. 145° (B. 14, 1600). — II, 1313.  
 6) α-Phenylhydrazon-α-Phenyl-β-Äthylpropan-γγ-Dicarbonsäure. Sm. 162° u. Zers. Diphenylhydrazinsalz (C. 1904 [1] 1258).  
 7) α,2-Lakton d. α-Oxy-γ-Phenylhydrazon-α-[3,4-Dioxyphenyl]butan-3,4-Dimethyläther-2-Carbonsäure. Sm. 159—160° (M. 14, 395). — II, 2008.

- $C_{19}H_{20}O_4N_2$  8) Diäthylester d.  $\alpha'$ -Phenylhydrazon- $\alpha$ -Phenyllessigsäure- $\alpha^2$ -Carbon-säure. Sm. 111° (B. 41, 3261 C. 1908 [2] 1432).  
 9) Acetat d. 2-Acetylamido-1-[2-Oxybenzyl]acetylamidobenzol. Sm. 133° (B. 28, 935). — IV, 556.  
 10) Di[Phenylamidoformiat] d. 1, 2-Dioxy-R-Pentamethylen. Sm. 211 bis 212° (B. 32, 2051). — \*II, 180.  
 11)  $\beta$ -Phenylmonamid d.  $\beta$ -Phenylacetylamidopropan- $\alpha\beta$ -Dicarbon-säure +  $H_2O$ . Sm. 140–141° (A. 261, 148). — II, 439.  
 12) Phenylimidoäthoxymethylphenylmonamid d. Oxalsäuremonoäthyl-ester. Sm. 101–104° (Soc. 91, 970 C. 1907 [2] 448).  
 $C_{19}H_{20}O_4N_4$  C 62,0 — H 5,4 — O 17,4 — N 15,2 — M. G. 368.  
 1)  $\alpha\alpha$ -Di[Phenylhydrazon]pentan- $\alpha\alpha$ -Dicarbonsäure. Sm. 130° u. Zers. (Bl. [4] 1, 83 C. 1907 [1] 1183).  
 $C_{19}H_{20}O_4N_8$  C 53,8 — H 4,7 — O 15,1 — N 26,4 — M. G. 424.  
 1) Di[3-Nitrobenzylidenamido]pentamethylendiamin. Sm. 134° (A. 288, 235). — III, 32.  
 $C_{19}H_{20}O_5N_2$  C 64,0 — H 5,6 — O 22,5 — N 7,9 — M. G. 356.  
 1) Dimethyläther d. 4,4'-Di[Acetylamido]-3,3'-Dioxydiphenylketon. Sm. 208–209° (J. pr. [2] 79, 495 C. 1909 [2] 362).  
 2) Nitrocodein. (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> (A. 77, 358). — III, 903.  
 3) Oxim d. Benzoylcotarnin. Sm. 165–166° (A. 254, 336). — III, 917.  
 4) Phenylbenzylhydrazon d. Glykuronsäurelakton. Sm. 141° u. Zers. K (B. 33, 2997). — \*IV, 541.  
 5) Diäthylester d. s-Diphenylharnstoff-3,3'-Dicarbonsäure. Sm. 160,5° (162°) (J. pr. [2] 4, 294; B. 11, 702). — II, 1260.  
 6) Di[4-Propionylamidophenylester] d. Kohlensäure. Sm. 180° (C. 1897 [1] 469). — \*II, 404.  
 7) Diacetylderivat d. Verb.  $C_{15}H_{16}O_8N_2$ . Sm. 211–212° (J. pr. [2] 70, 373 C. 1904 [2] 1566).  
 $C_{19}H_{20}O_5N_4$  C 59,4 — H 5,2 — O 20,8 — N 14,6 — M. G. 384.  
 1) Verbindung (aus 2-Nitrobenzaldehyd u. Acetessigsäureäthylester). Sm. 189°. HCl, (2HCl, PtCl<sub>4</sub>) (B. 20, 1341). — IV, 370.  
 2) isom. Verbindung (aus 2-Nitrobenzaldehyd u. Acetessigsäureäthylester). Sm. 192° (B. 20, 1343). — IV, 370.  
 $C_{19}H_{20}O_6N_2$  C 61,3 — H 5,4 — O 25,8 — N 7,5 — M. G. 372.  
 1) 3-Nitro- $\alpha$ -Oxybenzylhydrocotarnin. Sm. 170–171°. (2HCl, PtCl<sub>4</sub>) (B. 31, 2100). — \*III, 674.  
 2) Diäthylester d.  $\alpha$ -Phthalylamido- $\delta$ -Cyanbutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 91° (C. 1903 [2] 33).  
 3) Diäthylester d. 2,6-Dimethyl-4-[3-Nitrophenyl]pyridin-3,5-Dicarbonsäure. Sm. 65°. (2HCl, PtCl<sub>4</sub>), Nitrat (B. 20, 1339; D. R. P. 42295). — IV, 386; \*IV, 232.  
 $C_{19}H_{20}O_6N_4$  C 57,0 — H 5,0 — O 24,0 — N 14,0 — M. G. 400.  
 1) Base (aus Cinchonin). Sm. 238° u. Zers. 2HCl (B. 40, 2016 C. 1907 [2] 74).  
 2)  $\beta\gamma$ -Di[4-Oxyphenylhydrazon]pentan- $\beta^3\gamma^8$ -Dicarbonsäure. Sm. 202° (C. 1900 [1] 205; B. 33, 645). — \*II, 900.  
 $C_{19}H_{20}O_7N_2$  C 58,7 — H 5,2 — O 28,9 — N 7,2 — M. G. 388.  
 1) s-Tyrosinharnstoff. Sm. 240° u. Zers. (C. r. 142, 48 C. 1906 [1] 347).  
 2) Noryohimbinsäure (C. 1899 [1] 529). — \*III, 710.  
 3) Carbonat d. 4-Oxyphenylamidoameisensäureäthylester. Sm. 184° (C. 1897 [1] 469). — \*II, 405.  
 $C_{19}H_{20}O_7S_2$  1) Cinnamylidenbenzylidenacetonebischydrosulfonsäure. K<sub>2</sub> + 3H<sub>2</sub>O (B. 37, 4053 C. 1904 [2] 1649).  
 $C_{19}H_{20}O_7S_3$  1) Diäthylester d.  $\beta\beta'$ -Dioxythio- $\gamma$ -Pyronedithiophendiäthyläther- $\alpha\alpha'$ -Dicarbonsäure. Sm. 217–218° (B. 41, 4050 C. 1909 [1] 85).  
 $C_{19}H_{20}O_8N_4$  C 52,8 — H 4,6 — O 29,6 — N 13,0 — M. G. 432.  
 1) Di[ $\beta$ -Nitro-4-Methoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 202° (G. 34 [2] 266 C. 1904 [2] 1453).  
 $C_{19}H_{20}O_9N_2$  C 54,3 — H 4,8 — O 34,3 — N 6,6 — M. G. 420.  
 1) Oxim d. Nitrotrimethylbrasilon. Sm. 159–162° (B. 36, 2321 C. 1903 [2] 443).  
 $C_{19}H_{20}O_9N_6$  C 47,9 — H 4,2 — O 30,2 — N 17,6 — M. G. 476.  
 1) Tetranitrohydrocinchonin (J. pr. [2] 8, 300). — III, 836.

- C<sub>10</sub>H<sub>20</sub>NJ** 1) Methyläthylisopropylphenylammoniumjodid. Sm. 160° (B. 42, 1563 C. 1909 [1] 1989).
- C<sub>19</sub>H<sub>20</sub>N<sub>1</sub>Br<sub>2</sub>** 1) Cinchenbromid.  $\alpha$ -Modif. Sm. 115°;  $\beta$ -Modif. Sm. 133—134° (B. 19, 2858; 20, 2512). — III, 837.
- C<sub>19</sub>H<sub>20</sub>N<sub>3</sub>J** 1) Jodäthylat d. 6-Phenylamido-4-Methyl-2-Phenyl-1,3-Diazin + H<sub>2</sub>O. Sm. 215° u. Zers. (Am. 20, 487). — IV, 1168.
- C<sub>19</sub>H<sub>20</sub>N<sub>1</sub>S** 1) Äthyläther d. 5-Merkapto-4-Phenylazo-3-Methyl-1-[4-Methylphenyl]pyrazol. Sm. 61° (A. 338, 212 C. 1905 [1] 1158).
- C<sub>19</sub>H<sub>21</sub>ON**
- 1) d-1-[ $\beta$ -Phenylisobutyryl]amido-2,3-Dihydroinden. Sm. 148—149° (Soc. 85, 449 C. 1904 [1] 1445).
  - 2) r-1-[ $\beta$ -Phenylisobutyryl]amido-2,3-Dihydroinden. Sm. 110—111° (Soc. 85, 444 C. 1904 [1] 954, 1445).
  - 3) isom. r-1-[ $\beta$ -Phenylisobutyryl]amido-2,3-Dihydroinden. Sm. 119,5° (Soc. 85, 445 C. 1904 [1] 954, 1445).
  - 4)  $\gamma$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\alpha$ -Hepten. Sm. 117° (Am. 38, 543 C. 1908 [1] 228).
  - 5)  $\epsilon$ -Oximido- $\alpha\epsilon$ -Diphenyl- $\gamma$ -Äthyl- $\alpha$ -Penten. Sm. 91° (B. 38, 1207 C. 1905 [1] 1240).
  - 6) 2-Oximido-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen. Sm. 158 bis 159° (165,5°) (Soc. 85, 1482 C. 1905 [1] 172).
  - 7) Phenylamid d.  $\alpha$ -Phenyl- $\delta$ -Methyl- $\beta$ -Penten- $\delta$ -Carbonsäure. Sm. 90° (Bl. [3] 35, 370 C. 1906 [2] 320).
  - 8) 1-Naphtylamid d.  $\alpha$ -Oktin- $\alpha$ -Carbonsäure. Sm. 99—100° (C. r. 136, 554 C. 1903 [1] 825).
  - 9) 1-Naphtylamid d. Isolaureonolsäure. Sm. 148—149° (C. 1899 [2] 831). — \*II, 334.
  - 10) 2-Naphtylamid d. Isolaureonolsäure. Sm. 148—149° (C. 1899 [2] 831). — \*II, 337.
- C<sub>19</sub>H<sub>21</sub>ON<sub>3</sub>** C 74,3 — H 6,8 — O 5,2 — N 13,7 — M. G. 307.
- 1) Oxim d. Cinchoninon. Sm. 105—110° (B. 40, 3658 C. 1907 [2] 1750; B. 41, 64 C. 1908 [1] 964).
- C<sub>19</sub>H<sub>21</sub>OBr** 1)  $\delta$ -Brom- $\gamma$ -Keto- $\epsilon\epsilon$ -Diphenyl- $\beta\beta$ -Dimethylpentan. Sm. 145° (Am. 38, 540 C. 1908 [1] 228).
- C<sub>19</sub>H<sub>21</sub>O<sub>2</sub>N** C 77,3 — H 7,1 — O 10,8 — N 4,7 — M. G. 295.
- 1) 3-Methyläther-4-[ $\beta$ -Dimethylamidoäthyl]äther d. 3,4-Dioxyphenanthren. Fl. HCl (B. 38, 3149 C. 1905 [2] 1439).
  - 2)  $\alpha$ -[3-Methylphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 99 bis 100° (Soc. 85, 1174 C. 1904 [2] 1215).
  - 3)  $\alpha$ -[4-Methylphenyl]amido- $\beta$ -Acetyl- $\gamma$ -Keto- $\alpha$ -Phenylbutan. Sm. 96° (Soc. 85, 1174 C. 1904 [2] 1215).
  - 4)  $\zeta$ -Benzoylamido- $\alpha$ -Keto- $\alpha$ -Phenylhexan. Sm. 95° (B. 42, 1251 C. 1909 [1] 1694).
  - 5) 3-Methyläther-4-Äthyläther d. 3,5-Dimethyl-2-[3,4-Dioxyphenyl]indol. Sm. 174° (B. 37, 874 C. 1904 [1] 1154).
  - 6) Dimethyläther d. Apomorphin. + C<sub>2</sub>H<sub>6</sub>O, HJ (B. 35, 4388 C. 1903 [1] 339; B. 41, 3051 C. 1908 [2] 1445).
  - 7) Aldehyd d.  $\beta$ -[2,4-Dimethylphenyl]benzoylamidobuttersäure. Sm. 157° (B. 29, 1469). — \*II, 314.
  - 8) Benzocat d. 3-Dimethylamido-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Fl. HCl (A. 288, 120). — \*II, 719.
  - 9)  $\beta$ -Phenylakrylat d.  $\beta$ -Dimethylamido- $\alpha$ -[4-Oxyphenyl]äthan. Sm. 55,8°. HCl + H<sub>2</sub>O (C. r. 144, 210 C. 1907 [1] 1055).
  - 10)  $\beta\gamma$ -Diphenylpropylimid d. Essigsäure. Sm. 85° (B. 23, 2863). — II, 637.
- C<sub>19</sub>H<sub>21</sub>O<sub>2</sub>N<sub>3</sub>** C 70,6 — H 6,5 — O 9,9 — N 13,0 — M. G. 323.
- 1)  $\beta$ -Semicarbazon- $\gamma\delta$ -Diphenylhexan- $\gamma\delta$ -Oxyd. Sm. 204° (Soc. 83, 297 C. 1903 [1] 878).
  - 2) Nitrosocinchotoxin. Sm. 98° (B. 28, 1069). — III, 846.
  - 3) Isonitrosocinchotoxin. Sm. 169—170°. HCl, HJ, Acetat (B. 33, 3224; B. 38, 307 C. 1905 [1] 541). — \*III, 637.
- C<sub>19</sub>H<sub>21</sub>O<sub>3</sub>N** C 73,3 — H 6,7 — O 15,4 — N 4,5 — M. G. 311.
- 1) 6,7-Methylenäther-8-Methyläther d. 6,7,8-Trioxy-2-Methyl-1-Benzyl-1,2,3,4-Tetrahydroisochinolin (Benzylhydrocotarnin). Sm. 70°. HJ (B. 39, 2231 C. 1906 [2] 440).



- C<sub>19</sub>H<sub>21</sub>O<sub>3</sub>N**
- 2)  $\alpha$ -Oxyacanthin. Sm. 208—214° (202—204°) (wasserfrei). HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 5[6]H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + 4H<sub>2</sub>O), HBr + 2H<sub>2</sub>O, HJ + 2H<sub>2</sub>O, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 2[4 u. 6]H<sub>2</sub>O (*J.* 1861, 545; *B.* 19, 3190; 28 [2] 614; *C.* 1895 [1] 924). — III, 803.
  - 3)  $\beta$ -Oxyacanthin (*B.* 19, 3192). — III, 803.
  - 4) Protocuridin. Sm. 274—276°. (2HCl, PtCl<sub>4</sub>) (*C.* 1897 [2] 1079). — \*III, 652.
  - 5) Thebain. Sm. 193°. Salze meist bekannt (*A.* 86, 184; 153, 61; 176, 196; *B.* 13, 1074; 27, 2961; 28, 941; 30, 1374; *J.* 1866, 823; 1867, 525; *Bl.* [3] 21, 1001; *A. Spl.* 8, 264; *C.* 1900 [2] 768; *Soc.* 29, 652; *B.* 39, 1411 *C.* 1906 [1] 1662; *J. pr.* [2] 76, 428 *C.* 1908 [1] 386). — III, 909; \*III, 675.
  - 6) Thebenin, siehe C<sub>18</sub>H<sub>19</sub>O<sub>3</sub>N. — III, 910.
  - 7) Methyläther d. Thebenin (Methebenin). HCl, HJ, H<sub>2</sub>SO<sub>4</sub> (*B.* 32, 179; *B.* 36, 3082 *C.* 1903 [2] 955; *B.* 37, 2785 *C.* 1904 [2] 716). — \*III, 675.
  - 8) Base (aus Pseudocodeinjodmethylat). Zers. bei 235° (*B.* 40, 2038 *C.* 1907 [2] 161).
  - 9) Methylester d. 4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 101° (*Bl.* [3] 25, 173). — \*II, 1000.
  - 10) Äthylester d.  $\alpha$ -Phenylamido- $\gamma$ -Oxy- $\alpha$ -Phenyl- $\beta$ -Buten- $\beta$ -Carbonsäure. Sm. 103—104° (107—108°) (*B.* 30, 601; 31, 207, 602, 1967; *B.* 35, 3947 *C.* 1903 [1] 18; *B.* 35, 4326 *C.* 1903 [1] 283; *B.* 35, 4439 *C.* 1903 [1] 283; *B.* 36, 937 *C.* 1903 [1] 1018; *Soc.* 85, 1454 *C.* 1905 [1] 171). — \*II, 972.
  - 11) Äthylester d.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 78° (80°) (*B.* 30, 601; 31, 207, 602, 1967; *B.* 35, 3947 *C.* 1903 [1] 18; *B.* 35, 4326 *C.* 1903 [1] 283; *B.* 35, 4439 *C.* 1903 [1] 283; *B.* 36, 937 *C.* 1903 [1] 1018; *Soc.* 83, 1295 *C.* 1904 [1] 94). — \*II, 972.
  - 12) Äthylester d. isom.  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 103° (*Soc.* 85, 1177 *C.* 1904 [2] 1216).
  - 13) Äthylester d.  $\gamma$ -[2-Benzoylamidophenyl]buttersäure. Sm. 97° (*B.* 40, 1846 *C.* 1907 [2] 40).
  - 14) Äthylester d.  $\alpha$ -Phenacylamido- $\beta$ -Phenylpropionsäure. Fl. (*A.* 307, 157). — \*II, 836.
  - 15) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Benzoyl- $\alpha$ -[1,2,3,4-Tetrahydro-5-Phenyl]-propionsäure. Sm. 83° (*Soc.* 93, 1958 *C.* 1909 [1] 288).
  - 16) Äthylester d. 2,4,5-Trimethyldiphenylketon- $p$ -Aminoameisensäure. Sm. 105° (*B.* 17, 2675). — III, 236.
  - 17) Acetat d. 5-Oxy-4-Acetylphenylamidomethyl-1,2-Dimethylbenzol. Sm. 85° (*B.* 35, 138 *C.* 1902 [1] 467).
  - 18) Benzoat d.  $\beta$ -Benzoylamido- $\gamma$ -Oxypentan. Sm. 122° (*C.* 1902 [1] 716).
  - 19) Benzoat d. 3-Valerylamido-4-Oxy-1-Methylbenzol. Sm. 142° (*A.* 369, 233 *C.* 1909 [2] 1995).
  - 20) 4-Methylphenylmonamid d.  $\alpha$ -Phenylbutan- $\gamma$ - $\delta$ -Dicarbonsäure. Sm. 146° (*A.* 306, 258). — \*II, 1073.
- C<sub>19</sub>H<sub>21</sub>O<sub>3</sub>N<sub>3</sub>**
- C 67,3 — H 6,2 — O 14,1 — N 12,4 — M. G. 339.
  - 1) 6-Benzoylamidoacetyloxy-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 200° u. Zers. (*A.* 340, 96 *C.* 1905 [2] 322).
  - 2) Phenylamid d.  $\beta$ -Benzoylamidoacetylamidobuttersäure. Sm. 206° (*J. pr.* [2] 70, 212 *C.* 1904 [2] 1460).
  - 3) Di[Methylphenylamid] d. Oximidomalonäthyläthersäure. Sm. 138° (*Soc.* 83, 43 *C.* 1903 [1] 442).
  - 4) isom. Di[Methylphenylamid] d. Oximidomalonäthyläthersäure. Sm. 168° (*Soc.* 83, 43 *C.* 1903 [1] 442).
- C<sub>19</sub>H<sub>21</sub>O<sub>4</sub>N**
- C 69,7 — H 6,4 — O 19,6 — N 4,3 — M. G. 327.
  - 1) Diäthyläther d. Benzoylamidomethyl-3,4-Dioxyphenylketon. Sm. 152° (*D. R. P.* 185 598 *C.* 1907 [2] 654).
  - 2) 2,6-Dimethyläther d. 4-Oximido-2,6-Di[2-Oxyphenyl]tetrahydropyran. Sm. 202° (*B.* 32, 1747; *C.* 1899 [2] 476; 1900 [1] 608). — \*III, 544.
  - 3) 6,7-Methylenäther-1<sup>4</sup>,8-Dimethyläther d. 6,7,8-Trioxy-2-Methyl-1-[4-Oxyphenyl]-1,2,3,4-Tetrahydroisochinolin. Fl. (*B.* 39, 2230 *C.* 1906 [2] 440).

- C<sub>19</sub>H<sub>21</sub>O<sub>4</sub>N** 4) Tubocurarin. (2HCl, PtCl<sub>4</sub>), HJ (C. 1895 [2] 1086). — \*III, 652.  
 5) Acetylmorphin.  $\alpha$ -Modif. + 2H<sub>2</sub>O. Sm. 187°;  $\beta$ -Modif. amorph. HCl + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>) (Soc. 27, 1038; 28, 315; Ar. 228, 573; 237, 216). — III, 899; \*III, 669.  
 6) Oxybenzylhydrocotarnin. Sm. 240° u. Zers. (B. 29, 2045). — III, 909.  
 7) Diäthylester d. 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbonsäure. Sm. 66–67° (B. 16, 1608). — IV, 386.  
 8) Diacetat d. 5-Äthyl-2-[ $\alpha\beta$ -Dioxy- $\beta$ -Phenyläthyl]pyridin. Sd. 315 bis 320° u. Zers. (B. 22, 1059). — IV, 398.  
 9) Dibenzoat d.  $\gamma$ -Dimethylamido- $\alpha\beta$ -Dioxypropan. Fl. HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HNO<sub>3</sub>, Pikrat (B. 15, 1154; Soc. 93, 1799 C. 1909 [1] 144). — II, 1141.  
 10) Dibenzoat d. Methylidi[ $\beta$ -Oxyäthyl]amin. Fl. HCl. (HCl, AuCl<sub>3</sub>), HBr, saures Oxalat, Pikrat (Soc. 93, 1796 C. 1909 [1] 144).  
**C<sub>19</sub>H<sub>21</sub>O<sub>4</sub>N<sub>3</sub>** C 64,2 — H 5,9 — O 18,0 — N 11,8 — M. G. 355.  
 1)  $\beta$ -Nitro- $\alpha\gamma$ -Di[Acetylphenylamido]propan. Sm. 129° (B. 38, 2041 C. 1905 [2] 301).  
 2) Antipyrinorthoform. Sm. 82° (A. 325, 317 C. 1903 [1] 769). — \*IV, 325.  
 3) isom. Antipyrinorthoform. Sm. 93° (A. 325, 318 C. 1903 [1] 769). — \*IV, 325.  
**C<sub>19</sub>H<sub>21</sub>O<sub>4</sub>Br** 1) 4-Benzoat d. 3,4-Dioxy-1-[ $\beta$ -Brom- $\alpha$ -Oxypropyl]benzol-3-Methyläther- $\alpha$ -Äthyläther. Sm. 72–73° (B. 35, 123 C. 1902 [1] 474).  
**C<sub>19</sub>H<sub>21</sub>O<sub>5</sub>N** C 66,5 — H 6,1 — O 23,3 — N 4,1 — M. G. 343.  
 1)  $\alpha$ -Thebaizon (Methylester d. Säure C<sub>18</sub>H<sub>19</sub>O<sub>5</sub>N). Sm. 125–126° (B. 40, 3652 C. 1907 [2] 1423).  
 2) Morphoxylelessigsäure (C. 1901 [1] 148). — \*III, 670.  
 3) Trimethylcolchicinsäure + 2H<sub>2</sub>O. Sm. 159°. + 2CH<sub>3</sub>O, HCl + 1 $\frac{3}{4}$ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (M. 9, 10, 875). — III, 874.  
 4) Methylester d. Morphincarbonsäure. Sm. 116°. H<sub>2</sub>SO<sub>4</sub> (B. 25 [2] 202). — III, 900.  
 5) Äthylester d. 3-Methoxyl-1-[4-Äthoxylphenyl]imidomethylbenzol-4-Kohlensäure (Eupyrin). Sm. 87–88° (C. 1899 [1] 1174; 1901 [1] 641). — \*III, 76.  
 6) Diäthylester d. 2,6-Dimethyl-4-[3-Oxyphenyl]pyridin-3,5-Dicarbonsäure. Sm. 174° (G. 17, 465). — IV, 387.  
 7) Diäthylester d. 4-Keto-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 170–171°. (2HCl, PtCl<sub>4</sub>) (B. 19, 25). — II, 2005.  
 8) Acetat d. 3-Nitrobenzoylcampher. Sm. 127–128° (Soc. 81, 411 C. 1902 [1] 873). — \*III, 220.  
 9) Phenylamidoformiat d. Filicinsäurebutanon. Sm. 115° (A. 318, 240).  
 10) Verbindung (aus Thebain). Sm. 125–126° (D.R.P. 201324 C. 1903 [2] 995).  
**C<sub>19</sub>H<sub>21</sub>O<sub>5</sub>Cl** 1) Diäthylester d. 1-Keto-5-Methyl-3-[4-Chlorphenyl]-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 100–101° (A. 303, 255). — \*II, 1142.  
**C<sub>19</sub>H<sub>21</sub>O<sub>6</sub>Br** 1) 4-Benzoat d. 5-Brom-3,4-Dioxy-1-[ $\alpha\beta$ -Dioxypropyl]benzol- $\alpha,\beta,3$ -Trimethyläther. Sm. 92–93° (B. 35, 120 C. 1902 [1] 474).  
**C<sub>19</sub>H<sub>21</sub>O<sub>6</sub>N** C 63,5 — H 5,8 — O 26,7 — N 3,9 — M. G. 359.  
 1) Trimethyläther d. Brasileïn + Hydroxylamin. Zers. bei 150° (Soc. 93, 1135 C. 1908 [2] 611).  
 2) Helicinmonanilid + H<sub>2</sub>O (A. 154, 31). — III, 69.  
 3) Diäthylester d. 6-Oxy-2-Keto-1-Phenyl-1,2-Dihydropyridinäthyläther-3,5-Dicarbonsäure. Sm. 115° (A. 285, 119). — \*IV, 131.  
**C<sub>19</sub>H<sub>21</sub>O<sub>6</sub>Br** 1) 3,4<sup>3</sup>,4<sup>4</sup>,5-Tetramethyläther d. 6-Brom-3,5-Dioxy-4-[ $\alpha,3,4$ -Trioxybenzyl]-1,2-Dihydrobenzofuran (Tr. d. Bromkatechin). Sm. 173–174° (B. 35, 2410 C. 1902 [2] 448; B. 39, 4011 C. 1907 [1] 259).  
**C<sub>19</sub>H<sub>21</sub>O<sub>6</sub>J** 1) 3,4<sup>3</sup>,4<sup>4</sup>,5-Tetramethyläther d. 6-Jod-3,5-Dioxy-4-[ $\alpha,3,4$ -Trioxybenzyl]-1,2-Dihydrobenzofuran. Sm. 192–193° (B. 40, 4910 C. 1908 [1] 470).  
**C<sub>19</sub>H<sub>21</sub>O<sub>9</sub>N** C 56,0 — H 5,2 — O 35,4 — N 3,4 — M. G. 407.  
 1) Benzylnitroarbutin + H<sub>2</sub>O. Sm. 142–143° u. Zers. (A. 221, 370). — III, 572.  
**C<sub>19</sub>H<sub>21</sub>NCl<sub>2</sub>** 1) 5,10-Dichlor-1,3,4,6,7,9-Hexamethyl-5,10-Dihydroakridin. Sm. 216° (Soc. 85, 1202 C. 1904 [2] 1060).

- C<sub>19</sub>H<sub>21</sub>N<sub>2</sub>Cl** 1) Chlormethylat d. *s*-Phenylimido- $\alpha$ -Methylphenylamido- $\alpha\gamma$ -Pentadien +  $\frac{1}{2}$  H<sub>2</sub>O. Sm. 116—118°. (HCl + 3CH<sub>3</sub>O), 2 + PtCl<sub>4</sub> (A. 338, 121 C. 1905 [1] 454).  
 2) Allocinchoninchlorid (M. 23, 448 C. 1902 [2] 376). — \*III, 639.  
 3) Cinchoninchlorid + 2H<sub>2</sub>O. Sm. 72° (82° wasserfrei). HCl (B. 13, 287; 14, 103, 1854; 17, 1985; 18, 2379; 25, 1545; 31, 2358; J. 1881, 937; M. 21, 543). — III, 836; \*III, 633.  
 4) Cinchonidinchlorid. Sm. 108—109° (B. 17, 1986). — III, 852.  
 5) Verbindung (aus  $\beta$ -i-Pseudocinchonin). 2HCl (M. 25, 1148 C. 1905 [1] 185).
- C<sub>19</sub>H<sub>21</sub>N<sub>2</sub>Br** 1) Brommethylat d. 2-[Methylphenylamido]-1-Phenyl-1,2-Dihydrobenzol. Sm. 139° (J. pr. [2] 69, 134 C. 1904 [1] 816).  
 2) Bromäthylat d. 1-Äthyl-4,5-Diphenylimidazol. Sm. 153—154° (B. 38, 1538 C. 1905 [1] 1561).  
 3) Hydrobromcinen. Sm. 105—116° (B. 20, 2522). — III, 817.
- C<sub>19</sub>H<sub>21</sub>N<sub>2</sub>J** 1) Jodäthylat d. 1-Äthyl-2,4-Diphenylimidazol. Sm. 154° (B. 34, 1832). — \*IV, 690.
- C<sub>19</sub>H<sub>21</sub>N<sub>3</sub>Cl<sub>4</sub>** 1) Verbindung (aus  $\alpha$ -Oxytri[4-Amidophenyl]methan) (Bl. [3] 9, 690). — II, 1087.
- C<sub>19</sub>H<sub>21</sub>N<sub>3</sub>Br<sub>4</sub>** 1) Verbindung (aus  $\alpha$ -Oxytri[4-Amidophenyl]methan) (Bl. [3] 9, 690). — II, 1087.
- C<sub>19</sub>H<sub>21</sub>N<sub>3</sub>S<sub>2</sub>** 1)  $\alpha$ -Phenylmethyldithiomonobenzyl-*c*-Methylketuret. Sm. 85° (B. 28, 1108). — \*II, 640.  
 2) 4,4'-Biphenylenamid d. Amylimidodi[thioameisensäure]. Sm. 148° (B. 27, 1559). — IV, 965.
- C<sub>19</sub>H<sub>22</sub>ON<sub>2</sub>** C 77,5 — H 7,5 — O 5,4 — N 9,5 — M. G. 294.  
 1)  $\gamma$ -Keto- $\gamma$ -Phenyl- $\alpha$ -[2,4-Di(Dimethylamido)phenyl]propen. Pikrat (B. 41, 101 C. 1908 [1] 520).  
 2) Camphyloxyphenylpyrimidin. Sm. 140° (PINNER, Imidoäther 291). — IV, 1018.  
 3) 3-Keto-2-Methyl-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 117—118° (B. 25, 2937). — II, 507.  
 4) Allocinchonin (Apocinchonin; Apocinchonin; Isoapocinchonin). Sm. 228° (214—216°). HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HClO<sub>3</sub>, HClO<sub>4</sub> + H<sub>2</sub>O, HBr + H<sub>2</sub>O, HJ, 2HJ + 2H<sub>2</sub>O, 4HJ, H<sub>2</sub>SO<sub>4</sub> +  $\frac{1}{2}$ (3)H<sub>2</sub>O, Oxalat + 2H<sub>2</sub>O (B. 16, 384; 26, 2005; 31, 2360; A. 205, 330; 276, 99, 115; M. 14, 371; 19, 467, 475; 20, 438, 448, 575; 22, 191, 284; M. 23, 443 C. 1902 [2] 375; M. 23, 455 C. 1902 [2] 376; M. 24, 313 C. 1903 [2] 578). — III, 844, 847; \*III, 639.  
 5) Apochinamin. Sm. 114°. HCl +  $\frac{1}{2}$ H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O, Oxalat + H<sub>2</sub>O, Tartrat + xH<sub>2</sub>O (A. 207, 294). — III, 857.  
 6) Apocinchonin. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Oxalat (A. 205, 331). — III, 845.  
 7) Apocinchonidin. Sm. 225° u. Zers. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Tartrat (A. 205, 327). — III, 853.  
 8) Cinchonibin. Sm. bei 259°. (2HCl, PtCl<sub>4</sub> +  $\frac{1}{2}$ H<sub>2</sub>O), Rhodanat, Oxalat, Succinat, Tartrat (Bl. 49, 747; J. 1888, 2287; A. 260, 222). — III, 848.  
 9) Cinchonin (Cinchotoxin). Sm. 58—59° (49—50°). (2HCl, ZnCl<sub>2</sub> + 2H<sub>2</sub>O), (2HCl, CdCl<sub>2</sub> +  $2\frac{1}{2}$ H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), (3HCl, 2PtCl<sub>4</sub> + 4H<sub>2</sub>O), HJ, HNO<sub>3</sub> + H<sub>2</sub>O, Oxalat + 4H<sub>2</sub>O, Ditartrat, Succinat + H<sub>2</sub>O (J. 1853, 423, 473; Soc. 25, 102; A. ch. [7] 10, 242; A. 147, 242; 166, 277; 178, 253; 201, 333; B. 28, 1064, 1071; 33, 3221; Bl. [3] 13, 1005; M. 24, 669 C. 1903 [2] 1283; C. 1908 [1] 47; 1909 [1] 1014, 1487; 1909 [2] 38). — III, 845; \*III, 836.  
 10) Cinchonidin. Sm. 207,2° (202,4°). Salze meist bekannt. Lit. bedeutend. — III, 848; \*III, 641.  
 11)  $\beta$ -Cinchonidin. Sm. 244°. (2HCl, PtCl<sub>4</sub>), 3HJ, Oxalat, Ditartrat, Pikrat (M. 13, 655). — III, 853.  
 12)  $\gamma$ -Cinchonidin. Sm. 238°. (2HCl, PtCl<sub>4</sub>), Ditartrat (M. 13, 659). — III, 853.  
 13)  $\alpha$ -Cinchonin (Homocinchonin). Sm. 255,4° (264,3°). Salze meist bekannt. Lit. bedeutend. — III, 828; \*III, 630.



- $C_{19}H_{22}ON_2$  14)  $\beta$ -Cinchonin. ( $2HCl$ ,  $PtCl_4$ ),  $2HJ$ ,  $3HJ$ ,  $H_2SO_4 + 2H_2O$  (*M.* 13, 680; *B.* 28, 1426). — *III*, 848.
- 15)  $\gamma$ -Cinchonin. Sm. 235–236°. ( $2HCl$ ,  $PtCl_4$ ),  $H_2SO_4$  (*M.* 13, 688). — *III*, 848.
- 16)  $\delta$ -Cinchonin, siehe  $C_{18}H_{22}ON_2$ . — \**III*, 640.
- 17)  $\epsilon$ -Cinchonin. Sm. 151,5–152°.  $HCl$  (*M.* 19, 467, 473; 20, 574). — \**III*, 641.
- 18) Homocinchonidin. Sm. 207,6°. Salze meist bekannt (*A.* 205, 203; 207, 310; 243, 148; 258, 140; *B.* 14, 46, 1890; *M.* 2, 345; *Fr.* 35, 134). — *III*, 854.
- 19) Hydrocinchoninon. Sm. 138°.  $HCl$ , Pikrat, Pikrolonat (*A.* 364, 350 *C.* 1909 [1] 1242).
- 20)  $\alpha$ -Isocinchonicin (*M.* 21, 561). — \**III*, 638.
- 21) Isocinchonidin. Sm. 235° (*A.* 243, 149). — *III*, 853.
- 22)  $\alpha$ -Isocinchonin (Cinchonilin). Sm. 126° (130,4°).  $HCl + 3(2)H_2O$ ,  $2HCl + 4H_2O$ , ( $2HCl$ ,  $PtCl_4 + 2H_2O$ ),  $2(HCl, AuCl_3) + H_2O$ ,  $HBr$ ,  $2HJ$ ,  $Rhodanat + H_2O$  (*A.* 276, 91; *J.* 1888, 2287; *Bl.* 49, 747; *B.* 20, 2521; 28, 1426; *M.* 13, 676; 19, 466, 472; 20, 445, 573, 585; 21, 535; 22, 184, 199, 285; *M.* 22, 1083 *C.* 1902 [1] 479; *M.* 22, 1097 *C.* 1902 [1] 480; *M.* 23, 466 *C.* 1902 [2] 377; *M.* 24, 313 *C.* 1903 [2] 578). — *III*, 846; \**III*, 637.
- 23)  $\beta$ -Isocinchonin. Sm. 125° (126–127°). Salze meist bekannt (*A.* 260, 216; 276, 97; *J.* 1888, 2286; *Bl.* 49, 747; *M.* 13, 687; 20, 573; 21, 512, 535; 22, 186, 204, 978; *B.* 28, 1421; 31, 2360; *M.* 22, 1097 *C.* 1902 [1] 480; *M.* 23, 465 *C.* 1902 [2] 377; *M.* 24, 313 *C.* 1903 [2] 578). — *III*, 846; \**III*, 638.
- 24)  $\alpha$ -Isopseudocinchonicin. Sm. 73–74°.  $HJ + H_2O$ , Oxalat +  $6H_2O$  (*M.* 21, 559; *M.* 24, 332 *C.* 1903 [2] 578). — \**III*, 638.
- 25)  $\beta$ -Isopseudocinchonicin.  $HCl + 3H_2O$ ,  $HJ + H_2O$ ,  $2HJ + 3H_2O$  (*M.* 21, 525; *M.* 24, 299 *C.* 1903 [2] 297; *M.* 24, 332 *C.* 1903 [2] 578; *M.* 24, 675 *C.* 1903 [2] 1284; *M.* 25, 1145 *C.* 1905 [1] 184). — \**III*, 639.
- 26) Tautocinchonin. Sm. 252,5° (246°).  $2HJ$ ,  $H_2SO_4 + 2H_2O$  (*M.* 19, 463, 468; 20, 443, 574; 22, 151).
- 27) Base (aus Allocinchonin). Oxalat +  $H_2O$  (*M.* 22, 202). — \**III*, 640.
- 28) Base (aus Hydrochlorcinchonin). Sm. 170,5–171° (*M.* 22, 169).
- 29) Nitril d. 6-Keto-2,2,4-Trimethyl-1-[1,2,3,4-Tetrahydro-2-Naphtyl]-1,2,3,6-Tetrahydropyridin-5-Carbonsäure. Sm. 210–211° (*C.* 1895 [2] 973).
- 30) Phenylhydrazid d.  $\alpha$ -Phenyl- $\delta$ -Methyl- $\beta$ -Penten- $\delta$ -Carbonsäure. Sm. 99° (*Bl.* [3] 35, 370 *C.* 1906 [2] 320).
- $C_{19}H_{22}ON_4$  C 70,8 — H 6,8 — O 5,0 — N 17,4 — *M.* G. 322.
- 1)  $\beta\zeta$ -Di[Phenylhydrazon]- $\delta$ -Ketoheptan. Sm. 142° u. Zers. (*A.* 257, 279). — *IV*, 787.
- 2)  $\beta\delta$ -Di[Methylphenylhydrazon]- $\gamma$ -Ketopentan. Sm. 126° u. Zers. (*B.* 40, 2730 *C.* 1907 [2] 327).
- $C_{19}H_{22}OS$  1) Phenyläther d.  $\gamma$ -Keto- $\epsilon$ -Merkapto- $\epsilon$ -Phenyl- $\beta$ -Methylpentan. Sm. 86–88° (*B.* 37, 507 *C.* 1904 [1] 883).
- $C_{19}H_{22}O_2N_2$  C 73,6 — H 7,1 — O 10,3 — N 9,0 — *M.* G. 310.
- 1)  $\alpha$ -[ $\alpha\beta$ -Diphenylureido]- $\gamma$ -Ketoheptan. Sm. 107–108° (*Bl.* [4] 3, 661 *C.* 1908 [2] 174).
- 2) Äthyläther d. Benzoylimido-2,4,5-Trimethylphenylamidoxymethan. Sm. 79–80° (*Am.* 32, 368 *C.* 1904 [2] 1507).
- 3)  $\alpha\beta$ -Di[Acetylphenylamido]propan. Sm. 146–147° (*B.* 25, 3272). — *II*, 368.
- 4) Di[5-Acetylamido-2-Methylphenyl]methan. Sm. 270° (*B.* 27, 3315). — *IV*, 984.
- 5) Di[4-Acetylamido-3-Methylphenyl]methan. Sm. 198° u. Zers. (*B.* 27, 1811). — *IV*, 984.
- 6) 4-Acetylamido-3-[Acetyl-4-Methylphenylamido]methyl-1-Methylbenzol. Sm. 135° (*J. pr.* [2] 73, 217 *C.* 1906 [1] 1261).
- 7)  $\alpha\epsilon$ -Di[Benzoylamido]pentan. Sm. 129,5° (129–131°; 135°) (*H.* 13, 567; 16, 196; *B.* 32, 3544; *B.* 37, 3588 *C.* 1904 [2] 1407). — *II*, 1170.
- 8) labil.  $\beta\delta$ -Di[Benzoylamido]pentan. Sm. 189° (190–191°) (*B.* 31, 550; 32, 1194). — \**II*, 734.

- $C_{19}H_{22}O_2N_2$  9) stabil.  $\beta\delta$ -Di[Benzoylamido]pentan. Sm. 189–190° (B. 31, 551; 32, 1197). — \*II, 734.
- 10)  $d - \alpha\delta$ -Di[Benzoylamido]- $\beta$ -Methylbutan. Sm. 151–152° (Bl. [3] 17, 807).
- 11)  $\alpha\eta$ -Dioximido- $\alpha\eta$ -Diphenylheptan. Sm. 175–176° (Soc. 55, 347). — III, 301.
- 12) Dibenzyläther d.  $\beta\gamma$ -Dioximidopentan. Sm. 62–63° (G. 30 [2] 30). — \*II, 306.
- 13) Phenylhydrazon d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther-4-Acetylmethyläther (Ph. d. Acetonyl Eugenol). Sm. 93° (B. 27, 2465). — IV, 768.
- 14) Phenylhydrazon d. 3,4-Dioxy-1-Propenylbenzol-3-Methyläther-4-Acetylmethyläther (Ph. d. Acetonyliso Eugenol). Sm. 145° (B. 27, 2466). — IV, 768.
- 15) Dibenzoylisoamylhydrazin. Sm. 133° (B. 34, 3269).
- 16) Dimethyläther d. 5',6'-Dioxy-3'-Allyl-2,4-Dimethylazobenzol. Sm. 56° (C. 1908 [1] 24).
- 17) 5'-Methyläther-6'-Äthyläther d. 5',6'-Dioxy-3'-Allyl-2-Methylazobenzol. Fl. (B. 41, 414 C. 1908 [1] 1048).
- 18) 5'-Methyläther-6'-Äthyläther d. 5',6'-Dioxy-3'-Allyl-3-Methylazobenzol. Sm. 55° (G. 36 [2] 31 C. 1906 [2] 1192).
- 19) 5'-Methyläther-6'-Äthyläther d. 5',6'-Dioxy-3'-Allyl-4-Methylazobenzol. Sm. 55° (G. 36 [2] 33 C. 1906 [2] 1192; B. 41, 412 C. 1908 [1] 1048).
- 20) 4-[4-Methylphenyl]amido-4-Oxy-5-Keto-2-Methyl-1-[4-Methylphenyl]tetrahydropyrrol (C. r. 146, 1401 C. 1908 [2] 525).
- 21) Apochinin + 2H<sub>2</sub>O. Sm. 210° u. Zers. (2HCl, PtCl<sub>4</sub>, 2HJ + H<sub>2</sub>O, Oxalat (A. 205, 323; 230, 65; B. 28, 1972; M. 16, 34). — III, 818.
- 22) Apoconchinin + 2H<sub>2</sub>O. Sm. 137° (wasserfrei). HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (A. 205, 326). — III, 826.
- 23) Cuprein + 2H<sub>2</sub>O. Sm. 198°. Salze meist bekannt (A. 230, 57; C. 1897 [1] 1252; Bl. [3] 7, 305; R. 8, 147; C. 1909 [1] 1014). — III, 821; \*III, 630.
- 24)  $\alpha$ -Oxycinchonin. Sm. 252° u. Zers. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> +  $\frac{1}{2}$ H<sub>2</sub>O), (HCl, AuCl<sub>3</sub> + H<sub>2</sub>O), HBr + H<sub>2</sub>O, HJ + H<sub>2</sub>O, Oxalat (Bl. 49, 748; J. 1889, 2019). — III, 840.
- 25)  $\beta$ -Oxycinchonin. Sm. 273°. HCl + H<sub>2</sub>O, 2HCl + 3H<sub>2</sub>O, (2HCl, CdCl<sub>2</sub> + 2H<sub>2</sub>O), (2HCl, PtCl<sub>4</sub>), HBr + H<sub>2</sub>O, 2HBr, HJ, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> + 4H<sub>2</sub>O, Oxalat + H<sub>2</sub>O, Succinat + 3H<sub>2</sub>O, Tartrat + H<sub>2</sub>O (Bl. 49, 748; C. 1895 [1] 436; B. 28 [2] 61). — III, 840.
- 26) isom. Oxycinchonin. (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> (A. 108, 347; 123, 381). — III, 840.
- 27) isom. <sup>p</sup> Oxycinchonin. Sm. 205° (J. 1876, 822). — III, 835.
- 28)  $\alpha$ -[4-Methylphenyl]imido- $\gamma$ -[4-Methylphenyl]amidovaleriansäure. Sm. 238° (A. ch. [7] 9, 475). — \*II, 283.
- 29) Methylester d. 4,5-Camphyl-1-Phenylpyrazol-3-Carbonsäure. Sm. 80,5–81,5° (Am. 20, 337). — \*IV, 579.
- 30) Nitril d.  $\beta$ -Isovaleroxyl- $\alpha$ -[2-Cyanphenyl]- $\alpha$ -Hexen- $\alpha$ -Carbonsäure. Sm. 119–120°. + C<sub>2</sub>H<sub>6</sub>O (Sm. 153–154°) (B. 30, 895). — \*II, 1137.
- 31) Phenylamid d. Pentan- $\alpha\delta$ -Dicarbonsäure. Sm. 168° (174–175°) (Bl. [3] 25, 443; C. 1903 [2] 289; A. 336, 302 C. 1905 [1] 92).
- 32) Phenylamid d. Pentan- $\alpha\epsilon$ -Dicarbonsäure. Sm. 155° (A. 295, 179). — \*II, 213.
- 33) Phenylamid d.  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 199–200° (197–198°) (Bl. [3] 15, 228; C. 1903 [2] 288; A. 336, 302 C. 1905 [1] 92). — \*II, 213.
- 34) isom. Phenylamid d.  $\beta$ -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. 203 bis 204° (C. 1903 [2] 288).
- 35) Phenylamid d.  $\beta$ -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 147° (C. r. 138, 580 C. 1904 [1] 925).
- 36) Base (aus Dihydrojodapoconchinin). Sm. 157°. (2HCl, PtCl<sub>4</sub>) (M. 12, 675). — III, 826.
- 37) Verbindung (aus Furfurol u. Methylanilin). HCl (Sm. 94°) (A. 239, 354). — III, 723.

- C<sub>19</sub>H<sub>22</sub>O<sub>2</sub>N<sub>4</sub>** C 67,4 — H 6,5 — O 9,5 — N 16,6 — M. G. 338.
- 1) Diäthyläther d. 5-Methyl-2,3-Di[4-Oxyphenyl]-2,3,4-Tetrazin. Sm. 116° (B. 33, 645; C. 1900 [1] 205). — \*IV, 903.
  - 2) Äthylester d. βγ-Di[Phenylhydrazon]butan-α-Carbonsäure. Sm. 115° (B. 40, 1652 C. 1907 [1] 1622).
  - 3) 4-Methylphenylhydrazid d. 5-Keto-3-Methyl-1-[4-Methylphenyl]-tetrahydropyrazol-3-Carbonsäure. Sm. 204—206° u. Zers. (J. pr. [2] 74, 311 C. 1906 [2] 1821).
- C<sub>19</sub>H<sub>22</sub>O<sub>2</sub>N<sub>6</sub>** C 62,3 — H 6,0 — O 8,7 — N 23,0 — M. G. 366.
- 1) Di[2-Oxybenzylidenamido]-R-Pentamethylentetramin. Sm. 213° (A. 288, 234). — III, 72.
- C<sub>19</sub>H<sub>22</sub>O<sub>2</sub>S** 1) Diäthyläther d. Di[*p*-Oxy-*p*-Methylphenyl]thioketon. Sm. 117—118° (B. 28, 2872). — III, 232.
- 2) Dipropyläther d. 4,4'-Dioxydiphenylthioketon. Sm. 105—106° (B. 28, 2871). — III, 211.
- C<sub>19</sub>H<sub>22</sub>O<sub>2</sub>S<sub>2</sub>** 1) γγ-Dimerkaptovalerianidibenzyläthersäure. Sm. 70° (B. 34, 2653).
- 2) ββ-Dimerkaptο-α-Methylbutterdibenzyläthersäure. Sm. 131—133° (B. 34, 2631).
- 3) Äthylester d. γγ-Dimerkaptοvalerianphenyläthersäure. Fl. (B. 34, 2655).
- 4) Äthylester d. ββ-Dimerkaptο-α-Methylbutterdiphenyläthersäure. Sm. 49° (B. 34, 2664).
- C<sub>19</sub>H<sub>22</sub>O<sub>3</sub>N<sub>2</sub>** C 69,9 — H 6,7 — O 14,7 — N 8,6 — M. G. 326.
- 1) Äthyläther d. 4,6'-Di[Formylamido]-3-Oxy-2,6,3'-Trimethylbi-phenyl. Sm. 189° (A. 369, 31 C. 1909 [2] 1855).
  - 2) Diacetylderivat d. 4'-Amido-4-Oxy-2-Methyldiphenylamin-4-Äthyl-äther. Sm. 153° (A. 287, 158). — \*IV, 387.
  - 3) Diacetylderivat d. 4-Amido-4'-Oxy-3-Methyldiphenylamin-4'-Äthyl-äther. Sm. 180—181° (A. 287, 166). — \*IV, 404.
  - 4) 4,5-Dioxy-2-Keto-1,3-Diäthyl-4,5-Diphenyltetrahydroimidazol. Sm. 157,5° u. Zers. (A. 368, 238 C. 1909 [2] 1469).
  - 5) Dimethyläther d. syn-4,5-Dioxy-2-Keto-1-Äthyl-4,5-Diphenyltetrahydroimidazol. Sm. 81° (A. 368, 232 C. 1909 [2] 1468).
  - 6) Diäthyläther d. anti-4,5-Dioxy-2-Keto-4,5-Diphenyltetrahydroimidazol. Zers. bei 225°. + C<sub>2</sub>H<sub>6</sub>O (A. 368, 181 C. 1909 [2] 1464).
  - 7) Diäthyläther d. syn-4,5-Dioxy-2-Keto-4,5-Diphenyltetrahydroimidazol. Sm. 185—186°. + CH<sub>4</sub>O, + C<sub>2</sub>H<sub>6</sub>O (A. 368, 177 C. 1909 [2] 1463).
  - 8) Dioxycinchonidin? (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>SO<sub>4</sub> + 2H<sub>2</sub>O (A. 172, 104; J. pr. [2] 69, 196 C. 1904 [1] 1448). — III, 852.
  - 9) 2-[*p*-Naphtylureido]-1-Methylhexahydrobenzol-2-Carbonsäure. Sm. 180° u. Zers. (B. 41, 2936 C. 1908 [2] 1515).
  - 10) Äthylester d. γ-Oximido-α-Phenylamido-α-Phenylbutan-β-Carbonsäure. Sm. 136—137° (G. 29 [2] 27). — \*II, 972.
  - 11) Äthylester d. isom. γ-Oximido-α-Phenylamido-2-Phenylbutan-β-Carbonsäure. Sm. 153° u. Zers. (G. 29 [2] 27). — \*II, 972.
  - 12) Isoamylester d. αβ-Diphenylharnstoff-α-Carbonsäure. Sm. 58° (B. 4, 248). — II, 382.
  - 13) 6-Acetat d. α-[5,6-Dioxy-3-Allylphenyl]-β-[4-Methylphenyl]hydrazin-5-Methyläther. Sm. 109—110° (B. 41, 413 C. 1908 [1] 1048).
  - 14) α-Benzyl-β-Phenylhydrazid d. Bernsteinsäuremonoäthylester. Sm. 79° (B. 26, 678). — IV, 812.
- C<sub>19</sub>H<sub>22</sub>O<sub>3</sub>N<sub>4</sub>** C 64,5 — H 6,1 — O 13,6 — N 15,8 — M. G. 354.
- 1) 4-Benzoylamidoacetylhydrazon-1-Oximido-2-Methyl-5-Isopropyl-1,4-Dihydrobenzol. Zers. bei 240° (A. 343, 192 C. 1906 [1] 837).
  - 2) Semicarbazon d. Codeinon. Zers. bei 250° (B. 40, 2037 C. 1907 [2] 161).
  - 3) Semicarbazon d. Pseudocodeinon. Sm. 180° (B. 40, 2036 C. 1907 [2] 161; B. 40, 3342 Ann. C. 1907 [2] 921).
- C<sub>19</sub>H<sub>22</sub>O<sub>3</sub>S** 1) γ-Keto-ε-Phenylsulfon-ε-Phenyl-β-Methylpentan. Sm. 161—164° (B. 37, 507 C. 1904 [1] 883).
- C<sub>19</sub>H<sub>22</sub>O<sub>4</sub>N<sub>2</sub>** C 66,7 — H 6,4 — O 18,7 — N 8,2 — M. G. 342.
- 1) αα-Di[*p*-Nitrophenyl]heptan. Fl. (Bl. 47, 49). — II, 242.
  - 2) ββ-Di[*p*-Acetylamido-4-Oxyphenyl]propan (C. 1904 [2] 1737).



- $C_{19}H_{22}O_4N_2$  3) Dimethyläther d. 4,4'-Di[Acetylamido]-3,3'-Dioxydiphenylmethan. Sm. 180,5° (*J. pr.* [2] 79, 495 *C.* 1909 [2] 362).
- 4) Äthyläther d. 2-Nitro-6-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 138° (*B.* 35, 2795 *C.* 1902 [2] 989).
- 5) Chitenin + 4H<sub>2</sub>O. Sm. 286° u. Zers. (wasserfrei). (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), 2HBr + 1(1/2)H<sub>2</sub>O, 2H<sub>2</sub>SO<sub>4</sub> + 15H<sub>2</sub>O, Ag (*A.* 199, 352; *Z.* 1869, 594; *M.* 14, 598). — III, 819.
- 6) Chitenidin + 2H<sub>2</sub>O. Sm. 246° u. Zers. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> + 3H<sub>2</sub>O (*B.* 15, 1659). — III, 826.
- 7)  $\alpha\epsilon$ -Di[Phenylamido]pentan- $\alpha^2, \epsilon^2$ -Dicarbonsäure. Sm. 171° (*B.* 40, 857 *C.* 1907 [1] 1123).
- 8) 4,4'-Di[Methylamido]diphenylmethan-NN'-Di[Methylcarbonsäure]. Sm. 126° (*B.* 41, 2142 *C.* 1908 [2] 702).
- 9) Dimethylester d. Di[4-Methylphenylamido]malonsäure. Sm. 172° (*C. r.* 141, 49 *C.* 1905 [2] 458).
- 10) Diäthylester d. Di[Phenylamido]malonsäure. Sm. 103° (117—118°) (*Am.* 19, 695; *C. r.* 141, 49 *C.* 1905 [2] 458). — \*II, 231.
- 11) Diäthylester d. 4,4'-Diamidodiphenylmethan-3,3'-Dicarbonsäure. Sm. 109° (*A.* 324, 131 *C.* 1902 [2] 1253).
- 12) Diäthylester d. 2-Diamidodiphenylmethan-4,4'-Dicarbonsäure. Sm. 148° (*C. r.* 141, 199 *C.* 1905 [2] 770).
- 13) Diäthylester d. 1-Benzylidenamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 49° (*B.* 40, 4754 *C.* 1908 [1] 260).
- 14) Diäthylester d. 2,6-Dimethyl-4-[3-Amidophenyl]pyridin-3,5-Dicarbonsäure. Sm. 109—110°. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O) (*B.* 20, 1340; *D.R.P.* 42295). — II, 387; \*IV, 232.
- 15) Di[Phenylamidoformiat] d.  $\beta\delta$ -Dioxypentan. Sm. 141° (*M.* 27, 1110 *C.* 1907 [1] 628).
- 16) 4-Methylphenylamid d. Mesoxaläthyläthersäure (*Am.* 16, 382). — \*II, 381.
- 17) Di[4-Methoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 241 bis 242° (*G.* 34 [2] 264 *C.* 1904 [2] 1453).
- 18) Di[4-Äthoxyphenylamid] d. Methandicarbonsäure. Sm. 233—234° (226°) (*G.* 25 [2] 540; *B.* 31, 3257). — \*II, 410.
- $C_{19}H_{22}O_4N_4$  C 61,6 — H 5,9 — O 17,3 — N 15,1 — M. G. 370.
- 1) Di[Phenylhydrazon] d. Methylenglykose. Sm. 164—166° (*B.* 32, 2587). — \*IV, 522.
- 2) Phenylhydrazond.Glyazindihydrotetramethylmalonsäuremethyl-ester- $\epsilon$ -Lakton. Sm. 270° (*Soc.* 83, 1259 *C.* 1903 [2] 1423).
- $C_{19}H_{22}O_4N_6$  C 57,3 — H 5,5 — O 16,1 — N 21,1 — M. G. 398.
- 1)  $\alpha\gamma$ -Propylenäther d. 4-Oxy-1-Semicarbazonmethylbenzol. Sm. 297 bis 298° (*A.* 357, 376 *C.* 1908 [1] 358).
- $C_{19}H_{22}O_5N_2$  C 63,7 — H 6,1 — O 22,4 — N 7,8 — M. G. 358.
- 1) 4',5'-Dimethyläther d. 4,5-Dioxy-2-Keto-4,5-Di[4-Oxyphenyl]-1,3-Dimethyltetrahydroimidazol. Sm. 193° u. Zers. (*A.* 368, 218 *C.* 1909 [2] 1467).
- 2) Nitromorphimethin. Sm. 214—215° (*B.* 38, 1857 *C.* 1905 [2] 52).
- 3) Diäthylester d. 1-[4-Oxybenzyliden]amido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 154° (*B.* 40, 4754 *C.* 1908 [1] 260).
- 4) Diäthylester d. 1-Benzoylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 123—124° (*B.* 35, 4315 *C.* 1903 [1] 336; *B.* 38, 2374 *C.* 1905 [2] 459). — \*IV, 357.
- 5) Verbindung (aus uns-Phenylbenzylhydrazin u. Rhamnose). Sm. 50—60° (*Soc.* 83, 1289 *C.* 1904 [1] 86).
- $C_{19}H_{22}O_5N_4$  C 59,1 — H 5,7 — O 20,7 — N 14,5 — M. G. 386.
- 1) Dinitrocinchonamin. Sm. 118°. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (*A.* 225, 227; *A. ch.* [6] 19, 119). — III, 929.
- 2) Diäthylester d. s-Diphenylcarbazzidicarbonsäure. Sm. 158—159° (*B.* 32, 15). — \*IV, 434.
- 3) Diäthylester d. isom. Diphenylcarbazzidicarbonsäure. Sm. 194° (*B.* 33, 460). — \*IV, 434.
- $C_{19}H_{22}O_6S_2$  1)  $\delta\delta$ -Dibenzylsulfon- $\beta$ -Ketopentan. Sm. 137—138° (*B.* 35, 501 *C.* 1902 [1] 637).
- 2)  $\beta\beta$ -Dibenzylsulfon- $\gamma$ -Ketopentan (*B.* 35, 499 *C.* 1902 [1] 637).

- C<sub>19</sub>H<sub>22</sub>O<sub>6</sub>N<sub>2</sub>** C 61,0 — H 5,9 — O 25,6 — N 7,5 — M. G. 374.  
 1) 4,4'- $\alpha$ -Propylenäther d. 4-Oxy-3-Methoxybenzaloxim. Sm. 161 bis 162° (A. 357, 382 C. 1908 [1] 358).  
 2) Helicinphenylhydrazon. Sm. 187° (B. 18, 1659). — IV, 759.  
 3) Diäthylester d. 2,6-Dimethyl-4-[2-Nitrophenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 119—120° (B. 20, 1341). — IV, 370.  
 4) Diäthylester d. 2,6-Dimethyl-4-[3-Nitrophenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 161° (B. 20, 1338; D. R. P. 42295). — IV, 371; \*IV, 220.  
 5) Diäthylester d. 2,6-Dimethyl-4-[4-Nitrophenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 118—122° (B. 20, 1340). — IV, 371.
- C<sub>19</sub>H<sub>22</sub>O<sub>6</sub>S<sub>2</sub>** 1)  $\gamma\gamma$ -Di[Benzylsulfon]valeriansäure. Sm. 143—145° u. Zers. (B. 34, 2651).  
 2) Äthylester d.  $\gamma\gamma$ -Di[Phenylsulfon]valeriansäure. Sm. 112—113° (B. 34, 2655).  
 3) Äthylester d.  $\beta\beta$ -Di[Phenylsulfon]- $\alpha$ -Methylbuttersäure. Sm. 130° (B. 34, 2665).
- C<sub>19</sub>H<sub>22</sub>O<sub>7</sub>N<sub>4</sub>** C 54,5 — H 5,3 — O 26,8 — N 13,4 — M. G. 418.  
 1) Verbindung (aus Harnstoff u. 2-Nitrobenzol-1-Carbonsäurealdehyd). Sm. 170° (M. 10, 305). — III, 33.
- C<sub>19</sub>H<sub>22</sub>O<sub>7</sub>S<sub>2</sub>** 1) Di[P-Trimethylphenyl]keton-?-Disulfonsäure (Dipseudocumylketon-disulfonsäure). Ba (J. pr. [2] 47, 50). — III, 239.
- C<sub>19</sub>H<sub>22</sub>O<sub>8</sub>N<sub>2</sub>** C 56,2 — H 5,4 — O 31,5 — N 6,9 — M. G. 406.  
 1) Verbindung (aus Nitrocodeinsäure). Sm. 180° (B. 42, 3510 C. 1909 [2] 1472).
- C<sub>19</sub>H<sub>22</sub>O<sub>9</sub>N<sub>2</sub>** C 54,0 — H 5,2 — O 34,1 — N 6,6 — M. G. 422.  
 1) 3,5-Diacetat d. 2,4-Di[Diacetylamido]-1,3,5-Trioxybenzol-1-Methyläther. Sm. 169° (M. 21, 27). — \*II, 618.
- C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>S** 1) 4'-Phenylthioureido-1,2,3,4,5,6-Hexahydrobiphenyl. Sm. 157—158° (A. 318, 324).
- C<sub>19</sub>H<sub>22</sub>N<sub>3</sub>J** 1) Jodmethylat d. 5-Methylbenzylamido-3-Methyl-1-Phenylpyrazol. Sm. 115° (A. 339, 174 C. 1905 [1] 1402).  
 2) 2-Jodäthylat d. 5-Methylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 184—185° (159°) (B. 36, 3277 C. 1903 [2] 1189; B. 40, 4485 C. 1908 [1] 138).
- C<sub>19</sub>H<sub>22</sub>N<sub>4</sub>S<sub>2</sub>** 1) Diphenylthioharnstoff (aus Trimethylenäthylendiamin). Sm. 216—217° u. Zers. (B. 33, 761). — \*II, 196.
- C<sub>19</sub>H<sub>22</sub>N<sub>5</sub>Cl** 1) Chlormethylat d. 5-Äthylamido-4-Phenylazo-3-Methyl-1-Phenylpyrazol. 2 + PtCl<sub>4</sub> (A. 354, 107 C. 1907 [2] 611).
- C<sub>19</sub>H<sub>22</sub>N<sub>6</sub>J** 1) Jodmethylat d. 5-Äthylamido-4-Phenylazo-3-Methyl-1-Phenylpyrazol. Sm. 218° (A. 354, 107 C. 1907 [2] 610).
- C<sub>19</sub>H<sub>23</sub>ON** C 81,1 — H 8,2 — O 5,7 — N 5,0 — M. G. 281.  
 1)  $\alpha$ -Phenylamido- $\gamma$ -Keto- $\alpha$ -Phenylheptan. Sm. 80° (Bl. [3] 33, 396 C. 1905 [1] 1317).  
 2) 2-Benzoylamido-5-Pseudobutyl-1,3-Dimethylbenzol. Sm. 233° (B. 33, 2563). — \*II, 732.  
 3) 4-Benzoylamido-5-Pseudobutyl-1,3-Dimethylbenzol. Sm. 206° (B. 33, 2567). — \*II, 732.  
 4)  $\alpha$ -Oximido- $\alpha\gamma$ -Di[2,5-Dimethylphenyl]propan. Sm. 82—84° (A. ch. [7] 2, 206). — III, 239.  
 5) Tetrahydroapocinchen. Sm. 45—50° (J. pr. [2] 61, 21). — \*III, 634.  
 6) Phenylamidoformiat d.  $\alpha$ -Oxy- $\alpha$ -[2,4,6-Trimethylphenyl]propan. Sm. 141° (B. 35, 2256 C. 1902 [2] 274).  
 7)  $\alpha$ -Phenyläthylamid d.  $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 112° (B. 37, 2703 C. 1904 [2] 518; J. pr. [2] 71, 347 C. 1905 [1] 1598).  
 8) isom.  $\alpha$ -Phenyläthylamid d.  $\alpha$ -Phenylbutan- $\beta$ -Carbonsäure. Sm. 85—87° (B. 37, 2703 C. 1904 [2] 518; J. pr. [2] 71, 352 C. 1905 [1] 1598).
- C<sub>19</sub>H<sub>23</sub>ON<sub>3</sub>** C 73,8 — H 7,4 — O 5,2 — N 13,6 — M. G. 309.  
 1) Oxim d. Hydrocinchoninon. Sm. 88—100° (A. 364, 351 C. 1909 [1] 1243).
- C<sub>19</sub>H<sub>23</sub>O<sub>2</sub>N** C 76,8 — H 7,7 — O 10,8 — N 4,6 — M. G. 297.  
 1) Äthyläther d. 4-Diäthylamido-3'-Oxydiphenylketon. Sm. 104° (D. R. P. 65952). — \*III, 153.

- $C_{19}H_{23}O_3N$
- 2) Äthyläther d. 2-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 144° (B. 35, 2799 C. 1902 [2] 989).
  - 3) Äthyläther d. 6-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 151—152° (B. 35, 2800 C. 1902 [2] 989).
  - 4) Phenyläther d. ζ-Benzoylamido-α-Oxyhexan. Sm. 80° (B. 38, 3087 C. 1905 [2] 1262).
  - 5) Dimethylketen-p-Toluchinaldin. Sm. 129—130° (B. 40, 1151 C. 1907 [1] 1260).
  - 6) Desoxycodomethin. Sm. 162—164°.  $HNO_3$  (B. 40, 3865 C. 1907 [2] 1633).
  - 7) Methylester d. 4-Diäthylamidodiphenylmethan-2'-Carbonsäure. Fl. (Bl. [3] 25, 202).
  - 8) 1-Naphtylester d. d-2-Propylhexahydropyridin-1-Carbonsäure. Sd. 300° (Bl. [3] 19, 189). — \*IV, 30.
  - 9) 2-Naphtylester d. d-2-Propylhexahydropyridin-1-Carbonsäure. Sd. oberhalb 300° (Bl. [3] 19, 189). — \*IV, 30.
  - 10) Benzoat d. γ-Dimethylamido-β-Oxy-α-Phenyl-β-Methylpropan. HCl (C. r. 138, 768 C. 1904 [1] 1196; D. R. P. 169746 C. 1906 [1] 1585).
  - 11) Phenylamidoformiat d. γ-Oxy-α-Phenyl-γ-Methylbutan. Sm. 94 bis 95° (B. 37, 2317 C. 1904 [2] 217).
  - 12) Phenylamidoformiat d. γ-Oxy-γ-Benzylpentan. Sm. 98° (B. 37, 1724 C. 1904 [1] 1515).
  - 13) 2-Methylphenylamid d. Oxyessig-4-tert. Butylphenyläthersäure. Sm. 91° (Am. 19, 75). — \*II, 458.
  - 14) 4-Methylphenylamid d. Oxyessig-4-tert. Butylphenyläthersäure. Sm. 122° (Am. 19, 76). — \*II, 458.
- $C_{19}H_{23}O_2N_3$
- 1) 2-Acetylamido-4,4'-Di[Dimethylamido]diphenylketon. Sm. 162,25° (B. 39, 1274 C. 1906 [1] 1746).
  - 2) 3-Acetylamido-4,4'-Di[Dimethylamido]diphenylketon. Sm. 153,5 bis 154,5° (B. 39, 1270 C. 1906 [1] 1745).
- $C_{19}H_{23}O_3N$
- C 72,9 — H 7,3 — O 15,3 — N 4,5 — M. G. 313.
  - 1) Dipropyläther d. α-Oximido-4,4'-Dioxydiphenylmethan. Sm. 113° (B. 28, 2871). — III, 199.
  - 2) Äthylpiperin d. ε-Keto-ε-Piperidyl-α-[3,4-Dioxyphenyl]-δ-Äthyl-α-Pentadien. Sm. 118—119° (B. 28, 1196). — IV, 17.
  - 3) α-Methylmorphimethin (Methocodein). Sm. 118,5°.  $HCl + 2H_2O$ , (2HCl,  $PtCl_4 + 2H_2O$ ) (A. ch. [5] 27, 276; A. 222, 218; B. 22, 185, 1113; 27, 1145; 30, 355; B. 39, 19 C. 1906 [1] 684). — III, 903; \*III, 672.
  - 4) β-Methylmorphimethin (Methocodein). Sm. 134—135°.  $HCl$ , Tartrat (B. 22, 1133; 27, 1145; B. 35, 3009 C. 1902 [2] 1133; B. 39, 20 C. 1906 [1] 684; B. 39, 1418 C. 1906 [1] 1664). — III, 904.
  - 5) γ-Methylmorphimethin (Methylisomorphimethin). Sm. 167° (Soc. 79, 577; B. 35, 3010 C. 1902 [2] 1133). — \*III, 674.
  - 6) δ-Methylmorphimethin. Sm. 111—113° (B. 35, 3011 C. 1902 [2] 1133).
  - 7) ε-Methylmorphimethin. Sm. 128—130°.  $HCl + H_2O$  (B. 39, 4412 C. 1907 [1] 353; B. 41, 981 C. 1908 [1] 1709; A. 368, 318 C. 1909 [2] 1662).
  - 8) ζ-Methylmorphimethin. Fl. (B. 40, 3850 C. 1907 [2] 1631).
  - 9) Dihydrothebain. Sm. 154° (B. 32, 192). — \*III, 676.
  - 10) Isodihydrothebain. Sm. 138° HJ (B. 32, 195). — \*III, 677.
  - 11) Äthylmorphin (D. R. P. 102634, 107225, 108075). — \*III, 669.
  - 12) Methyläther d. Thebainon. Sm. 156° (B. 38, 3168 C. 1905 [2] 1442).
  - 13) Äthyläther d. Morphin +  $H_2O$  (Codäthylin). Sm. 83°.  $HCl + H_2O$  (Dionin) (D. R. P. 39887; H. 40, 3, 21; A. ch. [5] 27, 278; C. 1899 [1] 430, 705; 1900 [1] 1086). — III, 908; \*III, 674.
  - 14) Benzylamidocamphoformencarbonsäure. Sm. 140°. Benzylaminsalz (Am. 34, 244 C. 1905 [2] 1490).
  - 15) 3-Methylphenylamidocamphoformencarbonsäure. Sm. 154°. 3-Toluidinsalz (Am. 34, 246 C. 1905 [2] 1490).
  - 16) 4-Methylphenylamidocamphoformencarbonsäure. Sm. 168°. 4-Toluidinsalz (Am. 34, 243 C. 1905 [2] 1490).
  - 17) Äthylester d. 3-Benzoyl-1,2,4,6-Tetramethyl-1,4-Dihydropyridin-5-Carbonsäure. Sm. 97° (B. 24, 1669). — IV, 90.



- C<sub>19</sub>H<sub>29</sub>O<sub>3</sub>N** 18) 2-Oxyphenylester d. Isoamylbenzylamidoameisensäure. Sm. 74° (A. 310, 222). — \*II, 549.
- 19)  $\beta$ -Benzoat d.  $\gamma$ -Dimethylamido- $\beta$ -Oxy- $\alpha$ -[4-Oxyphenyl]propan-4-Methyläther. HCl (C. r. 145, 876 C. 1908 [1] 130).
- 20)  $\beta$ -Phenylamidoformiat d.  $\alpha\beta$ -Dioxy- $\beta$ -Äthylbutan- $\alpha$ -Phenyläther. Sm. 98° (B. 39, 2297 C. 1906 [2] 524).
- C<sub>19</sub>H<sub>29</sub>O<sub>3</sub>N<sub>3</sub>** C 66,9 — H 6,7 — O 14,1 — N 12,3 — M. G. 341.
- 1) Diäthyläther d. Acetyldi[4-Oxyphenyl]guanidin. Sm. 165° (D.R.P. 66550). — \*II, 406.
- 2) Gynesin. (2HCl, 2AuCl<sub>3</sub>) (H. 49, 85 C. 1906 [2] 1445). C 69,3 — H 7,0 — O 19,4 — N 4,2 — M. G. 329.
- C<sub>19</sub>H<sub>23</sub>O<sub>4</sub>N** 1) Corytuberin + 5H<sub>2</sub>O (oder C<sub>19</sub>H<sub>25</sub>O<sub>4</sub>N). Sm. 240° u. Zers. HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), HBr, H<sub>2</sub>SO<sub>4</sub> + 4H<sub>2</sub>O (Ar. 240, 101 C. 1902 [1] 820; Ar. 246, 578 C. 1909 [1] 32). — \*III, 650.
- 2) d-Cinnamylcocain. Sm. 68° HCl, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>), HBr, HNO<sub>3</sub> (B. 24, 7). — III, 869.
- 3) l-Cinnamylcocain. Sm. 121°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 21, 3374; 22, 132, 2661; A. 271, 184). — III, 869.
- 4) Allocinnamylcocain. Fl. (2HCl, PtCl<sub>4</sub>) (B. 27, 2046). — III, 869.
- 5)  $\gamma$ -Isatropylcocain +  $\frac{1}{2}$ H<sub>2</sub>O (Cocamin;  $\alpha$ -Truxillin oder C<sub>38</sub>H<sub>46</sub>O<sub>8</sub>N<sub>2</sub>) (B. 22, 665, 682; A. 271, 187; J. pr. [2] 66, 418 C. 1903 [1] 528). — III, 869.
- 6)  $\delta$ -Isatropylcocain (Isococamin;  $\beta$ -Truxillin). Zers. oberhalb 120°. (2HCl, PtCl<sub>4</sub>), (HCl, AuCl<sub>3</sub>) (B. 21, 2342, 3196; 22, 681; A. 271, 191). — III, 869.
- 7)  $\epsilon$ -Isatropylcocain ( $\gamma$ -Truxillin). Sm. bei 63° (B. 22, 130). — III, 869.
- 8) Ketodihydromethylmorphinmethin (Oxymethylmorphinmethin). Fl. + (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>O, HCl, HJ, Pikrat, Pikrolonat (B. 39, 1416 C. 1906 [1] 1664; B. 40, 1980 C. 1907 [2] 154).
- 9) Diäthylester d. 2,5-Dimethyl-1-[4-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Sm. 67° (B. 18, 304). — IV, 92.
- 10) Diäthylester d. 2,6-Dimethyl-4-Phenyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 157° (B. 16, 1607; 31, 742; M. 17, 349; C. 1899 [2] 440). — IV, 370; \*IV, 220.
- C<sub>19</sub>H<sub>23</sub>O<sub>4</sub>N<sub>3</sub>** C 63,9 — H 6,4 — O 17,9 — N 11,8 — M. G. 357.
- 1) Isoamylidi[4-Nitrobenzyl]amin. Sm. 57° (B. 30, 67). — \*II, 293.
- 2) Diäthyläther d.  $\alpha$ -[4-Oxyphenyl]amidoacetyl- $\beta$ -[4-Oxyphenyl]-harnstoff. Sm. 162° (C. 1899 [2] 420). — \*II, 411.
- 3) Methylenäther d. 3,4-Dioxybenzylidencamphorylpseudosemicarbazon. Sm. 229° (Soc. 87, 730 C. 1905 [2] 242).
- 4) r- $\alpha$ -[ $\beta$ -1-Naphtylureido]isocapronylamidoessigsäure. Sm. 186° (C. 1907 [2] 1157).
- C<sub>19</sub>H<sub>23</sub>O<sub>5</sub>N** C 66,1 — H 6,7 — O 23,2 — N 4,0 — M. G. 345.
- 1) Laarotetanin. Sm. 134°. HCl + 6H<sub>2</sub>O, HBr + 2H<sub>2</sub>O, HJ + 2H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 5H<sub>2</sub>O, Pikrat (C. 1899 [1] 122). — \*III, 661.
- 2) Acetylatroscin. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), (HCl, AuCl<sub>3</sub>) (J. pr. [2] 64, 374). — \*III, 618.
- 3) Acetylscopolamin. (HCl, AuCl<sub>3</sub>). — III, 796.
- 4) Acetylhyoscine. (HCl, AuCl<sub>3</sub>) (J. pr. [2] 64, 365). — \*III, 621.
- 5) Diäthylester d. 1-Oximido-5-Methyl-3-Phenyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 173° (A. 281, 78). — II, 1971.
- C<sub>19</sub>H<sub>23</sub>O<sub>6</sub>N** C 63,1 — H 6,4 — O 26,6 — N 3,9 — M. G. 361.
- 1) Hexamethyläther d. 5-[2,4,5-Trioxybenzyliden]amido-1,2,4-Trioxybenzol. Sm. 142,5°. HCl (B. 39, 3682 C. 1907 [1] 37).
- 2) Diäthylester d.  $\epsilon$ -[1,2-Phtalyl]amidopentan- $\alpha\alpha$ -Dicarbonsäure. Sm. 46° (B. 32, 1269; B. 42, 556 C. 1909 [1] 861).
- C<sub>19</sub>H<sub>23</sub>O<sub>6</sub>N<sub>3</sub>** C 58,6 — H 5,9 — O 24,7 — N 10,8 — M. G. 389.
- 1) Diäthylester d. 4-[4-Nitrophenyl]hydrazon-6-Methyl-1,2,3,4-Tetrahydrobenzol-1,3-Dicarbonsäure. Sm. 165° (A. 360, 297 C. 1908 [2] 247).
- C<sub>19</sub>H<sub>28</sub>O<sub>6</sub>N<sub>13</sub>** C 41,1 — H 4,1 — O 17,3 — N 37,4 — M. G. 555.
- 1)  $\alpha$ -Nitro- $\alpha\alpha$ -Di[Kaffeinäzo]propan. Sm. 237–238° (Am. 23, 69). — \*IV, 1086.

- $C_{19}H_{23}O_6Cl$  1) Diäthylester d.  $\beta\zeta$ -Diketo- $\delta$ -[4-Chlorphenyl]heptan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 150—151° (A. 303, 253). — \*II, 1176.
- $C_{19}H_{23}O_6Br$  1) Diäthylester d.  $\beta$ -Brom- $\beta\zeta$ -Diketo- $\delta$ -Phenylheptan- $\gamma\epsilon$ -Dicarbonsäure. Sm. 159° (B. 18, 2584). — II, 2020.
- $C_{19}H_{23}O_7N$  1) Phenylamidoformiat d. trim.  $\beta\gamma$ -Diketobutan. Sm. 132°. (+  $C_6H_6$  Sm. 86°) (B. 35, 3295 C. 1902 [2] 1247).  
2)  $\alpha$ -Phenylmonamid d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure- $\alpha\gamma\gamma$ -Triäthylester. Fl. (A. 285, 140). — \*II, 223.
- $C_{19}H_{23}O_8N$  C 58,0 — H 5,8 — O 32,6 — N 3,6 — M. G. 393.  
1) Diäthylester d. 3,5-Dioxy-3-Methyl-1-[3-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Fl. Na +  $C_2H_6O$  (A. 332, 36 C. 1904 [1] 1566).  
2) Diäthylester d. 3,5-Dioxy-3-Methyl-1-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Sm. 129—130°. Na (A. 332, 31 C. 1904 [1] 1566).  
3) Diäthylester d. isom. 3,5-Dioxy-3-Methyl-1-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2,6-Dicarbonsäure. Sm. 130—135° (A. 332, 33 C. 1904 [1] 1566).  
4) Diäthylester d. 5-Keto-1-Oxy-1-Methyl-3-[2-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäure. Sm. 163—164° (A. 303, 231; 332, 30). — \*II, 1176.  
5) Diäthylester d. 5-Keto-1-Oxy-1-Methyl-3-[3-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäure. Sm. 146° (148°) (A. 303, 232; A. 323, 105 C. 1902 [2] 785; Soc. 83, 719 C. 1903 [2] 54; A. 332, 35 C. 1904 [1] 1566). — \*II, 1176.  
6) Diäthylester d. 5-Keto-1-Oxy-1-Methyl-3-[4-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäure. Sm. 170—171° (164°) (A. 303, 236; A. 323, 105 C. 1902 [2] 785; A. 332, 31 C. 1904 [1] 1566). — \*II, 1176.  
7) Diäthylester d. isom. 5-Keto-1-Oxy-1-Methyl-3-[4-Nitrophenyl]hexahydrobenzol-2,4-Dicarbonsäure. Sm. 152—153° (A. 332, 32 C. 1904 [1] 1566).
- $C_{19}H_{23}O_8N_3$  C 54,1 — H 5,5 — O 30,4 — N 10,0 — M. G. 421.  
1) Verbindung (aus Äthylxanthophansäure). Sm. 194° (B. 39, 2086 C. 1906 [2] 423).
- $C_{19}H_{23}N_2Cl$  1) Cinchotinchlorid. Sm. 85—87° (B. 27, 2291). — III, 858.
- $C_{19}H_{23}N_2Br$  1) 4-Bromphenylhydrazon d. Curcumon. Sm. 71° (B. 42, 2519 C. 1909 [2] 529).
- $C_{19}H_{23}N_4J$  1) Jodmethylat d. 5-[ $\alpha\beta$ -Dimethyl- $\beta$ -Phenylhydrazido]-3-Methyl-1-Phenylpyrazol. Sm. 191° (B. 42, 2768 C. 1909 [2] 625).
- $C_{19}H_{24}ON_2$  C 76,9 — H 8,1 — O 5,4 — N 9,5 — M. G. 296.  
1) s-Di[4-Propylphenyl]harnstoff. Sm. 205° (B. 17, 1224). — II, 549.  
2) s-Di[2,4,5-Trimethylphenyl]harnstoff. Sm. 274° (subl. bei 280°) (B. 21, 528; 25, 1089; Bl. [3] 17, 732). — II, 552; \*II, 317.  
3) s-Di[2,4,6-Trimethylphenyl]harnstoff. Sm. oberhalb 300° (B. 15, 1017). — II, 554.  
4) s-Di[ $\beta$ -Trimethylphenyl]harnstoff. Sm. oberhalb 290° (B. 18, 2233). — II, 556.  
5)  $\alpha$ -[d-sec. Butyl]- $\beta\beta$ -Dibenzylharnstoff. Sm. 69° (Ar. 242, 71 C. 1904 [1] 999).  
6)  $\alpha$ -Isobutyl- $\beta\beta$ -Dibenzylharnstoff. Sm. 108—109° (B. 25, 1821). — II, 526.  
7)  $\alpha$ -Isobutyl- $\beta$ -Benzyl- $\beta$ -[4-Methylphenyl]harnstoff. Sm. 41° (B. 25, 1824). — II, 526.  
8)  $\alpha$ -Isobutyl- $\beta\beta$ -[4-Methylphenyl]harnstoff. Sm. 118—119° (B. 25, 1822). — II, 495.  
9) 2,4-Dimethylphenyl-2-Acetylamo-3,5-Dimethylbenzylamin. Sm. 278° (C. 1900 [1] 496). — \*IV, 418.  
10) Isobutyläther d. 2-Methylphenylimido-2-Methylphenylamidooxymethan. Sd. 218°<sub>18</sub> (C. 1899 [1] 829). — \*II, 254.  
11) 4-Dimethylamido-4'-Diäthylamidodiphenylketon. Sm. 94° (D.R.P. 44077). — \*III, 149.

- C<sub>18</sub>H<sub>24</sub>ON<sub>2</sub>** 12) **4,4'-Di[Dimethylamido]-2,2'-Dimethyldiphenylketon** (*J. pr.* [2] 71, 114 *C.* 1905 [1] 1024).
- 13) **Tetramethyldiamidoditolylmethanoxyd** (D.R.P. 99613). — \*II, 605.
- 14) **Cinchonamin**. Sm. 185°. Salze meist bekannt (*A.* 225, 218; *C.* 1902 [1] 782; 1906 [1] 564; *A. ch.* [6] 19, 23, 100; *G.* 22 [2] 637; *B.* 16, 62; 34, 1824; *Bl.* [3] 19, 39; *C. r.* 136, 185 *C.* 1903 [1] 525; *C.* 1909 [1] 1013). — III, 928; \*III, 690.
- 15) **Cinchotin** (Cinchonin; Hydrocinchonin). Sm. 277,3° (268°; 265—267,5°). Salze meist bekannt (*A. Spl.* 7, 249; *A.* 166, 256; 197, 362; 260, 220; 300, 42, 357; *B.* 14, 436, 1266; 15, 519; 27, 2290; 27 [2] 256; 28, 1076; *Bl.* 49, 747; *C. r.* 132, 410, 828; *M.* 16, 68; 18, 414; 20, 430, 578; 22, 807; *M.* 22, 1103 *C.* 1902 [1] 480). — III, 848, 858; \*III, 642.
- 16) **Dihydrocinchonin**. Sm. 265°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*J. pr.* [2] 8, 294; *Bl.* [3] 25, 877; *B.* 11, 314; 15, 855; *M.* 16, 326). — III, 836.
- 17) **isom. Hydrocinchonin**. Sm. 256°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*B.* 15, 855). — III, 858.
- 18) **Hydrocinchonidin** (Cinchamidin). Sm. 229—230°. Salze meist bekannt (*B.* 14, 1270, 1683, 1893; 15, 520; *A.* 214, 1). — III, 857.
- 19) **amorph. Hydrocinchonidin**. Sm. unter 100°. (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), Oxalat (*A.* 214, 13). — III, 858.
- 20) **Curarin** (siehe auch C<sub>18</sub>H<sub>35</sub>N) (*A.* 235, 673). — \*III, 652.
- 21) **Pereirin**. Sm. 124° u. Zers. (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (*A.* 202, 147). — III, 923.
- C<sub>19</sub>H<sub>24</sub>ON<sub>4</sub>** C 70,4 — H 7,4 — O 4,9 — N 17,3 — M. G. 324.
- 1) **Benzaldehydphenylhydrazin**. Sm. 154° (*Bl.* [3] 15, 845). — IV, 748.
- 2) **4'-Diäthylamido-5-Acetylamido-2-Methylazobenzol**. Sm. 159° (*A.* 234, 359). — IV, 1384.
- C<sub>19</sub>H<sub>24</sub>O<sub>2</sub>N<sub>2</sub>** C 73,1 — H 7,7 — O 10,2 — N 9,0 — M. G. 312.
- 1) **Äthyläther d. 4'-Acetylamido-5'-Oxy-2,4,2'-Trimethyldiphenylamin**. Sm. 114° (*A.* 369, 35 *C.* 1909 [2] 1855).
- 2) **Diäthyläther d. 1,3-Di[4-Oxyphenyl]tetrahydroimidazol**. Sm. 214° (*B.* 31, 3256). — \*IV, 296.
- 3) **Chinamin**. Sm. 172°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O), HClO<sub>3</sub>, HBr + H<sub>2</sub>O, HJ, HNO<sub>3</sub>, Oxalat (*A.* 166, 266; 182, 163; 197, 48; 199, 333; 207, 288; 209, 42; *B.* 10, 2157; *J.* 1874, 874). — III, 856.
- 4) **Chinamicin**. Sm. 109°. (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O) (*A.* 207, 303). — III, 857.
- 5) **Chinamidin**. Sm. 93°. HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O), HBr + H<sub>2</sub>O, Oxalat + 4H<sub>2</sub>O (*A.* 207, 293, 299). — III, 856.
- 6) **Conchinamin**. Sm. 123° (121°). Salze meist bekannt (*A.* 207, 289; 209, 38, 62). — III, 859.
- 7) **Hydrocuprein** + 2H<sub>2</sub>O. Sm. 168—170°. 2HCl + H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), 2HJ, H<sub>2</sub>SO<sub>4</sub>, Tartrat + 2H<sub>2</sub>O (*A.* 241, 280; *M.* 12, 431; 16, 73). — III, 861.
- 8) **Geissospermin** + H<sub>2</sub>O. Sm. bei 160°. (2HCl, PtCl<sub>4</sub>) (*A.* 202, 143). — III, 923.
- 9) **Nichin** + 2H<sub>2</sub>O. Sm. bei 102° (130—132°; 146° wasserfrei). 2HCl, (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), HJ, 2HJ, H<sub>2</sub>SO<sub>4</sub> + 3½H<sub>2</sub>O, H<sub>2</sub>SO<sub>4</sub> + 10H<sub>2</sub>O, Bioxalat (*M.* 14, 431, 556). — III, 820.
- 10) **Isonichin**. Sm. 208—209°. (2HCl, PtCl<sub>4</sub>) (*M.* 14, 441). — III, 821.
- 11) **Oxyechotin**. Sm. 268°. HCl + 2H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub>), H<sub>2</sub>SO<sub>4</sub> + 8H<sub>2</sub>O (*M.* 22, 976). — \*III, 632.
- 12) **isom. Oxyechotin**. Fl. 2 Pikrat (*M.* 22, 811). — \*III, 643.
- 13) **ββ-Di[4-Dimethylamidophenyl]propionsäure**. Sm. 222—230°. K, Na, Ca, Ag (*Bl.* [3] 35, 1016 *C.* 1907 [1] 117; *C. r.* 143, 916 *C.* 1907 [1] 478; *C. r.* 144, 644 *C.* 1907 [1] 1697).
- 14) **Acetylphenylaminocamphoformenamin**. Sm. 174° (*Am.* 39, 120 *C.* 1908 [1] 842).
- 15) **Methylester d. Di[4-Dimethylamidophenyl]essigsäure**. Sm. 68° (*C.* 1895 [1] 201).
- C<sub>19</sub>H<sub>24</sub>O<sub>2</sub>N<sub>4</sub>** C 67,0 — H 7,1 — O 9,4 — N 16,5 — M. G. 340.
- 1) **αε-Di[4-Methylphenylnitrosamido]pentan**. Sm. 70—71° (*B.* 40, 3926 *C.* 1907 [2] 1525).
- 2) **αε-Di[β-Phenylureido]pentan**. Sm. 207—209° (*H.* 43, 356 *C.* 1905 [1] 274).



- $C_{19}H_{24}O_2N_4$  3) Diäthyläther d.  $\alpha\beta$ -Di[4-Oxyphenylhydrazon]propan. Sm. 135° (*C.* 1900 [1] 205). — \*IV, 548.
- 4) Orcin + 2 Molec. Phenylhydrazin. Sm. 61–62° (*B.* 24 [2] 904). — IV, 654.
- 5) Äthylester d.  $\gamma$ -Phenylhydrazon- $\beta$ -Phenylhydrazidovaleriansäure. Sm. 205° n. Zers. (*B.* 21, 2494). — IV, 741.
- $C_{19}H_{24}O_3N_2$  C 69,5 — H 7,3 — O 14,6 — N 8,5 — M. G. 328.
- 1) Dipropyläther d. s-Di[4-Oxyphenyl]harnstoff. Sm. 201° (*B.* 34, 1939).
- 2) Methylester d. Phenylhydrazoncampheroxalsäure. Sm. 204–205° (*Am.* 20, 336). — \*IV, 463.
- 3) Äthylester d. Phenylazocamphocarbonsäure. Sm. 65,5° (*B.* 25 [2] 726). — IV, 1468.
- $C_{19}H_{24}O_3N_4$  C 64,0 — H 6,7 — O 13,5 — N 15,8 — M. G. 356.
- 1) Semicarbazon d. Thebainon. Sm. 227° (*B.* 38, 3165 *C.* 1905 [2] 1442).
- 2) Di[Methylphenylhydrazon] d. d-Arabinoketose. Sm. 172° u. Zers. (*B.* 35, 963 *C.* 1902 [1] 860). — \*IV, 520.
- 3) Di[Methylphenylhydrazon] d. l-Arabinoketose. Sm. 168–170° u. Zers. (*Soc.* 75, 791). — \*IV, 520.
- 4) Di[Methylphenylhydrazon] d. r-Arabinoketose. Sm. 137–138° (*B.* 35, 2632 *C.* 1902 [2] 576; *B.* 39, 48 *C.* 1906 [1] 548). — \*IV, 520.
- 5) Di[Methylphenylhydrazon] d. i-Riboketose. Sm. 175° (*B.* 35, 2629 *C.* 1902 [2] 575). — \*IV, 520.
- 6) Di[Methylphenylhydrazon] d. i-Xyloketose. Sm. 173° (*B.* 35, 2628 *C.* 1902 [2] 575). — \*IV, 520.
- 7) Verbindung (aus Formaldehyd u. Acetylphenylhydrazin) (*C.* 1902 [2] 340).
- $C_{19}H_{24}O_4N_2$  C 66,3 — H 7,0 — O 18,6 — N 8,1 — M. G. 344.
- 1) Phenylbenzylhydrazon d. Rhamnose. Sm. 121° (*R.* 15, 227). — \*IV, 543.
- 2) Phenylbenzylhydrazon d. Fukose. Sm. 172–173° (*B.* 37, 307 *C.* 1904 [1] 307).
- 3) Oxim d. Ketodihydromethylmorphimethin. HCl (*B.* 40, 1983 *C.* 1907 [2] 155).
- 4) Diäthylester d. 2,5-Dimethyl-1-[4-Amido-2-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Sm. 105–106° (*B.* 35, 684 *C.* 1902 [1] 715). — \*IV, 77.
- 5) Diäthylester d. 2,5-Dimethyl-1-[m-Amidotolyl]pyrrol-3,4-Dicarbonsäure. Sm. 134° (*A.* 236, 311). — IV, 549.
- 6) Diäthylester d. 1-Methylphenylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Fl. (*A.* 236, 309). — IV, 549.
- 7) Verbindung (aus Benzamidin u. Campheroxalsäure) (*Am.* 34, 250 *C.* 1905 [2] 1491).
- $C_{19}H_{24}O_4N_4$  C 61,3 — H 6,5 — O 17,2 — N 15,0 — M. G. 372.
- 1) Di[Phenylhydrazon] d. Rhamnose. Sm. 200° u. Zers. (*B.* 23, 3105). — IV, 792.
- 2) Phenylhydrazon-Methylphenylhydrazon d. d-Glykose. Sm. 192° (192–195°) (*B.* 37, 3852 *C.* 1904 [2] 1711; *B.* 37, 3363 *C.* 1904 [2] 1210; *M.* 25, 1161 *C.* 1905 [1] 355).
- 3) isom. Phenylhydrazon-Methylphenylhydrazon d. d-Glykose. Sm. 205° (*B.* 37, 3852 *C.* 1904 [2] 1711).
- 4) Methyläther d. Glykosephenylosazon. Sm. 142–144° (*Soc.* 95, 1225 *C.* 1909 [2] 800).
- 5) Di[Phenylhydrazid] d.  $\beta\delta$ -Dioxypentan- $\beta\delta$ -Dicarbonsäure. Sm. 176,5° (*B.* 25, 3244). — IV, 721.
- 6) isom. Di[Phenylhydrazid] d.  $\beta\delta$ -Dioxypentan- $\beta\delta$ -Dicarbonsäure. Sm. 186° (*B.* 25, 3246). — IV, 722.
- $C_{19}H_{24}O_4N_6$  C 57,0 — H 6,0 — O 16,0 — N 21,0 — M. G. 400.
- 1) Verbindung (aus Aceton, Benzaldehyd u. Harnstoff). Sm. 186–187° (*G.* 23 [1] 404). — III, 38.
- $C_{19}H_{24}O_4S_2$  1)  $\alpha\alpha$ -Di[Benzylsulfon]pentan. Sm. 162–163° (*B.* 41, 4254 *C.* 1909 [1] 274).
- 2)  $\alpha$ -Isocamylsulfon- $\alpha$ -Benzylsulfon- $\alpha$ -Phenylmethan. Sm. 145° (*B.* 36, 301 *C.* 1903 [1] 500).
- 3) Arabinosebenzylmerkaptal. Sm. 144° (*B.* 29, 552). — \*II, 639.

- $C_{19}H_{24}O_5N_2$  C 63,3 — H 6,7 — O 22,2 — N 7,8 — M. G. 360.
- 1) Phenylbenzylhydrazon d. d-Galaktose. Sm. 189—190° (154°; 157 bis 158°). + Pyridin (B. 37, 305 C. 1904 [1] 649; R. 15, 227; A. 366, 291 C. 1909 [2] 186). — \*IV, 543.
  - 2) Phenylbenzylhydrazon d. d-Glykose. Sm. 165° (B. 32, 3236; R. 15, 227; A. 366, 284 C. 1909 [2] 186). — \*IV, 543.
  - 3) Phenylbenzylhydrazon d. l-Gulose. Sm. 124° (R. 19, 182). — \*IV, 543.
  - 4) Phenylbenzylhydrazon d. d-Mannose. Sm. 165° (R. 15, 227). — \*IV, 543.
  - 5) m-Acetylamido-d-Cocain. Sm. 44—45°. HCl (B. 27, 1882). — III, 868.
  - 6) Verbindung (aus 2-Keto-1,4,5-Triox-1,3-Dimethyl-4,5-Diphenyl-R-Pentamethylen). Sm. 185° u. Zers. (Soc. 83, 301 C. 1903 [1] 878).
- $C_{19}H_{24}O_5N_4$  C 58,8 — H 6,2 — O 20,6 — N 14,4 — M. G. 388.
- 1) Di[Phenylhydrazon] d.  $\alpha$ -Galaheptose. Sm. 218° (224° corr.) u. Zers. (A. 288, 146). — IV, 794.
  - 2) Di[Phenylhydrazon] d. Glykoheptose. Sm. 195° u. Zers. (A. 270, 77, 88; H. 35, 571). — IV, 792; \*IV, 523.
  - 3) Di[Phenylhydrazon] d. d-Mannoheptose. Sm. 200° u. Zers. (B. 23, 2231). — IV, 793.
  - 4) Di[Phenylhydrazon] d. l-Mannoheptose. Sm. bei 203° u. Zers. (A. 272, 187). — IV, 793.
  - 5) Di[Phenylhydrazon] d. i-Mannoheptose. Sm. bei 200° u. Zers. (A. 272, 188). — IV, 793.
  - 6) Di[Phenylhydrazon] d. Perseulose. Sm. 233° (C. r. 147, 203 C. 1908 [2] 771).
  - 7) Di[Phenylhydrazon] d. Volemit. Sm. 196° u. Zers. (B. 28, 1974). — IV, 794.
  - 8) Di[Phenylhydrazon] einer Heptose (aus Harn). Sm. 195—196° (H. 49, 206 C. 1906 [2] 1770).
- $C_{19}H_{24}O_5N_6$  C 54,8 — H 5,8 — O 19,2 — N 20,2 — M. G. 416.
- 1) Dianisotriureid (A. 151, 199). — III, 86.
- $C_{19}H_{24}O_6N_2$  C 60,6 — H 6,4 — O 25,5 — N 7,4 — M. G. 376.
- 1) Diphenylhydrazon d.  $\alpha$ -Glykoheptose. Sm. 140° (H. 35, 570 C. 1902 [2] 634). — \*IV, 523.
  - 2) Diäthylester d.  $\delta$ -[4-Methylphenyl]azo- $\epsilon$ -Keto- $\beta$ -Oxy- $\beta$ -Hexen- $\gamma$ - $\delta$ -Dicarbonsäure. Sm. 119—120° (B. 33, 3363). — \*IV, 1065.
- $C_{19}H_{24}O_7N_2$  C 58,2 — H 6,1 — O 28,6 — N 7,1 — M. G. 392.
- 1) Verbindung (aus Kakothelin). (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), Ag (B. 20, 456). — III, 948.
- $C_{19}H_{24}O_7N_4$  C 54,3 — H 5,7 — O 26,7 — N 13,3 — M. G. 420.
- 1) Phenylhydrazid d.  $\alpha$ -Pentaoxypimelinsäure. Sm. 200° u. Zers. (A. 270, 91). — IV, 732.
  - 2) Phenylhydrazid d. isom. Pentaoxypimelinsäure. Sm. 225° u. Zers. (A. 272, 197). — IV, 732.
- $C_{19}H_{24}O_8N_2$  C 55,9 — H 5,9 — O 31,4 — N 6,8 — M. G. 408.
- 1) Diäthylester d.  $\zeta$ -Oximido- $\beta$ -Keto- $\delta$ -[3-Nitrophenyl]heptan- $\gamma$ - $\delta$ -Dicarbonsäure. Sm. 201° (A. 303, 233). — \*II, 1177.
  - 2) Diäthylester d.  $\zeta$ -Oximido- $\beta$ -Keto- $\delta$ -[4-Nitrophenyl]heptan- $\gamma$ - $\delta$ -Dicarbonsäure. Sm. 208° u. Zers. (A. 303, 237). — \*II, 1178.
- $C_{19}H_{24}O_8N_4$  C 52,3 — H 5,5 — O 29,4 — N 12,8 — M. G. 436.
- 1) Äthylester d. Benzoylamidoacetylamidoacetoxylacetylamidoacetyl-amidoessigsäure. Sm. 204—205° (B. 39, 1382 C. 1906 [1] 1873).
- $C_{19}H_{24}O_8N_6$  C 49,1 — H 5,2 — O 27,6 — N 18,1 — M. G. 464.
- 1) Benzoylpenta[Amidoacetyl]amidoessigsäure. Sm. 280—285° (268° u. Zers.). Ag (J. pr. [2] 24, 240; [2] 26, 197 B. 16, 756; B. 37, 1279 C. 1904 [1] 1335; J. pr. [2] 70, 88, 99 C. 1904 [2] 1034, 1035). — II, 1182, 1190.
  - 2) Polypeptid (aus Asparagin). Zers. bei 210° (C. 1907 [2] 1067).
- $C_{19}H_{24}O_{10}N_2$  C 51,8 — H 5,5 — O 36,4 — N 6,3 — M. G. 440.
- 1) Pentamethylester d.  $\beta$ -[ $\beta$ -Phenylhydrazido]propan- $\alpha\alpha\beta\gamma\gamma$ -Pentacarbonsäure. Sm. 135° (Soc. 91, 1363 C. 1907 [2] 1236).
- $C_{19}H_{24}NJ$  1) Äthylallylbenzyl-4-Methylphenylammoniumjodid. Zers. bei 114 bis 116° (B. 37, 2725 C. 1904 [2] 592).

- C<sub>19</sub>H<sub>24</sub>NJ** 2) Jodmethylat d.  $\alpha$ -Dimethylamido- $\alpha$ -[2-Äthenylphenyl]- $\beta$ -Phenyl-äthan. Sm. 175—185° (*B.* 42, 1765 *C.* 1909 [2] 38).
- 3) Jodbenzylat d. d-2-Methyl-1-Äthyltetrahydrochinolin. Sm. 161° (*B.* 38, 1295 *C.* 1905 [1] 1412).
- C<sub>19</sub>H<sub>24</sub>N<sub>2</sub>S** 1)  $\alpha\beta$ -Dipropyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 103,5° (*B.* 21, 103). — II, 597.
- 2) s-Di[4-Propylphenyl]thioharnstoff. Sm. 138° (*B.* 17, 1222). — II, 549.
- 3) s-Di[4-Isopropylphenyl]thioharnstoff. Sm. 149° (*B.* 39, 4374 *C.* 1907 [1] 337).
- 4) s-Di[2,4,6-Trimethylphenyl]thioharnstoff. Sm. 196° (*B.* 15, 1013). — II, 555.
- 5) s-Di[ $\beta$ -Trimethylphenyl]thioharnstoff. Sm. 146° (*B.* 18, 2233). — II, 556.
- 6) s-Di[2,4-Dimethylbenzyl]thioharnstoff. Sm. 176—177° (*B.* 22, 123). — II, 553.
- 7) s-Di[3,5-Dimethylbenzyl]thioharnstoff. Sm. 165° (*B.* 25, 3014). — II, 555.
- 8) s-Di[ $\beta$ -(2-Methylphenyl)äthyl]thioharnstoff. Sm. 113,5° (*C.* 1907 [1] 1789).
- 9) s-P-Äthylphenyl-4-Isobutylphenylthioharnstoff. Sm. 140° (*B.* 16, 2023). — II, 558.
- 10)  $\alpha$ -[d-sec. Butyl]- $\beta\beta$ -Dibenzylthioharnstoff. Sm. 56° (*Ar.* 242, 62 *C.* 1904 [1] 998).
- 11) Di[Hexahydrochinolyl]thioharnstoff? Sm. 129° (*B.* 27, 1479). — IV, 139.
- C<sub>19</sub>H<sub>24</sub>N<sub>3</sub>J** 1) 4-Jodmethylat d. 4-Dimethylamido-4'-Cyandimethylamidodiphenylmethan. Sm. 172—173° (*B.* 41, 2142 *C.* 1908 [2] 701).
- C<sub>19</sub>H<sub>24</sub>N<sub>4</sub>S** 1) Phenylhydrazon d. Diacetonphenylthioharnstoff. Sm. 169° (*B.* 32, 3158). — \*IV, 501.
- 2) Methylsenfölauramin. Sm. 203—203,5° (*J. pr.* [2] 50, 442). — IV, 1175.
- C<sub>19</sub>H<sub>24</sub>N<sub>4</sub>S<sub>4</sub>** 1)  $\alpha\epsilon$ -Amylenester d.  $\beta$ -Phenylhydrazidodithioameisensäure. Sm. 140 bis 141° (*J. pr.* [2] 65, 479 *C.* 1902 [2] 28). — \*IV, 439.
- C<sub>19</sub>H<sub>25</sub>ON** C 80,6 — H 8,8 — O 5,7 — N 4,9 — M. G. 283.
- 1) Äthylallylbenzyl-4-Methylphenylammoniumhydroxyd. Salze, siehe (*B.* 37, 2726 *C.* 1904 [2] 592).
- 2) d- $\alpha$ -Phenyläthylamido-d-Methylenecampher. Sm. 145—148° (*Soc.* 95, 172 *C.* 1909 [1] 1331).
- 3) l- $\alpha$ -Phenyläthylamido-d-Methylenecampher. Sm. 112—114,5° (*Soc.* 95, 174 *C.* 1909 [1] 1331).
- 4) d-4-Dimethylamidobenzylidencampher. Sm. 139°. HCl (*C. r.* 148, 1493 *C.* 1909 [2] 213).
- 5) Äthylphenylcamphoformenamin. Sd. 285°<sub>110</sub> (*Am.* 39, 118 *C.* 1908 [1] 842).
- 6) l-Naphtylamid d. Oktan- $\alpha$ -Carbonsäure. Sm. 91° (*Soc.* 93, 1037 *C.* 1908 [2] 504).
- C<sub>19</sub>H<sub>25</sub>ON<sub>3</sub>** C 73,3 — H 8,0 — O 5,1 — N 13,5 — M. G. 311.
- 1)  $\beta$ -Isopropylphenylamido- $\alpha$ -2,4,5-Trimethylphenylharnstoff. Sm. 155°. — IV, 674.
- 2)  $\beta$ -[2,4,5-Trimethylphenyl]amido- $\alpha$ -2,4,5-Trimethylphenylharnstoff. Sm. 240°. — IV, 813.
- 3) 2-Acetylamido-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 136° (138°) (*D. R. P.* 79250; *B.* 39, 1273 *C.* 1906 [1] 1745).
- C<sub>19</sub>H<sub>25</sub>O<sub>2</sub>N** C 76,2 — H 8,4 — O 10,7 — N 4,7 — M. G. 299.
- 1) 4-Äthyläther d. l-Methylallylbenzyl-4-Oxyphenylammoniumhydroxyd. d-Campfersulfonat, d-Bromcampfersulfonat (*B.* 40, 1006 *C.* 1907 [1] 1252).
- 2) 4-Äthyläther d. r-Methylallylbenzyl-4-Oxyphenylammoniumhydroxyd. d-Campfersulfonat (*B.* 40, 1005 *C.* 1907 [1] 1252).
- 3) Protocurarin (*C.* 1897 [2] 1080). — \*III, 653.
- 4) l-Naphtylamidiformiat d.  $\alpha$ -Oxyoktan. Sm. 66° (*C.* 1909 [2] 1380). C 69,7 — H 7,6 — O 9,8 — N 12,8 — M. G. 327.
- C<sub>19</sub>H<sub>25</sub>O<sub>2</sub>N<sub>3</sub>** 1)  $\alpha$ -Oxy-2-Acetylamido-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 162° (165—169°) (*D. R. P.* 79250; *B.* 39, 1275 *C.* 1906 [1] 1746). — \*II, 659.



- $C_{19}H_{25}O_2N_3$  2)  $\alpha$ -Oxy-3-Acetylamido-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 145,5—146° (B. 39, 1271 C. 1906 [1] 1745).
- 3) Methyläther d. 4-Oxybenzylidenpinylpseudosemicarbazon. Sm. 224—225° (Soc. 91, 23 C. 1907 [1] 1041).
- 4) Nitrosotetrahydrocinchonin.  $HNO_2$  (Sm. 200° u. Zers.) (B. 28, 1639). — III, 836.
- 5) Nitrosotetrahydrocinchonidin.  $HNO_2$  (B. 29, 802). — III, 853.
- $C_{19}H_{25}O_2P$  1) 4-Methylphenyldiäthylphenylphosphorketobetaïn. Fl. Salze, siehe (A. 315, 91). — \*IV, 1181.
- $C_{19}H_{25}O_3N$  C 72,4 — H 7,9 — O 15,2 — N 4,4 — M. G. 315.
- 1) Dihydromethylmorphimethin (B. 32, 1048). — \*III, 672.
- 2) Äthylester d. Säure  $C_{17}H_{21}O_3N$  (aus Dimethylketenchinolin). Sm. 60,5 bis 61,5° (B. 40, 1150 C. 1907 [1] 1260).
- $C_{19}H_{25}O_3N_3$  C 66,5 — H 7,3 — O 14,0 — N 12,2 — M. G. 343.
- 1) Methyläther d. 4-Oxybenzylidencamphorylpseudosemicarbazon. Sm. 234° u. Zers. (Soc. 87, 730 C. 1905 [2] 242).
- $C_{19}H_{25}O_3N_5$  C 61,4 — H 6,7 — O 12,9 — N 18,9 — M. G. 371.
- 1) Verbindung (aus d. Acetylcyanessigsäureäthylester u. Phenylhydrazin). Sm. 86° (C. 1895 [2] 83).
- $C_{19}H_{25}O_3Br$  1) Brompodocarpinäthyläthersäure. Sm. 158°. +  $C_2H_6O$  (A. 170, 237). — II, 1685.
- $C_{19}H_{25}O_3P$  1) Diäthylester d.  $\beta\beta'$ -Diphenylisopropylphosphinsäure. Sd. 240°<sub>20</sub> (B. 34, 1296). — \*IV, 1184.
- 2) Di[2,4,5-Trimethylphenylester] d. Methylphosphinsäure. Sm. 79 bis 90° (?) (B. 31, 1053). — \*II, 449.
- $C_{19}H_{25}O_4N$  C 68,9 — H 7,6 — O 19,3 — N 4,2 — M. G. 331.
- 1) i-Acetylatropin. Fl. (B. 41, 731 C. 1908 [1] 1557).
- 2) Corytuberin. Zers. bei 200°.  $HCl$ , (2 $HCl$ ,  $PtCl_4$ ),  $H_2SO_4$  (Soc. 63, 485; Ar. 240, 19 C. 1902 [1] 529). — III, 877.
- 3) Äthylester d.  $\beta$ -Methylamido- $\zeta$ -Keto- $\gamma$ -Acetyl- $\delta$ -Phenyl- $\beta$ -Hepten- $\epsilon$ -Carbonsäure. Sm. 198° (B. 36, 2186 C. 1903 [2] 569).
- 4) Propylester d. d-Benzoyllegonin.  $HCl + H_2O$  (B. 23, 987). — III, 867.
- 5) Propylester d. l-Benzoyllegonin. Sm. 78—79,5° (Am. 10, 147). — III, 867.
- $C_{19}H_{25}O_4N_3$  C 63,5 — H 7,0 — O 17,8 — N 11,7 — M. G. 359.
- 1) 3-Methyläther d. 3,4-Dioxybenzylidencamphorylpseudosemicarbazon. Sm. 219°. +  $C_6H_6$  (Soc. 87, 730 C. 1905 [2] 242).
- $C_{19}H_{25}O_5N$  C 65,7 — H 7,2 — O 23,1 — N 4,0 — M. G. 347.
- 1) Diäthylester d.  $\beta$ -Amido- $\zeta$ -Keto- $\delta$ -Phenyl- $\beta$ -Hepten- $\gamma\epsilon$ -Dicarbonsäure. Sm. 58° (B. 33, 3805). — \*II, 1176.
- 2) Diäthylester d. isom.  $\beta$ -Amido- $\zeta$ -Keto- $\delta$ -Phenyl- $\beta$ -Hepten- $\gamma\epsilon$ -Dicarbonsäure +  $H_2O$ . Sm. 72° (98° wasserfrei) (B. 33, 3806). — \*II, 1176.
- 3) Diäthylester d. isom.  $\beta$ -Amido- $\zeta$ -Keto- $\delta$ -Phenyl- $\beta$ -Hepten- $\gamma\epsilon$ -Dicarbonsäure. Sm. 98° (B. 33, 3805).
- $C_{19}H_{25}O_5N_3$  C 60,8 — H 6,7 — O 21,3 — N 11,2 — M. G. 375.
- 1) Jaborinsäure. Ag, Ag +  $AgNO_3$ , +  $PtCl_4$ , + 2 $AuCl_3$ , (2 $HCl$ ,  $PtCl_4$ ) (Bl. 46, 479; 48, 225). — III, 925.
- $C_{19}H_{25}O_6N_3$  C 58,3 — H 6,4 — O 24,6 — N 10,7 — M. G. 391.
- 1) Phenylhydrazid d. Phenylamidogalaktosecarbonsäure. Sm. 203° (B. 27, 1290). — IV, 726.
- 2) Phenylhydrazid d. Phenylamidoglykosecarbonsäure. Sm. 210° (B. 27, 1290). — IV, 726.
- $C_{19}H_{25}O_7N$  C 60,1 — H 6,6 — O 29,5 — N 3,7 — M. G. 379.
- 1) Diäthylester d. Anhydrocotarninmalonsäure. Sm. 73° (B. 37, 2740 C. 1904 [2] 544).
- $C_{19}H_{25}O_7N_5$  C 52,4 — H 5,7 — O 25,7 — N 16,1 — M. G. 435.
- 1) Äthylester d. Benzoyltetra[Amidoacetyl]amidoessigsäure. Sm. 256 bis 257° u. Zers. (244—246°) (B. 37, 1299 C. 1904 [1] 1337; J. pr. [2] 70, 96 C. 1904 [2] 1035).
- $C_{19}H_{25}O_8N$  C 57,7 — H 6,3 — O 32,4 — N 3,5 — M. G. 395.
- 1) Triäthylester d.  $\beta$ -Phenylamidoformoxylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 67° (C. 1908 [2] 2006).

- C<sub>19</sub>H<sub>25</sub>N<sub>2</sub>Br** 1) 4-Bromphenylhydrazon d.  $\alpha$ -Jonon. Sm. 142—143° (B. 28, 1755; 31, 852, 877; J. pr. [2] 57, 494). — IV, 770; \*IV, 502.  
2) 4-Bromphenylhydrazon d.  $\beta$ -Jonon. Sm. 115—116° (B. 31, 872). — \*IV, 502.  
3) isom. 4-Bromphenylhydrazon d.  $\beta$ -Jonon. Sm. 165° (166—167°) (B. 28, 1756; C. 1904 [1] 281). — IV, 770.  
4) 4-Bromphenylhydrazon d. Pseudojonon. Sm. 102—104° (B. 31, 846). — \*IV, 502.  
5) 4-Bromphenylhydrazon d. Iron. Sm. 168—170° (B. 28, 1757). — IV, 770.  
6) 4-Bromphenylhydrazon d. Camphenilidenaceton. Sm. 114—115° (D. R. P. 138211 C. 1903 [1] 269).
- C<sub>19</sub>H<sub>25</sub>N<sub>2</sub>J** 1)  $\alpha$ -Jod- $\alpha$ -Di[Phenylamido]heptan (A. ch. [6] 16, 172). — II, 445.  
2) Jodmethylat d. 1,4-Dibenzylhexahydro-1,4-Diazin (J. d. Dibenzylpiperazin). Sm. 217° (C. 1898 [1] 381, 727). — \*II, 294.  
3) Jodmethylat d. 1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin (A. 173, 141). — II, 487.
- C<sub>19</sub>H<sub>26</sub>ON<sub>2</sub>** C 76,5 — H 8,7 — O 5,4 — N 9,3 — M. G. 298.  
1)  $\alpha$ -Oxy-4,4'-Di[Dimethylamido]-2,2'-Dimethyldiphenylmethan. Sm. 50° (J. pr. [2] 71, 113 C. 1905 [1] 1024).  
2) Äthyläther d.  $\alpha$ -Oxydi[4-Dimethylamidophenyl]methan. Fl. (C. 1902 [1] 471).  
3) Phenylhydrazon d. Acetonylisocampher. Sm. 128—129° (B. 34, 3060). — \*IV, 509.  
4) Tetrahydrocinchonin. Fl. (B. 28, 1425, 1638). — III, 836.  
5) Tetrahydrocinchonidin. Fl. (B. 29, 802). — III, 853.  
6) Curarin (siehe auch C<sub>18</sub>H<sub>35</sub>N) (C. 1897 [2] 1078). — \*III, 652.
- C<sub>19</sub>H<sub>26</sub>O<sub>2</sub>N<sub>2</sub>** C 72,6 — H 8,3 — O 10,2 — N 8,9 — M. G. 314.  
1) Di[Äthylamidooxytolyl]methan (CH<sub>3</sub>:OH:C<sub>2</sub>H<sub>5</sub>NH=1:4:2). Sm. 169° (D. R. P. 84988). — \*II, 605.  
2) Dimethyläther d.  $\alpha\epsilon$ -Di[2-Oxyphenylamido]pentan. Sm. 131° (B. 40, 857 C. 1907 [1] 1123).
- C<sub>19</sub>H<sub>26</sub>O<sub>2</sub>Cl<sub>2</sub>** 1) Dichlorabiëtinsäure. Sm. 124° (J. 1861, 391). — II, 1436.
- C<sub>19</sub>H<sub>26</sub>O<sub>2</sub>Br<sub>2</sub>** 1) l-Menthylester d.  $\alpha\beta$ -Dibrom- $\beta$ -Phenylpropionsäure. Sm. 84° (Soc. 79, 1308 C. 1902 [1] 195). — \*III, 335.
- C<sub>19</sub>H<sub>26</sub>O<sub>4</sub>N<sub>4</sub>** C 61,0 — H 6,9 — O 17,1 — N 15,0 — M. G. 374.  
1)  $\alpha$ -[l- $\alpha$ -Amidoisocapronylamido]acetyl-amido- $\beta$ -[d-3-Indolyl]propionsäure (l-Leucylglycyl-d-Tryptophan). Zers. bei 234° (B. 40, 2749 C. 1907 [2] 464).
- C<sub>19</sub>H<sub>26</sub>O<sub>4</sub>N<sub>6</sub>** C 56,7 — H 6,5 — O 15,9 — N 20,9 — M. G. 402.  
1) Di[Isopropylidenhydrazid] d.  $\alpha$ -Benzoylamidoacetyl-amidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 183° u. Zers. (J. pr. [2] 70, 176 C. 1904 [2] 1396).
- C<sub>19</sub>H<sub>26</sub>O<sub>5</sub>N<sub>4</sub>** C 58,5 — H 6,7 — O 20,5 — N 14,3 — M. G. 390.  
1) Äthylester d.  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobuteryl]hydrazon-buttersäure. Sm. 142° (J. pr. [2] 70, 210 C. 1904 [2] 1460).
- C<sub>19</sub>H<sub>26</sub>O<sub>10</sub>N<sub>4</sub>** C 48,5 — H 5,5 — O 34,0 — N 11,9 — M. G. 470.  
1) Verbindung (aus Glykoseamidoguanidin) + H<sub>2</sub>O (B. 27, 973). — \*I, 641.
- C<sub>19</sub>H<sub>26</sub>O<sub>12</sub>N<sub>2</sub>** C 48,1 — H 5,5 — O 40,5 — N 5,9 — M. G. 474.  
1) Maltose-2,3-Diamidobenzol-1-Carbonsäure. Sm. 235°. Ba (B. 20, 2212; 34, 905). — II, 1274.  
2) Verbindung (aus Glykuronsäure u. 3,4-Diamido-1-Methylbenzol). K (Zers. bei 130°) (H. 13, 278). — IV, 616.
- C<sub>19</sub>H<sub>26</sub>NJ** 1)  $\alpha$ -Methyl-1-Amylphenylbenzylammoniumjodid. Sm. 144—145° (C. 1904 [2] 952; 1905 [1] 675; Soc. 87, 144 C. 1905 [1] 1009).  
2)  $\beta$ -Methyl-1-Amylphenylbenzylammoniumjodid. Sm. 131—132° (C. 1904 [2] 952; 1905 [1] 675; Soc. 87, 143 C. 1905 [1] 1010).  
3) l-Methylisoamyphenylbenzylammoniumjodid. Sm. 156° (C. 1905 [1] 927; Soc. 89, 296 C. 1906 [1] 1543).  
4) i-Methylisoamyphenylbenzylammoniumjodid. Sm. 156° (C. 1905 [1] 927; Soc. 89, 294 C. 1906 [1] 1543).  
5) Methylisobutylidibenzylammoniumjodid. Sm. 174—175° (Soc. 83, 1412 C. 1904 [1] 438).

- C<sub>19</sub>H<sub>26</sub>N<sub>2</sub>S** 1) 6- $\beta$ -Phenylthioureido]-4-Isobutenyl-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 129—130° (B. 39, 3451 C. 1906 [2] 1559).
- C<sub>19</sub>H<sub>26</sub>N<sub>4</sub>S** 1) s-Di[4-Äthylamido-3-Methylphenyl]thioharnstoff. Sm. 163° (A. 286, 165). — IV, 609.
- C<sub>19</sub>H<sub>27</sub>ON** C 80,0 — H 9,5 — O 5,6 — N 4,9 — M. G. 285.
- 1)  $\alpha$ -Methyl-1-Amylphenylbenzylammoniumhydroxyd. 1-Campher-sulfonat (Soc. 87, 143 C. 1905 [1] 1010).
- 2)  $\beta$ -Methyl-1-Amylphenylbenzylammoniumhydroxyd. d-Campher-sulfonat (Soc. 87, 142 C. 1905 [1] 1010).
- 3) 1-Methylisoamylphenylbenzylammoniumhydroxyd. d-Campher-sulfonat (C. 1905 [1] 927; Soc. 89, 295 C. 1906 [1] 1543).
- 4) i-Methylisoamylphenylbenzylammoniumhydroxyd. d-Campher-sulfonat, d-Bromcamphersulfonat (Soc. 89, 294 C. 1906 [1] 1543).
- 5) Benzoyläthylbornylamin. Sm. 93—94° (Soc. 75, 946). — \*IV, 60.
- C<sub>19</sub>H<sub>27</sub>O<sub>2</sub>N** C 75,7 — H 9,0 — O 10,6 — N 4,7 — M. G. 301.
- 1) Phenylamidoformiat d. Dimethylborneol. Sm. 111,5—112° (C. r. 148, 1646 C. 1909 [2] 443).
- 2) Cinnamylat d. 4-Oxy-1,2,2,6,6-Pentamethylhexahydropyridin. Sd. 260° (C. 1900 [1] 1082). — \*IV, 35.
- C<sub>19</sub>H<sub>27</sub>O<sub>2</sub>Br** 1) Bromabiëtsäure. Sm. 134° (B. 12, 1443). — II, 1436.
- C<sub>19</sub>H<sub>27</sub>O<sub>2</sub>Br<sub>3</sub>** 1) Laurat d. 3,5-Dibrom-2-Oxy-1-Brommethylbenzol. Sm. 60—61° (A. 332, 201 C. 1904 [2] 211).
- C<sub>19</sub>H<sub>27</sub>O<sub>3</sub>N** C 71,9 — H 8,5 — O 15,1 — N 4,4 — M. G. 317.
- 1) Äthylatropin. (2HCl, PtCl<sub>4</sub>), HJ (A. 138, 239). — III, 784.
- C<sub>19</sub>H<sub>27</sub>O<sub>3</sub>N<sub>3</sub>** C 66,1 — H 7,8 — O 13,9 — N 12,2 — M. G. 345.
- 1) Semicarbazon d. Benzoylcampholsäuremethylester. Sm. 222° (C. r. 144, 299 C. 1907 [1] 1126).
- C<sub>19</sub>H<sub>27</sub>O<sub>4</sub>N** C 68,5 — H 8,1 — O 19,2 — N 4,2 — M. G. 333.
- 1) Piperidinguajakol (Guajaperol). Sm. 79,8° (C. 1898 [1] 857; 1898 [2] 836; Soc. 73, 141, 145).
- 2) Methylester d. 4-Benzoxyl-1,2,2,6,6-Pentamethylhexahydropyridin-4-Carbonsäure ( $\alpha$ -Eucaïn). Sm. 103°. HCl (C. 1896 [1] 1131; 1902 [1] 478). — \*IV, 42.
- 3) Methylester d. 4-[4-Methylbenzoxyl]-1,2,2,6-Tetramethylhexahydropyridin-4-Carbonsäure. Sm. 116° (D. R. P. 92589). — \*IV, 42.
- 4) Methylester d. 4-[2-Methylbenzoxyl]-2,2,6,6-Tetramethylhexahydropyridin-4-Carbonsäure. Sm. 92° (D. R. P. 92589). — \*IV, 43.
- 5) Methylester d. 4-[4-Methylbenzoxyl]-2,2,6,6-Tetramethylhexahydropyridin-4-Carbonsäure. Sm. 116° (D. R. P. 92589). — \*IV, 43.
- 6) Diäthylester d.  $\alpha$ -[1-Piperidyl]- $\alpha$ -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 58—59°. HCl (B. 29, 814). — IV, 21.
- C<sub>19</sub>H<sub>27</sub>O<sub>5</sub>N** C 65,3 — H 7,7 — O 22,9 — N 4,0 — M. G. 349.
- 1) Äthylester d. Sebacinsäuremonophenylamid-3-Carbonsäure. Sm. 146°. Ba + 2H<sub>2</sub>O (G. 15, 551). — II, 1266.
- C<sub>19</sub>H<sub>27</sub>O<sub>5</sub>N<sub>3</sub>** C 60,5 — H 7,1 — O 21,2 — N 11,1 — M. G. 377.
- 1) Äthylester d.  $\beta$ -[ $\beta$ -Benzoylamidoacetylamidobutyryl]amidobuttersäure. Sm. 103° (J. pr. [2] 70, 220 C. 1904 [2] 1461).
- C<sub>19</sub>H<sub>27</sub>O<sub>6</sub>Cl** 1) Chlorhydrin d. Dehydrodioxyparasantonsäurediäthylester. Sm. 170 bis 171° (C. 1903 [2] 1447).
- C<sub>19</sub>H<sub>27</sub>N<sub>2</sub>J** 1) Methyläthyl $\beta$ -Äthylphenylamidoäthyl]phenylammoniumjodid. Zers. bei 180° (B. 42, 308 C. 1909 [1] 545).
- 2) Jodmethylat d.  $\alpha\beta$ -Di[4-Dimethylamidophenyl]äthan (B. 20, 912). — IV, 978.
- 3) Jodmethylat d.  $\alpha\beta$ -Di[Methyl-4-Methylphenylamido]äthan. Zers. bei 100° (A. 224, 342). — II, 437.
- C<sub>19</sub>H<sub>28</sub>ON<sub>2</sub>** C 76,0 — H 9,3 — O 5,3 — N 9,3 — M. G. 300.
- 1)  $\alpha$ -Phenyl- $\beta\beta$ -Di[Hexahydrophenyl]harnstoff. Sm. 169° (C. 1905 [1] 1004).
- 2) Nitril d. 6-Keto-1-Camphyl-2,2,4-Trimethyl-1,2,3,6-Tetrahydropyridin-5-Carbonsäure. Sm. 203,5—204,5° (B. 26 [2] 943). — \*IV, 71.
- C<sub>19</sub>H<sub>29</sub>O<sub>3</sub>N<sub>2</sub>** C 68,7 — H 8,4 — O 14,5 — N 8,4 — M. G. 332.
- 1) Di[Methylhydroxyd] d. Di[4-Dimethylamidophenyl]keton. (2Chlorid + PtCl<sub>4</sub>), Bromid + H<sub>2</sub>O, Jodid + 3H<sub>2</sub>O, Trichromat, Methylsulfat (J. pr. [2] 66, 393 C. 1902 [2] 1509).



- $C_{19}H_{28}O_3N_2$  2) 1- $[\beta$ -Menthylureido]phenyllessigsäure. Sm.  $161^\circ$  (C. 1908 [2] 2007).  
 $C_{19}H_{28}O_4N_2$  C 65,5 — H 8,0 — O 18,4 — N 8,0 — M. G. 348.
- 1) Methylester d. 4-Phenylamidoformoxyl-1,2,2,6,6-Pentamethylhexahydropyridin-4-Carbonsäure. Sm.  $132-133^\circ$  (C. 1900 [1] 1082). — \*IV, 42.
- $C_{19}H_{28}O_6S_2$  1) Diäthylester d. 4-Methyl-1,3-Phenylendi $[\alpha$ -Sulfonbuttersäure]. Fl. (J. pr. [2] 68, 338 C. 1903 [2] 1172).
- $C_{19}H_{28}N_2Cl_2$  1) Dichlormethylat d. Di[4-Dimethylamidophenyl]methan (B. 12, 1170). — IV, 975.
- $C_{19}H_{28}N_2J_2$  1) Dijodmethylat d. Di[4-Dimethylamidophenyl]methan. Sm.  $214^\circ$  u. Zers. (B. 12, 1170). — IV, 974.
- $C_{19}H_{29}N_4S_2$  1) Verbindung (aus Schwefelkohlenstoff u. Trimethylenphenylendiamin). Zers. bei  $105^\circ$  ( $116^\circ$ ) (G. 19, 692; B. 23, 1171).  
 C 79,4 — H 10,1 — O 5,6 — N 4,9 — M. G. 287.
- $C_{19}H_{29}ON$  1) Solanidin. Sm.  $190-192^\circ$  (G. 35 [1] 42 C. 1905 [1] 1252).  
 C 75,2 — H 9,6 — O 10,6 — N 4,6 — M. G. 303.
- $C_{19}H_{29}O_4N$  1) 2,4-Dimethylphenylester d. 1-Menthylamidoameisensäure. Sm.  $137^\circ$  (Soc. 91, 303 C. 1907 [1] 1330).  
 2) 2,5-Dimethylphenylester d. 1-Menthylamidoameisensäure. Sm.  $135^\circ$  (Soc. 91, 303 C. 1907 [1] 1330).  
 3) 3,4-Dimethylphenylester d. 1-Menthylamidoameisensäure. Sm.  $104^\circ$  (Soc. 91, 303 C. 1907 [1] 1330).  
 4)  $\beta$ -Phenyläthylester d. 1-Menthylamidoameisensäure. Sd.  $240^\circ_{25}$  (Soc. 89, 96 C. 1906 [1] 1019).  
 5) Benzoat d. 4-Oxy-2,3,6-Trimethyl-2,6-Diäthylhexahydropyridin. Fl. HCl (B. 41, 781 C. 1908 [1] 1530).  
 6) Phenylamidoformiat d. 1-3-Oxy-4-Isoamyl-1-Methylhexahydrobenzol. Fl. (C. r. 140, 478 C. 1905 [1] 873).  
 7) Cinnamylat d.  $\alpha$ -Dimethylamido- $\beta$ -Oxy- $\beta$ -Dimethylhexan. HCl (D. R. P. 169787 C. 1906 [1] 1683).  
 C 68,1 — H 8,6 — O 19,1 — N 4,2 — M. G. 335.
- $C_{19}H_{29}O_4N$  1) Äthylhydroxyd d. Atropin. Nitrat, Sulfat (D. R. P. 138443 C. 1903 [1] 427).  
 2) Diäthylester d. 2,6-Dimethyl-4-Hexylpyridin-3,5-Dicarbonsäure. Fl. (2HCl, PtCl<sub>4</sub>) (A. 246, 39). — IV, 171.
- $C_{19}H_{29}O_{10}N_8$  C 49,7 — H 6,3 — O 34,9 — N 9,1 — M. G. 457.
- 1) Tetraäthylester d.  $s$ -Semicarbazon- $\alpha$ -Keto- $\gamma$ -Methylpentan- $\alpha\beta\delta\epsilon$ -Tetracarbonsäure + H<sub>2</sub>O. Sm.  $185^\circ$  (Bl. [4] 1, 42 C. 1907 [1] 1053).
- $C_{19}H_{29}N_8S$  1) Phenylthioharnstoff d. Base  $C_{19}H_{24}N_8$  (aus Nitroso- $\alpha$ -Pipikolin). Sm.  $116^\circ$  (B. 31, 2278). — \*IV, 310.
- $C_{19}H_{30}O_4N_2$  C 65,1 — H 8,5 — O 18,3 — N 8,0 — M. G. 350.  
 1) 4-Nitrobenzoat d.  $\beta$ -Diisoamylamido- $\alpha$ -Oxyäthan. Fl. (D. R. P. 179627 C. 1907 [1] 1364).  
 C 46,9 — H 6,2 — O 29,6 — N 17,3 — M. G. 486.
- $C_{19}H_{30}O_9N_6$  1) Leimpepton (C. 1903 [1] 1144). — \*IV, 1167.  
 2)  $\beta$ -Trypsinglutinpepton (H. 38, 258 C. 1903 [2] 210; H. 38, 320 C. 1903 [2] 211). — \*IV, 1167.
- $C_{19}H_{30}O_{10}N_2$  C 51,1 — H 6,7 — O 35,9 — N 6,3 — M. G. 446.  
 1) Glykose-3,4-Diamido-1-Methylbenzol. Sm.  $160^\circ$  u. Zers. (B. 20, 495). — IV, 621.
- $C_{19}H_{30}O_{10}N_5$  1) Lanugininsäure. Ba, Pb (J. 1871, 857; B. 22, 1120). — II, 2110.  
 $C_{19}H_{31}ON$  C 78,9 — H 10,7 — O 5,5 — N 4,8 — M. G. 289.
- 1) 2-Methylphenylamid d. Laurinsäure. Sm.  $81,5^\circ$  (Am. 27, 307 C. 1902 [1] 1303; Bl. [3] 29, 1121 C. 1904 [1] 259).  
 2) 4-Methylphenylamid d. Laurinsäure. Sm.  $82-83^\circ$  ( $81^\circ$ ) (Bl. [3] 29, 1122 C. 1904 [1] 259; Soc. 93, 1037 C. 1908 [2] 503).
- $C_{19}H_{31}O_2N$  C 74,7 — H 10,2 — O 10,5 — N 4,6 — M. G. 305.  
 1) Benzoat d.  $\beta$ -Diisoamylamido- $\alpha$ -Oxyäthan. Sm.  $87-88^\circ$ . HCl, Oxalat (D. R. P. 175080 C. 1908 [2] 1226; D. R. P. 187209 C. 1907 [2] 1465; D. R. P. 190688 C. 1907 [2] 2005).  
 2) 4-Methylphenylamid d.  $\alpha$ -Oxyundekan- $\alpha$ -Carbonsäure. Sm.  $100^\circ$  (Bl. [3] 29, 1127 C. 1904 [1] 261).
- $C_{19}H_{31}O_5N$  C 71,0 — H 9,6 — O 15,0 — N 4,4 — M. G. 321.  
 1) Methylamid d. Embeliasäure. Sm.  $166,5^\circ$  (C. 1900 [1] 606). — \*II, 1235.

- $C_{19}H_{31}O_4N$  C 67,6 — H 9,2 — O 19,0 — N 4,1 — M. G. 337.  
 1) Diäthylester d. Hexyldihydrolutidindicarbonsäure. Sm. 54° (A. 246, 38). — IV, 96.
- $C_{19}H_{31}O_6N$  C 64,5 — H 8,8 — O 22,7 — N 4,0 — M. G. 353.  
 1) Diäthylester d. 1-Oximido-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 116—118° (A. 288, 342). — \*I, 390.
- $C_{19}H_{31}O_6N$  C 61,8 — H 8,4 — O 26,0 — N 3,8 — M. G. 369.  
 1) Triäthylester d.  $\delta$ -Cyan- $\beta$ -(Dimethylheptan- $\gamma$ - $\delta$ -Tricarbonsäure. Sd. 208—212°<sub>16</sub> (Soc. 81, 33 C. 1902 [1] 409).
- $C_{19}H_{32}ON_4$  C 68,7 — H 9,6 — O 4,8 — N 16,9 — M. G. 332.  
 1) Verbindung (aus  $\beta$ -Camphernitrilsäureamid). Sm. 293° (B. 33, 2962).
- $C_{19}H_{32}O_2N_2$  C 71,2 — H 10,0 — O 10,0 — N 8,7 — M. G. 320.  
 1) 4-Amidobenzoat d.  $\beta$ -Diisocamylamido- $\alpha$ -Oxyäthan. Sm. 44—45°. HCl (D.R.P. 179627 C. 1907 [1] 1364).
- $C_{19}H_{32}O_2Br_8$  1) Methylester d. Hexabromstearinsäure. Sm. 157—158° (B. 42, 1330 C. 1909 [1] 1698).
- $C_{19}H_{32}O_2S_8$  1) Diamyläther d.  $\alpha$ -Phenylsulfon- $\beta\gamma$ -Dimerkaptopropan. Fl. (J. pr. [2] 56, 453). — \*II, 469.
- $C_{19}H_{32}O_4Si$  1) Methyläthylphenylmenthyläther d. Siliciumtetrahydroxyd. Fl. (Soc. 79, 458).
- $C_{19}H_{33}O_6S_3$  1)  $\beta\gamma$ -Diamylsulfon- $\alpha$ -Phenylsulfonpropan. Sm. 120° (J. pr. [2] 56, 454). — \*II, 469.
- $C_{19}H_{33}NJ$  1)  $\alpha$ -Jodbenzylat d. d-2-Propyl-1-Butylhexahydropyridin. Sm. 167 bis 169° (B. 38, 599 C. 1905 [1] 751).
- $C_{19}H_{33}ON$  C 78,3 — H 11,3 — O 5,5 — N 4,8 — M. G. 291.  
 1) 3-Oxy- $\beta$ -Diisobutylamidomethyl-1-Methyl-4-Isopropylbenzol. Sm. 92° (C. 1906 [1] 256).  
 2) Diisobutylcamphoformenamin. Sm. 73—74° (Am. 39, 114 C. 1908 [1] 841).
- $C_{19}H_{34}O_2N_6$  C 60,3 — H 9,0 — O 8,5 — N 22,2 — M. G. 378.  
 1)  $\alpha\gamma$ -Di[2-Semicarbazon-4-Methylhexahydrophenyl]propan. Sm. 107° (A. 348, 110 C. 1906 [2] 783).
- $C_{19}H_{34}N_2J_2$  1) Di[Jodmethylat]d. 2-Diäthylamidomethyl-1-Piperidylmethylbenzol. Sm. 216° (B. 31, 428). — \*IV, 413.
- $C_{19}H_{35}O_2N$  C 73,8 — H 11,3 — O 10,4 — N 4,5 — M. G. 309.  
 1)  $\alpha$ -Cyanstearinsäure. Sm. 83,5° (B. 24, 2778). — I, 1221.
- $C_{19}H_{35}O_4N_3$  C 61,8 — H 9,5 — O 17,3 — N 11,4 — M. G. 369.  
 1) Methylester d. Semicarbazonoxydihydrochaulmoograsäure. Sm. 110° (Soc. 91, 567 C. 1907 [2] 72).
- $C_{19}H_{35}O_5N_{11}$  C 45,9 — H 7,0 — O 16,1 — N 31,0 — M. G. 497.  
 1) Verbindung (aus Hexäthylidentetramin). Sm. 212° u. Zers. (M. 21, 145).
- $C_{19}H_{36}ON_2$  C 74,0 — H 11,7 — O 5,2 — N 9,1 — M. G. 308.  
 1) s-Di[1-Methyl-3-Isopropylecyklopentyl]harnstoff (Diapofenchylharnstoff). Sm. 168—169° (C. 1908 [1] 1181).  
 2) s-Dicamphelylharnstoff. Sm. 220—221° (G. 22 [1] 220). — I, 1301.  
 3) s-Difenchelylharnstoff. Sm. 169° (A. 369, 81 C. 1909 [2] 2002).
- $C_{19}H_{36}O_2N_4$  C 64,8 — H 10,2 — O 9,1 — N 15,9 — M. G. 352.  
 1) Di[Piperidylmethylamid] d. Pentan- $\gamma\gamma$ -Dicarbonsäure. Sm. 115 bis 119° (A. 343, 276 C. 1906 [1] 926).
- $C_{19}H_{36}O_2Cl_2$  1) Methylester d. Dichlorstearinsäure (B. 23, 2531). — I, 476.
- $C_{19}H_{36}O_3N_2$  C 67,1 — H 10,6 — O 14,1 — N 8,2 — M. G. 340.  
 1) Äthylester d. r- $\delta$ -[1- $\beta$ -Menthylureido]- $\beta$ -Methylbutan- $\delta$ -Carbonsäure. Sm. 198° (C. 1908 [2] 2007).
- $C_{19}H_{38}N_2J_2$  1) Bisjodmethylat d. Dimethylspartein + H<sub>2</sub>O (C. r. 145, 816 C. 1908 [1] 139).
- $C_{19}H_{38}N_2S$  1) s-Dicamphelylthioharnstoff. Sm. 108—109° (G. 23 [2] 507). — \*I, 741.
- $C_{19}H_{37}O_3N$  C 73,3 — H 11,9 — O 10,3 — N 4,5 — M. G. 311.  
 1) Oktylester d. 1-Menthylamidocameisensäure. Sd. 220°<sub>24</sub> (Soc. 89, 96 C. 1906 [1] 1019).
- $C_{19}H_{37}O_3N$  C 69,7 — H 11,3 — O 14,7 — N 4,3 — M. G. 327.  
 1) Monamid d. Heptadekan- $\alpha\alpha$ -Dicarbonsäure (B. 24, 2780). — I, 1388.
- $C_{19}H_{37}O_4N_8$  C 61,4 — H 10,0 — O 17,2 — N 11,3 — M. G. 371.  
 1) Semicarbazonoxyestearinsäure. Sm. 134—135° (B. 36, 2659 C. 1903 [2] 826).

- $C_{19}H_{38}ON_2$  C 73,6 — H 12,2 — O 5,2 — N 9,0 — M. G. 310.  
 1) Isopropylidenhydrazid d. Palmitinsäure. Sm. 71° (*J. pr.* [2] 64, 426 *C.* 1902 [1] 24).
- $C_{19}H_{38}OS_2$  1) Diamyläther d.  $\beta\zeta$ -Dimerkapto- $\delta$ -Keto- $\beta\zeta$ -Dimethylheptan. Fl. (B. 35, 815 *C.* 1902 [1] 757).
- $C_{19}H_{38}O_2N_2$  C 69,9 — H 11,6 — O 9,8 — N 8,6 — M. G. 326.  
 1) Bismethylhydroxyd d. Dimethylspartein (*C. r.* 145, 816 *C.* 1908 [1] 139).
- $C_{19}H_{38}O_4N_2$  C 63,7 — H 10,6 — O 17,9 — N 7,8 — M. G. 358.  
 1) Di[ $\beta$ -Diäthylamidoäthylester] d. Pentan- $\gamma\gamma$ -Dicarbonsäure. Fl. Citrat (*A.* 359, 185 *C.* 1908 [1] 1539).
- $C_{19}H_{38}O_5N_4$  C 46,7 — H 9,5 — O 19,9 — N 13,9 — M. G. 402.  
 1) Diäthylester d. s-Dihexylharnstoff- $\zeta\zeta$ -Diamidoameisensäure. Sm. 132° (*J. pr.* [2] 62, 203).
- $C_{19}H_{38}O_5S_2$  1)  $\beta\zeta$ -Di[Amylsulfon]- $\delta$ -Keto- $\beta\zeta$ -Dimethylheptan. Sm. 127—128° (*B.* 35, 815 *C.* 1902 [1] 757).
- $C_{19}H_{39}ON$  C 76,8 — H 13,1 — O 5,4 — N 4,7 — M. G. 297.  
 1)  $\beta$ -Oximidononadekan. Sm. 76—77° (*A.* 357, 162 *C.* 1908 [1] 260; *C.* 1909 [1] 1403).
- $C_{19}H_{39}O_2N$  C 72,9 — H 12,4 — O 10,2 — N 4,5 — M. G. 313.  
 1) Methylester d.  $\alpha$ -Amidostearinsäure. HCl (*A.* 362, 339 *C.* 1908 [2] 1252).  
 2) Methylester d. Heptadekylamidoameisensäure. Sm. 63—64° (*Am.* 22, 30). — \*I, 713.  
 3) Verbindung (aus Cerebron). HCl (*H.* 49, 290 *C.* 1906 [2] 1846).
- $C_{19}H_{39}O_2N_3$  C 66,9 — H 11,4 — O 9,4 — N 12,3 — M. G. 341.  
 1)  $\alpha$ -Semicarbazon- $\kappa$ -Oxyoktadekan. Sm. 54° (*B.* 41, 2799 *C.* 1908 [2] 1247).
- $C_{19}H_{45}Cl_4P_3$  1) Chlormethintri[Triäthylphosphoniumchlorid]. 2 + 3PtCl<sub>4</sub> (*B.* 40, 1516 *C.* 1907 [1] 1670).
- $C_{19}H_{45}Br_4P_3$  1) Brommethintri[Triäthylphosphoniumbromid] (*B.* 40, 1516 *C.* 1907 [1] 1670).
- $C_{19}H_{46}Cl_3P_3$  1) Formylnonäthyltriphosphoniumchlorid. 6 + 3PtCl<sub>4</sub> (*J.* 1859, 377; 1861, 488). — I, 1507.
- $C_{19}H_{46}J_3P_3$  1) Formylnonäthyltriphosphoniumjodid (*J.* 1859, 377). — I, 1507.

### $C_{19}$ -Gruppe mit vier Elementen.

- $C_{19}H_8O_2NBr_7$  1) Benzoat d. 2,3,5,6,2',4',6'-Heptabrom-4-Oxydiphenylamin. Sm. 206° (*Soc.* 93, 325 *C.* 1908 [1] 1620).
- $C_{19}H_8O_6Br_7S$  1) Tetrabromsulfonfluorescein (*Bl.* [3] 17, 823). — \*II, 702.
- $C_{19}H_8O_2NCl_8$  1) Benzoat d. 2,3,6,2',4',6'-Hexachlor-4-Oxydiphenylamin. Sm. 169° (*Soc.* 87, 396 *C.* 1905 [1] 1595).
- $C_{19}H_{10}ONBr_3$  1)  $\beta$ -Tribrom-9-Benzoylcarbazol. Sm. 228—230° (*G.* 25 [2] 397). — IV, 393.
- $C_{19}H_{10}O_2NBr_5$  1) Benzoat d. 2,4,6,2',4',6'-Pentabrom-4'-Oxydiphenylamin. Sm. 176° (*Soc.* 93, 323 *C.* 1908 [1] 1620).
- $C_{19}H_{10}O_4NBr$  1) Monooxim d. 3-Brom-2-[1,3-Diketo-2,3-Dihydro-2-Indenyl]-1,4-Naphtochinon. Sm. 233° (*B.* 35, 3958 *C.* 1903 [1] 32).
- $C_{19}H_{10}O_4N_3Br$  1) Diäthylester d.  $\beta$ -Brom- $\beta$ -Dinitro- $\beta$ -Phenylamidophenylmethan-dicarbonsäure. Sm. 127° (*Am.* 12, 299). — II, 1842.
- $C_{19}H_{10}O_6N_4S$  1) 2,4,6-Trinitrophenyläther d. 5-Merkaptoakridin. Sm. 233° u. Zers. (*J. pr.* [2] 68, 81 *C.* 1903 [2] 445).
- $C_{19}H_{10}O_6N_4Se$  1) 2,4,6-Trinitrophenyläther d. 5-Selenoakridin. Zers. bei 198°. Pikrat (*J. pr.* [2] 68, 94 *C.* 1903 [2] 446).
- $C_{19}H_{10}O_6Br_2S$  1) Dibromsulfonfluorescein + H<sub>2</sub>O (*Am.* 9, 377; 17, 548). — III, 200; — \*II, 702.
- $C_{19}H_{11}ONBr_2$  1)  $\beta$ -Dibrom-9-Benzoylcarbazol. Sm. 215—216° (*G.* 25 [2] 395). — IV, 393.
- $C_{19}H_{11}O_2NBr_4$  1) Benzoat d. 2,4,2',5'-Tetrabrom-4'-Oxydiphenylamin. Sm. 178° (*Soc.* 93, 321 *C.* 1908 [1] 1619).



- $C_{19}H_{11}O_2N_2Cl$  1) 6-Chlor-2-Phenyl-1,7-Naphtisodiazin-4-Carbonsäure. Sm. 278° (B. 33, 2931). — \*IV, 726.  
2) 6-Chlor-3-Phenyl-4,7-Naphtisodiazin-1-Carbonsäure. Sm. 289° (B. 33, 2921). — \*IV, 725.
- $C_{19}H_{11}O_3N_2Cl_3$  1) Benzoat d. 2,4,6-Tribrom-4'-Oxyazobenzol. Sm. 132° (Soc. 77, 814).
- $C_{19}H_{11}O_2N_2Br$  1) 6-Brom-2-Phenyl-1,7-Naphtisodiazin-4-Carbonsäure. Sm. 286 bis 288° (B. 33, 2931). — \*IV, 726.  
2) 6-Brom-3-Phenyl-4,7-Naphtisodiazin-1-Carbonsäure. Sm. 283° (285°) (B. 33, 2922). — \*IV, 726.
- $C_{19}H_{11}O_2N_2Br_3$  1) Benzoat d. 3,5,4'-Tribrom-4-Oxyazobenzol. Sm. 129° (Soc. 77, 812). — \*IV, 1036.  
2) Benzoat d. 2',4',6'-Tribrom-4-Oxyazobenzol. Sm. 132° (Soc. 77, 814). — \*IV, 1035.
- $C_{19}H_{11}O_2N_2J$  1) 6-Jod-3-Phenyl-4,7-Naphtisodiazin-1-Carbonsäure. Sm. 272° (B. 33, 2922). — \*IV, 726.
- $C_{19}H_{11}O_2ClBr_4$  1)  $\alpha$ -Chlor-3,5,3',5'-Tetrabrom-4,4'-Dioxytriphenylmethan (A. 363, 275 C. 1909 [1] 176).
- $C_{19}H_{11}O_3N_2Cl$  1) 3-Chlor-6-Nitro-9-Benzoylcarbazon. Sm. 257—258° (G. 26 [1] 289). — IV, 393.
- $C_{19}H_{11}O_3N_2Cl_3$  1) 3,5,6-Trichlor-2-[ $\beta$ -Benzoyl- $\beta$ -Phenylhydrazido]-1,4-Benzochinon. Sm. 158,5° (C. 1900 [1] 902). — \*IV, 1096.
- $C_{19}H_{11}O_3N_2Br$  1) 9-Benzoyl-p-Bromnitrocarbazon. Sm. 267—268° (G. 22 [2] 573). — IV, 393.
- $C_{19}H_{11}O_4N_3S$  1) 2,4-Dinitrophenyläther d. 5-Merkaptoakridin. Sm. 290° u. Zers. (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 68, 83 C. 1903 [2] 445).
- $C_{19}H_{11}O_4N_3Se$  1) 2,4-Dinitrophenyläther d. 5-Selenoakridin. Sm. 273° (2HCl, PtCl<sub>4</sub>), Pikrat (J. pr. [2] 68, 96 C. 1903 [2] 446).
- $C_{19}H_{11}O_{11}N_3S$  1) Di[2-Nitrophenylester] d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 164° (Am. 30, 381 C. 1904 [1] 275).  
2) Di[4-Nitrophenylester] d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 152° (Am. 30, 381 C. 1904 [1] 275).
- $C_{19}H_{12}ONBr$  1) 9-Benzoyl-p-Bromcarbazon. Sm. 124—125° (G. 22 [2] 570). — IV, 392.
- $C_{19}H_{12}ON_2Cl_4$  1) 2,3,5,4'-Tetrachlor-4-[2-Oxybenzyliden]amidodiphenylamin. Sm. 153—154° (C. 1898 [2] 36; A. 367, 315 C. 1909 [2] 1224). — \*IV, 395.
- $C_{19}H_{12}ON_2S_8$  1) Benzoat d. 5-Merkapto-2-Thiocarbonyl-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 146° (J. pr. [2] 60, 214). — \*IV, 613.
- $C_{19}H_{12}ON_3Cl_3$  1) Trichloracetat d. 4-Benzoylamido-1-Diazonaphtalin (Soc. 91, 1319 C. 1907 [2] 1076).
- $C_{19}H_{12}O_2NBr$  1) p-Brom-2,6-Dimethylchinolinphtalon. Sm. 159—160° (B. 34, 2306). — \*IV, 206.  
2) Brom-o-Methylchinolinphtalon (B. 36, 3918 C. 1904 [1] 98).
- $C_{19}H_{12}O_2NBr_3$  1) p-Brom-2,6-Dimethylchinolinphtalondibromid. Sm. 233—234° u. Zers. (B. 34, 2307). — \*IV, 206.  
2) Benzoat d. 2,4,p-Tribrom-4'-Oxydiphenylamin. Sm. 147° (Soc. 93, 318 C. 1908 [1] 1619).
- $C_{19}H_{12}O_2N_2Br_2$  1) Benzoat d. 3,5-Dibrom-4-Oxyazobenzol. Sm. 120° (Soc. 77, 715). — \*IV, 1035.
- $C_{19}H_{12}O_2N_2S$  1) 1-[2-Nitrocinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 183° (C. 1905 [1] 100).  
2) 1-[3-Nitrocinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 200° (C. 1905 [1] 100).  
3) 1-[4-Nitrocinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 228° (C. 1905 [1] 100).  
4) 2-[2-Nitrocinnamenyl]- $\beta$ -Naphtothiazol. Sm. 168° (C. 1905 [1] 101).  
5) 2-[3-Nitrocinnamenyl]- $\beta$ -Naphtothiazol. Sm. 190° (C. 1905 [1] 101).  
6) 2-[4-Nitrocinnamenyl]- $\beta$ -Naphtothiazol. Sm. 226° (C. 1905 [1] 101).
- $C_{19}H_{12}O_2N_3Br$  1) 7-Brom-9-Phenylhydrazon-2-Nitrofluoren. Sm. 245° u. Zers. (B. 38, 3756 C. 1906 [1] 43).

- $C_{19}H_{12}O_2N_3Br$  2) 6-[4-Brom-1-Amido-2-Naphtyl]azo-1,2-Benzpyron. Sm. 240 bis 241° u. Zers. (*Soc.* 85, 751 *C.* 1904 [2] 448).
- $C_{19}H_{12}O_3N_2S$  1) 5-Nitro-3-Benzoylphenthiazin. Sm. 200° u. Zers. (*A.* 366, 101 *C.* 1909 [2] 123).
- $C_{19}H_{12}O_4N_2S$  1) Nitril d.  $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -[4-Nitrophenyl]akrylsäure. Sm. 187° (*J. pr.* [2] 78, 132 *C.* 1908 [2] 1171).
- $C_{19}H_{12}O_4N_3Br$  1) Benzoat d. 5-Brom-3-Nitro-4-Oxyazobenzol. Sm. 131° (*Soc.* 89, 185 *C.* 1906 [1] 1339).
- $C_{19}H_{12}O_5N_2S$  1) 2-Phenyl-1,7-Naphtisodiazin-4-Carbonsäure- $\beta$ -Sulfonsäure. Ba (*B.* 33, 2932). — \*IV, 727.
- $C_{19}H_{12}O_5Br_2S$  1) Dibromphenylsulfonphtalein (*Am.* 20, 264). — \*II, 698.
- $C_{19}H_{12}O_6N_2Br_2$  1) 5,5'-Dibrom-3,3'-Dinitro-4,4'-Dioxytriphenylmethan. Sm. 161° (*A.* 363, 270 *C.* 1909 [1] 176).
- $C_{19}H_{12}O_6N_3Cl$  1)  $\alpha$ -Chlor-4,4',4''-Trinitrotriphenylmethan (*B.* 37, 1639 *C.* 1904 [1] 1649).
- $C_{19}H_{12}O_6N_5Cl$  1) N- $\alpha$ -Imidobenzyl-2-Chlor-2',4',6'-Trinitrodiphenylamin. Sm. 146 bis 148° (*J. pr.* [2] 78, 496 *C.* 1909 [1] 281).
- 2) N- $\alpha$ -Imidobenzyl-3-Chlor-2',4',6'-Trinitrodiphenylamin. Sm. 148° u. Zers. (*J. pr.* [2] 78, 490 *C.* 1909 [1] 281).
- 3) N- $\alpha$ -Imidobenzyl-4-Chlor-2',4',6'-Trinitrodiphenylamin. Sm. 171° u. Zers. (*J. pr.* [2] 67, 468 *C.* 1903 [1] 1422). — \*IV, 566.
- $C_{19}H_{12}NClBr_2$  1) Dibromid d. 5-[4-Chlorphenyl]akridin. Sm. 176°.  $H_2Cr_2O_7$  (*Soc.* 91, 1662 *C.* 1907 [2] 2061).
- $C_{19}H_{12}NClS$  1) 2-[2-Chlorcinnamenyl]- $\beta$ -Naphtothiazol. Sm. 144° (*C.* 1905 [1] 101).
- $C_{19}H_{13}ONCl_2$  1) Di[ $\beta$ -Chlorphenyl]amid d. Benzolcarbonsäure. Sm. 153° (*B.* 14, 2369; 15, 1285). — II, 1164.
- $C_{19}H_{13}ONBr_2$  1) Di[ $\beta$ -Bromphenyl]amid d. Benzolcarbonsäure. Sm. 142° (*B.* 15, 830). — II, 1164.
- $C_{19}H_{13}ONJ_2$  1) Di[ $\beta$ -Jodphenyl]amid d. Benzolcarbonsäure. Sm. 156—157° (*D. R. P.* 81928). — \*II, 731.
- $C_{19}H_{13}ONS$  1) Benzoylthiodiphenylamin. Sm. 170,5° u. Zers. (*B.* 18, 1844). — II, 1179.
- 2) 1-[2-Oxycinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 249° (*C.* 1905 [1] 100).
- 3) 1-[4-Oxycinnamenyl]- $\alpha$ -Naphtothiazol. Sm. 271° (*C.* 1905 [1] 100).
- $C_{19}H_{13}ON_6Cl_3$  1) Diazo-4-Rosanilinchlorid. + 3  $AuCl_3$  (*A.* 194, 268). — IV, 1552.
- $C_{19}H_{13}O_2NBr_2$  1) Di[4-Bromphenyläther] d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenylimidomethan. Sm. 106° (*B.* 28, 978). — \*II, 373.
- $C_{19}H_{13}O_2NBr_4$  1) o-Methylchinophtalontetrabromid (*B.* 36, 3918 *C.* 1904 [1] 98).
- 2) p-Methylchinophtalontetrabromid (*B.* 35, 1662 *C.* 1902 [1] 1369).
- $C_{19}H_{13}O_2NS$  1) Phenylester d. Thiodiphenylamin-N-Carbonsäure. Sm. 164° (*B.* 24, 2908). — II, 806.
- 2) Nitril d.  $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -Phenylakrylsäure. Sm. 122° (*J. pr.* [2] 78, 131 *C.* 1908 [2] 1171).
- $C_{19}H_{13}O_2N_2Cl$  1) 2-Chlor-4-Phenylbenzoylhydrazon-1-Keto-1,4-Dihydrobenzol. Sm. 172,5° (*C.* 1908 [2] 241).
- 2) 1[oder 4]-Chlor-2-Oxybenzylphenazon. Sm. 234° (*A.* 290, 306). — IV, 1004.
- 3) Acetylmethylchlornaphteurhodon. Sm. oberhalb 220° (*Soc.* 63, 1386). — IV, 1063.
- 4) Benzoat d. 3-Chlor-4-Oxyazobenzol. Sm. 109° (*C.* 1908 [2] 241).
- 5) Benzoat d. 2-Chlor-4'-Oxyazobenzol. Sm. 131° (*B.* 26, 2977). — IV, 1408.
- 6) Benzoat d. 3-Chlor-4'-Oxyazobenzol. Sm. 118° (*B.* 26, 2977). — IV, 1409.
- 7) Benzoat d. 4-Chlor-4'-Oxyazobenzol. Sm. 154° (*B.* 26, 2978). — IV, 1409.
- $C_{19}H_{13}O_2N_2Br$  1) Benzoat d. 2-Brom-4'-Oxyazobenzol. Sm. 122—123° (*B.* 31, 2115). — IV, 1409.
- 2) Benzoat d. 3-Brom-4'-Oxyazobenzol. Sm. 122° (*B.* 28, 803). — IV, 1409.
- 3) Benzoat d. 4-Brom-4'-Oxyazobenzol. Sm. 166° (*B.* 31, 2116). — IV, 1410.

- $C_{19}H_{13}O_3NCl_2$  1) 3,5-Dichlor-2-Amidoaurin (B. 40, 3597 C. 1907 [2] 1747).  
 $C_{19}H_{13}O_3NBr_2$  1) 3,5-Dibrom-2-Amidoaurin (B. 40, 3597 C. 1907 [2] 1747).  
 $C_{19}H_{13}O_3NS$  1) Nitril d.  $\alpha$ -[2-Naphtyl]- $\beta$ -[2-Oxyphenyl]akrylsäure. Sm. 173° (J. pr. [2] 78, 131 C. 1908 [2] 1171).  
 $C_{19}H_{13}O_3N_2Cl$  1) Verbindung (aus d. Aldehyd  $C_7H_2O_4Cl_2$ ). Sm. 250° (A. 363, 232 C. 1909 [1] 164).  
 $C_{19}H_{13}O_3N_2Br$  1) 4'-Brom-3-Nitro-4-Phenylamidodiphenylketon. Sm. 180° (B. 24, 3773). — III, 183.  
 $C_{19}H_{13}O_4NBr_8$  1) Diacetat d. Methyl-di[3,4,5,6-Tetrabrom-2-Oxybenzyl]amin. Sm. 145—150° (A. 344, 148 C. 1906 [1] 1157).  
 $C_{19}H_{13}O_4NS$  1) 5-[4-Oxyphenyl]akridin- $\beta$ -Sulfonsäure. Na (Bl. [3] 31, 1093 C. 1904 [2] 1509).  
 $C_{19}H_{13}O_4N_2Cl$  1)  $\beta$ -Chlor- $\alpha\gamma$ -Di[1, 2-Phtalylamido]propan ( $\beta$ -Chlortrimethylen-diphtalimid). Sm. 208—209° (B. 25, 3056). — II, 1807.  
 2) Verbindung (aus Chlordioxybenzochinon u. Benzoyl-o-Phenylendiamin). Sm. 237° (B. 28, 357). — IV, 565.  
 $C_{19}H_{13}O_4N_3S$  1) 4-Nitro-2-Sulfobenzoësäuredianil? Sm. 208° (Am. 25, 23). — \*II, 806.  
 $C_{19}H_{13}O_4N_3S_2$  1) p-Rosanilindisulfon.  $H_2SO_4 + H_2O$  (B. 39, 4209 C. 1907 [1] 345).  
 $C_{19}H_{13}O_5NS$  1) Resorcinsaccharein. Sm. 265—267° (Bl. [3] 17, 695). — \*II, 702.  
 $C_{19}H_{13}O_5N_3S$  1) 3,5-Dinitro-4-[2-Merkaptophenyl]amidodiphenylketon. Sm. 200° u. Zers. (A. 366, 101 C. 1909 [2] 123).  
 $C_{19}H_{13}O_6NS_2$  1) 5-Phenylakridin- $\beta$ -Sulfonsäure.  $Na_2$  (A. 224, 32). — IV, 468.  
 $C_{19}H_{13}O_6N_3S_2$  1) Di[4-Nitrophenyläther] d. 4-Nitro-1-Dimerkaptomethylbenzol. Sm. 166° (B. 41, 2272 C. 1908 [2] 692).  
 $C_{19}H_{13}O_7NS$  1) Diphenylester d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 119° (Am. 25, 12; Am. 30, 374 C. 1904 [1] 275). — \*II, 805.  
 $C_{19}H_{13}O_9NS$  1) Verbindung (aus Resorcin u. d. s-Chlorid d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure) (Am. 25, 17). — \*II, 805.  
 $C_{19}H_{13}O_9N_5S$  1) 1-[2,4-Dinitrophenyl]amido-4-[4-Nitrobenzyliden]amidobenzol-4<sup>2</sup>-Sulfonsäure (D.R.P. 135335 C. 1902 [2] 1167).  
 $C_{19}H_{13}O_{10}N_3S_2$  1) Di[4-Nitrophenyl]sulfon-4-Nitrophenylmethan. Sm. 235° (B. 41, 2272 C. 1908 [2] 692).  
 $C_{19}H_{13}O_{11}N_5S$  1) 4-Methylbenzolsulfonat d. 2',4', $\beta$ , $\beta$ -Tetranitro-4-Oxydiphenylamin. Sm. 189,5° (B. 37, 1732 C. 1904 [1] 1521).  
 $C_{19}H_{13}O_{11}NS$  1) Helicinleucindisulfit (A. 210, 126). — III, 68.  
 $C_{19}H_{13}O_{13}N_5S_5$  1) p-Rosanilindisulfontrisulfonsäure +  $4H_2O$  (B. 39, 4209 C. 1907 [1] 345).  
 $C_{19}H_{14}ONCl$  1) 1-Naphtylamid d.  $\alpha$ -Chlor- $\beta$ -Phenylakrylsäure. Sm. 134° (Soc. 89, 114 C. 1906 [1] 1016).  
 2) 2-Naphtylamid d.  $\alpha$ -Chlor- $\beta$ -Phenylakrylsäure. Sm. 139° (Soc. 89, 114 C. 1906 [1] 1016).  
 $C_{19}H_{14}ON_2Cl_2$  1)  $\alpha$ -Phenylhydrazon-3,5-Dichlor-2-Oxydiphenylmethan. Sm. 186°. Phenylhydrazinsalz (A. 346, 383 C. 1906 [2] 336).  
 $C_{19}H_{14}ON_2Br_2$  1) lab.  $\alpha$ -Phenylhydrazon-3,5-Dibrom-2-Oxydiphenylmethan. Sm. 143° (A. 346, 387 C. 1906 [2] 337).  
 2) stab.  $\alpha$ -Phenylhydrazon-3,5-Dibrom-2-Oxydiphenylmethan. Sm. 176—177° (A. 346, 387 C. 1906 [2] 337).  
 $C_{19}H_{14}ON_3S$  1) Phenylamid d. Thiodiphenylamin-N-Carbonsäure. Sm. 168 bis 169° (B. 24, 2910). — II, 806.  
 $C_{19}H_{14}ON_3Cl$  1) 4-Benzoylchloramidoazobenzol. Sm. 144° (Soc. 81, 983 C. 1902 [2] 360). — \*IV, 1011.  
 2) Phenylamid d. 4'-Chlorazobenzol-3-Carbonsäure. Sm. 198° (A. 263, 232). — IV, 1461.  
 $C_{19}H_{14}OClIJ$  1) 4-Benzoyldiphenyljodoniumchlorid. Sm. 200°. +  $HgCl_2$ , 2 +  $PtCl_4$  (B. 38, 3456 C. 1905 [2] 1587).  
 $C_{19}H_{14}OBrJ$  1) 4-Benzoyldiphenyljodoniumbromid. Sm. 157° (B. 38, 3456 C. 1905 [2] 1587).  
 $C_{19}H_{14}O_2NCl$  1)  $\alpha$ -Chlor-4-Nitrotriphenylmethan. Sm. 92—93° (B. 37, 606 C. 1904 [1] 887).  
 $C_{19}H_{14}O_2NBr$  1) Phenyläther-4-Bromphenyläther d.  $\alpha\alpha$ -Dioxy- $\alpha$ -Phenylimido-methan. Sm. 83° (B. 28, 981). — \*II, 373.  
 $C_{19}H_{14}O_2N_2Br_2$  1)  $\alpha\beta$ -Dibrom- $\alpha$ -[2-Nitrophenyl]- $\beta$ -[6-Phenyl-2-Pyridyl]äthan. Sm. 145° (B. 35, 417 C. 1902 [1] 669). — \*IV, 275.



- $C_{19}H_{14}O_2N_2Br_2$  2)  $\alpha\beta$ -Dibrom- $\alpha$ -[3-Nitrophenyl]- $\beta$ -[6-Phenyl-2-Pyridyl]äthan. Sm. 189° (B. 35, 417 C. 1902 [1] 669). — \*IV, 275.
- $C_{19}H_{14}O_2N_2S$  1) Verbindung (aus 2-Cyanbenzol-1-Sulfonsäurechlorid u. Anilin). Sm. 187—189° (189,5°) (B. 26, 2292; Am. 18, 810). — II, 1297; \*II, 801.
- $C_{19}H_{14}O_2N_5Br$  1) 4-[ $\alpha$ -Cyan-4-Nitrobenzyliden]amido-3,5-Dimethyl-1-[4-Bromphenyl]pyrazol. Sm. 218,5° (B. 40, 669 C. 1907 [1] 968).
- $C_{19}H_{14}O_3NCl$  1) 5-Chlor-2-Amidoaurin (B. 40, 3597 C. 1907 [2] 1747).
- $C_{19}H_{14}O_3NBr$  1) 5-Brom-2-Amidoaurin (B. 40, 3597 C. 1907 [2] 1747).  
2) Benzylamid d. 3-Brom-1,4-Naphtochinon-2-Methylcarbonsäure. Sm. 100—101° (B. 33, 570 Anm.). — \*II, 1089.
- $C_{19}H_{14}O_3NBr_3$  1) Verbindung (aus d. Lakton  $C_{19}H_{19}O_4N$ ). Sm. 175° (Soc. 87, 446 C. 1905 [1] 1639).
- $C_{19}H_{14}O_3N_2Br_2$  1) 2-Keto-1,3-Diacetyl-4,5-Di[4-Bromphenyl]-2,3-Dihydroimidazol. Sm. 192—193° (B. 41, 1756 C. 1908 [2] 421).
- $C_{19}H_{14}O_3N_4S$  1) 2,4<sup>3</sup>-Inn. Anhydrid d. 1,4-Diphenyl-1,2,3,5-Tetrazol-2-Phenylhydroxyd-4'-Sulfonsäure. Sm. oberhalb 250° (B. 33, 750). — \*IV, 939.
- $C_{19}H_{14}O_3N_5Cl$  1) 2-[4-Oxychlorphenylat] d. 4-[4-Nitrophenyl]-1-Phenyl-1,2,3,5-Tetrazol. Zers. bei 208—209° (B. 31, 477). — IV, 1232.
- $C_{19}H_{14}O_3N_5Br$  1)  $\alpha$ -Phenyl- $\beta$ -[3-Bromphenyl]azo- $\beta$ -[3-Nitrophenyl]harnstoff. Sm. 128° (B. 21, 2576). — IV, 1566.  
2)  $\alpha$ -Phenyl- $\beta$ -[4-Bromphenyl]azo- $\beta$ -[3-Nitrophenyl]harnstoff. Sm. 134° (B. 21, 2575). — IV, 1566.  
3)  $\alpha$ -Phenyl- $\beta$ -[4-Bromphenyl]azo- $\beta$ -[4-Nitrophenyl]harnstoff. Sm. 129° (B. 21, 2574). — IV, 1566.
- $C_{19}H_{14}O_4NP$  1) Phenylimid d. Phenylphosphorsäure-2-Carbonsäurephenylester. Sm. 152° (B. 31, 2178). — \*II, 891.
- $C_{19}H_{14}O_4N_2Br_2$  1) 2,5-Diketo-1,3-Diacetyl-4,4-Di[4-Bromphenyl]tetrahydroimidazol. Sm. 187° (B. 41, 1387 C. 1908 [1] 2103).
- $C_{19}H_{14}O_4N_2S$  1) 3-Amidophenolsulfonphtalein (Am. 20, 268). — \*II, 698.  
2) 4-Amidophenolsulfonphtalein (Am. 20, 269).
- $C_{19}H_{14}O_4N_2S_2$  1) Di[4-Nitrophenyläther] d. Dimerkaptomethylbenzol. Sm. 152° (154°) (R. 20, 403 C. 1902 [1] 417; B. 41, 2271 C. 1908 [2] 692). — \*III, 6.
- $C_{19}H_{14}O_5N_2Br_4$  1) 1,3-Dibrom-2-Keto-1,3-Di[ $\alpha$ -Brom-3-Nitrobenzyl]-R-Pentamethylen. Sm. 178° u. Zers. (B. 36, 1504 C. 1903 [1] 1352).
- $C_{19}H_{14}O_5N_2S_2$  1) Di[4-Nitrobenzyläther] d. 2-Dimerkaptomethylfuran. Sm. 87° (B. 40, 2008 C. 1907 [2] 45).
- $C_{19}H_{14}O_5N_2S$  1) Monobenzoat d. 2,5-Dioxyazobenzol-4'-Sulfonsäure. Ba (B. 26, 1912). — IV, 1447.
- $C_{19}H_{14}O_7N_3P$  1)  $\beta$ -Trinitrodiphenylbenzylphosphinoxid. Sm. 206° (B. 21, 1507). — IV, 1662.
- $C_{19}H_{14}O_7N_4S$  1) 4-Nitro-4'-[4-Nitrobenzyliden]amidodiphenylamin-2-Sulfonsäure (D. R. P. 135335 C. 1902 [2] 1167).
- $C_{19}H_{14}O_8N_2Br_2$  1) Di[4-Nitrobenzoat] d. cis-3,5-Dibrom-1,2-Dioxy-R-Pentamethylen. Sm. 147—148° (A. 314, 309).  
2) Di[4-Nitrobenzoat] d. trans-3,5-Dibrom-1,2-Dioxy-R-Pentamethylen. Sm. 158—159° (A. 314, 305).
- $C_{19}H_{15}ONBr_4$  1) Pyridiniumbromid d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[3,5-Dibrom-4-Oxyphenyl]äthan. Sm. 194° u. Zers. (A. 349, 119 C. 1906 [2] 1257).
- $C_{19}H_{15}ONS$  1) Phenylamid d. 4-Oxybenzylphenyläther-1-Thiocarbonsäure. Sm. 133° (J. pr. [2] 59, 582). — \*II, 915.
- $C_{19}H_{15}ONS_2$  1) 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-Cinnamyliden-tetrahydrothiazol. Sm. 175° (M. 26, 1212 C. 1905 [2] 1675).  
2) 2-Thiocarbonyl-4-Keto-3-[3-Methylphenyl]-5-Cinnamyliden-tetrahydrothiazol. Sm. 145—146° (M. 29, 405 C. 1908 [2] 1039).  
3) 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-Cinnamyliden-tetrahydrothiazol. Sm. 185° (M. 26, 1215 C. 1905 [2] 1676).
- $C_{19}H_{15}ON_2Cl$  1) 4-Chlor-4'-[2-Oxybenzyliden]amidodiphenylamin. Sm. 170° (A. 303, 315). — \*IV, 395.  
2) Methyläther d. 1-Chlor-2-[ $\alpha$ -Cyan-4-Oxybenzyl]amidonaphtalin. Sm. 132° (Soc. 77, 1218). — \*II, 917.
- $C_{19}H_{15}ON_2Br$  1) Methyläther d. 1-Brom-2-[ $\alpha$ -Cyan-4-Oxybenzyl]amidonaphtalin. Sm. 150—151° (Soc. 77, 1216). — \*II, 917.

- $C_{19}H_{15}ON_2Br$  2) 6-Brom-2-[2-Oxyphenyl]-1-Phenyl-2,3-Dihydrobenzimidazol. Sm. 155° (A. 303, 325). — \*IV, 367.
- $C_{19}H_{15}ON_3S$  1) 3-Merkapto-5-Keto-4-[2-Naphtyl]-1-[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol. Sm. 275° (B. 32, 1086; 34, 325). — \*IV, 535.  
2) 5-[2-Naphtyl]amido-2-Keto-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 210° (B. 32, 1086). — \*IV, 535.
- $C_{19}H_{15}ON_4Cl$  1) 2-Chlor-2-[4-Oxyphenyl]-1,4-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol. Sm. 243—244° u. Zers. (B. 29, 1852). — IV, 1268.  
2)  $\alpha$ -Phenyl- $\beta$ -Phenylazo- $\beta$ -[4-Chlorphenyl]harnstoff. Sm. 126 bis 127° (B. 30, 1408). — IV, 1561.
- $C_{19}H_{15}ON_4Br$  1)  $\alpha$ -Phenyl- $\beta$ -Phenylazo- $\beta$ -[4-Bromphenyl]harnstoff. Sm. 131° (B. 21, 2569; 30, 1405). — IV, 1562.
- $C_{19}H_{15}ON_4J$  1)  $\alpha$ -Phenyl- $\beta$ -Phenylazo- $\beta$ -[4-Jodphenyl]harnstoff. Sm. 132° (B. 30, 1409).
- $C_{19}H_{15}O_2NBr_2$  1) N-Acetyl-3,5-Dibrom-2-Oxybenzoyl-2-Naphtylamin. Sm. 137° (A. 332, 187 C. 1904 [2] 210).
- $C_{19}H_{15}O_2NS$  1) N-Anhydrid d.  $\alpha$ -Amidotriphenylmethan-2-Sulfonsäure (Diphenylbenzylsultam). Sm. 210°. K (B. 29, 2296). — \*II, 351.  
2) Nitril d.  $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -Phenylpropionsäure? Sm. 128° (J. pr. [2] 72, 332 C. 1905 [2] 1785).
- $C_{19}H_{15}O_2N_2Br$  1) Acetat d. 4-Oxy-1-[2-Brom-4-Methylphenyl]azonaphtalin. Sm. 155° (B. 31, 1784). — IV, 1436.
- $C_{19}H_{15}O_2SAs$  1) Triphenylarsinsulfid-4-Carbonsäure. Sm. 178° (A. 321, 192 C. 1902 [2] 46). — \*IV, 1198.
- $C_{19}H_{15}O_3NS$  1)  $\alpha$ -Oximido-4-Phenylsulfondiphenylmethan. Sm. 201° (Am. 20, 314). — \*III, 151.  
2) 4-Phenylsulfonamidodiphenylketon. Sm. 156° (Soc. 85, 397 C. 1904 [1] 1404).  
3) Phenylamid d. Diphenylketon-2-Sulfonsäure. Sm. 143—145° (Am. 17, 359). — III, 192.  
4) Phenylamid d. Diphenylsulfon-4-Carbonsäure. Sm. 202—203° (Am. 20, 309; 25, 106). — \*II, 807, 901.  
5) Benzoylphenylamid d. Benzolsulfonsäure. Sm. 114—115° (112 bis 113°; 104°) (Am. 19, 763; C. 1899 [2] 868; C. r. 137, 714 C. 1903 [2] 1428; Bl. [3] 31, 623 C. 1904 [2] 97). — \*II, 737.
- $C_{19}H_{15}O_3NS_2$  1) Acetat d. 2-Thiocarbonyl-4-Keto-5-[2-Oxybenzyliden]-3-[3-Methylphenyl]tetrahydrothiazol. Sm. 231° (M. 29, 403 C. 1908 [2] 1038).
- $C_{19}H_{15}O_3N_2Br$  1) 4-Brom-2-Nitro-1-Acetylbenzylamidonaphtalin. Sm. 128° (Soc. 89, 1436 C. 1906 [2] 1615).
- $C_{19}H_{15}O_3N_4Cl$  1) 12-Chlormethylat d. 9-Nitro-5-Acetylamido- $\alpha\beta$ -Naphtophenazin (B. 31, 3093). — \*IV, 859.
- $C_{19}H_{15}O_4N_3S$  1) Nitril d. 1-[2,4-Dimethylphenyl]azo-2-Oxynaphtalin-3-Carbonsäure-6-Sulfonsäure. Na (D. R. P. 189935 C. 1907 [2] 2007).  
2) Phenylamid d. 3-Phenylsulfon-4-Oxyphenylazoameisensäure. Sm. 195—196° u. Zers. (A. 334, 179 C. 1904 [2] 834).
- $C_{19}H_{15}O_6N_3S$  1) Di[Phenylamid] d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 222° (Am. 25, 21). — \*II, 807.  
2) Verbindung (aus d. Diphenylamid d. 4-Nitrobenzol-1-Carbonsäure-2-Sulfonsäure). Sm. noch nicht bei 340° (Am. 25, 25). — \*II, 807.
- $C_{19}H_{15}O_6ClS$  1) 4,4', $\beta$ -Trioxytriphenylsulfinechlorid- $\beta$ -Carbonsäure. 2 + PtCl<sub>4</sub> (Soc. 91, 1121 C. 1907 [2] 899).
- $C_{19}H_{15}O_6NS_2$  1)  $\alpha\alpha$ -Di[Phenylsulfon]- $\alpha$ -[2-Nitrophenyl]methan. Sm. 158—160° (B. 35, 2347 C. 1902 [2] 516).  
2)  $\alpha\alpha$ -Di[Phenylsulfon]- $\alpha$ -[3-Nitrophenyl]methan. Sm. 176° (B. 35, 2348 C. 1902 [2] 516).  
3)  $\alpha\alpha$ -Di[Phenylsulfon]- $\alpha$ -[4-Nitrophenyl]methan. Sm. 210—212° (B. 35, 2349 C. 1902 [2] 517).
- $C_{19}H_{15}O_6N_3S$  1) Di[4-Nitrophenyl]amid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 167—168° (B. 35, 1442 C. 1902 [1] 1200).
- $C_{19}H_{15}O_6ClS_3$  1)  $\alpha$ -Chlortriphenylsulfonmethan. Sm. 260° (B. 25, 350). — II, 784.
- $C_{19}H_{15}O_6BrS_3$  1)  $\alpha$ -Bromtriphenylsulfonmethan. Sm. 255° u. Zers. (B. 25, 351). — II, 784.
- $C_{19}H_{15}O_7NBr_2$  1) Phenylamid d. 2,6-Dibrom-3,4,5-Triacetoxybenzol-1-Carbonsäure (Bl. [3] 11, 325). — II, 1924.

- $C_{19}H_{15}O_7N_8S$  1) 4-Methylbenzolsulfonat d. 2',4'-Dinitro-4-Oxydiphenylamin. Sm. 178,5° (B. 37, 1731 C. 1904 [1] 1521).
- $C_{19}H_{15}O_{10}NBr_2$  1) Oxim d. Dibromeichenrindengerbsäure (A. 240, 336). — III, 588.
- $C_{19}H_{15}NJSb$  1) Triphenylantimonjodecyanid (B. 40, 1514 C. 1907 [1] 1670).
- $C_{19}H_{16}ONBr$  1) 3-Brom-4-Oxy-1-[2,5-Dimethylphenyl]imidomethylnaphtalin. Sm. 206° u. Zers. (A. 357, 333 C. 1908 [1] 354).
- $C_{19}H_{16}ON_2S$  1) Methyläther d. Benzoylimido-1-Naphtylamidomerkaptomethan (Benzoyl- $\alpha$ -Naphtylthiolmethylpseudothioharnstoff). Sm. 124° (Am. 26, 412).
- 2) 2-Phenylimido-4-Keto-3-Allyl-5-Benzylidentetrahydrothiazol. Sm. 106° (C. 1899 [2] 805). — \*II, 954.
- 3) Verbindung (aus 4-Thionylamido-1-Methylbenzol) (A. 274, 228). — II, 489.
- $C_{19}H_{16}ON_3Cl$  1) 7-Chlormethylat d. 10-Acetylamido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl<sub>4</sub> (B. 31, 3097). — \*IV, 867.
- $C_{19}H_{16}ON_3P$  1)  $\alpha$ -Phenylamidobenzylidenamid d. Phosphorsäurephenylimid. Sm. 227—228° (Soc. 95, 1154 C. 1909 [2] 815).
- $C_{19}H_{16}O_2NBr$  1)  $\gamma$ -Brompropylimid d. Diphenylmaleinsäure. Sm. 112° (B. 40, 4406 C. 1908 [1] 41).
- $C_{19}H_{16}O_2N_2S$  1)  $\alpha$ -Phenylsulfonimido- $\alpha$ -Phenylamido- $\alpha$ -Phenylmethan. Sm. 138 bis 139° (A. 214, 214; B. 11, 754). — IV, 847.
- 2) S-4-Methylphenyläther d. 4'-Merkapto-2,4-Dioxyazobenzol (J. pr. [2] 68, 274 C. 1903 [2] 994).
- $C_{19}H_{16}O_2N_3Br$  1) 8-Brom-5-[6-Cumarylazo]amido-1,2,3,4-Tetrahydronaphtalin. Zers. bei 165—168° (Soc. 85, 750 C. 1904 [2] 448).
- $C_{19}H_{16}O_2N_4S$  1) 4-Methylphenyläther d. 4-Nitro-4'-Merkaptodiazoamidobenzol. Sm. 166° u. Zers. (J. pr. [2] 68, 276 C. 1903 [2] 994).
- $C_{19}H_{16}O_4N_4S_2$  1) 4-[4-Methylphenylthiosulfondiazo]azobenzol. Sm. 114° u. Zers. (J. pr. [2] 62, 426). — \*IV, 1108.
- $C_{19}H_{16}O_3N_2Br$  1) Verbindung (aus d.  $\alpha$ -Cyan- $\beta$ -[4-Oxyphenyl]akrylsäureäthylester) =  $(C_{19}H_{16}O_3N_2Br)_x$ ? Sm. 183° (J. pr. [2] 54, 537). — \*II, 1131.
- $C_{19}H_{16}O_3N_2Br_2$  1) ?-Dibrom-?-Di[Phenylamido]-1,2-Benzochinonmonomethylhemiacetal. Sm. 144—145° (B. 35, 3854 C. 1903 [1] 26).
- $C_{19}H_{16}O_3N_2S$  1)  $\beta$ -Benzyliden- $\alpha$ -Diphenylhydrazin- $\beta^3$ -Sulfonsäure. Na (B. 24, 792). — IV, 754.
- 2) 4-Benzoyl-3-Methyl-1-Phenylpyrazol-5-Merkaptoessigsäure. Sm. 124° (A. 361, 291 C. 1908 [2] 522).
- 3) Benzolsulfonat d. 4'-Oxy-2-Methylazobenzol. Sm. 64° (J. pr. [2] 78, 389 C. 1909 [1] 361).
- 4) Benzolsulfonat d. 4'-Oxy-4-Methylazobenzol. Sm. 114° (J. pr. [2] 78, 392 C. 1909 [1] 362).
- 5) Phenylamid d. 2-Phenylsulfonamidobenzol-1-Carbonsäure. Sm. 144—144,5° (J. pr. [2] 44, 428). — II, 1253.
- 6) s-Di[Phenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 196° (Am. 17, 316, 339; 18, 809; B. 31, 1658; Am. 30, 273 C. 1903 [2] 1120). — II, 803.
- 7) uns-Di[Phenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 270° u. Zers. (270—280° u. Zers.). + C<sub>2</sub>H<sub>6</sub>O (Am. 17, 317, 341; 18, 809; B. 31, 1658). — \*II, 803.
- 8) Di[Phenylamid] d. Benzol-1-Carbonsäure-3-Sulfonsäure (A. 102, 258). — II, 1300.
- 9) Verbindung (aus 2,3'-Bichinolyl) (B. 18, 333). — IV, 1067.
- $C_{19}H_{16}O_3N_4S$  1)  $\alpha$ -Phenylazo- $\alpha$ -Phenylhydrazon- $\alpha$ -[3-Sulfophenyl]methan (Form-azylbenzol-I-m-Sulfonsäure). Na (B. 33, 750). — \*IV, 934.
- 2)  $\alpha$ -Phenylazo- $\alpha$ -[4-Sulfophenyl]hydrazon- $\alpha$ -Phenylmethan (Form-azylbenzol-II-p-Sulfonsäure). Na (B. 33, 747). — \*IV, 934.
- 3)  $\alpha$ -[4-Sulfophenyl]azo- $\alpha$ -Phenylhydrazon- $\alpha$ -Phenylmethan (Form-azylbenzol-III-p-Sulfonsäure). Na (B. 33, 749). — \*IV, 934.
- 4) 6-Amido-2,3-Diphenyl-2,3-Dihydro-1,2,4-Benzotriazin-2<sup>3</sup>-Sulfonsäure (B. 30, 2600). — IV, 1287.
- 5) 6-Amido-2,3-Diphenyl-2,3-Dihydro-1,2,4-Benzotriazin-2<sup>3</sup>-Sulfonsäure (B. 30, 2600). — IV, 1287.
- 6) 6-Amido-2,3-Diphenyl-2,3-Dihydro-1,2,4-Benzotriazin-2<sup>4</sup>-Sulfonsäure (B. 30, 2599). — IV, 1287.



- $C_{19}H_{16}O_3N_4S$  7) Azoverbindung (aus 1-Amidobenzol-4-Sulfonsäure u.  $\alpha$ -[4-Amidophenyl]- $\beta$ -[2-Pyridyl]äthen). Na (*B.* 40, 3405 *C.* 1907 [2] 1343).
- $C_{19}H_{16}O_4N_4S$  1) 4-Nitro-4'-Methylphenylsulfonamidobiphenyl. Sm. 132° (*Soc.* 91, 1508 *C.* 1907 [2] 1518).  
 2)  $\beta$ -Benzoyl- $\alpha$ -Phenylsulfon- $\alpha$ -[4-Oxyphenyl]hydrazin. Sm. 102° (*A.* 340, 101 *C.* 1905 [2] 322).  
 3) 2-Oxyazobenzolbenzyläther-5-Sulfonsäure. Na (*J. pr.* [2] 77, 120 *C.* 1908 [1] 955).  
 4) Phenyl-2-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 143° (*J. pr.* [2] 51, 263). — \*II, 301.
- $C_{19}H_{16}O_4N_2S_2$  1) 1,3-Di[Phenylsulfon]-2,3-Dihydrobenzimidazol (Dibenzolsulfonmethylen-o-Phenylendiamin). Sm. 147—148° (*A.* 287, 224). — IV, 561.
- $C_{19}H_{16}O_4N_4S$  1)  $\alpha$ -Phenylhydrazon- $\alpha$ -[4-Sulfophenyl]azo- $\alpha$ -[2-Oxyphenyl]methan. K (*C.* 1903 [2] 427).  
 2) 4-Oxy-3-Phenylhydrazonmethy lazobenzol-4'-Sulfonsäure. Na (*A.* 251, 178). — IV, 1476.
- $C_{19}H_{16}O_4N_6S$  1) s-Thioharnstoff d. 2-Keto-5-Methyl-3-[4-Amidophenyl]-2,3-Dihydro-1,3,4-Oxidiazol. Sm. 208° (*B.* 26, 1319). — IV, 1127.
- $C_{19}H_{16}O_5N_2S$  1) 4-Methylbenzolsulfonat d. 4'-Nitro-4-Oxydiphenylamin. Sm. 143° (*B.* 42, 1079 *C.* 1909 [1] 1553).
- $C_{19}H_{16}O_7N_3As$  1) Methyltri[ $\beta$ -Nitrophenyl]arsoniumhydroxyd. Nitrat (*A.* 321, 169 *C.* 1902 [2] 44). — \*IV, 1191.
- $C_{19}H_{16}O_8N_2Br_2$  1) Diacetat d.  $\beta\beta$ -Di[5-Brom-3-Nitro-4-Oxyphenyl]propan. Sm. 196 bis 197° (*A.* 343, 88 *C.* 1906 [1] 132).  
 2) o-Tolylthioninchlorid (*B.* 33, 3294).
- $C_{19}H_{16}N_3ClS$  1) 3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl-1-Naphtylamin. Sm. 196 bis 197° (*A.* 344, 214 *C.* 1906 [1] 1161).  
 2) 3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl-2-Naphtylamin. Sm. 181 bis 182° (*B.* 29, 1120; *A.* 344, 212 *C.* 1906 [1] 1161). — \*II, 455.  
 3) 2,6-Dibrom-4-Oxy-3,5-Dimethylbenzyl-2-Naphtylamin. Sm. 233° (*A.* 344, 235 *C.* 1906 [1] 1163).  
 4) Pyridiniumbromid d.  $\alpha\beta$ -Dibrom- $\alpha$ -Phenyl- $\beta$ -[4-Oxyphenyl]äthan. Sm. 175° u. Zers. (*A.* 349, 122 *C.* 1906 [2] 1258).
- $C_{19}H_{17}ONS$  1) Phenylamid d. 2-Oxynaphtalinäthyläther-1-Thiocarbonsäure. Sm. 164—165° (*J. pr.* [2] 59, 582). — \*II, 989.  
 2) Phenylamid d. 4-Oxynaphtalinäthyläther-1-Thiocarbonsäure. Sm. 199—200° (*J. pr.* [2] 59, 582).  
 3) 1-Naphtylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 156—157° (*J. pr.* [2] 59, 591). — \*II, 915.  
 4) 2-Naphtylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 148—149° (*J. pr.* [2] 59, 592). — \*II, 915.
- $C_{19}H_{17}ON_3Cl_2$  1)  $\alpha$ -Oxy-2,2'-Dichlor-4,4',4''-Triamidotriphenylmethan (*B.* 19, 1989). — II, 1087.
- $C_{19}H_{17}ON_3S$  1) o-Tolylthionin. Chlorid, Nitrat +  $\frac{1}{2}H_2O$  (*B.* 33, 3294).
- $C_{19}H_{17}O_2NS$  1) Diphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 141° (*B.* 35, 1441 *C.* 1902 [1] 1200).  
 2) Diphenylmethylanid d. Benzolsulfonsäure. Sm. 182° (*J. pr.* [2] 77, 14 *C.* 1908 [1] 630).  
 3) Phenylbenzylanid d. Benzolsulfonsäure. Sm. 119° (*A.* 273, 14). — II, 531.
- $C_{19}H_{17}O_2N_2Br$  1) Methylenäther d.  $\epsilon$ -[4-Bromphenyl]hydrazon- $\alpha$ -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadien. Sm. 162—163° (*Ar.* 246, 352 *C.* 1908 [2] 888).  
 2)  $\beta$ -Brom- $\beta$ -[1-Piperidyl]-1-Amidoanthrachinon (D.R.P. 136777 *C.* 1902 [2] 1375).
- $C_{19}H_{17}O_3NCl_4$  1) 3,4,5,6-Tetrachlor-4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 160° (*C.* 1899 [2] 372; *Bl.* [3] 25, 602). — \*II, 1001.
- $C_{19}H_{17}O_3N_2P$  1) 4-[ $\alpha$ -Phenylhydrazonbenzyl]phenylphosphinsäure. Sm. 124° (*A.* 315, 47). — \*IV, 1184.
- $C_{19}H_{17}O_3N_3S$  1) 4-Methylphenylsulfonamido-4'-Diazobiphenyl. Salze, siehe (*Soc.* 91, 1510 *C.* 1907 [2] 1518).  
 2) Phenylazotetrahydro- $\alpha$ -Naphtochinolinsulfonsäure (*B.* 24, 2478). — IV, 1487.
- $C_{19}H_{17}O_3N_6S$  1) Furfuramidallylsenfö. Sm. 118° (*B.* 10, 1191). — III, 724.

- $C_{19}H_{17}O_4NS$  1) *r*- $\alpha$ -[2-Naphtylsulfon]amido- $\beta$ -Phenylpropionsäure. Sm. 143—144° (B. 35, 3783 C. 1902 [2] 1469).  
2) Acetyl-4-Methylphenyl-1-Naphtylamin- $\beta$ -Sulfonsäure. Ba (J. pr. [2] 64, 501 C. 1902 [1] 257).  
3) Äthylester d. 2-[2-Naphtylsulfon]amidobenzol-1-Carbonsäure. Sm. 131,5° (A. 367, 113 C. 1909 [2] 698).
- $C_{19}H_{17}O_4NS_2$  1) Benzylimid d. Benzolsulfonsäure. Sm. 136° (C. 1897 [2] 848; 1899 [2] 868). — \*II, 301.
- $C_{19}H_{17}O_4N_2Cl$  1) Diäthylester d. Azochlordiphenylmethandicarbonsäure. Sm. 151° (C. r. 144, 1224 C. 1907 [2] 407).
- $C_{19}H_{17}O_4N_3S$  1) 3-Nitrobenzylidendiphenylaminanhydrosulfit. Sm. 128° u. Zers. (A. 316, 140). — \*III, 21.  
2) Phenylamid d.  $\alpha$ -Phenylsulfon- $\alpha$ -[4-Oxyphenyl]hydrazin- $\beta$ -Carbonsäure. Sm. 166—167° u. Zers. (A. 334, 177 C. 1904 [2] 834).
- $C_{19}H_{17}O_5NS$  1)  $\beta$ -[1-Piperidyl]-9,10-Anthrachinon-1-Sulfonsäure (D.R.P. 136777 C. 1902 [2] 1373).  
2) 4-Methylbenzolsulfonat d.  $\alpha$ -Cyan- $\beta$ -Oxy- $\beta$ -Phenylakrylsäure-äthylester. Sm. 84° (Bl. [3] 31, 338 C. 1904 [1] 1135).
- $C_{19}H_{17}O_5NS_2$  1)  $\alpha$ -Phenylsulfon- $\gamma$ -[2-Naphtyl]sulfon- $\beta$ -Oximidopropan. Sm. 167° (J. pr. [2] 55, 412). — \*II, 528.
- $C_{19}H_{17}O_6NS_4$  1) Verbindung (aus 2,5,6-Trioxyphephen-1,3-Disulfid u. o-Toluidin) (Bl. [3] 15, 418).
- $C_{19}H_{17}O_6N_3S$  1) 6-[4-Acetylamidophenyl]ureido-1-Oxynaphtalin-3-Sulfonsäure (D.R.P. 148505 C. 1904 [1] 488).  
2) 2-Oxy-1-[3-Nitro-2,4,5-Trimethylphenylazo]naphtalin-1<sup>6</sup>-Sulfonsäure + 2H<sub>2</sub>O. Ca (B. 20, 2067). — IV, 1438.
- $C_{19}H_{17}O_6N_3S_2$  1) 5-Nitro-2,4-Di[Phenylsulfonamido]-1-Methylbenzol. Sm. 185° (D.R.P. 166600 C. 1906 [1] 517).
- $C_{19}H_{17}N_3ClJ$  1) Jodmethylat d. 3-Chlor-4,6-Dimethyl-2-[2-Naphtyl]-2,1,5-Benzotriazol. Sm. 301° u. Zers. (A. 366, 406 C. 1909 [2] 290).
- $C_{19}H_{17}ClJAs$  1) Jodmethyltriphenylarsoniumchlorid. Sm. 203° (A. 321, 172 C. 1902 [2] 44). — \*IV, 1191.
- $C_{19}H_{17}Cl_3JAs$  1) Chlormethyltriphenylarsoniumjodidechlorid. Sm. 138° (A. 321, 171 C. 1902 [2] 44). — \*IV, 1191.
- $C_{19}H_{15}ONBr$  1) Bromapocinchen. Sm. 186—188° (B. 20, 2678). — III, 838.
- $C_{19}H_{15}ON_2Cl_6$  1) Hexachlorhydrocinchonin +  $\frac{1}{2}$ H<sub>2</sub>O (J. pr. [2] 8, 302). — III, 836.
- $C_{19}H_{15}ON_2S$  1) Äthyläther d. 5-Merkapto-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 98° (A. 361, 288 C. 1908 [2] 522).  
2) Benzyläther d. 2-Merkapto-4-Keto-6-Methyl-5-Benzyl-3,4-Dihydro-1,3-Diazin. Sm. 194° (Am. 62, 114 C. 1909 [2] 1050).
- $C_{19}H_{15}ON_2S_2$  1) 2-Thiocarbonyl-4-Keto-3-Benzyl-5-[4-Dimethylamidobenzyliden]tetrahydrothiazol. Sm. 177° (M. 29, 408 C. 1908 [2] 1039).  
2) 2-Thiocarbonyl-4-Keto-3-[2-Methylphenyl]-5-[4-Dimethylamidobenzyliden]tetrahydrothiazol. Sm. 209° (M. 26, 1206 C. 1905 [2] 1675).  
3) 2-Thiocarbonyl-4-Keto-3-[3-Methylphenyl]-5-[4-Dimethylamidobenzyliden]tetrahydrothiazol. Sm. 140° (M. 29, 404 C. 1908 [2] 1039).  
4) 2-Thiocarbonyl-4-Keto-3-[4-Methylphenyl]-5-[4-Dimethylamidobenzyliden]tetrahydrothiazol. Sm. 206° (M. 26, 1206 C. 1905 [2] 1675).
- $C_{19}H_{15}ON_3Cl$  1)  $\epsilon$ -Phenylhydrazon- $\alpha$ -[Acetyl-4-Chlorphenyl]amido- $\alpha\gamma$ -Pentadien. Sm. 175° u. Zers. (A. 353, 383 C. 1907 [2] 411).  
2) uns-Dimethyldiamidotolunaphtazoxoniumchlorid (C. 1902 [2] 458). — \*IV, 876.
- $C_{19}H_{15}OClAs$  1) Oxymethyltriphenylarsoniumchlorid. Sm. 112°. 2 + PtCl<sub>4</sub> (A. 321, 173 C. 1902 [2] 44). — \*IV, 1191.
- $C_{19}H_{15}OJP$  1) Jodmethylat d. Diphenylphenoxyphosphin. Sm. 134—136° u. Zers. (B. 18, 2116). — IV, 1657.
- $C_{19}H_{15}OJAs$  1) Oxymethyltriphenylarsoniumjodid. Sm. 171° (A. 321, 173 C. 1902 [2] 44). — \*IV, 1191.
- $C_{19}H_{15}O_2NJ$  1) Jodmethylat d. 2-Methylchinolin-3-Carbonsäurebenzylester. Sm. 172° u. Zers. (A. 282, 125). — IV, 353.

- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>NP** 1) Phenylmonamid d. 4-Methylphenylphosphinsäuremonophenylester. Sm. 59°; Sd. 283°<sub>48</sub> (A. 293, 268). — IV, 1669.
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>S** 1) 4-Amido-4'-Methylphenylsulfonamidobiphenyl. Sm. 134—135° (Soc. 91, 1508 C. 1907 [2] 1518).  
 2) Benzylidendiphenylaminanhydrosulfit. Sm. 125° (A. 316, 137). — \*III, 20.  
 3) isom. Benzylidendiphenylaminanhydrosulfit +  $\frac{1}{2}$ H<sub>2</sub>O. Sm. 132 bis 133° u. Zers. (A. 316, 139; B. 39, 2810 C. 1906 [2] 1491). — \*III, 20.  
 4)  $\alpha$ -[2-Naphtyl]sulfon- $\beta$ -Phenylhydrazonpropan. Sm. 147° (J. pr. [2] 55, 401). — IV, 768.  
 5) Äthylester d.  $\alpha$ -Cyan- $\beta$ -Phenylimido- $\beta$ -Merkaptoäthanbenzyläther- $\alpha$ -Carbonsäure. Sm. 70—80° (Soc. 93, 627 C. 1908 [1] 1930).  
 6) Phenyl-2-Amidobenzylamid d. Benzolsulfonsäure. Sm. 139 bis 140° (J. pr. [2] 51, 263). — IV, 627.
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>S<sub>2</sub>** 1) 2,4,5-Trimethyl-1-[1-Naphtylthiosulfon]diazobenzol. Zers. bei 52° (J. pr. [2] 62, 396). — \*IV, 1116.  
 2) 2,4,5-Trimethyl-1-[2-Naphtylthiosulfon]diazobenzol. Zers. bei 85° (J. pr. [2] 62, 397). — \*IV, 1116.
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>S<sub>4</sub>** 1)  $\alpha\gamma$ -Trimethylenester d. Benzoylamidodithioameisensäure. Sm. 154—155° (C. 1902 [1] 1401).
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>N<sub>2</sub>Cl** 1) Diäthyläther d. 6-Chlor-2,4-Di[4-Oxyphenyl]-1,3,5-Triazin. Sm. 149° (corr.) (B. 36, 3194 C. 1903 [2] 956).
- C<sub>19</sub>H<sub>18</sub>O<sub>2</sub>N<sub>4</sub>S** 1) 4-Phenylsulfonamido-4'-Methylamidoozobenzol. Sm. 170°. + C<sub>2</sub>H<sub>6</sub>O (Soc. 91, 1514 C. 1907 [2] 1610).  
 2) Benzyläther d. 3-Diacetylamido-5-Merkapto-1-Phenyl-1,2,4-Triazol. Sm. 122° (A. 348, 192 C. 1906 [2] 794).  
 3) Benzyläther d. 5-Diacetylamido-3-Merkapto-1-Phenyl-1,2,4-Triazol. Sm. 228—229° (A. 355, 208 C. 1907 [2] 1327).  
 4) 4-Phenylazo-3-Methyl-1-[4-Methylphenyl]pyrazol-5-Merkaptoessigsäure. Sm. 159°. Ba (A. 338, 214 C. 1905 [1] 1158).
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>NBr<sub>3</sub>** 1) Acetat d. N-Acetyl-2,5,6-Tribrom-4-Oxy-3-Methyldibenzylamin. Sm. 118—120° (A. 344, 180 C. 1906 [1] 1159).
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>NP** 1) Phenylmonamid d. Phosphorsäurephenyl-4-Methylphenylester. Sm. 106° (A. 326, 227 C. 1903 [1] 866).  
 2) Methylphenylmonamid d. Phosphorsäurediphenylester. Sm. 50° (A. 326, 254 C. 1903 [1] 868).  
 3) Benzylmonamid d. Phosphorsäurediphenylester. Sm. 104—105° (A. 326, 175 C. 1903 [1] 819).  
 4) 2-Methylphenylamid d. Phosphorsäurediphenylester. Sm. 176° (B. 27, 2578). — \*II, 359.  
 5) 4-Methylphenylamid d. Phosphorsäurediphenylester. Sm. 134° (B. 27, 2576). — \*II, 359.
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub>Cl<sub>2</sub>** 1) 4-Chlorphenylmonamid d.  $\beta$ -[4-Chlorphenyl]amidoäthen- $\alpha\alpha$ -Dicarbonsäuremonooäthylester. Sm. 176° (B. 35, 2508 C. 1902 [2] 438).
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>N<sub>2</sub>S** 1) 4-[4-Methylphenylsulfon]amido-4'-Oxydiphenylamin (D. R. P. 192530 C. 1908 [1] 575).  
 2) Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[1-Naphtyl]sulfonäthan. Sm. 162° (J. pr. [2] 78, 11 C. 1908 [2] 506).  
 3) Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Amido- $\beta$ -[2-Naphtyl]sulfonäthan. Sm. 129° (J. pr. [2] 78, 12 C. 1908 [2] 506).  
 4) 5-Äthylsulfon-4-Benzoyl-3-Methyl-1-Phenylpyrazol. Sm. 122° (A. 361, 289 C. 1908 [2] 522).  
 5) Amid d. r- $\alpha$ -[2-Naphtylsulfon]amido- $\beta$ -Phenylpropionsäure. Sm. 164—166° (B. 41, 4440 C. 1909 [1] 440).
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>N<sub>6</sub>S** 1) Benzoldisazo-2,4-Toluylendiamin-4'-Sulfonsäure (B. 16, 2036). — IV, 1385.
- C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>JP** 1) Jodmethylester d. Phosphorigsäuretriphenylester. Sm. 70—75° (B. 31, 1049; C. 1906 [2] 1640). — \*II, 357.
- C<sub>19</sub>H<sub>18</sub>O<sub>4</sub>NBr** 1) Verbindung (aus Hydroberberindbromid). Sm. 153—154°. + AgNO<sub>3</sub>. — III, 801.
- C<sub>19</sub>H<sub>18</sub>O<sub>4</sub>N<sub>2</sub>Br<sub>2</sub>** 1) Acetat d.  $\alpha\beta$ -Diacetyl- $\alpha$ -[3,5-Dibrom-2-Oxybenzyl]- $\beta$ -Phenylhydrazin. Sm. 143—145° (A. 360, 8 C. 1908 [1] 2031).



- $C_{19}H_{18}O_4N_2S_2$  1) 3,4-Di[Phenylsulfonamido]-1-Methylbenzol. Sm. 178—179° (A. 265, 190). — IV, 617.  
 2)  $\alpha\alpha$ -Diphenylsulfon- $\beta$ -Methyl- $\beta$ -Phenylhydrazin. Sm. 169—170° (B. 32, 1804). — \*IV, 474.  
 3) Di[Phenylamid] d. 1-Methylbenzol-2,4-Disulfonsäure. Sm. 187° (189°) (Soc. 73, 754; B. 35, 1960 C. 1902 [2] 111). — \*II, 223.  
 4) Di[Phenylamid] d. 1-Methylbenzol-2,5-Disulfonsäure. Sm. 178° (Soc. 73, 744, 758). — \*II, 223.  
 5) Di[Phenylamid] d. 1-Methylbenzol-2,6-Disulfonsäure. Sm. 162° (Soc. 73, 772). — \*II, 223.  
 6) Di[Phenylamid] d. 1-Methylbenzol-3,4-Disulfonsäure. Sm. 190° (Soc. 73, 746, 752). — \*II, 223.  
 7) Di[Phenylamid] d. 1-Methylbenzol-3,5-Disulfonsäure. Sm. 153° (Soc. 73, 749). — \*II, 223.
- $C_{19}H_{18}O_4N_3Cl$  1) Äthylester d.  $\beta$ -[5-Chlor-2-(4-Nitrobenzyliden)amidophenyl]-imidobuttersäure. Sm. 210° (J. pr. [2] 74, 60 C. 1906 [2] 1502).
- $C_{19}H_{18}O_7N_4S$  1) Benzaldehyd-2-Nitrophenylthionaminsaures-2-Nitro-1-Amidobenzol. Sm. 88° (A. 274, 226). — III, 7.  
 2) Benzaldehyd-3-Nitrophenylthionaminsaures 3-Nitro-1-Amidobenzol. Sm. 90—91° (A. 274, 224). — III, 7.  
 3) Benzaldehyd-4-Nitrophenylthionaminsaures 4-Nitro-1-Amidobenzol. Sm. 95—96° (A. 274, 225). — III, 7.
- $C_{19}H_{18}O_7N_4S_2$  1) 6-Oxy-2-[3-Amido-4-Dimethylamidophenyl]- $\beta$ -Naphtimidazol-2,8-Disulfonsäure (D. R. P. 167139 C. 1906 [1] 797; D. R. P. 193350 C. 1908 [1] 1000).
- $C_{19}H_{18}N_4SSi$  1) Verbindung (aus Siliciumthiocyanat) (Soc. 89, 401 C. 1906 [1] 1692).
- $C_{19}H_{18}Cl_2JAs$  1) Methyltriphenylarsoniumjodidchlorid. Sm. 144° (A. 321, 167 C. 1902 [2] 44). — \*IV, 1191.
- $C_{19}H_{19}ON_2P$  1) Di[Phenylamid] d. 2-Methylphenylphosphinsäure. Sm. 234° (A. 293, 295). — IV, 1668.  
 2) Di[Phenylamid] d. 4-Methylphenylphosphinsäure. Sm. 209° (A. 293, 267). — IV, 1669.
- $C_{19}H_{19}O_2NCl_4$  1) Acetat d. 2,3,5,6-Tetrachlor-4'-Diäthylamido-4-Oxydiphenylmethan. Sm. 120° (A. 349, 93 C. 1906 [2] 1255).
- $C_{19}H_{19}O_2NBr_2$  1) Benzat d. 1-[3,5-Dibrom-2-Oxybenzyl]hexahydropyridin. Sm. 110—111° (A. 332, 220 C. 1904 [2] 202).
- $C_{19}H_{19}O_2N_2Cl$  1) Äthylester d. 2,4-Diphenylimidazolchlorammoniumessigsäure. Sm. 260° (B. 34, 1832). — \*IV, 690.
- $C_{19}H_{19}O_2N_2Br$  1) Äthylester d. 2,4-Diphenylimidazolbromammoniumessigsäure. Sm. 236° (B. 34, 1832). — \*IV, 690.
- $C_{19}H_{19}O_2N_2P$  1) Phenylamid-4-Methylphenylamid d. Phosphorsäuremonophenylester. Sm. 136—137° (A. 326, 249 C. 1903 [1] 868).  
 2) Monophenylhydrazid d. 4-Methylphenylphosphinsäuremonophenylester. Sm. 173—174° (A. 293, 263). — IV, 1669.
- $C_{19}H_{19}O_3NCl_2$  1) Methylester d. 3,6-Dichlor-4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 152° (Bl. [3] 23, 638). — \*II, 1001.
- $C_{19}H_{19}O_3NBr_2$  1) Methylester d. 3,6-Dibrom-4'-Diäthylamidodiphenylketon-2-Carbonsäure. Sm. 186° (C. r. 142, 1276 C. 1906 [2] 248).  
 2) Acetat d. 3,6-Dibrom-5-Oxy-1-Acetylphenylamidomethyl-2,4-Dimethylbenzol. Sm. 167—168° (B. 35, 136 C. 1902 [1] 466).  
 3) Acetat d. N-Acetyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 140° (A. 332, 184 C. 1904 [2] 209).  
 4) Acetat d. N-Acetylphenyl-2,6-Dibrom-4-Oxy-3,5-Dimethylbenzylamin. Sm. 168—169,5° (A. 344, 248 C. 1906 [1] 1164).
- $C_{19}H_{19}O_3NBr_5$  1) Galipidipentabromid. HBr (Ar. 243, 487 C. 1905 [2] 1799).
- $C_{19}H_{19}O_3NS_2$  1) Benzoylimidodithiokohlensäurebenzylesteräthylacetat. Sm. 79° (Am. 26, 198).  
 2) Verbindung (aus Benzoylamidodithioameisensäure u.  $\beta$ -Phenylpropionsäureäthylester). Sm. 79° (Am. 26, 199).
- $C_{19}H_{19}O_3N_3S$  1) Tri[4-Amidophenyl]methan- $\alpha$ -Sulfonsäure +  $3\frac{1}{2}$  H<sub>2</sub>O (p-Rosanilinleukosulfonsäure). HCl + 2 H<sub>2</sub>O (Fuchsin-schweifige Säure) (B. 33, 310; B. 33, 3494 C. 1905 [2] 1632). — \*IV, 854.
- $C_{19}H_{19}O_6NS$  1) Verbindung (aus 2-Oxynaphtalin 6-Sulfonsäure u. 4-Amidobenzolcarbonsäureäthylester) (D. R. P. 181324 C. 1907 [1] 1651).

- $C_{19}H_{19}N_2ClBr_2$  1) Chlormethylat d. *s*-[4-Bromphenyl]imido- $\alpha$ -[Methyl-4-Bromphenyl]amido- $\alpha\gamma$ -Pentadien. Sm. 205–208° u. Zers. 2 +  $PtCl_4$  (A. 338, 125 C. 1905 [1] 454).
- $C_{19}H_{20}ON_2Cl_2$  1) Dichloreinchonin. Sm. 220–230°. 2HCl, (2HCl,  $PtCl_4$  +  $H_2O$ ), 2HBr (J. 1847/48, 618; B. 12, 423; 25, 1543). — III, 835.
- $C_{19}H_{20}ON_2Br_2$  1)  $\alpha$ -Dibromeinchonidin. Sm. 180°. 2HBr (Bl. [3] 25, 85; J. pr. [2] 69, 193 C. 1904 [1] 1448). — \*III, 642.  
2)  $\beta$ -Dibromeinchonidin. Zers. bei 200° (Bl. [3] 25, 87). — \*III, 642.  
3) isom. Dibromeinchonidin. Sm. 186°. (2HBr,  $Br_2$ ) (J. pr. [2] 69, 209 C. 1904 [1] 1448; J. pr. [2] 71, 5 C. 1905 [1] 458).  
4) Dehydroeinchonindibromid. Sm. 172–173°. HBr (B. 25, 1544). — III, 839.
- $C_{19}H_{20}ON_2S$  1) 5-Äthyläther d. 2-Merkapto-5-Oxy-3-Phenyl-6,7,8,9-Tetrahydro- $\alpha$ -Naphthimidazol. Sm. 269–270° (B. 31, 903). — \*II, 499.
- $C_{19}H_{20}ON_3J$  1) Jodmethylat d. 4-[4-Dimethylamidophenyl]azo-1-Oxynaphtalin (Soc. 93, 342 C. 1908 [1] 1686).  
2) Jodmethylat d. 5-Acetylphenylamido-3-Methyl-1-Phenylpyrazol. Sm. 204° (A. 339, 179 C. 1905 [1] 1403).  
3) Jodmethylat d. 3-Imido-4-Benzoyl-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 238° (B. 41, 2675 C. 1908 [2] 1365).
- $C_{19}H_{20}ON_3P$  1) Di[Phenylamid]-Methylphenylamid d. Phosphorsäure. Sm. 192° (A. 326, 255 C. 1903 [1] 869).  
2) Di[Phenylamid]-2-Methylphenylamid d. Phosphorsäure. Sm. 175° (B. 27, 2579). — \*II, 251.  
3) Di[Phenylamid]-4-Methylphenylamid d. Phosphorsäure. Sm. 168° (B. 27, 2577). — \*II, 268.
- $C_{19}H_{20}O_2NBr_3$  1) Acetat d. 3,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 156–157° (A. 334, 300 C. 1904 [2] 985).  
2) Acetat d. 2,6,3'-Tribrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 150–151,5° (A. 334, 324 C. 1904 [2] 988).
- $C_{19}H_{20}O_2NJ$  1) Jodmethylat d. 6,7-Dioxy-1-Benzylisochinolinidimethyläther. Sm. 206–207° (B. 37, 3401 C. 1904 [2] 1318).
- $C_{19}H_{20}O_2N_2Cl_2$  1) Chlorid d.  $\alpha\gamma$ -Di[4-Methylphenylamido]propan-NN-Dicarbon-säure. Sm. 82° (B. 32, 2256). — \*II, 271.
- $C_{19}H_{20}O_2N_2S$  1) Diallyläther d. *s*-Di[4-Oxyphenyl]thioharnstoff. Sm. 161° (B. 34, 1941).  
2) Isobutyläther d.  $\alpha$ -Benzoyl- $\beta$ -[ $\alpha$ -Oxybenzyliden]thioharnstoff (Benzoylthiocarbamidimidoisobutylbenzoat). Sm. 120° (C. 1900 [2] 531). — \*II, 761.
- $C_{19}H_{20}O_2Cl_3J$  1) Trichloräthylidenäther d. 4-Isoamylidiphenyljodoniumdihydroxyd. Sm. 85° (B. 34, 3685).
- $C_{19}H_{20}O_3NCl$  1) Acetat d. Chloromorphid. Sm. 174–178° (Soc. 77, 1031). — \*III, 670.  
2) Acetyl- $\beta$ -Chloromorphid. Sm. 163° (B. 40, 4284 C. 1907 [2] 1851).
- $C_{19}H_{20}O_3NBr$  1) Bromthebain (B. 17, 528). — III, 910.
- $C_{19}H_{20}O_3NBr_5$  1) Bromthebainetetrabromid (B. 17, 528). — III, 910.
- $C_{19}H_{20}O_3NJ$  1) Jodmethylat d. Difuraltropinon. Sm. 281° u. Zers. (B. 30, 2716). — \*III, 613.
- $C_{19}H_{20}O_3N_2Br_2$  1) Diäthyläther d. anti-4,5-Dioxy-2-Keto-4,5-Di[4-Bromphenyl]-tetrahydroimidazol. Sm. 266–268° u. Zers. (A. 368, 215 C. 1909 [2] 1466; A. 368, 268 C. 1909 [2] 1568).  
2) Diäthyläther d. syn-4,5-Dioxy-2-Keto-4,5-Di[4-Bromphenyl]-tetrahydroimidazol. Zers. bei 125–130°. +  $C_2H_6O$  (A. 368, 211 C. 1909 [2] 1466).
- $C_{19}H_{20}O_3N_2S$  1) Sulfocinchen. Zers. bei 280° (B. 31, 2361). — \*III, 633.  
2) Cinchensulforsäure (B. 31, 2363). — \*III, 633.  
3) Verbindung (aus Benzaldehyd u. Anilinsulfit). Sm. 24° (B. 24, 749). — III, 6.
- $C_{19}H_{20}O_4NCl$  1) Diäthylester d. 2,6-Dimethyl-4-[4-Chlorphenyl]pyridin-3,5-Dicarbon-säure. Sm. 67° (J. pr. [2] 65, 289 C. 1902 [1] 1216). — \*IV, 232.
- $C_{19}H_{20}O_4NBr$  1) Brompropylat d. Papaverolin. Sm. 140° (J. pr. [2] 56, 344). — \*IV, 264.

- $C_{19}H_{20}O_4N_2Br_2$  1) Di[P-Brom-4-Methoxyphenylamid] d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 82—83° (*G.* 34 [2] 267 *C.* 1904 [2] 1453).
- $C_{19}H_{20}N_2ClBr$  1) Chlormethylat d.  $\epsilon$ -Phenylimido- $\alpha$ -[Methyl-4-Bromphenyl]amido- $\alpha\gamma$ -Pentadien. Sm. 111—112° u. Zers. (*A.* 338, 138 *C.* 1905 [1] 455).
- 2) Chlormethylat d.  $\epsilon$ -[4-Bromphenyl]imido- $\alpha$ -Methylphenylamido- $\alpha\gamma$ -Pentadien. Sm. 144° u. Zers. (*A.* 338, 137 *C.* 1905 [1] 455).
- $C_{19}H_{21}ONS_2$  1) 1-Phenyl-2-[2,4,5-Trimethylphenyl]imidoxanthid. Sm. 96—97° (*B.* 35, 2473 *C.* 1902 [2] 441).
- $C_{19}H_{21}ON_2Br$  1) Bromcinchonin (*J.* 1847/48, 619; 1876, 822). — III, 835.
- 2) isom. Bromcinchonin (Hydrobromdehydrocinchonin). Sm. bei 235° u. Zers. (225—226°).  $HCl + 2H_2O$ , 2HBr, Oxalat +  $7H_2O$  (*B.* 20, 2524; *J. pr.* [2] 68, 430 *C.* 1904 [1] 179; *J. pr.* [2] 71, 23 *C.* 1905 [1] 458). — III, 839.
- 3) Bromcinchonidin. Sm. 218°. 2HBr +  $2H_2O$ , Oxalat +  $2H_2O$  (*J. pr.* [2] 69, 199 *C.* 1904 [1] 1448; *J. pr.* [2] 71, 5 *C.* 1905 [1] 458).
- 4) Hydrobromoxycinehen. Sm. 180—190°. 2HBr (*B.* 23, 2669). — III, 837.
- $C_{19}H_{21}ON_2J$  1) Jodecinchonin. Sm. bei 140° (D.R.P. 126796 *C.* 1902 [1] 80).
- $C_{19}H_{21}ON_4P$  1) Di[Phenylhydrazid] d. 4-Methylphenylphosphinsäure. Sm. 171° (*A.* 293, 269). — IV, 1669.
- $C_{19}H_{21}O_2NBr_2$  1) Acetat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 144—145° (*A.* 334, 288 *C.* 1904 [2] 984).
- 2) Acetat d. 2,6-Dibrom-4'-Dimethylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 145—146,5° (*A.* 334, 320 *C.* 1904 [2] 987).
- $C_{19}H_{21}O_2NBr_4$  1) Methylidi[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]amin. Sm. 168 bis 169° (173°). HBr (*B.* 29, 1113; *A.* 344, 207 *C.* 1906 [1] 1161). — \*II, 455.
- 2) Methylidi[2,6-Dibrom-4-Oxy-3,5-Dimethylbenzyl]amin. Sm. 154° (*A.* 344, 230 *C.* 1906 [1] 1162).
- $C_{19}H_{21}O_2N_2Cl$  1) Verbindung (aus d. 2-Methylphenylamid d.  $\alpha$ -Chlor- $\alpha$ -Oxybuttersäure). Sm. 105—107° (*B.* 21, 305). — II, 466.
- $C_{19}H_{21}O_3N_3S$  1) 6-Phenylazo-1,2,3,4,7,8,9,10-Oktahydro- $\alpha$ -Naphtochinolin-6'-Sulfonsäure (*B.* 24, 2490). — IV, 1485.
- $C_{19}H_{21}O_4NS$  1) Diäthylester d. 4-Thiocarbonyl-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 245—246° (*B.* 20, 2112). — II, 2006.
- $C_{19}H_{21}O_4N_2Br$  1) Äthyläther d. 5-Brom-2-Nitro-6-Amido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 171° (*B.* 35, 2796 *C.* 1902 [2] 989).
- $C_{19}H_{21}O_4N_4Br$  1) 4-Bromphenylhydrazon d. Glyazindihydotetramethyldimalonsäuremethylester- $\epsilon$ -Lakton. Sm. 196° (*Soc.* 83, 1259 *C.* 1903 [2] 1423).
- $C_{19}H_{21}O_7N_2Br$  1) 5-Methylester-1<sup>3</sup>,1'-Diäthylester d. 3-Brom-2-Keto-1-[2,5-Dimethylpyrryl]-1,2-Dihydropyridin-1<sup>3</sup>,1',5-Tricarbonsäure. Sm. 155° (*B.* 41, 3283 *C.* 1908 [2] 1605).
- $C_{19}H_{22}ONBr_3$  1) 3,6,3'-Tribrom-4'-Diäthylamido-4-Oxy-2,5-Dimethyldiphenylmethan (*A.* 334, 318 *C.* 1904 [2] 987).
- $C_{19}H_{22}ON_2Cl_2$  1) Dichlordihydrocinchonin. Sm. 215° (*J.* 1847/48, 618; *B.* 25, 1543; *M.* 25, 904 *C.* 1904 [2] 1319).
- 2) Dichlordihydrocalloecinonin. Sm. 205—206° (*M.* 25, 905 *C.* 1904 [2] 1319).
- $C_{19}H_{22}ON_2Br_2$  1)  $\alpha$ -Dibromdihydrocinchonin +  $H_2O$  ( $\alpha$ -Cinchonindibromid). Zers. bei 110°. 2HCl, 2HBr, (2HBr, Br<sub>2</sub>), 2HNO<sub>3</sub> +  $H_2O$ , + PtCl<sub>4</sub> +  $2H_2O$  (*J.* 1849, 376; 1876, 822; *J. pr.* [2] 63, 344; *B.* 17, 1995; 19, 2854; 20, 2515; *M.* 24, 130 *C.* 1903 [1] 976; *J. pr.* [2] 68, 428, 436 *C.* 1904 [1] 179; *J. pr.* [2] 71, 21 *C.* 1905 [1] 458; *J. pr.* [2] 74, 166 *C.* 1903 [2] 1681). — III, 831; \*III, 631.
- 2)  $\beta$ -Dibromdihydrocinchonin. 2HBr, 2HNO<sub>3</sub> +  $H_2O$  (*B.* 20, 2516; *J. pr.* [2] 71, 22 *C.* 1905 [1] 458; *J. pr.* [2] 74, 167 *C.* 1906 [2] 1681).
- 3) Dibromdihydro- $\alpha$ -i-Cinchonin? Sm. 199—200° (*M.* 24, 125 *C.* 1903 [1] 976).
- 4) Dibromdihydro- $\beta$ -i-Cinchonin? Sm. 217—218° (*M.* 24, 126 *C.* 1903 [1] 976).
- 5) isom. Dibromdihydrocinchonin +  $H_2O$ . Sm. 203° (*C.* 1909 [2] 2084).



- $C_{19}H_{22}ON_2Br_2$  6)  $\alpha$ -Dibromdihydrocinchonidin. Sm. 225° u. Zers.  $2HCl + 2H_2O$ ,  $2HBr + 2H_2O$ ,  $(2HBr, Br_2)$ ,  $(2HBr, Br_4 + H_2O)$ ,  $2HNO_3 + H_2O$ ,  $H_2SO_4 + 6H_2O$  (*J. pr.* [2] 63, 334; *J. pr.* [2] 69, 193 *C.* 1904 [1] 1447; *J. pr.* [2] 71, 3 *C.* 1905 [1] 458; *J. pr.* [2] 74, 163 *C.* 1906 [2] 1680). — \*III, 641.
- 7)  $\beta$ -Dibromdihydrocinchonidin. Sm. 210° u. Zers.  $(2HCl, MnCl_2 + H_2O)$ ,  $(2HBr, PbBr_2)$ ,  $2HBr + 3H_2O$ ,  $(2HBr, Br_2)$ ,  $2HNO_3 + H_2O$ ,  $H_2SO_4 + 7H_2O$ ,  $2H_2SO_4$  (*J. pr.* [2] 71, 3 *C.* 1905 [1] 458; *J. pr.* [2] 74, 166 *C.* 1906 [2] 1680).
- $C_{19}H_{22}ON_2Br_4$  1) Cinchonintetrabromid (*C.* 1909 [2] 2084).
- $C_{19}H_{22}ON_2J_2$  1) Dijoddihydrocinchonin. Sm. 147—149° u. Zers. (*C.* 1909 [2] 989).
- $C_{19}H_{22}ON_2S$  1) Äthyläther d. Benzoylimido-2,4,5-Trimethylphenylamidomerkaptomethan (Benzoylpseudocumylthioläthylpseudothioharnstoff). Sm. 83—84° (*Am.* 26, 414).
- 2)  $\beta$ -Isovaleryl- $\alpha$ -Phenyl- $\alpha$ -Benzylthioharnstoff (Valerylimidophenylbenzylamidomerkaptomethan). Sm. 125—126° (*Soc.* 67, 1043). — \*II, 298.
- 3)  $\alpha$ -Acetyl- $\alpha\beta$ -Di[ $\beta$ -Phenyläthyl]thioharnstoff. Sm. 73° (*B.* 19, 1824). — II, 539.
- $C_{19}H_{22}ON_2S_2$  1) Isoamylester d.  $\alpha\beta$ -Diphenylthioureidothiolameisensäure (Isoamylester d. Diphenyldithioallophansäure). Sm. 87° (*J. pr.* [2] 32, 258). — II, 398.
- $C_{19}H_{22}ON_3Cl$  1) Propyläther d. Verb.  $C_{18}H_{16}ON_3Cl$  (*B.* 31, 1414). — \*IV, 480.
- $C_{19}H_{22}ON_3P$  1) Methylphenylamid-Di[Phenylhydrazid] d. Phosphorsäure. Sm. 148° (*A.* 326, 255 *C.* 1903 [1] 869). — \*IV, 424.
- $C_{19}H_{22}O_2NCl$  1) Chloromethylmorphimethin.  $HCl$  (*B.* 39, 3134 *C.* 1906 [2] 1334).
- $C_{19}H_{22}O_2NJ$  1) Jodmethylat d. Apomorphin-3-Methyläther. Sm. 229—230° u. Zers. (*B.* 35, 4388 *C.* 1903 [1] 339; *B.* 41, 3052 *C.* 1908 [2] 1445).
- $C_{19}H_{22}O_2N_2Br_2$  1) 3,6-Dibrom-6'-Dimethylamido-3'-Acetylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 223—224° (*A.* 334, 314 *C.* 1904 [2] 987).
- $C_{19}H_{22}O_2N_2S$  1) Isoamylester d.  $\alpha\beta$ -Diphenylureidothiolameisensäure. Sm. 70° (*B.* 4, 248). — II, 382.
- $C_{19}H_{22}O_2N_2S_2$  1) Di[Phenylamid] d. Merkptoessigpropylenäthersäure. Sm. 154 bis 155° (*J. pr.* [2] 74, 27 *C.* 1906 [2] 752).
- 2) Di[Phenylamid] d. Merkptoessigpropylidenäthersäure. Sm. 170° (*J. pr.* [2] 66, 187 *C.* 1902 [2] 933).
- $C_{19}H_{22}O_3NBr$  1) l-Brom- $\alpha$ -Methylmorphimethin. 2 Modif. Sm. 132° u. 182—184° ( $2HCl, PtCl_4 + 4H_2O$ ) (*A.* 297, 213; *B.* 40, 2830 *C.* 1907 [2] 545; *B.* 40, 4151 *C.* 1907 [2] 1850). — \*III, 672.
- 2) d-Brom- $\beta$ -Methylmorphimethin. Sm. 184° (*B.* 40, 2830 *C.* 1907 [2] 545).
- $C_{19}H_{22}O_3NJ$  1) Jodmethylat d. Codeinon. Sm. 180° (*B.* 36, 3073 *C.* 1903 [2] 953).
- 2) Jodmethylat d. Pseudocodeinon. Zers. bei 220° (*B.* 40, 2038 *C.* 1907 [2] 161; *B.* 40, 3342 *Anm.* *C.* 1907 [2] 921).
- 3) Jodmethylat d. Curin. Sm. 252—253° (*C.* 1895 [2] 1086). — \*III, 652.
- 4) Jodmethylat d. Morphothebain. Sm. 221—222° (*B.* 19, 1598; 32, 191; *M.* 18, 389). — III, 910; \*III, 676.
- 5) Jodmethylat d. Nor-p-Thebain. Sm. 220° (*B.* 40, 4153 *C.* 1907 [2] 1850).
- $C_{19}H_{22}O_3N_2S$  1) Diäthyläther d. Acetyldi[4-Oxyphenyl]isothioharnstoff. Sm. 98° (*B.* 32, 3657). — \*II, 406.
- $C_{19}H_{22}O_4NCl$  1) Diäthylester d. 2,6-Dimethyl-4-[4-Chlorphenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 147° (*J. pr.* [2] 65, 287 *C.* 1902 [1] 1216). — \*IV, 220.
- $C_{19}H_{22}O_4NBr$  1) Brommethylat d.  $\alpha$ -Oxy- $\beta$ -Phenylakroyltropein- $\beta^2$ -Carbonsäure- $\alpha\beta^2$ -Lakton (*Soc.* 91, 97 *C.* 1907 [1] 1137).
- $C_{19}H_{22}O_4N_2S$  1) Cinchonidinsulfonsäure. Sm. 225°. ( $2HCl, PtCl_4 + 3H_2O$ ) (*A.* 267, 142; *M.* 22, 171, 173, 189). — III, 853; \*III, 632.
- 2) Isocinchonidinsulfonsäure. ( $HCl, AuCl_3$ ) (*A.* 267, 140). — III, 853.
- 3) Isocinchoninsulfonsäure. ( $2HCl, AuCl_3 + 2H_2O$ ) (*A.* 267, 141). — III, 835.
- $C_{19}H_{22}O_5NCl$  1) Diäthylester d. l-Oximido-5-Methyl-3-[4-Chlorphenyl]-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 187—188° (*A.* 303, 254). — \*II, 1142.

- $C_{19}H_{22}O_5N_2S$  1) 4-Äthyläther- $\alpha$ -Benzyläther d.  $\alpha$ -Oximido- $\alpha$ -Acetylamido- $\beta$ -[4-Oxyphenyl]sulfonäthan. Sm. 115° (*J. pr.* [2] 78, 14 C. 1908 [2] 507).
- $C_{19}H_{22}O_6N_2S_2$  1) Di[Acetylphenylamid] d. Propan- $\alpha\gamma$ -Disulfonsäure. Sm. 176° (*B.* 34, 3480).
- $C_{19}H_{22}N_2ClBr$  1) Hydrobromcinchoninchlorid + 2H<sub>2</sub>O (*B.* 25, 1546). — III, 836.
- $C_{19}H_{22}N_2ClJ$  1) Hydrojodecinchoninchlorid (*B.* 31, 2358).
- $C_{19}H_{23}ONBr_2$  2) Hydrojodecinchonidinchlorid (*B.* 31, 2359).
- 1) 3,6-Dibrom-4'-Diäthylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 89–90°. HBr (*B.* 29, 1124; *A.* 334, 287). — \*III, 455.
- 2) 2,6-Dibrom-4'-Diäthylamido-4-Oxy-3,5-Dimethyldiphenylmethan. Sm. 132–133°. HBr (*A.* 334, 325 C. 1904 [2] 988).
- $C_{19}H_{23}ONS$  1) Phenylamid d. 5-Oxy-4-Isopropyl-1-Methylbenzoläthyläther-2-Thiocarbonsäure. Sm. 147–148° (*J. pr.* [2] 59, 581). — \*II, 936.
- 2) 2,4,5-Trimethylphenylamid d. 6-Oxy-1-Methylbenzoläthyläther-3-Thiocarbonsäure. Sm. 143° (*J. pr.* [2] 59, 587). — \*II, 921.
- $C_{19}H_{23}ON_2Cl$  1) Hydrochlorcinchonin. Sm. 212–213°. Salze meist bekannt (*A.* 205, 348; 276, 109, 112, 301; *J. pr.* [2] 8, 280; *M.* 16, 328; 20, 581; 22, 269; *B.* 20, 2519; *R.* 1, 108). — III, 831; \*III, 632.
- 2) Hydrochlor- $\beta$ -Isocinchonin. 2HCl (*M.* 26, 125 C. 1905 [1] 938).
- 3) Hydrochlor- $\alpha$ -Isocinchonin. Sm. 172° (185–186°). (2HCl, PtCl<sub>4</sub> + 3H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> + 4H<sub>2</sub>O (*A.* 276, 96; *M.* 20, 581; *M.* 25, 899 C. 1904 [2] 1319). — III, 846.
- 4) Hydrochlorapocinchonidin. Sm. 200°. 2HCl, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> (*A.* 205, 346; *M.* 20, 581; *J. pr.* [2] 8, 283). — III, 853.
- $C_{19}H_{23}ON_2Br$  1) Hydrobromcinchonin. Sm. 182°. 2HBr (*A.* 201, 324; *M.* 21, 519; 22, 274; *B.* 20, 2520; *M.* 24, 128 C. 1903 [1] 976). — III, 832; \*III, 632.
- 2) Hydrobromcinchonidin (*Bl.* [3] 25, 84).
- $C_{19}H_{23}ON_2J$  1) Hydrojodecinchonin. Sm. 158–160°. 2HCl, (2HCl, PtCl<sub>4</sub>), 2HNO<sub>3</sub> (*M.* 12, 662; 13, 432; 21, 539; 22, 278). — III, 832; \*III, 632.
- 2) Hydrojodalocinchonin. 2HJ (*M.* 22, 198). — \*III, 640.
- $C_{19}H_{23}ON_2J_3$  1) Trijodtetrahydrocinchonin + H<sub>2</sub>O. Sm. 89–91° (*C.* 1909 [2] 990).
- $C_{19}H_{23}ON_3S$  1) Propionylleukomethylenblau. Sm. 145–146° (*B.* 33, 1568). — \*II, 477.
- $C_{19}H_{23}O_3NBr_2$  1) Methyl-di[3-Brom-4-Oxy-2,5-Dimethylbenzyl]amin. Sm. 150 bis 151° (*A.* 344, 199 C. 1906 [1] 1160).
- 2) Methyl-di[5-Brom-6-Oxy-3,4-Dimethylbenzyl]amin. Sm. 116 bis 117° (*A.* 344, 195 C. 1906 [1] 1160).
- $C_{19}H_{23}O_2NS$  1) Phenylamid d. 4'-Methyl-1,2,3,4,5,6-Hexahydrobiphenyl-*p*-Sulfonsäure. Sm. 186,5–187,5° (*C.* 1907 [1] 1745).
- $C_{19}H_{23}O_2N_2Cl$  1) Hydrochlorapocchinin. Sm. 160°. 2HCl + 3H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 2H<sub>2</sub>O) (*J. pr.* [2] 8, 285; *A.* 205, 341). — III, 819.
- 2) Hydrochlorapocchinin + 2H<sub>2</sub>O. Sm. 164° (wasserfrei). 2HCl, (2HCl, PtCl<sub>4</sub> + 4H<sub>2</sub>O) (*A.* 205, 343). — III, 826.
- $C_{19}H_{23}O_2N_2Br$  1) Hydrobromapocchinin. Sm. 209–210°. (2HCl, PtCl<sub>4</sub>), HBr + H<sub>2</sub>O (*M.* 6, 751). — III, 819.
- $C_{19}H_{23}O_2N_2J$  1) Hydrojodapocchinin. (2HCl, PtCl<sub>4</sub> + H<sub>2</sub>O), 2HJ (*M.* 12, 330). — III, 819.
- $C_{19}H_{23}O_3NCl_2$  1) Dichlormethyldihydromorphimethin. Zers. bei 180–181° (*B.* 39, 3137 C. 1906 [2] 1335).
- $C_{19}H_{23}O_3NJ_2$  1) Codeinmethylenjodid. Sm. 214–216° (*C.* 1899 [1] 118). — \*III, 673.
- $C_{19}H_{23}O_4N_2Br$  1) Nitril d. Bromcocainiumessigsäure. Sm. 169° (*B.* 41, 2122 C. 1908 [2] 698).
- $C_{19}H_{23}O_4N_3S$  1) Diäthylester d. 1-[ $\beta$ -Phenylthioureido]-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 197° (*B.* 39, 649 C. 1906 [1] 1026).
- $C_{19}H_{23}O_6N_2J$  1) Jodmethylat d. Nitrocodein (*B.* 38, 1857 C. 1905 [2] 52).
- $C_{19}H_{24}ONBr$  1) Äthyläther d. *r*-Methylallylbenzyl-4-Oxyphenylammoniumbromid. Sm. 139–140° (*B.* 40, 1005 C. 1907 [1] 1251).
- $C_{19}H_{24}ONBr_3$  1) Diäthylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylammoniumbromid. Sm. 245–246° (u. 256–257°) (*B.* 29, 1123).
- 2) Bromäthylat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 189–192° u. Zers. (*B.* 29, 1125; *A.* 334, 287). — \*II, 455.

- C<sub>19</sub>H<sub>24</sub>ONJ** 1) Äthyläther d. l-Methylallylbenzyl-4-Oxyphenylammoniumjodid. Sm. 128° (B. 40, 1006 C. 1907 [1] 1252).  
 2) Äthyläther d. r-Methylallylbenzyl-4-Oxyphenylammoniumjodid. Sm. 128° (B. 40, 1004 C. 1907 [1] 1251).  
 3) Jodmethylat d. p-Dimethylamido-2,4,5-Trimethyldiphenylketon + xH<sub>2</sub>O. Sm. 187° u. Zers. (wasserfrei) (B. 17, 2675). — III, 236.
- C<sub>19</sub>H<sub>24</sub>ON<sub>2</sub>J<sub>2</sub>** 1) Dihydrojodeinchinin. Sm. 187—190° u. Zers. HJ, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> (M. 12, 583; 13, 431, 676; 15, 447). — III, 832.
- C<sub>19</sub>H<sub>24</sub>ON<sub>3</sub>J** 1) 3-Dimethylamido-9-Diäthylamido-4-Methylphenoxazoniumjodid (C. 1902 [2] 378). — \*IV, 841.  
 2) 9-Dimethylamido-3-Diäthylamido-4-Methylphenoxazoniumjodid (C. 1902 [2] 378). — \*IV, 841.
- C<sub>19</sub>H<sub>24</sub>OClP** 1) Diäthylbenzoylmethyl-4-Methylphenylphosphoniumchlorid. 2 + PtCl<sub>4</sub> (A. 315, 91). — \*IV, 1181.
- C<sub>19</sub>H<sub>24</sub>O<sub>2</sub>N<sub>2</sub>J<sub>2</sub>** 1) Dihydrojodapoehinin. HJ (M. 12, 684). — III, 819.  
 2) Dihydrojodapoehinin. Sm. bei 220°. HCl, HJ, HNO<sub>3</sub> (M. 12, 669). — III, 826.
- C<sub>19</sub>H<sub>24</sub>O<sub>2</sub>N<sub>3</sub>Br** 1) Menthylester d. α-Cyan-α-[4-Bromphenyl]azoessigsäure (2 isom. Formen). Sm. 97—98° (u. 95—105°) (C. 1903 [1] 566; Soc. 85, 45 C. 1904 [1] 789). — \*IV, 1052.
- C<sub>19</sub>H<sub>24</sub>O<sub>3</sub>NCl** 1) Chlormethylat d. Morphinmethyläther + H<sub>2</sub>O (Chlormethylat d. Codein). 2 + PtCl<sub>4</sub> + 3H<sub>2</sub>O (A. 222, 215). — III, 903.
- C<sub>19</sub>H<sub>24</sub>O<sub>3</sub>NBr** 1) Brommethylat d. Morphinmethyläther. Sm. 261° (D.R.P. 166362 C. 1906 [1] 619; D.R.P. 175796 C. 1906 [2] 1698).  
 2) Bromäthylat d. Morphin. Sm. 245° (D.R.P. 165898 C. 1906 [1] 516; D.R.P. 191088 C. 1908 [1] 499).  
 3) Bromdihydro-α-Methylmorphimethin. Sm. 165° (B. 40, 2830 C. 1907 [2] 545).  
 4) Bromdihydro-β-Methylmorphimethin. Sm. 169° (B. 40, 2831 C. 1907 [2] 545).
- C<sub>19</sub>H<sub>24</sub>O<sub>3</sub>NJ** 1) Jodmethylat d. Bebeerin (J. d. Bebirin). Sm. 268—270° (B. 29, 2057). — III, 798.  
 2) Jodmethylat d. Morphinmethyläther + 2H<sub>2</sub>O (Jodmethylat d. Codein). Zers. bei 270° (C. r. 92, 1140; M. 10, 733; A. ch. [5] 27, 276; A. 222, 215; B. 27, 1149; 30, 355). — III, 903; \*III, 672.  
 3) Jodmethylat d. α-Isocodein. Sm. 262° u. Zers. (270°) (Soc. 79, 575; B. 40, 4889 C. 1908 [1] 387). — \*III, 673.  
 4) Jodmethylat d. β-Isocodein. Sm. 215—216° (Soc. 91, 1417 C. 1907 [2] 1250; B. 40, 4889 C. 1908 [1] 387).  
 5) Jodmethylat d. Pseudocodein. Sm. 270° u. Zers. (278—279°) (B. 39, 4410 C. 1907 [1] 353; B. 41, 981 C. 1908 [1] 1709).  
 6) Jodmethylat d. Allo pseudokodein. Sm. 215° (B. 40, 3850 C. 1907 [2] 1631).  
 7) Jodmethylat d. Thebainon. Sm. 255—256° (B. 38, 3165 C. 1905 [2] 1442).  
 8) Jodäthylat d. Morphin + 1/2 H<sub>2</sub>O (A. 88, 340; C. r. 92, 1140). — III, 898.
- C<sub>19</sub>H<sub>24</sub>O<sub>4</sub>NBr** 1) Bromoxydihydro-α-Methylmorphimethin. Sm. 170° (B. 40, 2828 C. 1907 [2] 544).
- C<sub>19</sub>H<sub>24</sub>O<sub>4</sub>NJ** 1) Jodmethylat d. Oxycodein. Zers. bei 240—250°. + CH<sub>4</sub>O, + 1/2 C<sub>2</sub>H<sub>6</sub>O (B. 36, 3070 C. 1903 [2] 953; B. 39, 1416 C. 1904 [1] 1664).
- C<sub>19</sub>H<sub>24</sub>O<sub>4</sub>N<sub>2</sub>S** 1) Cinchotinsulfonsäure + H<sub>2</sub>O. Sm. 245—246° u. Zers. (224°). HCl + 5H<sub>2</sub>O, (2HCl, PtCl<sub>4</sub> + 6H<sub>2</sub>O), H<sub>2</sub>SO<sub>4</sub> + 8H<sub>2</sub>O (M. 18, 415; 22, 803; A. 267, 139; 300, 54, 358). — \*III, 643.
- C<sub>19</sub>H<sub>24</sub>O<sub>4</sub>N<sub>2</sub>S<sub>2</sub>** 1) 1,4-Di[4-Methylphenylsulfon]-2-Methylhexahydro-1,4-Diazin. Sm. 174° (B. 33, 762). — \*IV, 297.  
 2) Trimethylenäthylendi-p-Toluolsulfimid. Sm. 150—151° (B. 32, 2041). — \*II, 77.
- C<sub>19</sub>H<sub>24</sub>O<sub>4</sub>N<sub>3</sub>Br** 1) α-[d-α-Bromisocapronylamido]acetyl-amido-β-[d-3-Indolyl]propionsäure (d-α-Bromisocapronylglycyl-d-Tryptophan). Sm. 90—98° (B. 40, 2749 C. 1907 [2] 464).
- C<sub>19</sub>H<sub>24</sub>O<sub>5</sub>NBr** 1) Brommethylat d. αβ-Dioxy-β-Phenylpropionyltropoëin-β<sup>2</sup>-Carbon-säure-αβ<sup>2</sup>-Lakton. Sm. 257—258° (Soc. 91, 95 C. 1907 [1] 1137).



- $C_{19}H_{24}O_5NP$  1) Phosphorigssäureester d.  $\alpha$ -Methylmorphimethin. HCl (B. 39, 3135 C. 1906 [2] 1334).
- $C_{19}H_{24}O_5N_2S$  1)  $r$ - $\alpha$ -[2-Naphtylsulfon- $\alpha$ -Amidoisocapronyl]amidopropionsäure. Sm. 151° (B. 37, 3107 C. 1904 [2] 1210).
- $C_{19}H_{24}O_8N_3Cl$  1) Methylcarbonat d.  $\alpha$ -[ $\alpha$ -Chloracetyl-amido- $\beta$ -(4-Oxyphenyl)propionylamidoacetyl]amidopropionsäuremethylester. Sm. 208° (B. 41, 2867 C. 1908 [2] 1251).
- $C_{19}H_{24}NSP$  1) Piperidid d. Di[4-Methylphenyl]thiophosphinsäure. Sm. 134° (A. 315, 68). — \*IV, 1178.
- $C_{19}H_{25}ON_2Br$  1) 4-Bromphenylhydrazon d. Acetonylisocampher. Sm. 154—156° (B. 34, 3060). — \*IV, 510.
- $C_{19}H_{25}O_2NBr_2$  1) Äthylhydroxyd d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 189—190°. Salze, siehe (B. 29, 1125; A. 334, 316 C. 1904 [2] 987). — \*II, 455.
- $C_{19}H_{25}O_2NS$  1) Phenylamid d. 2-Propyl-4-Isopropyl-1-Methylbenzol- $p$ -Sulfonsäure. Sm. 138° (B. 40, 2370 C. 1907 [2] 335).
- $C_{19}H_{25}O_2N_2J$  1) Hydrojodnichin +  $xH_2O$ . Sm. bei 60°. 2HJ (M. 14, 440). — III, 820.
- $C_{19}H_{25}O_3NS$  1) Phenyläther d.  $\eta$ -Phenylsulfonamido- $\alpha$ -Oxyheptan. Sm. 47° (B. 39, 4114 C. 1907 [1] 278).
- $C_{19}H_{25}O_3N_2Cl$  1) Nitril d. Chloratropiniumessigsäure. 2 + PtCl<sub>4</sub> (B. 41, 2122 C. 1908 [2] 698).
- $C_{19}H_{25}O_4NS_2$  1) norm. Heptylimid d. Benzolsulfonsäure. Sm. 91° (C. 1899 [2] 868). — \*II, 70.
- $C_{19}H_{26}ON_2J_2$  1) Jodmethylat d. 4,4'-Di[Dimethylamido]diphenylketon. Sm. 105° (B. 22, 1878). — III, 186.
- $C_{19}H_{26}ON_3P$  1) Di[4-Methylphenylamid] d. 1-Piperidylthiophosphinsäure. Sm. 173° (A. 326, 187 C. 1903 [1] 820). — \*IV, 9.
- $C_{19}H_{26}O_4NCl$  1) Chloräthylat d. 1-Scopolamin + 2H<sub>2</sub>O (Ch. d. Hyoscin). + AuCl<sub>3</sub> (J. pr. [2] 64, 369; B. 27 [2] 883). — III, 796; \*III, 621.
- $C_{19}H_{26}O_4NBr$  1) Chloräthylat d. Atroscin. + AuCl<sub>3</sub> (J. pr. [2] 64, 377). — \*III, 618.
- $C_{19}H_{26}O_4NBr$  1) Bromäthylat d. 1-Scopolamin (B. d. 1-Hyoscin) (J. pr. [2] 64, 369). — \*III, 621.
- $C_{19}H_{26}O_4NJ$  1) Jodäthylat d. 1-Scopolamin (J. d. 1-Hyoscin). Sm. 186° (J. pr. [2] 64, 369; B. 27 [2] 883). — III, 796; \*III, 621.
- $C_{19}H_{26}O_4N_2S_2$  1) Jodäthylat d. Atroscin. Sm. 170° (J. pr. [2] 64, 377). — \*III, 618.
- $C_{19}H_{26}O_4N_2S_2$  1)  $\alpha\eta$ -Di[Phenylsulfonamido]heptan. Sm. 104,5—105,5° (103—104°) (J. r. 28, 563; B. 39, 4119 C. 1907 [1] 278).
- $C_{19}H_{26}N_3SP$  1) Di[Äthylphenylamid] d. Propan- $\alpha$ -Disulfonsäure. Sm. 130° (B. 38, 3393 C. 1905 [2] 1525).
- $C_{19}H_{27}ONS_2$  1) Di[4-Methylphenylamid] d. 1-Piperidylthiophosphinsäure. Sm. 190° (A. 326, 215 C. 1903 [1] 822).
- $C_{19}H_{27}O_2NBr_4$  1) Methylphenylmenthylimidoxanthid. Sm. 85,5° (C. 1907 [1] 1206).
- $C_{19}H_{27}O_2NBr_4$  1) Acetat d. Diisoamyl-2,4,5,6-Tetrabrom-3-Oxybenzylamin (A. 344, 157 C. 1906 [1] 1157).
- $C_{19}H_{27}O_3N_2Cl$  1) Hydrochlorapatetrahydrochinin (M. 16, 635). — III, 816.
- $C_{19}H_{27}N_2S_4P$  1) 4-Methylphenyldi[1-Piperidyl]phosphin + 2 Molec. Schwefelkohlenstoff. Sm. 139° (B. 31, 1046). — IV, 1682.
- $C_{19}H_{27}N_3J_2S$  1) Bisjodmethylat d. Di[Dimethylamido]-N-Methyl-R-Thiodiphenylamin (A. 230, 114, 151). — II, 808.
- $C_{19}H_{28}ON_2J_2$  1) Bisjodmethylat d.  $\alpha$ -Oxydi[4-Dimethylamidophenyl]methan. Sm. 195° (B. 22, 1882; 29, 2300). — II, 1079; \*II, 659.
- $C_{19}H_{28}O_3NBr$  1) Bromäthylat d. Atropin. Sm. 173—174° (D.R.P. 145996 C. 1903 [2] 1226).
- $C_{19}H_{28}N_3SP$  1) Amylmonamid-Di[4-Methylphenylamid] d. Thiophosphorsäure. Sm. 129° (A. 326, 205 C. 1903 [1] 821).
- $C_{19}H_{31}ONBr_2$  1) Diisoamyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 43 bis 46° (A. 344, 215 C. 1906 [1] 1161).
- $C_{19}H_{31}ONBr_2$  2) Diisoamyl-3,5-Dibrom-4-Oxy-2,6-Dimethylbenzylamin. Sm. 81° (A. 344, 191 C. 1906 [1] 1160).
- $C_{19}H_{31}ONBr_2$  3) Diisoamyl-2,6-Dibrom-4-Oxy-3,5-Dimethylbenzylamin. Sm. 94° (A. 344, 238 C. 1906 [1] 1163).
- $C_{19}H_{32}ONBr$  1) Diisoamyl-3-Brom-4-Oxy-2,5-Dimethylbenzylamin. HCl (A. 344, 203 C. 1906 [1] 1161).

- $C_{19}H_{32}ONBr$  2) Diisoamyl-5-Brom-6-Oxy-3,4-Dimethylbenzylamin (*A.* 344, 197 *C.* 1906 [1] 1160).
- $C_{19}H_{32}O_2N_2S$  1) Verbindung (aus Diisoamylamin u. Benzoylamidithioameisensäuremethylester) (*Am.* 24, 207).
- $C_{19}H_{32}O_4N_2S$  1) Diäthylester d.  $\alpha\beta$ -Di[Hexahydrophenyl]thioharnstoff-2,2'-Dicarbonsäure. Sm. 133° (*A.* 295, 206). — \*II, 705.
- $C_{19}H_{32}N_2JP$  1) Äthyl-4-Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm. 191° (*B.* 31, 1046). — IV, 1682.
- $C_{19}H_{33}O_3NS$  1) Äthylamid d.  $\epsilon$ -Oxy- $\epsilon$ -Phenyl- $\beta\beta$ -Dimethylnonan- $\epsilon^2$ -Sulfonsäure. Sm. 66—67° (*B.* 37, 3261 *C.* 1904 [2] 1031).
- $C_{19}H_{34}O_2N_2J_2$  1) Jodmethylat d. Sparteiniodammoniumessigsäuremethylester. Sm. 232° (*Ar.* 242, 518 *C.* 1904 [2] 1412).
- 2) isom. Jodmethylat d. Sparteiniodammoniumessigsäuremethylester. Sm. 249° (*Ar.* 242, 518 *C.* 1904 [2] 1412).
- $C_{19}H_{37}ONS_2$  1) Cetylexer d. Acetylamidodithioameisensäure. Sm. 89—90° (*C.* 1901 [2] 275).
- $C_{19}H_{39}N_3JP$  1) Isobutyl-1-Tripiperidylphosphoniumjodid. Sm. 172° (*B.* 28, 2210). — IV, 11.
- $C_{19}H_{45}N_3JP$  1) Methyltri[Dipropylamido]phosphoniumjodid. Sm. 83—84° (*A.* 326, 170 *C.* 1903 [1] 762).

### $C_{19}$ -Gruppe mit fünf Elementen.

- $C_{19}H_9ONCl_2Br_2$  1)  $\beta$ -Dichlor- $\beta$ -Dibrom-1-Benzoylcarbazol. Sm. 267—268° (*G.* 25 [2] 363). — IV, 393.
- 2)  $\beta$ -Dichlor- $\beta$ -Dibrom-1-Benzoylcarbazol. Sm. 238—240° (*G.* 25 [2] 363). — IV, 393.
- $C_{19}H_{11}ONClBr$  1) 3-Chlor-6-Brom-9-Benzoylcarbazol. Sm. 202° (*G.* 25 [2] 360). — IV, 393.
- $C_{19}H_{12}O_5NBrS$  1) Bromresorcinsaccharein (*Bl.* [3] 17, 696).
- $C_{19}H_{12}O_5NJS$  1) Jodresorcinsaccharein (*Bl.* [3] 17, 696).
- $C_{19}H_{13}O_3N_2BrS$  1) Dianil d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 199 bis 200° (*Am.* 30, 495 *C.* 1904 [1] 370).
- $C_{19}H_{14}O_3NClS$  1) 4-Phenylsulfonchloramidodiphenylketon. Sm. 114° (*Soc.* 85, 397 *C.* 1904 [1] 1404).
- $C_{19}H_{15}O_3N_2ClS$  1) Di[Phenylamid] d. 4-Chlorbenzol-1-Carbonsäure-3-Sulfonsäure. Sm. 219—220° (*Am.* 16, 543). — II, 1303.
- $C_{19}H_{15}O_3N_2BrS$  1) Benzolsulfonat d. 2-Brom-4'-Oxy-4-Methylazobenzol. Sm. 115° (*B.* 31, 1783). — IV, 1414.
- 2)  $s$ -Di[Phenylamid] d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. 238—239° (*Am.* 30, 494 *C.* 1904 [1] 371).
- 3)  $uns$ -Di[Phenylamid] d. 4-Brombenzol-1-Carbonsäure-2-Sulfonsäure. Sm. noch nicht bei 300° (*Am.* 30, 494 *C.* 1904 [1] 370).
- $C_{19}H_{15}O_3N_4ClS$  1)  $\alpha$ -Phenylhydrazon- $\alpha$ -(4-Sulfophenyl)azo- $\alpha$ -(2-Chlorphenyl)methan. *K* (*C.* 1903 [2] 427).
- $C_{19}H_{15}O_3N_4JS$  1)  $\alpha$ -(4-Jodphenyl)hydrazon- $\alpha$ -Phenylazo- $\alpha$ -(3-Sulfophenyl)methan (II-p-Jodformazylbenzol-I m-Sulfonsäure). *Na* (*J. pr.* [2] 74, 314 *C.* 1906 [2] 1821).
- $C_{19}H_{15}O_3Cl_3JP$  1) Jodmethylat d. Phosphorigsäuretri-4-Chlorphenylester. Sm. 71° (*B.* 31, 1053). — \*II, 369.
- $C_{19}H_{16}ONClS$  1) 4-Chlorphenylamid d. 4-Oxynaphtalinäthyläther-1-Thiocarbonsäure. Sm. 191—192° (*J. pr.* [2] 59, 589). — \*II, 989.
- $C_{19}H_{16}ONBrS$  1) 3-Bromphenylamid d. 4-Oxynaphtalinäthyläther-1-Thiocarbonsäure. Sm. 159—160° (*J. pr.* [2] 59, 591). — \*II, 989.
- $C_{19}H_{16}O_2N_3ClS$  1) 4-Methylphenylsulfonamidobiphenyl-4'-Diazochlorid (*Soc.* 91, 1510 *C.* 1907 [2] 1518).
- $C_{19}H_{16}O_2N_3BrS$  1) 4-Methylphenylsulfonamidobiphenyl-4'-Diazobromid (*Soc.* 91, 1510 *C.* 1907 [2] 1518).
- $C_{19}H_{16}O_3N_3J_4S$  1) Benzaldehyd-2,4-Dijodphenylaminsaures 2,4-Dijod-1-Amidobenzol. Sm. 78° (*A.* 274, 224). — III, 7.
- $C_{19}H_{17}O_3NBrP$  1) 2-Brom-4-Methylphenylmonamid d. Phosphorsäurediphenylester. Sm. 126° (*A.* 326, 239 *C.* 1903 [1] 868).

- $C_{19}H_{17}O_4N_2ClS_2$  1) Di[Phenylamid] d. 2-Chlor-1-Methylbenzol-3,5-Disulfonsäure. Sm. 183° (Soc. 73, 751). — \*II, 224.  
 2) Di[Phenylamid] d. 2-Chlor-1-Methylbenzol-4,5-Disulfonsäure. Sm. 183° (Soc. 73, 747). — \*II, 224.  
 3) Di[Phenylamid] d. 2-Chlor-1-Methylbenzol-4,6-Disulfonsäure. Sm. 180° (Soc. 73, 776). — \*II, 224.  
 4) Di[Phenylamid] d. 4-Chlor-1-Methylbenzol-2,5-Disulfonsäure. Sm. 245° (Soc. 73, 744). — \*II, 224.  
 5) Di[Phenylamid] d. 4-Chlor-1-Methylbenzol-2,6-Disulfonsäure. Sm. 188° (Soc. 73, 771). — \*II, 224.  
 6) Di[Phenylamid] d. 4-Chlor-1-Methylbenzol-3,5-Disulfonsäure. Sm. 184° (Soc. 73, 743). — \*II, 224.
- $C_{19}H_{17}O_4N_2BrS_2$  1) Di[Phenylamid] d. 2-Brom-1-Methylbenzol-3,5-Disulfonsäure. Sm. 194° (Soc. 73, 750). — \*II, 224.
- $C_{19}H_{18}O_3N_2Cl_2S$  1) Benzaldehyd-3-Chlorphenylthionaminsaures 3-Chlor-1-Amidobenzol. Sm. 108° (A. 274, 218). — III, 7.
- $C_{19}H_{18}O_3N_2Br_2S$  1) Benzaldehyd-2-Bromphenylthionaminsaures 2-Brom-1-Amidobenzol. Sm. 93° (A. 274, 221). — III, 7.  
 2) Benzaldehyd-3-Bromphenylthionaminsaures 3-Brom-1-Amidobenzol. Sm. 101—102° (A. 274, 220). — III, 7.  
 3) Benzaldehyd-4-Bromphenylthionaminsaures 4-Brom-1-Amidobenzol. Sm. 122° (A. 274, 220). — III, 7.
- $C_{19}H_{18}O_3N_2J_2S$  1) Benzaldehyd-4-Jodphenylthionaminsaures 4-Jod-1-Amidobenzol. Sm. 121—122° (A. 274, 223). — III, 7.
- $C_{19}H_{19}ON_2ClS$  1) 2-Chlormethylat d. 5-Merkapto-3,4-Dimethyl-1-Phenylpyrazol-5-Benzot. Sm. 72° (A. 331, 219 C. 1904 [1] 1219).
- $C_{19}H_{19}ON_2JS$  1) Jodmethylat d. 3-Thiocarbonyl-4-Benzoyl-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 168° (B. 41, 2673 C. 1908 [2] 1364).
- $C_{19}H_{20}O_3NBrS$  1) Verbindung (aus 2-Methylchinolin u. 4-Brom-1-Methylbenzol-2-Sulfonsäureäthylester). Sm. 142° (C. 1906 [1] 1857).
- $C_{19}H_{20}O_3N_5ClS$  1) Chlormethylat d. 1-Amido-2-[4-Dimethylamidophenylazo]-naphthalin-4-Sulfonsäure. Sm. 196—197° (J. pr. [2] 66, 313 Anm.). — \*IV, 1029.
- $C_{19}H_{22}O_4N_3Br_2S$  1)  $\alpha$ -Dibromdihydrocinchonidinsulfonsäure.  $HBr + 2H_2O$ ,  $HNO_3 + H_2O$  (J. pr. [2] 71, 17 C. 1905 [1] 458).  
 2)  $\beta$ -Dibromdihydrocinchonidinsulfonsäure (J. pr. [2] 71, 20 C. 1905 [1] 458).
- $C_{19}H_{23}O_2NClJ$  1) Jodmethylat d.  $\alpha$ -Chlorocodid. Zers. bei 166—167° (168°) (A. 297, 215; B. 39, 3134 C. 1906 [2] 1334; A. 368, 317 C. 1909 [2] 1661). — \*III, 673.  
 2) Jodmethylat d.  $\beta$ -Chlorocodid. Sm. 180° (A. 368, 317 C. 1909 [2] 1662).  
 3) Jodmethylat d. Pseudochlorocodid. Sm. 185—186° u. Zers. (B. 40, 3352 C. 1907 [2] 921; A. 368, 316 C. 1909 [2] 1661).
- $C_{19}H_{23}O_3NClBr$  1) Chlormethylat d. Bromcodein +  $2\frac{1}{2}H_2O$  (A. 297, 218). — \*III, 672.
- $C_{19}H_{23}O_3NClJ$  1) Codeinmethylenchlorojodid. Sm. 235—238° u. Zers. (C. 1899 [1] 118). — \*III, 673.
- $C_{19}H_{23}O_3NBrJ$  1) Jodmethylat d. Bromcodein. Sm. 242—244° (A. 297, 212). — \*III, 672.
- $C_{19}H_{23}O_4N_2ClS$  1) Hydrochlorcinchoninsulfonsäure. Sm. 227°.  $HCl + 3H_2O$ ,  $(2HCl, PtCl_4 + 2H_2O)$ ,  $(HCl, AuCl_3)$ ,  $HJ + 2\frac{1}{2}H_2O$ ,  $H_2SO_4 + 8H_2O$  (A. 276, 112). — III, 835.
- $C_{19}H_{24}ONBr_2J$  1) Jodäthylat d. 3,6-Dibrom-4'-Dimethylamido-4-Oxy-2,5-Dimethyldiphenylmethan. Sm. 172—173° (A. 334, 316 C. 1904 [2] 987).

### $C_{20}$ -Gruppe mit einem Element.

- $C_{20}H_{14}$  C 94,5 — H 5,5 — M. G. 254.  
 1) 9-Benzylidenfluoren. Sm. 76°. Pikrat (B. 33, 852; C. 1903 [1] 1369; B. 38, 4108 C. 1906 [1] 366; A. 347, 296 C. 1906 [2] 961). — \*II, 130.  
 2) 1,1'-Binaphtyl. Sm. 154° (160,5°). Pikrat (A. 144, 78; B. 10, 1272, 1603; 15, 2170; 17, 3020; 33, 698; 34, 2184; Soc. 35, 225; B. 42, 2389 C. 1909 [2] 367). — II, 294; \*II, 130.



- C<sub>20</sub>H<sub>14</sub>**
- 3) 1,2'-Binaphtyl. Sm. 79—80° (76°) (*J.* 1877, 392; *Soc.* 35, 227; *B.* 23, 3199). — II, 295.
  - 4) 2,2'-Binaphtyl. Sm. 187° (183,5°); Sd. 452°<sub>753</sub> (*B.* 10, 1272, 1603; 12, 2131; 20, 662; 23, 3200; 30, 2663; *J.* 1870, 568; *Soc.* 35, 229; 40, 5; 47, 104; 65, 879; 67, 653; *A.* 284, 74; *A.* 332, 50 *C.* 1904 [2] 40; *Soc.* 85, 220 *C.* 1904 [1] 656, 939; *Soc.* 91, 1103 *C.* 1907 [2] 600). — II, 295; \*II, 130.
  - 5) 9-Phenylanthracen. Sm. 152—153°; Sd. 417° (*A.* 202, 61; 209, 276; *Am.* 13, 554; *A. ch.* [6] 1, 495; *C. r.* 140, 1461 *C.* 1905 [2] 253; *Bl.* [3] 35, 569 *C.* 1906 [2] 788). — II, 294.
- C<sub>20</sub>H<sub>16</sub>**
- C 93,8 — H 6,2 — M. G. 256.
- 1) ααβ-Triphenyläthen. Sm. 67—68° (*B.* 37, 1431 *C.* 1904 [1] 1351; *B.* 37, 1455 *C.* 1904 [1] 1353).
  - 2) 1,4-Dibenzylidenbenzol (*B.* 37, 1468 *C.* 1904 [1] 1342).
  - 3) 2-Benzylfluoren. Sm. 104—106° (102°) (*M.* 2, 443; *M.* 23, 925 *C.* 1902 [2] 1471; *M.* 25, 450 *C.* 1904 [2] 450). — II, 294.
  - 4) 4-Benzylfluoren. Sm. 77° (*M.* 23, 37 *C.* 1902 [1] 875).
  - 5) 9-Benzylfluoren. Sm. 130—131° (*A.* 347, 298 *C.* 1906 [2] 961).
  - 6) 9-[p-Methylphenyl]fluoren. Sm. 128° (*B.* 11, 203). — II, 294.
  - 7) Phenyldihydroanthracen. Sm. 120° (*A.* 202, 63). — II, 294.
  - 8) Kohlenwasserstoff (aus Benzaldehyd u. Benzol). Sd. oberhalb 360° (*A.* 242, 331). — II, 287.
- C<sub>20</sub>H<sub>18</sub>**
- C 93,0 — H 7,0 — M. G. 258.
- 1) αβ-Diphenyl-αγγη-Oktatetraën. Sm. 124° (*B.* 34, 2190; *B.* 42, 565 *C.* 1909 [1] 920).
  - 2) isom. αβ-Diphenyl-αγγη-Oktatetraën. Sm. 225° u. Zers. (*A.* 331, 165 *C.* 1904 [1] 1211; *B.* 42, 565 *C.* 1909 [1] 920).
  - 3) ααα-Triphenyläthan. Sm. 95°; Sd. 220—226°<sub>25</sub> (*B.* 36, 472 *C.* 1903 [1] 638; *B.* 39, 2963 *C.* 1906 [2] 1498).
  - 4) ααβ-Triphenyläthan. Sm. 53,4—54,5°; Sd. 348—349° (*B.* 15, 1128; *A.* 296, 247; *C.* 1898 [1] 438; *Bl.* [3] 17, 477; *B.* 37, 1455 *C.* 1904 [1] 1353). — II, 289; \*II, 128.
  - 5) 2-Methyltriphenylmethan. Sm. 82—83° (80°) (*B.* 37, 1249 *C.* 1904 [1] 1355; *Am.* 33, 195 *C.* 1905 [1] 880).
  - 6) 3-Methyltriphenylmethan. Sm. 62° (59—59,5°); Sd. 353—354,7°<sub>774</sub> (*B.* 16, 2368; *A. ch.* [6] 2, 342; *A.* 194, 282; *B.* 37, 1251 *C.* 1904 [1] 1355; *B.* 37, 3358 *C.* 1904 [2] 1126; *B.* 37, 3696 *C.* 1904 [2] 1500; *Am.* 33, 195 *C.* 1905 [1] 880). — II, 289.
  - 7) 4-Methyltriphenylmethan. Sm. 71°; Sd. oberhalb 360° (*A.* 194, 263; *B.* 7, 1209; *Bl.* [3] 17, 978; *B.* 37, 658 *C.* 1904 [1] 951). — II, 289; \*II, 128.
  - 8) 1,2-Dibenzylbenzol. Sm. 78° (*B.* 6, 121, 222; 9, 31; 27, 3237). — II, 289; \*II, 128.
  - 9) 1,4-Dibenzylbenzol. Sm. 86° (83—84°) (*B.* 6, 120, 221; 9, 31; 27, 3237; *B.* 37, 1467 *C.* 1904 [1] 1342). — II, 289; \*II, 128.
- C<sub>20</sub>H<sub>20</sub>**
- C 92,3 — H 7,7 — M. G. 260.
- 1) bim. α-Phenyl-αγ-Butadiën. Sd. 221°<sub>17</sub> (*B.* 35, 2697 *C.* 1902 [2] 588; *B.* 36, 4325 *C.* 1904 [1] 453; *B.* 37, 2274 *C.* 1904 [2] 217).
  - 2) 1-Äthyliden-3,5-Diphenyl-1,2,3,4-Tetrahydrobenzol. Sd. 150°<sub>32</sub> (*Am.* 37, 388 *C.* 1907 [1] 1541).
  - 3) 1,2-Diphenyltricyklooktan (Diphenylcyklooktadiën). Sd. 204—205°<sub>10</sub> (*B.* 35, 2137 *C.* 1902 [2] 187; *B.* 36, 4322 *C.* 1904 [1] 453; *B.* 39, 150 *C.* 1907 [1] 534).
  - 4) 9-Phenylhexahydroanthracen. Sd. 235°<sub>15</sub> (*C.* 1908 [1] 370).
- C<sub>20</sub>H<sub>22</sub>**
- C 91,6 — H 8,4 — M. G. 262.
- 1) Hexamethylanthracen. Sm. 220°. Pikrat (Sm. 203°) (*A. ch.* [6] 11, 272). — II, 278.
- C<sub>20</sub>H<sub>24</sub>**
- C 90,9 — H 9,1 — M. G. 264.
- 1) bim. β-[4-Methylphenyl]propen. Sm. 40° (*C.* 1907 [1] 1202).
  - 2) αβ-Di[p-Trimethylphenyl]äthen. Sm. 161°. Pikrat (*J. pr.* [2] 47, 51; *C.* 1906 [1] 27). — II, 255.
  - 3) 1,2-Dimethyl-4,5-Diphenylhexahydrobenzol. Sm. 97°; Sd. 270° (*B.* 29, 2123). — \*II, 120.

- C<sub>20</sub>H<sub>24</sub>** 4) polym. 4-Allyl-1-Methylbenzol. Sd. 350° (*G.* 14, 283, 505). — II, 171.  
 5) polym. 4-Allyl-1-Methylbenzol (*G.* 14, 283, 505). — II, 171.  
 6) 9,9-Dipropyl-9,10-Dihydroanthracen. Sm. 46–47° (*B.* 22, 1070). — II, 255.  
 7) 2,6-Diisopropyl-9,10-Dihydroanthracen. Sm. 90°; Sd. oberhalb 360° (*G.* 14, 280). — II, 255.  
**C<sub>20</sub>H<sub>26</sub>** C 90,2 — H 9,8 — M. G. 266.  
 1) αβ-Di[4-Isopropylphenyl]äthan. Sd. oberhalb 360° (*A.* 121, 251). — II, 242.  
 2) αα-Di[1,2,4-Trimethylphenyl]äthan (*J. pr.* [2] 47, 51). — II, 242.  
**C<sub>20</sub>H<sub>28</sub>** C 89,6 — H 10,4 — M. G. 268.  
 1) Diterebenthylen. Sd. 345–350° (*Bl.* 50, 420; 51, 119). — II, 220.  
 2) Kohlenwasserstoff (aus Cholesterylchlorid). Sd. 241–265°<sub>42</sub> (*M.* 24, 662 *C.* 1903 [2] 1236).  
**C<sub>20</sub>H<sub>30</sub>** C 88,9 — H 11,1 — M. G. 270.  
 1) Biscarven. Sd. 169–171°<sub>11</sub> (*B.* 32, 1316, 1325). — \*II, 94.  
 2) Biterebenthyll. Sd. 343–346°. 2 + HCl (*Soc.* 54, 161; *Bl.* 50, 420). — II, 176.  
**C<sub>20</sub>H<sub>32</sub>** 3) Pinakonen. Sm. 55–56° (*A.* 292, 17; *B.* 27, 2350). — \*II, 95.  
 C 88,2 — H 11,8 — M. G. 272.  
 1) Bisabolen. Sd. 259–260° (*C.* 1897 [2] 428; 1909 [2] 2156). — \*III, 404.  
 2) Camphotereben. Sd. 260–280° (*A.* 197, 332). — III, 539.  
 3) Colophen. Sd. 318–320° (*A.* 37, 192; 71, 350; *A. ch.* [5] 6, 40; *B.* 12, 1755). — III, 539.  
 4) Copaivabalsamöl. Sd. 252–256° (*A.* 7, 157; 34, 321; 148, 152; 242, 191; *M.* 2, 510). — III, 539.  
 5) Dicarvenen. Sd. 170–173° (*B.* 42, 524 *C.* 1909 [1] 749).  
 6) Dicinen. Sd. 328–333° (*B.* 17, 1973). — III, 540.  
 7) Diisocarvestren. Sd. 188–190°<sub>20</sub> (*Soc.* 93, 1892 *C.* 1909 [1] 173).  
 8) Diterpilen. Sd. 210–212°<sub>40</sub> (*A. ch.* [6] 15, 174, 191). — III, 541.  
 9) Metaterebenten. Sd. oberhalb 360° (*A. ch.* [3] 39, 19). — III, 540.  
 10) Nephren + H<sub>2</sub>O. Sm. 168° (wasserfrei) (*J. pr.* [2] 57, 443). — \*III, 469.  
 11) Paracajeputen. Sd. 310–316° (*J.* 1860, 482). — III, 541.  
 12) Petrolen. Sd. 280° (*A.* 23, 265).  
 13) Pinakonan. Sm. 98° (*B.* 27, 2350; *A.* 292, 21). — \*II, 89.  
 14) Diterpen (aus Callitrolsäure). Sd. 270–280° (*Soc.* 79, 1150). — \*III, 404.  
 15) Diterpen (aus Colophonium). Sd. 305–310° (*A. ch.* [6] 1, 240). — III, 537.  
 10) Kohlenwasserstoff (aus Pimarsäure). Sd. 180–185°<sub>11</sub> (*Soc.* 79, 1155). — \*III, 404.  
**C<sub>20</sub>H<sub>34</sub>** C 87,6 — H 12,4 — M. G. 274.  
 1) Colophenhydrür. Sd. 320–330° (*B.* 19, 2174). — II, 39.  
 2) d-Hydrodicamphen. Sm. 85–87° (*B.* 39, 1150 *C.* 1906 [1] 1426).  
 3) Hydrodicamphen. Sm. 75°; Sd. 326–327° (322–323°) (*Bl.* [3] 19, 318; *B.* 38, 3800 *C.* 1906 [1] 33). — \*II, 23.  
 4) Hydrodicamphen. Sm. 94°; Sd. 321–323,6° (*B.* 13, 793). — II, 39.  
**C<sub>20</sub>H<sub>36</sub>** 5) Hydrodicamphen. Sd. 321° (*A. ch.* [5] 19, 150; *B.* 13, 793). — II, 39.  
 C 87,0 — H 13,0 — M. G. 276.  
 1) Dimenthen. Sd. 320° (*Bl.* 31, 530). — II, 19.  
 2) Kohlenwasserstoff (aus Harzöl). Sd. 330–335° (*Bl.* 31, 119). — I, 140.  
 3) Kohlenwasserstoff (aus Menthol). Sd. 190–191°<sub>20</sub> (*C.* 1898 [1] 105; 1899 [2] 860). — \*II, 15.  
**C<sub>20</sub>H<sub>38</sub>** C 86,3 — H 13,7 — M. G. 278.  
 1) 1-3,3'-Dimethyl-6,6'-Diisopropyl-dodekahydrobiphenyl (1-Bimenthyl). Sm. 105,5–106° (*A.* 318, 330; *C.* 1901 [2] 347).  
 2) isom. flüssiges 1-Bimenthyl. Sd. 199–202°<sub>31</sub> (*A.* 318, 331, 339; *C.* 1901 [2] 347).  
 3) Eikosylen. Sd. 314–315° (*B.* 12, 69). — I, 137.  
 4) Phytadien. Sd. 185–188°<sub>33</sub> (*A.* 354, 258 *C.* 1907 [2] 915).  
 5) Kohlenwasserstoff (aus 3-Oxy-1-Methylhexahydrobenzol). Sd. 260° (*B.* 34, 2882).

$C_{20}H_{40}$ 

C 85,7 — H 14,3 — M. G. 280.

- 1) Phytan. *Sd.* 167—168°<sub>7,5</sub> (*A.* 354, 255 *C.* 1907 [2] 915).
- 2) Tetraamylen. *Sd.* 390—400° (*J.* 1861, 660). — *I*, 125.

 $C_{20}H_{42}$ 

C 85,1 — H 14,9 — M. G. 282.

- 1) norm. Eikosan. *Sm.* 36,7°; *Sd.* 205°<sub>15</sub> (121%) (*B.* 15, 1718; 19, 2220; 21, 2261; 29, 1323; *B.* 40, 4783 *C.* 1908 [1] 343). — *I*, 107; \**I*, 14.
- 2) Bryonan. *Sm.* 69°; *Sd.* 400° (*B.* 25 [2] 287). — \**I*, 14.
- 3) Lauran. *Sm.* 69° (*Ar.* 246, 173 *C.* 1908 [1] 1844).
- 4) Petrosilan. *Sm.* 69° (*C.* 1909 [2] 1137).
- 5) Phytan. *Sd.* 169,5°<sub>9,5</sub> (*B.* 41, 1477 *C.* 1908 [1] 2087).
- 6) Kohlenwasserstoff (aus Braunkohlenparaffin) (*B.* 12, 73).

**C<sub>20</sub>-Gruppe mit zwei Elementen.** $C_{20}H_4O_5$ 

C 74,1 — H 1,2 — O 24,7 — M. G. 324.

- 1) Verbindung (aus *Convallaria majalis*). *Sm.* 61° (*C.* 1901 [2] 419). — \**III*, 409.

 $C_{20}H_7Cl_9$ 

- 1) Enneachlordinaphtalin. *Sm.* 156—158° (*A.* 160, 73). — *II*, 189.

 $C_{20}H_7Br_7$ 

- 1) Heptabrom-2,2'-Binaphtyl (*J.* 1874, 446). — *II*, 295.

 $C_{20}H_8O_6$ 

C 69,8 — H 2,3 — O 27,9 — M. G. 344.

- 1) Dianhydrobisdiketodihydroinden-4,4'-Dicarbonsäure. *Ag<sub>2</sub>* (*B.* 31, 2088). — \**II*, 1192.

 $C_{20}H_8Cl_6$ 

- 1) Hexachlor-1,1'-Binaphtyl (*A.* 144, 82). — *II*, 295.

 $C_{20}H_8Br_6$ 

- 1) Hexabrom-1,1'-Binaphtyl (*A.* 144, 81). — *II*, 295.

 $C_{20}H_{10}O_2$ 

C 85,1 — H 3,5 — O 11,4 — M. G. 282.

- 1) Binaphtylendioxyd. *Sm.* 245° (*B.* 38, 3270 *C.* 1905 [2] 1493).

 $C_{20}H_{10}O_4$ 

C 76,4 — H 3,2 — O 20,4 — M. G. 314.

- 1) o-Dixanthon. *Sm.* 317° (*B.* 26, 75). — *III*, 306.
- 2) m-Dixanthon. *Sm.* 256° (*B.* 25, 1655). — *III*, 306.
- 3) α-Dinaphtyldichinon (*B.* 15, 1812). — *III*, 376.
- 4) 2,2'-Bi[1,4-Naphtochinon]. *Sm.* 216—217° u. Zers. (Zers. bei 270°) (*Soc.* 57, 632, 808; 67, 661; *B.* 30, 2663; 32, 546, 868). — *III*, 463; \**III*, 331.
- 5) 1,1'-Binaphtyl-3,4,3',4'-Dichinon. *Sm.* noch nicht bei 300° (*A.* 194, 206; *B.* 19, 2483; *Soc.* 67, 663). — *II*, 396.

 $C_{20}H_{10}O_5$ 

C 72,7 — H 3,0 — O 24,3 — M. G. 330.

- 1) α-Oxydixanthon. *Sm.* 258° (*B.* 24, 3981; 25, 1655). — *III*, 306.
- 2) β-Oxydixanthon. *Sm.* 326° (*B.* 25, 1656). — *III*, 306.
- 3) 4,4'-Di[1,2-Naphtochinon]oxyd. *Sm.* 245° (*B.* 30, 2199). — \**III*, 285.

 $C_{20}H_{10}O_6$ 

C 69,3 — H 2,9 — O 27,7 — M. G. 346.

- 1) 2,2'-Bi[3-Oxy-1,4-Naphtochinon]. *Sm.* 215° (*Soc.* 67, 662). — *III*, 463.
- 2) Coerulein (*B.* 4, 455, 555, 665; *A.* 209, 258, 271; *Bl.* [3] 11, 1136; *Am.* 23, 430; 26, 141). — *II*, 2088.

 $C_{20}H_{10}O_7$ 

C 66,3 — H 2,8 — O 30,9 — M. G. 362.

- 1) Oponal. *Sm.* 133—134° (*C.* 1899 [2] 315). — \**III*, 424.
- 2) Anhydrobisdiketodihydroinden-4,4'-Dicarbonsäure (*B.* 31, 2088). — \**II*, 1213.
- 3) Verbindung (aus 1-Amido-2,3-Dioxynaphtalin). Zers. bei 250° (*C.* 1902 [1] 935; *M.* 23, 523 *C.* 1902 [2] 744).

 $C_{20}H_{10}Cl_4$ 

- 1) Tetrachlor-2,2'-Binaphtyl (*J.* 1874, 446). — *II*, 295.

 $C_{20}H_{11}O_3$ 

- 1) Verbindung (aus 2,3-Dioxynaphtalin). *Sm.* 209—212° (*B.* 39, 1060 *C.* 1906 [1] 1354).

 $C_{20}H_{12}O$ 

C 89,5 — H 4,5 — O 6,0 — M. G. 268.

- 1) α-Binaphtylenoxyd. *Sm.* 182—182,5° (184°). 2 Pikrat (*A.* 209, 134; *M.* 22, 574; *B.* 13, 1724; 14, 196; 15, 1122; *J. r.* 14, 130). — *II*, 1005.
- 2) 2,6[β]-Binaphtylenoxyd. *Sm.* 161° (158°). + 1 u. 2 Pikrat (*B.* 13, 1724; 14, 200; 15, 1122, 2171; *Soc.* 59, 1096; *A.* 209, 136, 146; *J. r.* 14, 132; *B.* 38, 3661 *C.* 1905 [2] 1796). — *II*, 1005.
- 3) Coeroxen. *Sm.* 153° (*B.* 25, 3590; *A.* 348, 227 *C.* 1906 [2] 796).

 $C_{20}H_{12}O_2$ 

C 84,5 — H 4,2 — O 11,3 — M. G. 284.

- 1) Äther d. 2,3-Dioxynaphtalin (2,3-Dinaphtylendioxyd). *Sm.* 326° (355 bis 356°) (*B.* 39, 625 *C.* 1906 [1] 1012; *B.* 39, 1059 *C.* 1906 [1] 1354).



- $C_{20}H_{12}O_2$
- 2) 9-Keto-2-Benzoylfluoren. Sm. 175—177° (M. 23, 926 C. 1902 [2] 1471).
  - 3) 9-Keto-4-Benzoylfluoren. Sm. 95°; Sd. oberhalb 400° (M. 23, 30 C. 1902 [1] 875). — \*III, 238.
  - 4) 2-[2-Naphtyl]-1,4-Naphtochinon. Sm. 177° (Soc. 67, 657). — III, 463.
  - 5) Acenaphtanthrachinon. Sm. 215—220° (A. 327, 102 C. 1903 [1] 1229).
- $C_{20}H_{12}O_3$
- 6) Coeroxenol. Sm. 136° (A. 348, 225 C. 1906 [2] 796).  
C 80,0 — H 4,0 — O 16,0 — M. G. 300.
  - 1) 3-Oxy-2-[2-Naphtyl]-1,4-Naphtochinon. Sm. 187° u. Zers. (Soc. 67, 659). — III, 463.
  - 2) Phenyläther d. 1-Oxy-9,10-Anthrachinon. Sm. 145° (D.R.P. 158531 C. 1905 [1] 1517; A. 348, 231 C. 1906 [2] 797).
  - 3) Phenyläther d. 2-Oxy-9,10-Anthrachinon. Sm. 153° (D.R.P. 158531 C. 1905 [1] 1517).
  - 4) 2-Benzoylxanthon. Sm. 146—147° (B. 41, 1326 C. 1908 [1] 1984).
  - 5) 2-Benzoyl-3,4-β-Naphtopyron (α-Benzoyl-β-Naphtocumarin). Sm. 207° (208°) (B. 36, 1974 C. 1903 [2] 377; B. 37, 4486 C. 1905 [1] 248).
  - 6) Coeroxonol. Sm. 179—180° u. Zers. (A. 348, 216 C. 1906 [2] 795; D.R.P. 186882 C. 1907 [1] 1031).
  - 7) Fluoran. Sm. 180° (173—175°). +  $\frac{1}{2}C_2H_5O$ .  $HNO_3$ ,  $H_2SO_4$  (A. 212, 349; B. 24, 1417; 25, 1386, 3589; 28, 430; 31, 1740; Soc. 81, 664 C. 1902 [1] 1296) — II, 1983; \*II, 1154.
  - 8) Benzoat d. 1-Oxy-9-Ketofluoren. Sm. 128—129° (B. 31, 3034; J. pr. [2] 59, 451). — \*III, 178.
  - 9) Benzoat d. 3-Oxy-9-Ketofluoren. Sm. 150° (G. 35 [2] 547 C. 1906 [1] 850).
- $C_{20}H_{12}O_4$
- 10) Verbindung (aus 2,2'-Dioxy-1,1'-Binaphtyl). Sm. 230° (B. 38, 3270 C. 1905 [2] 1493).  
C 75,9 — H 3,8 — O 20,2 — M. G. 316.
  - 1) 2,5-Dibenzoyl-1,4-Benzochinon (C. 1906 [2] 1190).
  - 2) Binaphtyldichinhydrin. Sm. 120° (A. 194, 205; M. 29, 1095 C. 1909 [1] 527). — III, 396.
  - 3) 3,4-Methylenäther d. 2-[3,4-Dioxyphenyl]-1,4-α-Naphtopyron. Sm. 253—254° (B. 31, 708). — \*III, 582.
  - 4) 3,4-Methylenäther d. 2-Keto-1-[3,4-Dioxybenzyliden]-α-Naphtofuran (B. 30, 1469) — \*III, 537.
  - 5) 4-Benzoylbiphenylenoxyd-4<sup>2</sup>-Carbonsäure. Sm. 208—210°. Ag (M. 28, 416 C. 1907 [2] 817).
  - 6) Di[1-Keto-3-Inden]essigsäure (Diindonessigsäure). Sm. 192°. Na (B. 33, 2429; A. 247, 151). — \*II, 1108.
  - 7) Säure (aus 2-Oxynaphtalin). Sm. 281°. Ba + 7H<sub>2</sub>O, Ag (M. 10, 116). — II, 1914.
  - 8) αγ-δζ-Dilaktond. αζ-Dioxy-αζ-Diphenyl-αγδ-Hexatrien-γδ-Dicarbon-säure? (A. 299, 56; 319, 207). — \*II, 966.
  - 9) Acetat d. 6-Oxy-5,12-Naphtacenchinon (B. 36, 551 C. 1903 [1] 720).
  - 10) Benzoat d. 1-Oxyxanthon. Sm. 206,5° (B. 27, 1996). — III, 201.
  - 11) Benzoat d. 2-Oxyxanthon. Sm. 151° (B. 27, 1996). — III, 201.
  - 12) Benzoat d. 3-Oxyxanthon. Sm. 147° (B. 27, 1996). — III, 201.
  - 13) Benzoat d. 4-Oxyxanthon. Sm. 172° (B. 27, 1996). — III, 201.
  - 14) Verbindung (aus Diphenacylfumarsäure) (A. 299, 60).
  - 15) Verbindung (aus d. α,2-Lakton d. 2,4-Dioxytriphenylessigsäure). Sm. oberhalb 290° (J. pr. [2] 72, 165 C. 1905 [2] 1028).  
C 72,3 — H 3,6 — O 24,1 — M. G. 332.
- $C_{20}H_{12}O_5$
- 1) Fluoresceïn (Dioxyfluoran). Zers. oberhalb 290°. Ca + 4H<sub>2</sub>O, Ba + 9H<sub>2</sub>O, HCl, H<sub>2</sub>SO<sub>4</sub>, 2H<sub>2</sub>SO<sub>4</sub> (A. 183, 2; 212, 351; 215, 83; 238, 360; Ph. Ch. 37, 157; B. 11, 1342; 21, 3377; 24, 1413; 28, 28, 312, 428; 29, 2623; 32, 1135; D.R.P. 44002; Soc. 81, 665 C. 1902 [1] 1296; B. 40, 3604 C. 1907 [2] 1337). — II, 2060; \*II, 1208.
  - 2) Hydrochinonphtaleïn (2,7-Dioxyfluoran). Sm. 226—227°. Na<sub>2</sub> (H. 6, 507; 11, 714; 28, 2959; 31, 1743; Ph. Ch. 24, 485; B. 38, 1327 C. 1905 [1] 1497; B. 40, 3604 C. 1907 [2] 1337). — II, 2065; \*II, 1211.  
C 68,9 — H 3,4 — O 27,6 — M. G. 348.
- $C_{20}H_{12}O_6$
- 1) Cörolin (B. 14, 1326; A. 209, 274; Am. 23, 430). — II, 2088; \*II, 1222.

- $C_{20}H_{12}O_6$
- 2) Oxyfluorescein. Sm. 350° (*Soc.* 91, 1585 *C.* 1907 [2] 1627).
  - 3) Diresorcinphtalein +  $3\frac{1}{2}H_2O$ . Zers. bei 245° (*B.* 13, 1654; *M.* 5, 182). — II, 2067.
  - 4) Anhydrid d. Resoreinoxalein (*B.* 14, 2565). — II, 937.
  - 5) 2',3-Lakton d. 1-Keto-3-Methoxyl-2-[2-Oxy-1,3-Diketo-2,3-Dihydro-2-Indenyl]-2,3-Dihydroinden-3-Carbonsäure. Sm. 198° (*B.* 35, 3962 *C.* 1903 [1] 33).
  - 6) Dibenzoat d. 2,5-Dioxy-1,4-Benzochinon. Sm. 174° (*B.* 34, 3996 *C.* 1902 [1] 187). — \*III, 263.
- $C_{20}H_{12}O_7$
- C 65,9 — H 3,3 — O 30,8 — M. G. 364.
- 1) Phloroglucinphtalein. Zers. bei 240° (*B.* 13, 1652; *B.* 36, 1071 *C.* 1903 [1] 1181). — II, 2093.
  - 2) Oxyhydrochinonphtalein. HCl,  $H_2SO_4$  (*C.* 1906 [2] 682).
  - 3) Dioxyfluorescein.  $NH_4$  (*B.* 34, 2299, 2618, 2637).
  - 4) Gallein +  $H_2O$ . HCl, HBr,  $H_2SO_4$  (*B.* 4, 457; 14, 1326; 34, 2302; *A.* 209, 249, 261; *Am.* 23, 429; 26, 117; *B.* 36, 1561 *C.* 1903 [2] 118; *C.* 1906 [2] 681). — II, 2087; \*II, 1222.
  - 5) 1,9-Lakton d. 1-Oxy-2,3-Diacetoxyl-10-Keto-9,10-Dihydroanthracen-9-Methenylcarbonsäure (Diacetat d. o-Dioxyanthracumarin). Sm. 260° (*B.* 20, 3143). — II, 2028.
- $C_{20}H_{12}O_8$
- C 63,2 — H 3,1 — O 33,7 — M. G. 380.
- 1) Trioxyfluorescein (*B.* 36, 1083 *C.* 1903 [1] 1183).
  - 2) Pyrogallinphtaleinsäure (*B.* 4, 457, 663; *A.* 209, 261). — II, 2087.
- $C_{20}H_{12}O_{10}$
- C 58,2 — H 2,9 — O 38,8 — M. G. 412.
- 1) Triacetat d. Resoflavin. Sm. 275—279° (*A.* 351, 25 *C.* 1907 [1] 1428).
  - 2) Verbindung (aus d. Purpurogallin  $C_{20}H_{16}O_9$ ) (*J.* 1882, 682). — III, 346.
- $C_{20}H_{12}N_2$
- C 85,7 — H 4,3 — N 10,0 — M. G. 280.
- 1) 1,2-Anthraphenazin. Sm. 221—222° (*A.* 242, 83 *C.* 1905 [2] 1593; *B.* 39, 930 *C.* 1906 [1] 1256).
  - 2)  $\alpha$ - $\beta$ -Dinaphtazin. Sm. 242—243° (*B.* 23, 1333; 26, 184; 29, 2089, 2091; *A.* 272, 333; *B.* 38, 1816 *C.* 1905 [1] 1655; *B.* 41, 390 *C.* 1908 [1] 862; *B.* 41, 397 *C.* 1908 [1] 863). — IV, 1084.
  - 3) uns- $\alpha$ - $\beta$ -Dinaphtazin. Sm. 283—284° (279°) (*Gm.* 7, 24; D.R.P. 78748; *B.* 3, 291; 10, 573, 772; 19, 2795; 23, 1329; 26, 183; 29, 2089; 31, 2411; 33, 1542, 2711; *Soc.* 51, 100; *A.* 253, 28; 255, 147; 272, 351; *B.* 36, 4172 *C.* 1904 [1] 287; D.R.P. 165226 *C.* 1905 [2] 1757; *B.* 41, 399 *C.* 1908 [1] 863). — IV, 1083; \*IV, 730.
  - 4)  $\alpha$ - $\beta$ -Dinaphtazin. Sm. 246° (247°) (*B.* 29, 2087; *A.* 319, 265 *C.* 1902 [1] 359). — IV, 1085; \*IV, 731.
  - 5) 1,1'-Dinaphto-2,2'-Orthodiazin. Sm. 267—268°. (2HCl, PtCl<sub>4</sub>) (*B.* 36, 4162 *C.* 1904 [1] 286).
  - 6) 2,3-Biphenylen-1,4-Benzdiazin (Phenanthrophenazin). Sm. 217°. HCl (*A.* 237, 340; 292, 264). — IV, 1085.
  - 7) Chinakridin. Sm. 221° (*B.* 29, 81). — IV, 1086.
  - 8) isom. Chinakridin. Sm. 245° (*B.* 40, 2523 *C.* 1907 [2] 255).
  - 9)  $\alpha$ ,6-N-CH- $\beta$ ,5-Naphtachinakridin. Sm. 268—268,5° (*Soc.* 95, 1631 *C.* 1909 [2] 2178).
  - 10)  $\beta$ ,6-N-CH- $\alpha$ ,5-Naphtachinakridin. Sm. 220°. Salicylat (*Soc.* 95, 1632 *C.* 1909 [2] 2178).
  - 11) Chrysopiazin. Sm. 128—129° (*Soc.* 63, 1290). — IV, 1087.
  - 12) Base (aus Oxychinakridon). Sm. 213° (*B.* 29, 81). — IV, 1087.
- $C_{20}H_{13}Br_2$
- $C_{20}H_{12}Br_3$
- 1) Dibrom-1,1'-Binaphtyl. Sm. 215° (*A.* 144, 80). — II, 295.
  - 1)  $\alpha$ - $\beta$ -Tribrom- $\alpha$ - $\beta$ -Tri[p-Bromphenyl]äthan. Sm. 245° (*A.* 296, 247). — \*II, 128.
- $C_{20}H_{12}J_2$
- $C_{20}H_{12}S$
- $C_{20}H_{12}S_2$
- $C_{20}H_{13}N$
- 1) 4,4'-Dijod-1,1'-Binaphtyl. Sm. 238,6° (*B.* 33, 697). — \*II, 130.
  - 1) Dinaphtylenthiofen. Sm. 147° (*B.* 27, 3001). — \*III, 595.
  - 1) Naphthianthren. Sm. 184° (*B.* 42, 1175 *C.* 1909 [1] 1575).  
C 89,8 — H 4,9 — N 5,2 — M. G. 267.
  - 1) s-1,2-Dinaphtocarbazol ( $\beta$ -Dinaphtylenamin; 1,1'-Dinaphto-2,2'-imin). Sm. 159° (corr.). Pikrat (*B.* 15, 2174; *B.* 36, 4160 *C.* 1904 [1] 286; *Soc.* 83, 273 *C.* 1903 [1] 588, 883; *J. pr.* [2] 79, 399 *C.* 1909 [2] 831). — IV, 472; \*IV, 287.
  - 2) 1,2,2',1'-Dinaphtocarbazol. Sm. 231° (*Soc.* 83, 274 *C.* 1903 [1] 588, 883; *J. pr.* [2] 79, 416 *C.* 1909 [2] 832). — \*IV, 287.

- C<sub>20</sub>H<sub>13</sub>N** 3) isom. Dinaphtocarbazol (aus 1,1'-Dinitro-2,2'-Binaphtyl). Sm. 216°. Pikrat (*B.* 18, 3259; *B.* 38, 139 *C.* 1905 [1] 139; *J. pr.* [2] 79, 393 *C.* 1909 [2] 831). — IV, 473.
- 4) isom.  $\beta\beta$ -Dinaphtocarbazol. Sm. 169—170°. Pikrat (*B.* 19, 2242). — IV, 473.
- C<sub>20</sub>H<sub>13</sub>N<sub>3</sub>** 5) 2,3-Diphenylenindol. Sm. 188—189° (*Soc.* 71, 1124). — \*IV, 287.  
C 81,4 — H 4,4 — N 14,2 — M. G. 295.
- 1) Benzenyl- $\beta$ -o-Amidophenylbenzimidazol. Sm. 239°. HCl (*B.* 32, 1478). — \*IV, 885.
- 2) 2-[2-Naphtyl]- $\beta\beta$ -Naphttriazol. Sm. 186° (*B.* 28, 2202). — IV, 1170.
- 3)  $\alpha$ -Amido- $\alpha\beta$ -Naphtazin. Sm. bei 325° (*B.* 29, 2089). — IV, 1215.
- 4) Amidophenanthrophenazin. Sm. 279° (*B.* 21, 2306). — IV, 1214.
- 5) N-Phenyl-ps-Indophenazin. Sm. 265—266° (*B.* 34, 4014 *C.* 1902 [1] 205). — \*IV, 848.
- C<sub>20</sub>H<sub>14</sub>O** C 88,9 — H 5,2 — O 5,9 — M. G. 270.
- 1) 1,1'-Dinaphtyläther. Sm. 109—110° (105°). Pikrat (*B.* 14, 195; *B.* 36, 2942 *C.* 1903 [2] 885; *A.* 350, 93 *C.* 1907 [1] 159). — II, 857.
- 2) 1,2'-Dinaphtyläther. Sm. 81°; Sd. 264°<sub>15</sub>. 2 Pikrat (*A.* 350, 94 *C.* 1907 [1] 159).
- 3) 2,2'-Dinaphtyläther. Sm. 105°; Sd. oberhalb 360° (250°<sub>19</sub>). Pikrat Sm. 122—122,5° (*A.* 209, 149; *B.* 13, 1850; *B.* 14, 199; *B.* 15, 306; *Soc.* 40, 5; *C. r.* 141, 1027 *C.* 1906 [1] 364). — II 877; \*II, 520.
- 4) 10-Oxy-9-Phenylanthracen (Phenylanthranol). Sm. 141—144° u. Zers. (*HJ.* J<sub>9</sub>). + J<sub>2</sub> (*A.* 202, 54; *B.* 37, 3342 *C.* 1904 [2] 1057; *B.* 38, 1794 *C.* 1905 [1] 1647). — II, 1094.
- 5) 2-Benzoylfluoren. Sm. 124—126° (*M.* 23, 922 *C.* 1902 [2] 1471; *M.* 24, 591 *C.* 1903 [2] 1276; *M.* 24, 592 *C.* 1903 [2] 1276; *M.* 25, 449 *C.* 1904 [2] 449).
- 6) 9-Benzoylfluoren. Sm. 138° (*B.* 39, 1287 *C.* 1906 [1] 1771).
- 7) 1,2-Diphenylisobenzfuran. Sm. 125° (*C. r.* 140, 1349 *C.* 1905 [2] 138; *Bl.* [3] 35, 1127 *C.* 1907 [1] 478).
- 8) 9-Benzylidenxanthen. Sm. 114—115° (*B.* 38, 2505 *C.* 1905 [2] 634).  
C 83,9 — H 4,9 — O 11,2 — M. G. 286.
- C<sub>20</sub>H<sub>14</sub>O<sub>2</sub>** 1) 2,2'-Dioxy-1,1'-Binaphtyl. Sm. 217°. Pikrat, + 2 Pyridin (*J. r.* 6, 187; *B.* 14, 2345; *B.* 15, 2166; *B.* 21, 3562; *B.* 23, 3368; *Bl.* [3] 19, 610; [3] 21, 650; *J. pr.* [2] 79, 417 *C.* 1909 [2] 832). — II, 1004; \*II, 609.
- 2) 1,4-Dioxy-2,2'-Binaphtyl. Sm. 169—170° (*Soc.* 67, 658). — \*II, 610.
- 3) 3,3'-Dioxy-2,2'-Binaphtyl. Sm. 216° (*C. r.* 138, 1618 *C.* 1904 [2] 338).
- 4) 4,4'-Dioxy-2,2'-Binaphtyl. Sm. 300° (*Bl.* [3] 31, 1274 *C.* 1905 [1] 178).
- 5)  $\alpha$ -Dioxybinaphtyl. Sm. 300° (*J. r.* 6, 183). — II, 1004.
- 6) isom.  $\beta$ -Dioxybinaphtyl. Sm. 195° (*B.* 15, 807). — II, 1005.
- 7) 9-Oxy-10-Oxyphenylanthracen (*A.* 202, 58; *B.* 209, 277; *B.* 13, 1617). — II, 1112.
- 8) 9-Keto-4-[ $\alpha$ -Oxybenzyl]fluoren (oder 9-Oxy-4-Benzoylfluoren). Sm. 129° (*M.* 23, 40 *C.* 1902 [1] 876). — \*III, 199.
- 9) Benzyläther d. 1-Oxy-9-Ketofluoren. Sm. 93—94° (*B.* 31, 3034; *J. pr.* [2] 59, 452). — \*III, 178.
- 10) 10-Oxy-9-Keto-10-Phenyl-9,10-Dihydroanthracen (Phenylloxanthranol). Sm. 208° (*A.* 202, 58; *B.* 209, 277; *Bl.* [3] 17, 878; *B.* 13, 1617; *C. r.* 138, 1251 *C.* 1904 [2] 118). — III, 260; \*III, 199.
- 11) 1,2-Dibenzoylbenzol. Sm. 145—146° (149°) (*B.* 9, 32, 309; *C. r.* 140, 1349 *C.* 1905 [2] 138; *C. r.* 143, 432 *C.* 1906 [2] 1495; *Bl.* [3] 35, 1131 *C.* 1907 [1] 479; *Bl.* [3] 35, 1138 *C.* 1907 [1] 474; *C.* 1908 [2] 1739). — III, 305.
- 12) 1,3-Dibenzoylbenzol (Isophtalophenon). Sm. 99,5—100° (*B.* 13, 320). — III, 304.
- 13) 1,4-Dibenzoylbenzol (Terephtalophenon). Sm. 159—160° (160—161°) (*B.* 9, 31, 309; *B.* 19, 147, 1847; *Bl.* [4] 5, 961 *C.* 1909 [2] 1871). — III, 305.
- 14) 3[oder 5]-Oxy-1,2-Diphenylbenzfuran. Sm. 117,5° (*Soc.* 75, 1039). — \*III, 526.
- 15) 4-Oxy-1,2-Diphenylbenzfuran. Sm. 158—160° (*Soc.* 75, 1041). — \*III, 526.
- 16) 2-Benzoylxanthen. Sm. 148° (*B.* 41, 1325 *C.* 1908 [1] 1983).









